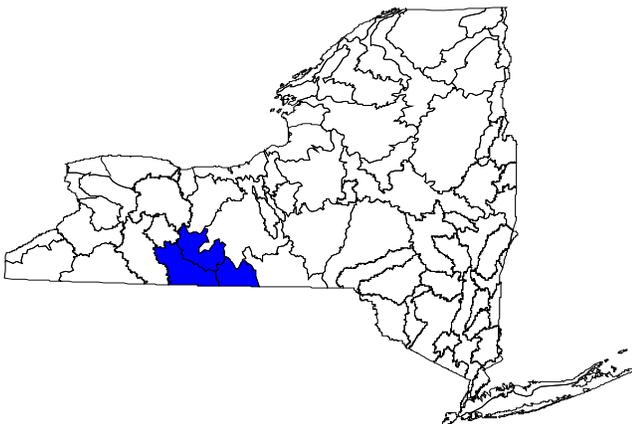


Bureau of Watershed Assessment and Research
Division of Water
NYS Department of Environmental Conservation

The 2004 Chemung River Basin Waterbody Inventory and Priority Waterbodies List

Encompassing all or portions of
Allegany, Chemung, Livingston,
Ontario, Schuyler, Steuben
and Yates Counties



May 2007

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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. These assessments reflect monitoring and water quality information drawn from a number of programs and sources, both within and outside the NYSDEC. This information has been compiled by the NYSDEC Division of Water into an inventory database of all waterbodies in New York State 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, etc) 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 fourteen drainage basins (about 20% of the state) each year. This schedule allows for a comprehensive re-assessment 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 other water quality partners outside the Department.

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 monitoring of basin waters. This includes water chemistry sampling at selected sites, sediment 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 support of 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 data and information – is compiled and distributed to participants for review and comment before the Final WI/PWL Assessment Report is issued.

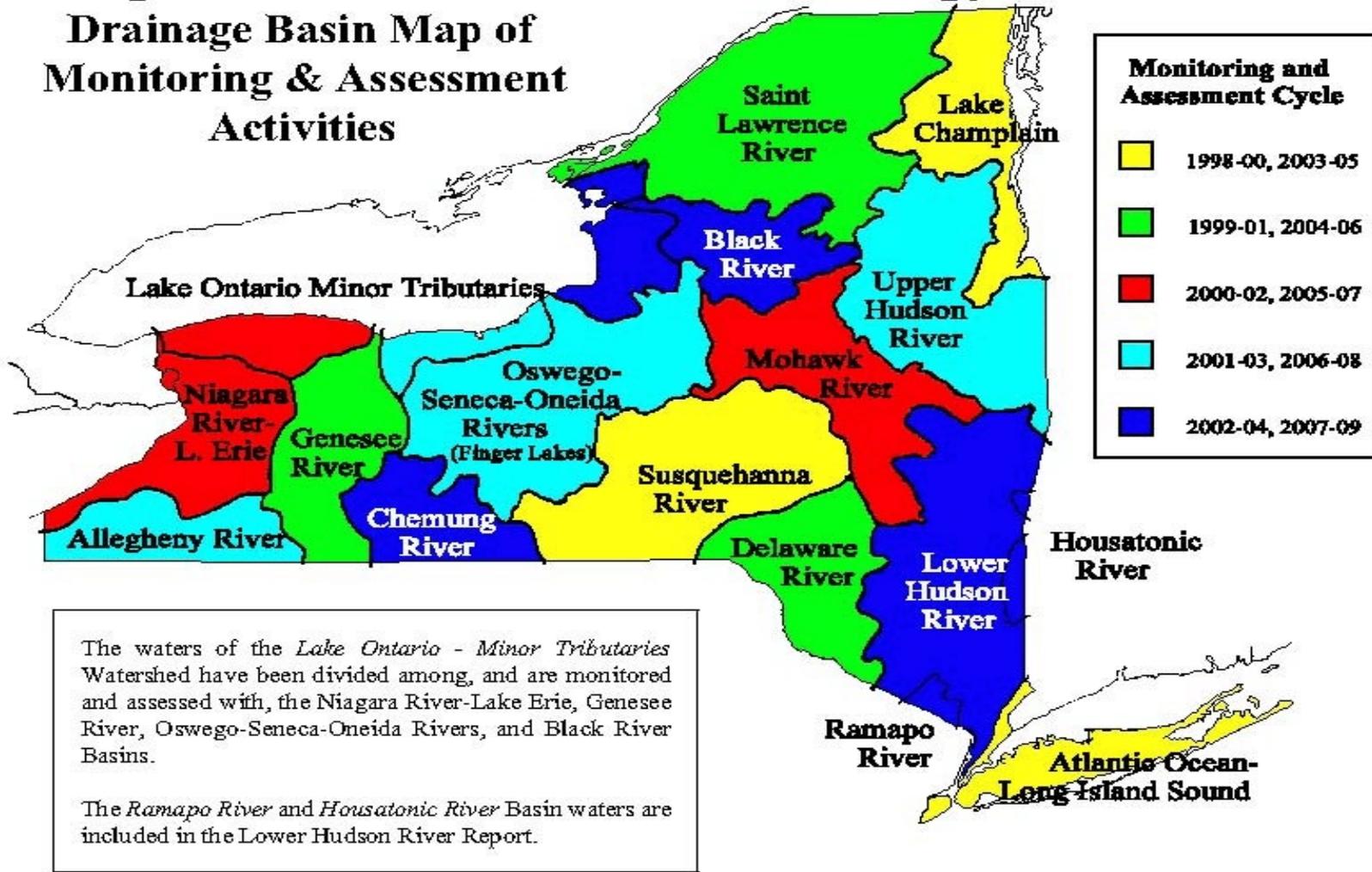
An Expanded *Waterbody Inventory*

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 information for **all** waters in the state and record good water quality in the state 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 from the inventory of all waters the subset of “*priority*” waterbody segments on which the Division can and 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
 Statewide Waters Assessment Section

Comprehensive Assessment Strategy

Drainage Basin Map of Monitoring & Assessment Activities



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 Segments: These are waterbodies with well documented water quality problems that result in *precluded*, or *impaired* uses. (Waters with *stressed*, *threatened* uses are not included in this category). This category includes both *High/Medium Resolvability* segments, where the Division 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., atmospheric deposition, etc.).

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

Threatened Waterbody Segments: 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 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 impact, but for which there is not sufficient or definitive documentation. These segments require additional monitoring to determine whether uses are restricted. (Generally, this monitoring will be done during the *Comprehensive Assessment Strategy* rotating basin schedule).

Waterbodies Having No Known Impacts: These are segments where monitoring data and information indicate that there are no use restrictions or other water quality impacts/issues.

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

Taken together, the *Impaired Segments*, *Waters with Minor Impacts* and *Threatened Waterbody Segments* 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 “on the Priority Waterbodies List.”** For these waters, additional monitoring and assessment activities to document possible or potential future use impacts, causes and sources are more appropriate than remedial/corrective or resource protection efforts.

Maintaining a comprehensive Waterbody Inventory allows Division staff to easily respond to questions – from both inside and outside the Department – concerning the water quality of specific rivers, lakes and watersheds. And 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 Chemung River Basin

Basin Description

The Chemung River Basin is located in the south central region of New York State – also known as the Southern Tier of the state – and north central Pennsylvania. The Chemung River is a significant tributary to the 27,580 square mile Susquehanna River Basin; it joins the Susquehanna River just south of the New York-Pennsylvania state line. The 41 mile long Chemung river is formed by the confluence of the Cohocton and Tioga Rivers. About 70% of the basin is within New York State; the remainder is in Pennsylvania. Together the rivers of the basin drain about 1,740 square miles of New York State, including most of Chemung and Steuben Counties, portions of Schuyler and Allegany Counties, and very small parts of Yates, Ontario and Livingston Counties.

The Chemung River Basin is mostly rural in character, with considerable agricultural lands and large tracts of forest and woodlands along the northern fringe of the Allegheny Mountain range. The basin is best described as lightly populated, with an estimated 187,579 residents (2000). However significant population centers of Elmira/Horseheads and Corning/Painted Post are located along the Chemung River valley. These areas are comprised of the cities/villages of Elmira (30,940), Corning (10,842), Horseheads (6,452), Elmira Heights (4,170) and Painted Post (1,842) and are home to a number of industries (including the Corning Glass Works), manufacturing and significant commercial development. Other population centers in the basin include the City of Hornell (9,019) and the Villages of Bath (5,641) and Canisteo (2,336).

There are about 2,940 miles of rivers and streams and about 90 lakes and ponds in the basin. Many of the ponds are too small to be individually assessed, but 23 significant* lake, pond and reservoir waterbody segments (covering over 2,900 acres) are included in the Chemung River Basin Waterbody Inventory. The steep slopes and flashy nature of the tributary streams make the Chemung Basin prone to flooding and flood control structures line much of the Chemung River and some of the tributaries. The largest tributaries to the Chemung River include the Cohocton River with about 1,099 miles of streams or 37% of the basin total and Tioga/Canisteo Rivers (979 miles, 33%); Newtown Creek is the next largest tributary (145 miles, 5%). Of the lakes and reservoirs, the largest are Lamoka Lake/Mill Pond (825 acres, or 28% of lake waterbody acres in the basin), Waneta Lake (781 acres, 27%) and Almond Lake (480 acres, 17%).

Water Quality Issues and Problems

Water quality in the Chemung River Basin is generally satisfactory but conditions in some specific waters varies. The vast majority of river segments support uses and nearly one-half (49%) of assessed river miles were found to have no known impacts to uses. However minor impacts – primarily due to nonpoint sources of silt/sediment and/or nutrients – are evident in about one-third of basin river miles. Agricultural activities and other nonpoint sources are frequently cited as contributing to impacts in the rivers. In basin lakes, water quality and aquatic life support is also generally satisfactory. However habitat modification (invasive nuisance species) and other excessive aquatic weed growth restricts recreational activities in varying degrees. Hydrologic modification related to flood control activities also comes into conflict with recreational uses of some of the lake waters in the basin. These and other water quality issues and problems are discussed in further detail below.

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

Agricultural Activity

Considerable agricultural activity in the rural Chemung River Basin has an impact on aquatic life use support and recreational uses of the waters. Agricultural runoff contributes nutrient and silt/sediment loads to the streams and lakes. If not properly managed agricultural practices can have significant impacts on the water quality rivers and lakes in the basin. Agricultural activities are a frequently cited source of PWL waters in the basin. However agriculture is largely seen as a potential threat – rather than a current source – of water quality impacts in the basin. Various state and local (county) agencies are working with the farming community to continue to manage these threats.

Streambank Erosion

Silt and sedimentation from the erosion of stream banks is a source of impacts to stream habitat and resident fisheries. Steep gradient streams that cut through silty soils are highly susceptible to erosion. Sediment loads and deposition in creek can be severe in the county. The municipal highway departments remove considerable volumes of gravel from streams each year. The maintenance of flood control structures require regular sediment removal.

Invasive Species/Habitat Modification

Recreational uses (swimming, boating, fishing) in basin lake waters can be limited by dense rooted vegetation. The predominant problem plant species are Eurasian water milfoil (*Myriophyllum spicatum*) and Curly-leafed Pondweed (*Potamogeton crispus*). Mechanical weed harvesting and chemical treatments are often used by area lake associations to control emergent aquatic vegetation and maintain recreational uses. Though these habitat alterations are not typically viewed as the result of specific water quality pollutants, nutrients and silt/sediment loadings can increase weed growth.

Flood Control

The high gradient and flashy streams in the basin make the Chemung River highly vulnerable to flooding and flood control structures line much of the Chemung River and some tributaries. In some ways the flood control effort conflicts with other uses of the waters. Stream access limitations as well as the modification of hydrology and habitat in some basin waters can impact both recreation and aquatic life. Efforts are made to limit the impacts to these other uses, but need to protect life and property of basin residents from flood waters is recognized as paramount.

Threats to Elmira Drinking Water

Drinking water use of the Chemung River water supply is considered to be threatened due to the susceptibility of the water supply to possible contamination. Class A surface waters of the state that serve as the source of potable water for significant populations are typically categorized as threatened. The Chemung River provides about 70% of the raw water that is distributed to 65,000 residents of Elmira, Horseheads and surrounding communities by the Elmira Water Board.

The New York State Health Department Source Water Assessment for the water supply of the Elmira Water Board found an elevated susceptibility to contamination for this source of drinking water. The amount of agricultural lands in the assessment area results in elevated potential for protozoa and pesticides contamination. While there are some facilities present, permitted discharges do not likely represent an important threat to source water quality based on their density in the assessment area. However the total amount of wastewater discharged to surface water in this assessment area is high enough to further raise the potential for contamination (particularly for protozoa).

Chesapeake Bay Loading Reductions

The Chemung River and its watershed is tributary to the Susquehanna River and is therefore part of the 6,250 square mile Chesapeake Bay Watershed. The Chesapeake Bay and its tidal tributaries are listed as Clean Water Act Section 303(d) Impaired/TMDL Waters due to low dissolved oxygen and reduced water clarity. To address these impairments the USEPA Chesapeake Bay Program has collected water quality monitoring data and conducted watershed computer modeling that documents that these impairments are the result of sediment and nutrient loadings from sources throughout the Chesapeake Bay Watershed.

By 2002, all of the Chesapeake Bay states had adopted a Memorandum of Understanding regarding cooperative efforts for the protection of the Chesapeake Bay. The MOU cites that unless water quality standards are met by 2010, the impairments to the Bay will require the establishment of a TMDL by May 2011. In the MOU, the signatories agree to work cooperatively to achieve the nutrient and sediment load reductions that are necessary to meet water quality standards in the Bay by 2010.

For sediment, the model predicts that New York State will achieve its sediment cap load without additional reduction efforts. However the model also shows that New York State's current nutrient loads do contribute to the impairment in the Bay; and implementation of agricultural best management practices (BMPs) and wastewater treatment plant upgrades throughout the basin that reduce nutrient (nitrogen) loadings will contribute to the restoration of the Bay. Although the waters that are the focus of this restoration lie well outside the borders of New York State, these and other activities that reduce nutrient (nitrogen) inputs to the waters of the Chemung River Basin should be viewed as high priority water quality restoration efforts deserving of particular support.

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 Chemung River Basin, the more significant threats to groundwater resources include inactive hazardous waste sites, pesticide application, animal feeding operations, on-site wastewater treatment systems, chemical spills and abandoned or improperly plugged oil and gas wells.

Chemung River Basin Water Quality Assessment

The series of charts presented on the following pages provides an overall assessment of water quality conditions in the entire Chemung River Basin. For each waterbody type (rivers/streams and lakes/reservoirs) 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 *Impaired Segments* which do not support appropriate uses. The purple portion represents segments with *Minor Impacts* and *Threatened Waterbody Segments*. Taken together, waters in both of these categories (represented by the red and purple segments) comprise the **Priority Waterbodies** (for that waterbody type) within the basin. The percentage of miles/acres for the other Water Quality Assessment Categories – *Waterbodies Having No Known Impacts*, *UnAssessed Waterbodies*, 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 *Priority Waterbodies*. The levels of severity are:

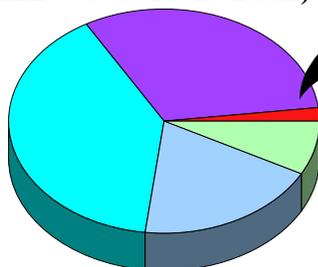
- Precluded:* waters do not support appropriate uses,
- Impaired:* waters frequently do not support appropriate uses,
- Stressed:* waters support appropriate uses, but other water quality impacts are apparent, and
- Threatened:* waters support uses and have no impacts, but activities threaten future 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 Chemung River Basin. The charts reflect the percentage of miles/acres of the total waterbody area on the Priority Waterbodies List where the source is listed as a major contributor to the water quality impact. For each source, the color shading of the bar indicates the severity (*Precluded, Impaired, Stressed, Threatened*) of the most significant water use impact to the waterbody.

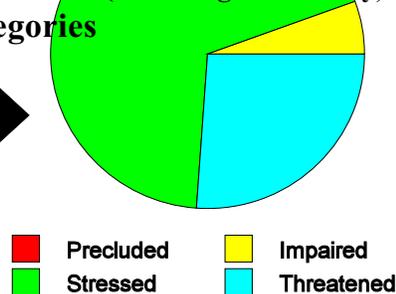
Rivers/Streams

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

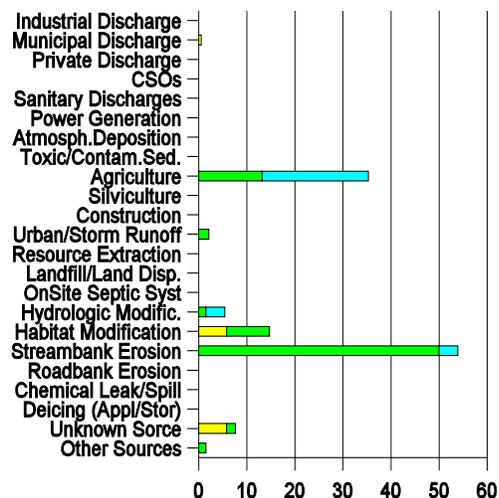
Severity of Problems
(PWL Segments Only)



Chemung River Basin

Total River Miles: 2,941
Total PWL Miles: 986

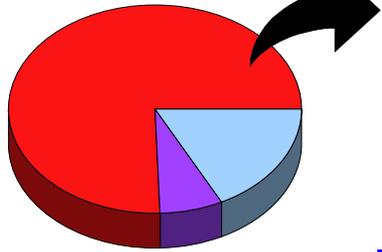
Major Sources of Impact
(PWL Segments Only)



Percent of PWL Waters Affected

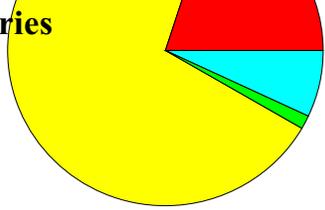
Lakes/Reservoirs

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

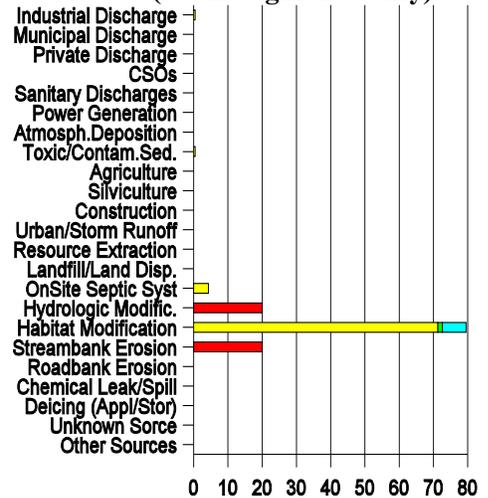
Severity of Problems (PWL Segments Only)



- Precluded
- Impaired
- Stressed
- Threatened

Chemung River Basin	
Total Lake Acres:	2,904
Total PWL Acres:	2,397

Major Sources of Impact (PWL Segments Only)



Percent of PWL Waters Affected

Basin Water Quality Summary

About one-third (34%) of the river miles in the Chemung River Basin (986 miles) are listed on the Priority Waterbodies List as either not supporting uses or having minor impacts or threats to water quality. The great majority (94%) of these river miles are considered *Stressed* or *Threatened* waters that fully support appropriate uses, but that have minor impacts/threats to uses. Only about six percent (6%) of basin river miles are *Impaired* and do not support appropriate uses.

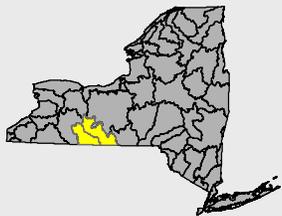
Eight of the 23 separate lake segments in the basin are included on the PWL as having impaired uses or minor impacts/threats to uses. However these 8 lakes impaired/impacted lakes represent 83% of the total lake acres in the basin. These water quality problems are primarily the result of excessive aquatic weed growth and/or invasive species that restrict recreational uses. However hydrologic modification in support of flood control efforts also impact recreational uses of other reservoirs.

Significant sources of impact and impairment to the waters of the basin include streambank erosion that increase silt/sediment loadings to the streams and lakes and agricultural nonpoint sources that increase nutrient loadings. Habitat modifications (invasive species and excessive weed growth) and hydrologic modifications (related to flood control) are also frequently cited sources of impairment/impact.

Figure 2

Chemung River Basin

2004 WI/PWL Water Quality Assessment



Assessment

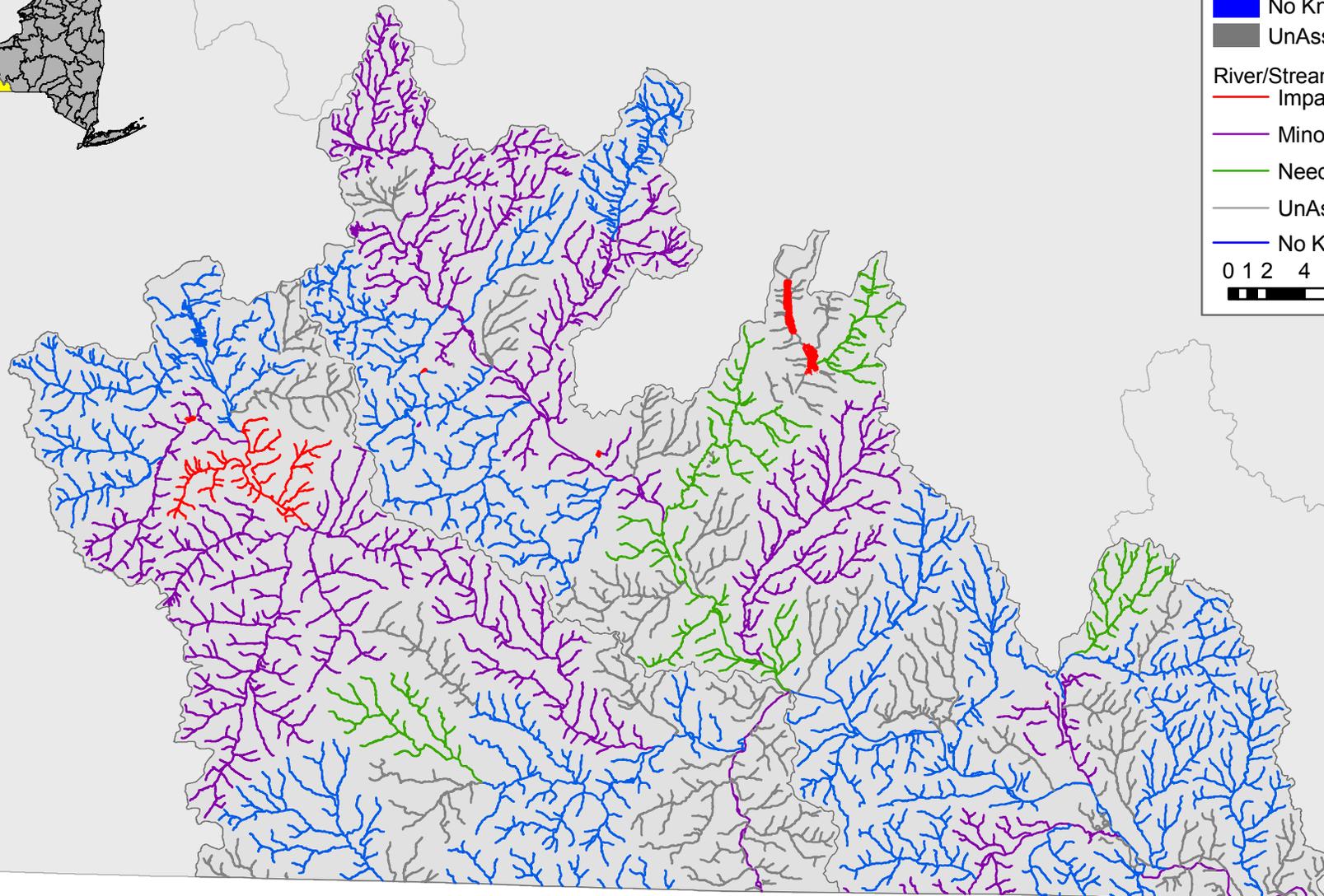
Lake/Reservoir

- Impaired Segment
- Minor Impacts
- Need Verification
- No Known Impact
- UnAssessed

River/Stream

- Impaired Segment
- Minor Impacts
- Need Verification
- UnAssessed
- No Known Impact

0 1 2 4 6 8 Miles



The 2004 Chemung River Basin Waterbody Inventory/Priority Waterbodies List

This inventory of water quality information includes individual waterbody *Data Sheets* describing the water quality conditions in the Chemung River 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 on the following pages are compiled in hydrological order and grouped by US Geological Survey Hydrologic Unit Code (HUC) basin and smaller watersheds in the Chemung River Basin (see Figure 2). An outline of the specific waterbodies in each watershed is presented at the beginning of each Watershed Section. Data sheets are included for each waterbody that has been assessed; that is, waterbodies listed as ***Impaired Segments, Segments with Minor Impacts, Threatened Waters***, waters with water quality impacts ***Needing Verification***, or waterbodies with ***No Known Impact***. ***UnAssessed*** waterbodies are listed in the hydrologic outline of waterbodies at the front of each Watershed Section; however, separate data sheets for these segments are not included.

The information outlined on the data sheets includes *Waterbody Location Information, Water Quality Problem/Issue Information, Resolution/Management Information* and *Further Details*. More explicit explanations of these data fields are outlined in Appendix B - Waterbody Inventory Data Sheet Background Information.

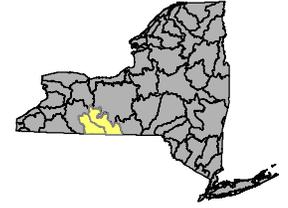
Note also that the inventory reflects the best available water quality information at the time of publication. Water quality information may be added or modified subsequent to the preparation of this edition of the Waterbody Inventory and Priority Waterbodies List. When water quality information is updated, the corresponding waterbody segment data sheet is issued with an appropriate revision date. The information on more recently revised data sheets supercedes the information in this listing.

In addition to the more detailed data sheets, a *Summary Listing of Priority Waters* provides a brief overview of all ***Priority Waterbodies*** (i.e., *Impaired Segments, Segments with Minor Impacts* and/or *Threatened Waters*). This listing follows the Data Sheet Section of the report.

Cross-referenced lists of the waterbody data sheets are included at the end of the report as Appendix C - County Index of Data Sheet Segments and Appendix D - Alphabetic Index of Data Sheet Segments.

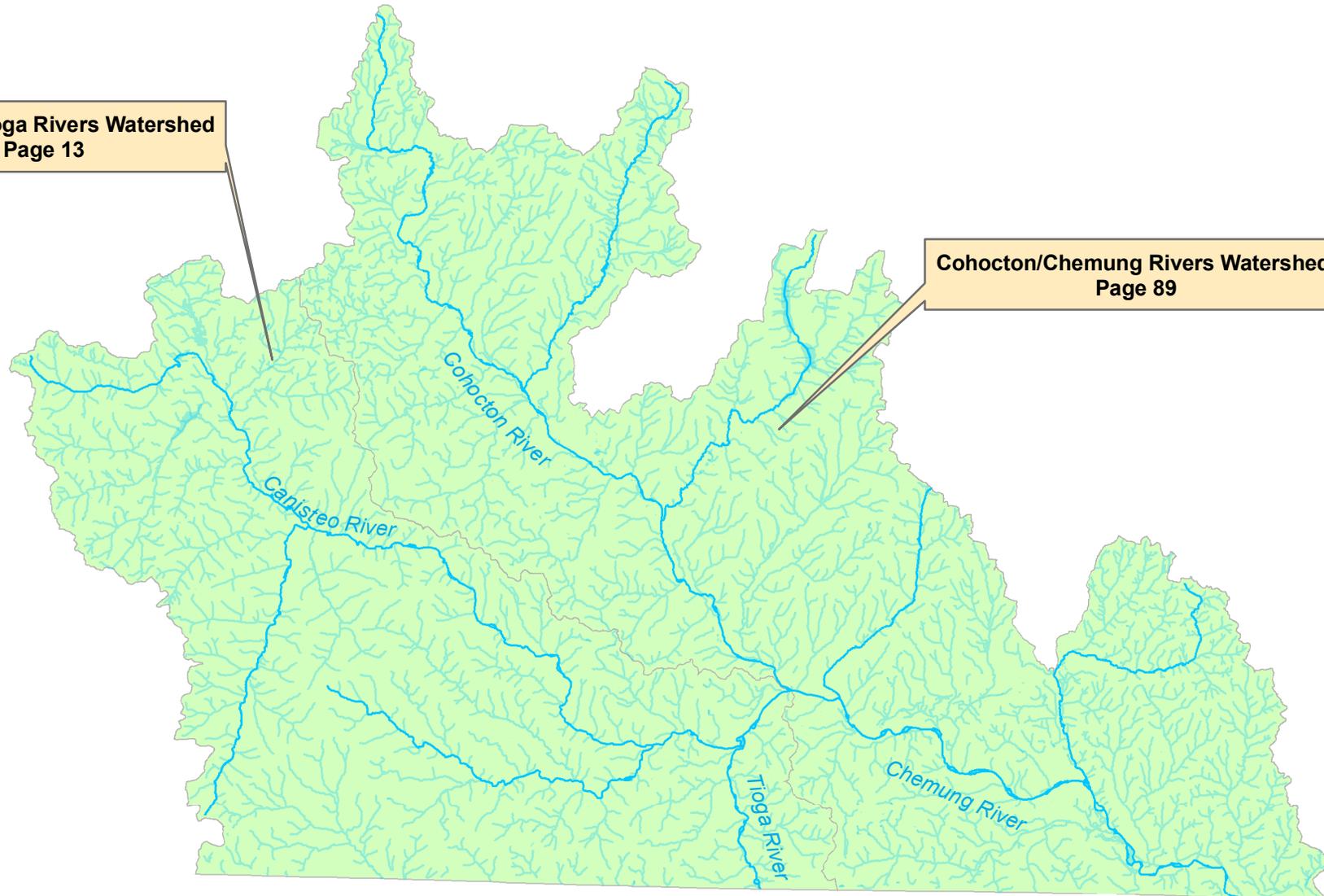
Figure 3

Chemung River Drainage Basin Watersheds



Canisteo/Tioga Rivers Watershed
Page 13

Cohocton/Chemung Rivers Watershed
Page 89



Waterbody Inventory for The Chemung/Cohocton River Watershed

Water Index Number	Waterbody Segment	Category
Chemung River, Main Stem, PA State Line to Corning		
Pa 3 (portion 1)	Chemung River, Lower, Main Stem (0501-0014)	Threatened
Pa 3 (portion 2)	Chemung River, Lower, Main Stem (0501-0015)	NoKnownImpact
Pa 3 (portion 3)	Chemung River, Upper, Main Stem (0501-0016)	NoKnownImpact
Pa 3 (portion 4)	Chemung River, Upper, Main Stem (0501-0017)	NoKnownImpact
Tribs to Lower Chemung River, PA State Line to Elmira		
Pa 3- 1 thru 5	Minor Tribs to Lower Chemung River (0501-0018)	UnAssessed
Pa 3- 6	Wynkoop Creek, Lower, and tribs (0501-0019)	NoKnownImpact
Pa 3- 6	Wynkoop Creek, Upper, and tribs (0501-0020)	NoKnownImpact
Pa 3- 7 thru 12	Minor Tribs to Chemung River (0501-0021)	UnAssessed
Pa 3-14	Baldwin Creek, Lower, and tribs (0501-0022)	NoKnownImpact
Pa 3-14	Baldwin Creek, Upper, and tribs (0501-0023)	NoKnownImpact
Pa 3-14- 2	Goldsmith Creek and tribs (0501-0024)	UnAssessed
Pa 3-14-21-P16b	Beaver Pond (0501-0025)	UnAssessed
Pa 3-16	Bentley Creek and tribs (0501-0026)	NoKnownImpact
Pa 3-17 thru 27 (selected)	Minor Tribs to Lower Chemung River (0501-0027)	UnAssessed
Pa 3-18	Seeley Creek and minor tribs (0501-0013)	Threatened
Pa 3-18- 1	South Creek and tribs (0501-0028)	NoKnownImpact
Pa 3-18-10	Mudlick Creek and tribs (0501-0029)	NoKnownImpact
Newtown Creek Watershed		
Pa 3-28	Newtown Creek, Lower, and tribs (0501-0003)	MinorImpacts
Pa 3-28	Newtown Creek, Middle, and minor tribs (0501-0007)	NoKnownImpact
Pa 3-28	Newtown Creek, Upper, and tribs (0501-0030)	NoKnownImpact
Pa 3-28- 4-P12	Weyer/Brick Pond (0501-0031)	UnAssessed
Pa 3-28- 6	Diven/Heller Creek and tribs (0501-0032)	MinorImpacts
Pa 3-28- 6-...P13a	Kopper Pond (0501-0012)	Impaired Seg
Pa 3-28- 6-P14	Eldridge Lake (0501-0033)	UnAssessed
Pa 3-28-10	Latta Creek and tribs (0501-0034)	UnAssessed
Pa 3-28-13	North Branch Newtown Creek and tribs (0501-0035)	Need Verific
Pa 3-28-19	Jackson Creek and tribs (0501-0036)	UnAssessed
Tribs to Upper Chemung River, Elmira to Corning		
Pa 3-29	Hoffman Brook, Lower, and tribs (0501-0037)	UnAssessed
Pa 3-29	Hoffman Brook, Upper, and tribs (0501-0038)	UnAssessed
Pa 3-29-P19	Elmira Reservoir (0501-0039)	UnAssessed
Pa 3-30 thru 56 (selected)	Minor Tribs to Chemung River (0501-0040)	NoKnownImpact
Pa 3-36	Hendy Creek and tribs (0501-0041)	NoKnownImpact

...Chemung/Cohocton River Watershed

Water Index Number	Waterbody Segment	Category
Tribs to Upper Chemung River, Elmira to Corning (con't)		
Pa 3-39	Sing Sing Creek, Lower, and minor tribs (0501-0042)	NoKnownImpct
Pa 3-39	Sing Sing Creek, Upper, and tribs (0501-0043)	NoKnownImpct
Pa 3-39- 1	Cuthrie Run/Breed Hollow Brook and tribs (0501-0044)	UnAssessed
Pa 3-42	Winfield Creek and tribs (0501-0045)	UnAssessed
Pa 3-47	Whisky Creek and tribs (0501-0046)	NoKnownImpct
Pa 3-52	Post Creek, Lower, and tribs (0501-0047)	NoKnownImpct
Pa 3-52	Post Creek, Upper, and tribs (0501-0004)	NoKnownImpct
Pa 3-55	Cutler Creek and tribs (0501-0048)	UnAssessed
Lower Cohocton River Watershed		
Pa 3-58 (portion 1)	Cohocton River, Lower, and minor tribs (0502-0010)	Need Verific
Pa 3-58 (portion 2)	Cohocton River, Middle, and minor tribs (0502-0017)	Threatened
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 3-58-15-P47- 4-P48-	Tribs to Waneta Lake (0502-0029)	UnAssessed
Pa 3-58-15-P47- 6	Tobehanna Creek and tribs (0502-0007)	Need Verific
Pa 3-58-18	Smith Run/Freeman Hollow Brook and tribs (0502-0030)	UnAssessed
Pa 3-58-19	Stocking Creek and tribs (0502-0016)	NoKnownImpct
Pa 3-58-20-P51	Lake Salubria (0502-0011)	Impaired Seg
Pa 3-58-27	Campbell Creek, Lower, and tribs (0502-0031)	NoKnownImpct
Pa 3-58-27	Campbell Creek, Upper, and tribs (0502-0032)	NoKnownImpct
Pa 3-58-28	Fivemile Creek, Lower, and tribs (0502-0033)	MinorImpacts
Pa 3-58-28	Fivemile Creek, Upper, and tribs (0502-0034)	NoKnownImpct
Upper Cohocton River Watershed		
Pa 3-58 (portion 3)	Cohocton River, Middle, and minor tribs (0502-0003)	Threatened
Pa 3-58 (portion 4)	Cohocton River, Upper, and minor tribs (0502-0018)	Threatened
Pa 3-58-29-13-P63	Mud Lake (0502-0035)	UnAssessed
Pa 3-58-31	Goff Creek and tribs (0502-0013)	NoKnownImpct
Pa 3-58-31- 7-P66	Smith Pond (0502-0012)	Impaired Seg
Pa 3-58-31-10-P68	Demmons Pond (0502-0015)	MinorImpacts

...Chemung/Cohocton River Watershed

Water Index Number	Waterbody Segment	Category
Upper Cohocton River Watershed (con't)		
Pa 3-58-32	Salmon Creek and tribs (0502-0036)	UnAssessed
Pa 3-58-34-P71	Loucks Pond (0502-0037)	UnAssessed
Pa 3-58-35	Tenmile Creek and tribs (0502-0038)	NoKnownImpct
Pa 3-58-38	Neil Creek and tribs (0502-0014)	NoKnownImpct
Pa 3-58-38..P79	Loon Lake (0502-0039)	Threatened
Pa 3-58-39	Twelvemile Creek and tribs (0502-0040)	MinorImpacts
Pa 3-58-45	Davis Hollow Creek and tribs (0502-0041)	UnAssessed

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Chemung River, Lower, Main Stem (0501-0014)

Threatened

Waterbody Location Information

Revised: 05/09/2007

Water Index No:	Pa 3 (portion 1)	Drain Basin:	Chemung River
Hydro Unit Code:	02050105/270	Str Class:	A
Waterbody Type:	River	Reg/County:	8/Chemung Co. (8)
Waterbody Size:	10.3 Miles	Quad Map:	WELLSBURG (M-14-4)
Seg Description:	from Waverly to Wellsburg		

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

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

Type of Pollutant(s)

Known: ---
Suspected: ---
Possible: PATHOGENS, Pesticides

Source(s) of Pollutant(s)

Known: ---
Suspected: ---
Possible: AGRICULTURE, Municipal

Resolution/Management Information

Issue Resolvability:	3 (Strategy Being Implemented)	
Verification Status:	5 (Management Strategy has been Developed)	
Lead Agency/Office:	ext/muni	Resolution Potential: High
TMDL/303d Status:	n/a	

Further Details

Drinking water use of this portion of the Chemung River Reservoir is considered to be threatened due to the susceptibility of the water supply to possible contamination from activities and sources in the watershed. Class A surface waters of the state that serve as the source of potable water for significant populations are typically categorized as threatened.

The New York State Health Department Source Water Assessment for the water supply of the Elmira Water Board (including the Chemung River) found an elevated susceptibility to contamination for this source of drinking water. The amount of agricultural lands in the assessment area results in elevated potential for protozoa and pesticides contamination. While there are some facilities present, permitted discharges do not likely represent an important threat to source water quality based on their density in the assessment area. However, it is appears that the total amount of wastewater discharged to surface water in this assessment area is high enough to further raise the potential for contamination (particularly for protozoa). There are no noteworthy contamination threats associated with other discrete contaminant sources. Finally, it should be noted that relatively high flow velocities make river drinking water supplies highly sensitive to existing and new sources of microbial contamination. (NYSDOH, SWAP, 2006)

The Chemung River Provides about 69% of the raw water distributed to 65,000 residents of Elmira, Horseheads and

surrounding communities by the Elmira Water Board. The daily average of water used is 6.1 million gallons per day. (Elmira Water Board, 2006 Drinking Water Report, March 2007)

NYSDEC Rotating Intensive Basin Studies (RIBS) Routine Network monitoring of the Chemung River in Chemung, Chemung County, is conducted annually at the Route 427 bridge. In addition, when RIBS Intensive Network monitoring is conducted in a targeted basin every five years, additional sampling methods are employed to gain an overall assessment of water quality. The most recent assessment was conducted in 2003. In addition to water column chemistry, this Intensive Network sampling includes sediment assessment, macroinvertebrate tissue analysis and toxicity testing, as well as macroinvertebrate community analysis. Biological (macroinvertebrate) sampling indicated non-impacted water quality conditions. The fauna showed some indications of nutrient enrichment by nonpoint agricultural sources, but the sample contained many mayflies, stoneflies and caddisflies. Water column sampling revealed total phenols and iron to be parameters of concern that exceed assessment criteria in about 15% of samples collected between 1998 and 2003. In the case of iron, this substance is considered to be naturally occurring and not a source of water quality impact. In the case of Total Phenols, analytical detection limitations may influence the frequency of results over the criterion. Testing of the water revealed no aquatic toxicity. Sediment analyses found nickel to be elevated and some indications of slight toxicity, but not such that would result in chronic impacts to aquatic life. (DEC/DOW, BWAM/RIBS, June 2005)

A biological (macroinvertebrate) assessment of Chemung River in Chemung (at Route 17W) was also conducted in 2002 as part of the RIBS Biological Screening effort. Sampling results indicated non-impacted water quality conditions. The fauna showed some indications of nutrient enrichment by nonpoint agricultural sources, but the sample contained many mayflies, stoneflies and caddisflies. Previous sampling at this site in 1984, 1991 and 1998 indicated slight impacts. Continued monitoring of this site is recommended in order to confirm this apparent improvement. A site farther downstream below Chemung (at Route 17) was last sampled in 1997 and revealed non-impacted water quality at the time. The fauna was diverse and well-balanced and dominated by mayflies and caddisflies with stoneflies also present. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the main stem of the river from the NY-Pa state line near Waverly to Bentley Creek (-16) in Wellsburg. The waters of this portion of the stream are Class A.

Chemung River, Lower, Main Stem (0501-0015)

NoKnownImpct

Waterbody Location Information

Revised: 01/18/2007

Water Index No: Pa 3 (portion 2)	Drain Basin: Chemung River	
Hydro Unit Code: 02050105/260	Str Class: C	Chemung River
Waterbody Type: River	Reg/County: 8/Chemung Co. (8)	
Waterbody Size: 9.2 Miles	Quad Map: ELMIRA (M-13-3)	
Seg Description: from Wellsburg to Elmira		

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

A biological (macroinvertebrate) assessment of Chemung River below Elmira (above Big Island) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. These results were similar to sampling results in 1992. Prior to 1992 impacts from inadequate wastewater treatment discharges from the Elmira WWTP were evident. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the main stem of the river from Bentley Creek (-16) in Wellsburg to Hoffman Brook (-29) in Elmira. The waters of this portion of the stream are Class C.

Chemung River, Upper, Main Stem (0501-0016)

NoKnownImpct

Waterbody Location Information

Revised: 01/18/2007

Water Index No: Pa 3 (portion 3)	Drain Basin: Chemung River	
Hydro Unit Code: 02050105/260	Str Class: A	Chemung River
Waterbody Type: River	Reg/County: 8/Chemung Co. (8)	
Waterbody Size: 11.5 Miles	Quad Map: SEELEY CREEK (M-13-4)	
Seg Description: from Elmira to near Big Flats		

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

While no recent sampling has been conducted within this reach, biological (macroinvertebrate) assessments of Chemung River just below the reach below Elmira (at Big Island) and just above the reach in South Corning (at Route 17) were conducted in 2002. Sampling results at both sites indicated non-impacted water quality conditions. The downstream sampling results were similar to sampling results in 1992. Prior to 1992 impacts from inadequate wastewater treatment discharges from the Elmira WWTP were evident. At the South Corning site, conditions were assessed as slightly impacted in 1997-98, but non-impacted prior to that in 1979, 1984 and 1992. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the main stem of the river from Hoffman Brook (-29) in Elmira to River Road Bridge near Big Flats. The waters of this portion of the stream are Class A.

Chemung River, Upper, Main Stem (0501-0017)

NoKnownImpct

Waterbody Location Information

Revised: 01/18/2007

Water Index No: Pa 3 (portion 4)	Drain Basin: Chemung River	
Hydro Unit Code: 02050105/140	Str Class: C	Chemung River
Waterbody Type: River	Reg/County: 8/Steuben Co. (51)	
Waterbody Size: 9.9 Miles	Quad Map: SEELEY CREEK (M-13-4)	
Seg Description: from near Big Flats to Painted Post		

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

A biological (macroinvertebrate) assessment of Chemung River in South Corning (at Route 17) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. Conditions at this site were assessed as slightly impacted in 1997-98, but non-impacted prior to that in 1979, 1984 and 1992. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the main stem of the river from River Road Bridge near Big Flats to confluence of Tioga (-57) and Cohocton (-58) Rivers. The waters of this portion of the stream are Class C.

Wynkoop Creek, Lower, and tribs (0501-0019)

NoKnownImpct

Waterbody Location Information

Revised: 01/18/2007

Water Index No: Pa 3- 6
Hydro Unit Code: 02050105/290 **Str Class:** C
Waterbody Type: River
Waterbody Size: 28.2 Miles
Seg Description: stream and tribs, from mouth to below Beantown

Drain Basin: Chemung River
Reg/County: 8/Chemung Co. (8)
Quad Map: WAVERLY (M-14-3)

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

A biological (macroinvertebrate) assessment of Wynkoop Creek in Chemung (at Route 17) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. The sample showed signs of siltation, but all metric values were within the range signifying non-impacted water quality. (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 the result of degraded habitat conditions rather than water quality conditions. Water chemistry results did not reveal any impacts and the biological sample contained many sensitive species. (SRBC, March 2007)

This segment includes the portion of the stream and all tribs from the mouth to/including unnamed trib (-11) below Beantown. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Mallory Creek (-7), are also Class C. Upper Wynkoop Creek is listed separately.

Wynkoop Creek, Upper, and tribs (0501-0020)

NoKnownImpct

Waterbody Location Information

Revised: 01/23/2007

Water Index No: Pa 3- 6
Hydro Unit Code: 02050105/290 **Str Class:** C(T)
Waterbody Type: River
Waterbody Size: 37.7 Miles
Seg Description: stream and tribs, above Beantown

Drain Basin: Chemung River
Reg/County: 8/Chemung Co. (8)
Quad Map: WELLSBURG (M-14-4)

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

A biological (macroinvertebrate) assessment of Wynkoop Creek in Beantown (at Wynkoop Creek Road) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. While the headwater nature of the stream likely contributed to some low metric values, some minor nonpoint source nutrient enrichment was indicated and diatoms were abundant on the stream substrate. However, nutrient biotic evaluation determined these effects on the fauna to be minor. Aquatic life 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, June 2005)

This segment includes the portion of the stream and all tribs above unnamed trib (-11) below Beantown. The waters of this portion of the stream are Class C,C(T),C(TS). Tribs to this reach/segment are Class C,C(TS). Lower Wynkoop Creek is listed separately.

Baldwin Creek, Lower, and tribs (0501-0022)

NoKnownImpct

Waterbody Location Information

Revised: 01/19/2007

Water Index No: Pa 3-14
Hydro Unit Code: 02050105/250 **Str Class:** C*
Waterbody Type: River
Waterbody Size: 12.7 Miles
Seg Description: stream and tribs, from mouth to East Elmira

Drain Basin: Chemung River
Reg/County: 8/Chemung Co. (8)
Quad Map: WELLSBURG (M-14-4)

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

A biological (macroinvertebrate) assessment of Baldwin Creek in East Elmira (at Lowman Road/Route 2) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. The sample was characterized by diverse a community dominated by mayflies and caddisflies. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs from the mouth to Goldsmith Creek (-3) in East Elmira. The waters of this portion of the stream are Class C from the mouth to the Ashland-Elmira Town line, Class B from the Ashland-Elmira Town line to unnamed trib (-2), and Class C for the remainder of the reach. Tribs to this reach/segment, including Hoffman Hollow Brook (-1), are Class C. Goldsmith Creek and Upper Baldwin Creek are listed separately.

Baldwin Creek, Upper, and tribs (0501-0023)

NoKnownImpct

Waterbody Location Information

Revised: 01/19/2007

Water Index No:	Pa 3-14	Drain Basin:	Chemung River
Hydro Unit Code:	02050105/250	Str Class:	C
Waterbody Type:	River	Reg/County:	8/Chemung Co. (8)
Waterbody Size:	42.3 Miles	Quad Map:	WELLSBURG (M-14-4)
Seg Description:	stream and tribs, above East Elmira		

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

A biological (macroinvertebrate) assessment of Baldwin Creek in Lowman (at Route 60) was conducted in 2002. Field sampling results indicated non-impacted water quality conditions. The sample satisfied field screening criteria and was returned to the stream. A laboratory-processed sample taken farther downstream in East Elmira was also determined to be non-impacted. Both samples revealed diverse communities dominated by mayflies and caddisflies. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs above Goldsmith Creek (-3) in East Elmira. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment, including Elston Hollow Brook (-7), are Class C. Goldsmith Creek and Lower Baldwin Creek are listed separately.

Bentley Creek and tribs (0501-0026)

NoKnownImpct

Waterbody Location Information

Revised: 01/19/2007

Water Index No:	Pa 3-16	Drain Basin:	Chemung River
Hydro Unit Code:	02050105/240	Str Class:	C
Waterbody Type:	River	Reg/County:	8/Chemung Co. (8)
Waterbody Size:	10.9 Miles	Quad Map:	WELLSBURG (M-14-4)
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/a	Resolution Potential: n/a
TMDL/303d Status:	n/a	

Further Details

A biological (macroinvertebrate) assessment of Bentley Creek in Wellsburg (at Route 427) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. The fauna reflected some influences of nutrient enrichment and siltation, but most metrics were within the range of non-impacted water quality. In spite of some minor effects on the fauna, aquatic life support is considered to be fully supported in the river, and there are no other apparent water quality impacts. (DEC/DOW, BWAM/SBU, June 2005)

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

Seeley Creek and minor tribs (0501-0013)

Threatened

Waterbody Location Information

Revised: 02/07/2007

Water Index No: Pa 3-18	Drain Basin: Chemung River	
Hydro Unit Code: 02050105/200	Str Class: C	Chemung River
Waterbody Type: River	Reg/County: 8/Chemung Co. (8)	
Waterbody Size: 38.7 Miles	Quad Map: ELMIRA (M-13-3)	
Seg Description: entire stream and selected tribs		

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

Use(s) Impacted Habitat/Hydrology	Severity Threatened	Problem Documentation Known
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Type of Pollutant(s)

Known: WATER LEVEL/FLOW, Silt/Sediment
Suspected: ---
Possible: ---

Source(s) of Pollutant(s)

Known: HYDRO MODIFICATION (due to road construction), STREAMBANK EROSION
Suspected: Habitat Modification
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

Hydrologic/habitat protection in Seeley Creek is threatened by extensive streambank erosion that results in bank failures and significant sediment loads entering the stream.

Hydrologic modifications to the Seeley Creek stream channel are thought to have reduced the flow capacity of the creek during high flow periods. These modifications involved the filling in of portions of the channel during highway construction along the creek in the 1960s, and disposal of property damage debris related the Hurricane Agnes in 1972. Because of reduced carrying capacity, the stream eventually carved out a new channel. In doing so it undercut a hillside and streambanks, resulting in the subsequent collapse of the streambank and depositing an estimated 40,000 cubic yards of sand and gravel into the stream. NYS DOT tried to address the problem in 1998 by lining the stream with rip-rap, but the undercutting appears to be continuing. In some areas the property lines of several residences have receded as much as 60 feet, on-site septic systems have been exposed and some buildings/structures have fallen into the creek during high runoff events. Continuing streambank erosion and instability is considered a threat to the biological community and fishery. (Chemung County WQCC, January 2006)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Seeley Creek in Southport,

Chemung County, (at Route 14) was conducted in 2003. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. During this sampling the biological (macroinvertebrate) assessment indicated non-impacted water quality conditions. Clean-water mayflies dominated the sample, although some nutrient enrichment was also indicated. Crayfish collected for tissue analysis showed no metals, organochlorine pesticides, PCBs, or PAHs above levels of concern. A fish community assessment reflected very good water quality. The most numerous species were central stonerollers, longnose dace, cutlips minnow, and fantail darters. Also present were banded darter, tessellated darter, mottled sculpin, green sunfish, rock bass, and brook stickleback. Water column sampling found no parameters of concern, however mercury was detected in one of the 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) assessments of Seeley Creek in Southport and in Seeley Creek (at Route 328) were conducted in 2002 as part of the RIBS Biological Screening effort. Sampling results indicated non-impacted water quality conditions. The downstream Southport site was also sampled in 1997 and 1998 and was found to be non-impacted in those years as well. The Seeley Creek site was field assessed as non-impacted in 2002. In 1998, this site was assessed as slightly impacted in Seeley Creek and non-impacted in nearby Webb Mills. These assessments corresponds with SRBC sampling conducted in 1997 (Traver, 1998). The minor/occasional biological impacts that do exist are most likely due to significant habitat alteration, poor substrate quality and/or overall instability than due to problems related to water quality. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the entire stream and selected/smaller tribs. The waters of the stream are Class C,C(T). Tribs to this reach/segment, including Dry Run (-6) and Bird Creek (-7), are Class C. South Creek (-1) and Mudlick Creek (-10) are listed separately. Tribs Pa 6 thru Pa 8 are also included in this segment.

South Creek and tribs (0501-0028)

NoKnownImpct

Waterbody Location Information

Revised: 01/19/2007

Water Index No: Pa 3-18-1
Hydro Unit Code: 02050105/200 **Str Class:** C
Waterbody Type: River
Waterbody Size: 20.6 Miles
Seg Description: entire stream and tribs

Drain Basin: Chemung River
Reg/County: 8/Chemung Co. (8)
Quad Map: ELMIRA (M-13-3)

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

A biological (macroinvertebrate) assessment of South Creek in Southport (at Route 26) was conducted in 2002. Field sampling results indicated non-impacted water quality conditions. The sample satisfied field screening criteria and was returned to the stream. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the entire stream and all tribs (within NYS). The waters of the stream are Class C. Tribs to this reach/segment, including Christian Hollow Brook (-1), are Class C,C(T). Tribs Pa 4 thru Pa 5 are also included in this segment.

Mudlick Creek and tribs (0501-0029)

NoKnownImpct

Waterbody Location Information

Revised: 01/19/2007

Water Index No:	Pa 3-18-10	Drain Basin:	Chemung River
Hydro Unit Code:	02050105/200	Str Class:	C
Waterbody Type:	River	Reg/County:	8/Chemung Co. (8)
Waterbody Size:	39.6 Miles	Quad Map:	SEELEY CREEK (M-13-4)
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/a	Resolution Potential: n/a
TMDL/303d Status:	n/a	

Further Details

A biological (macroinvertebrate) assessment of Mudlick Creek in Seeley Creek (at Kinner Hill Road) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. Previous sampling at this site in 1998 revealed slight impacts. (DEC/DOW, BWAM/SBU, June 2005)

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

Newtown Creek, Lower, and tribs (0501-0003)

MinorImpacts

Waterbody Location Information

Revised: 02/05/2007

Water Index No:	Pa 3-28	Drain Basin:	Chemung River
Hydro Unit Code:	02050105/170	Str Class:	C
Waterbody Type:	River	Reg/County:	8/Chemung Co. (8)
Waterbody Size:	15.8 Miles	Quad Map:	ELMIRA (M-13-3)
Seg Description:	stream and selected tribs, mouth to Elmira Hgts N		

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

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Stressed	Known
Habitat/Hydrology	Stressed	Possible

Type of Pollutant(s)

Known: ---
 Suspected: NUTRIENTS, UNKNOWN TOXICITY, Silt/Sediment
 Possible: ---

Source(s) of Pollutant(s)

Known: ---
 Suspected: URBAN/STORM RUNOFF, Agriculture
 Possible: Comb. Sewer Overflow, Habitat Modification

Resolution/Management Information

Issue Resolvability:	1 (Needs Verification/Study (see STATUS))	
Verification Status:	3 (Cause Identified, Source Unknown)	
Lead Agency/Office:	ext/WQCC	Resolution Potential: Medium
TMDL/303d Status:	n/a	

Further Details

Aquatic life support in this portion of Newtown Creek is known to experience minor impacts due to nutrient enrichment and aquatic toxicity. Likely sources of the impacts include nonpoint urban runoff and nutrient loadings from upstream rural/agricultural parts of the watershed.

A biological (macroinvertebrate) assessment of Newtown Creek in Elmira (at Route 352) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. Impact Source Determination indicated toxicity to be the primary factor affecting water quality, with siltation also contributing to the impacts. Nutrient biotic evaluation indicates nutrient enrichment and eutrophic condition in the stream. Similar results were found during sampling of this site in 1991, 1997 and 1998. (DEC/DOW, BWAM/SBU, June 2005)

Hydrologic/habitat modification may also be impacting the stream. There are four flood control dams in the watershed and berms and levees limits the floodplain in Elmira and Horseheads. Channel adjustments/disturbances and flow modification may contribute excessive sediment loads. (Steuben County WQCC, August 2004) Previously, a gravel mining operation, Benchmark New York (NY 006 8268) formerly General Crushed Stone, was cited as a likely source

of siltation in the stream. However a reclamation effort in 2004 reduced the size of the site to one-tenth its previous size, leaving only a small parcel (less than 10 acres) located 2400 feet from the stream actively mined. Consequently, it is unlikely this site has any significant impact on water quality. (DEC/Mineral Resources, Reg 8, January 2007)

This segment includes the portion of the stream and selected/smaller tribs from the mouth to/including Beaver Brook (-11) in Elmira Heights North. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment, including Beaver Brook (-11), are also Class C,C(T). Diven/Heller Creek (-6), Latta Creek (-10) and Middle/Upper Newtown Creek are listed separately.

Newtown Creek, Middle, and minor tribs (0501-0007) NoKnownImpct

Waterbody Location Information

Revised: 01/19/2007

Water Index No: Pa 3-28
Hydro Unit Code: 02050105/170 **Str Class:** C
Waterbody Type: River
Waterbody Size: 19.3 Miles
Seg Description: stream and selected tribs, Elmira Hgts N to Breesport

Drain Basin: Chemung River
Reg/County: 8/Chemung Co. (8)
Quad Map: HORSEHEADS (M-13-2)

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

A biological (macroinvertebrate) assessment of Newtown Creek in Horseheads (at East Franklin Street) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. Siltation is the likely cause of these impacts. In spite of some minor effects on the fauna, aquatic life support is considered to be fully supported in the river, and there are no other apparent water quality impacts. (DEC/DOW, BWAM/SBU, June 2005)

Previous assessments of the stream included some concerns about agricultural activities and development impacts on the fishery. However farming in the watershed is on the decline and while some development is occurring there have not been noticeable impacts from construction on the stream. These impacts would be of greater concern to trout waters. And while some tribs as well as upstream reaches of the creek are designated a trout waters, this reach of Newtown Creek is a warmwater fishery. DEC Fisheries staff have reported in the past that extending the trout classification downstream of the hamlet of Erin would be difficult.

This segment includes the portion of the stream and selected/smaller tribs from Beaver Brook (-11) in Elmira Heights North to Jackson Creek (-19) in Breesport. The waters of this portion of the stream are Class C. Tribs to this reach/segment are Class C,C(T),C(TS). North Branch Newtown Creek (-13), Jackson Creek and Lower/Upper Newtown

Creek are listed separately.

Newtown Creek, Upper, and tribs (0501-0030)

NoKnownImpct

Waterbody Location Information

Revised: 01/19/2007

Water Index No: Pa 3-28	Drain Basin: Chemung River
Hydro Unit Code: 02050105/170	Str Class: C
Waterbody Type: River	Reg/County: 8/Chemung Co. (8)
Waterbody Size: 40.2 Miles	Quad Map: ERIN (M-14-1)
Seg Description: stream and tribs, above Breesport	

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

A biological (macroinvertebrate) assessment of Newtown Creek in Breesport (at Church Road) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and selected/smaller tribs above Jackson Creek (-19) in Breesport. The waters of this portion of the stream are Class C,C(T),C(TS). Tribs to this reach/segment are Class C. Jackson Creek and Lower/Middle Newtown Creek are listed separately.

Diven/Heller Creek and tribs (0501-0032)

MinorImpacts

Waterbody Location Information

Revised: 01/19/2007

Water Index No: Pa 3-28- 6	Drain Basin: Chemung River	
Hydro Unit Code: 02050105/170	Str Class: C	Chemung River
Waterbody Type: River	Reg/County: 8/Chemung Co. (8)	
Waterbody Size: 12.4 Miles	Quad Map: ELMIRA (M-13-3)	
Seg Description: entire stream and tribs		

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: UNKNOWN TOXICITY
Possible: Metals (lead), Priority Organics (PAHs)

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))	
Verification Status: 2 (Problem Verified, Cause Unknown)	
Lead Agency/Office: DOW/BWAM	Resolution Potential: Medium
TMDL/303d Status: n/a	

Further Details

Aquatic life support and recreation uses in Diven Creek are known to experience minor impacts due to unspecified toxicity in the stream. The most likely source of the impacts is industrial sources in the area.

A biological (macroinvertebrate) assessment of Diven Creek in Elmira Heights (near the mouth) was conducted in 1997. Sampling results indicated slightly impacted water quality conditions, however the assessment showed the impact to be near the range of moderate. Impact Source Determination revealed toxicity to be the primary factor affecting water quality. Crayfish were collected and tissue analysis revealed lead and PAHs to be parameters of concern. (DEC/DOW, BWAM/SBU, June 2005)

A number of hazardous waste site have been identified and are being remediated in this urban/industrial area. The most significant of these is the Westinghouse-Koppers Pond hazardous waste site (Site No. 8-08-007). The main site features include the 8 acre Koppers Pond located upstream of and likely influencing this stream. The former Westinghouse facility manufactured television tubes and electronic imaging equipment. Polychlorinated biphenyls (PCBs) and metals present in the industrial wastewater have impacted sediments in portions of the industrial drainage way and Koppers Pond. In addition to PCBs, lead, chromium, copper and zinc are primary contaminants of concern at the site.

Investigations indicate that contaminants contained in industrial wastewater have impacted sediments in the Koppers Pond and industrial drainage way areas. The industrial drainage way has been remediated as part of the remedy for the Westinghouse facility. Exceedence of guidance values occur in pond sediments but additional studies are warranted to determine the full extent of the contamination in the pond. The site presents a significant environmental threat due to the ongoing releases from the contaminated sediments in the Pond. PCBs were detected in all fish samples taken from the Pond. The migration of contaminated groundwater from this site contributed to the forced closure of the Kentucky Avenue municipal wellfield. (DEC/DER, Environmental Site Remediation Database, 2006)

The Kentucky Avenue Wellfield (Site No. 8-08-0127) site is located in an industrial portion of the Village of Horseheads, Chemung County, NY. The site has many components including the active facilities, Westinghouse, Cutler-Hammer and Toshiba. It was shut down in 1980 due to high levels of trichloroethylene (TCE). In 1983 the site was added to the National Priorities List and a Remedial Investigation/Feasibility Study (RI/FS) was completed in 1986 under the Federal Superfund program. A supplemental RI/FS completed in 1990 identified the Westinghouse plant as the principal source of contamination. Some remedial work at the site has been completed, but further remedial options for Koppers Pond are the focus of ongoing discussions. (DEC/DER, Environmental Site Remediation Database, 2006)

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.

Kopper Pond (0501-0012)

Impaired Seg

Waterbody Location Information

Revised: 01/23/2007

Water Index No: Pa 3-28- 6-...P13a
Hydro Unit Code: 02050105/170 **Str Class:** C
Waterbody Type: Lake
Waterbody Size: 10.0 Acres
Seg Description: entire lake
Drain Basin: Chemung River
Reg/County: 8/Chemung Co. (8)
Quad Map: ELMIRA (M-13-3)

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

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

Type of Pollutant(s)

Known: PRIORITY ORGANICS (PCBs)
Suspected: Metals
Possible: - - -

Source(s) of Pollutant(s)

Known: INDUSTRIAL (Westinghouse), TOX/CONTAM. SEDIMENT
Suspected: Landfill/Land Disp. (Horseheads Landfill)
Possible: - - -

Resolution/Management Information

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

Further Details

Fish consumption and recreational uses in Koppers Pond is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of carp because of elevated PCB levels. The source of PCBs and other pollutants is industrial discharges. The advisory for this lake was first issued prior to 1998-99. (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

The Westinghouse-Koppers Pond hazardous waste site (Site No. 8-08-007) is located in an urban/industrial area of Elmira Heights/Horseheads. The main site features include the 8 acre Koppers Pond and a industrial drainage way. The drainage way receives wastewater from active manufacturing facilities and drains into the pond. The former Westinghouse facility manufactured television tubes and electronic imaging equipment. Polychlorinated biphenyls (PCBs) and metals present in the industrial wastewater have impacted sediments in portions of the industrial drainage way and Koppers Pond. In addition to PCBs, lead, chromium, copper and zinc are primary contaminants of concern at the site. Investigations indicate that contaminants contained in industrial wastewater have impacted sediments in the Koppers Pond and industrial drainage way areas. The industrial drainage way has been remediated as part of the remedy

for the Westinghouse facility. Exceedence of guidance values occur in pond sediments but additional studies are warranted to determine the full extent of the contamination in the pond. The site presents a significant environmental threat due to the ongoing releases from the contaminated sediments in the Pond. PCBs were detected in all fish samples taken from the Pond. The migration of contaminated groundwater from this site contributed to the forced closure of the Kentucky Avenue municipal wellfield. (DEC/DER, Environmental Site Remediation Database, 2006)

The Kentucky Avenue Wellfield (Site No. 8-08-0127) site is located in an industrial portion of the Village of Horseheads, Chemung County, NY. The site has many components including the active facilities, Westinghouse, Cutler-Hammer and Toshiba. It was shut down in 1980 due to high levels of trichloroethylene (TCE). In 1983 the site was added to the National Priorities List and a Remedial Investigation/Feasibility Study (RI/FS) was completed in 1986 under the Federal Superfund program. A supplemental RI/FS completed in 1990 identified the Westinghouse plant as the principal source of contamination. Remedial work at the site has include the excavation of the drainageway excavation to Koppers Pond, which was completed in December of 2002, and restoration work completed in 2003. Further remedial options for Koppers Pond are the focus of ongoing discussions. (DEC/DER, Environmental Site Remediation Database, 2006)

The Horseheads landfill (Site No. 8-08-011) may also contribute to the contamination of Koppers Pond. This inactive landfill is near an unnamed tributary to Diven Creek. The USEPA completed a Site Investigation report which recommended that any recreational uses of the adjacent stream and pond be discouraged due to elevated levels of heavy metals. (DEC/DER, Environmental Site Remediation Database, 2006)

North Branch Newtown Creek and tribs (0501-0035)

Need Verific

Waterbody Location Information

Revised: 05/11/2007

Water Index No: Pa 3-28-13	Drain Basin: Chemung River	
Hydro Unit Code: 02050105/170	Str Class: C	Chemung River
Waterbody Type: River	Reg/County: 8/Chemung Co. (8)	
Waterbody Size: 34.8 Miles	Quad Map: HORSEHEADS (M-13-2)	
Seg Description: entire stream and tribs		

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

Use(s) Impacted Aquatic Life	Severity Stressed	Problem Documentation Possible
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Type of Pollutant(s)

Known: ---
Suspected: NUTRIENTS
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	Resolution Potential: Medium
TMDL/303d Status: n/a	

Further Details

Aquatic life support in North Branch Newtown Creek may experience impacts due to nutrient loads and/or other pollutants from agricultural nonpoint sources.

A biological (macroinvertebrate) assessment of North Branch Newtown Creek in Sullivanville (at access off Route 13) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. Aquatic life is supported in the stream, although nutrient biotic evaluation suggests the level of eutrophication is sufficient to at least threaten aquatic life support. (DEC/DOW, BWAM/SBU, June 2005)

Sampling results from a 2006 Susquehanna River Basin Chemung River Subbasin Survey indicated more significant impacts with a fauna dominated by midges and other tolerant species although habitat condition was somewhat impacted and may be an influence on the sample. Water chemistry was not conducted at this site. (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 Bulkley Creek (-6), are also Class C

Minor Tribs to Chemung River (0501-0040)

NoKnownImpct

Waterbody Location Information

Revised: 01/23/2007

Water Index No: Pa 3-30 thru 56 (selected) **Drain Basin:** Chemung River
Hydro Unit Code: 02050105/150 **Str Class:** C Chemung River
Waterbody Type: River **Reg/County:** 8/Chemung Co. (8)
Waterbody Size: 46.4 Miles **Quad Map:** SEELEY CREEK (M-13-4)
Seg Description: total length of select tribs, fr Elmira to Painted Post

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

A biological (macroinvertebrate) assessment of Narrows Creek in Gibson (at Narrows Creek Road) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. The fauna was dominated by facultative midges and Impact Source Determination indicated nonpoint source enrichment as the primary contributor. 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 and there are no other apparent water quality impacts to designated uses. (DEC/DOW, BWAM/SBU, June 2005)

Narrows Creek 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.

This segment includes the total length of selected/smaller tribs to the Chemung River from Hoffman Creek (-29) in Elmira to the Tioga/Cohocton River confluence in Painted Post. Tribs within this segment, including Gillette Creek (-46), Gorton Creek (-50), Narrows Creek (-51) and Monkey Run (-53), are Class C. Hoffman Creek, Hendy Creek (-36), Sing Sing Creek (-39), Winfield Creek (-42), Wisky Creek (-47), Post Creek (-52), Cutler Creek (-55) and the Tioga and Cohocton Rivers are listed separately.

Hendy Creek and tribs (0501-0041)

NoKnownImpct

Waterbody Location Information

Revised: 01/19/2007

Water Index No: Pa 3-36	Drain Basin: Chemung River
Hydro Unit Code: 02050105/180	Str Class: C
Waterbody Type: River	Reg/County: 8/Chemung Co. (8)
Waterbody Size: 11.4 Miles	Quad Map: SEELEY CREEK (M-13-4)
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/a	Resolution Potential: n/a
TMDL/303d Status: n/a	

Further Details

A biological (macroinvertebrate) assessment of Hendy Creek in Dutch Hill (at Clark Hollow Road) was conducted in 2002. Fields sampling results indicated non-impacted water quality conditions. The fauna was diverse and all screening criteria for waters having no known impacts were met. (DEC/DOW, BWAM/SBU, June 2005)

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.

Sing Sing Creek, Upper, and tribs (0501-0043)

NoKnownImpct

Waterbody Location Information

Revised: 01/23/2007

Water Index No: Pa 3-39
Hydro Unit Code: 02050105/140 **Str Class:** C
Waterbody Type: River
Waterbody Size: 30.1 Miles
Seg Description: stream and tribs, above Fisherville

Drain Basin: Chemung River
Reg/County: 8/Chemung Co. (8)
Quad Map: BIG FLATS (M-13-1)

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

A biological (macroinvertebrate) assessment of Sing Sing Creek in Fisherville (at Sing Sing Road) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. The fauna was dominated by filter-feeding caddisflies indicating nonpoint source nutrient 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 and there are no other apparent water quality impacts to designated uses. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs above a point 1.0 mile below unnamed trib (-5) near Fisherville. The waters of this portion of the stream are Class C,C(TS). Tribs to this reach/segment, including Madison Creek (-8), are Class C. Lower Sing Sing Creek are listed separately.

Whisky Creek and tribs (0501-0046)

NoKnownImpct

Waterbody Location Information

Revised: 01/19/2007

Water Index No: Pa 3-47	Drain Basin: Chemung River
Hydro Unit Code: 02050105/150	Str Class: C
Waterbody Type: River	Reg/County: 8/Steuben Co. (51)
Waterbody Size: 22.9 Miles	Quad Map: CATON (M-12-3)
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/a	Resolution Potential: n/a
TMDL/303d Status: n/a	

Further Details

A biological (macroinvertebrate) assessment of Whisky Creek near South Corning at French Mill (at Whisky Creek Road) was conducted in 2002. Field sampling results indicated non-impacted water quality conditions. The fauna was diverse and all screening criteria for waters having no known impacts were met. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the entire stream and all tribs. The waters of the stream are Class C. Tribs to this reach/segment, including Bailey Creek (-1) and Caton Creek (-2), are Class C,C(T).

Post Creek, Lower, and tribs (0501-0047)

NoKnownImpct

Waterbody Location Information

Revised: 01/19/2007

Water Index No:	Pa 3-52	Drain Basin:	Chemung River
Hydro Unit Code:	02050105/130	Str Class:	C*
Waterbody Type:	River	Reg/County:	8/Steuben Co. (51)
Waterbody Size:	16.3 Miles	Quad Map:	CORNING (M-12-2)
Seg Description:	stream and tribs, from mouth to Ferenbaugh		

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

A biological (macroinvertebrate) assessment of Post Creek in Corning (at Route 414) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. A diverse and well-balanced fauna was found that included clean-water mayflies, stoneflies, caddisflies, riffle beetles and hellgrammites. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs from the mouth to/including Wilson Hollow Creek (-3) in Ferenbaugh. The waters of this portion of the stream are Class C from the mouth to the Railroad Bridge at East Pultney Street, then Class B to the High Street Bridge in Corning and Class C for the remainder of the reach. Tribs to this reach/segment, including Kerrick Creek/Mormon Hollow Brook (-1), Welsh Creek (-2) and Wilson Hollow Creek, are Class C. Upper Post Creek is listed separately.

Post Creek, Upper, and tribs (0501-0004)

NoKnownImpct

Waterbody Location Information

Revised: 02/05/2007

Water Index No: Pa 3-52	Drain Basin: Chemung River
Hydro Unit Code: 02050105/130	Str Class: C
Waterbody Type: River	Reg/County: 8/Steuben Co. (51)
Waterbody Size: 42.8 Miles	Quad Map: BIG FLATS (M-13-1)
Seg Description: stream and tribs, above Ferenbaugh	

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

A biological (macroinvertebrate) assessment of Post Creek in Post Creek (at Route 414) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. Siltation and nonpoint source nutrient enrichment were identified as the primary factors contributing to the impacts. 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)

This upper reach of the creek and tributaries are subject to significant erosion and sedimentation due to unstable stream banks. The resulting build up of silt and gravel, particularly near East Creek (PA 3-52-8) confluence, has the potential to restrict spawning in this trout stream. However available fishery data indicates that the stream supports brown trout, with some natural reproduction. (DEC/DFWMR, Region 8, 1998).

Flooding in the watershed is also a concern. The topography of the upper watershed results in flashy streams and flooding impacts the valley areas. Flooding due to poor drainage through wetlands in the headwaters of Post Creek (near hamlet of Beaver Dams) is also a concern. Inadequate height of a culvert under an active rail line may contribute to the drainage problem. (Schuyler County WQCC, January 2007)

This segment includes the portion of the stream and all tribs above Wilson Hollow Creek (-3) in Ferenbaugh. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment, including East Creek (-8), are Class C. Lower Post Creek is listed separately.

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)	Drain Basin:	Chemung River
Hydro Unit Code:	02050105/120	Str Class:	C
Waterbody Type:	River	Reg/County:	8/Steuben Co. (51)
Waterbody Size:	65.9 Miles	Quad Map:	CAMPBELL (M-12-1)
Seg Description:	stream and selected tribs, from mouth to Savona		

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: 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.

Cohocton River, Middle, and minor tribs (0502-0017)

Threatened

Waterbody Location Information

Revised: 02/02/2007

Water Index No: Pa 3-58 (portion 2) **Drain Basin:** Chemung River
Hydro Unit Code: 02050105/120 **Str Class:** C Chemung River
Waterbody Type: River **Reg/County:** 8/Steuben Co. (51)
Waterbody Size: 42.1 Miles **Quad Map:** BATH (L-11-3)
Seg Description: stream and selected tribs, from Savona to Kanona

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

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

Type of Pollutant(s)

Known: NUTRIENTS (phosphorus)
Suspected: Silt/Sediment
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 **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

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

Biological (macroinvertebrate) assessment of the Cohocton River in Savona (at Route 12), below Bath (at Route 11) and in Kanona (at Route 415) were conducted in 2002 and/or 2003. Sampling results indicated slightly to non-impacted water quality conditions. 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. Although aquatic life support is considered to be fully supported in the stream, sampling results 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)

One industrial facility - Bath Petroleum Storage Inc (BPSI) - discharges effluent from brine ponds to the river in this

segment. Previously, NYSDEC has cited this facility for violations of the chloride and total dissolved solids limits in the discharge permit and DEC enforcement action has been taken. The action charged that the discharge of high chlorides (periodically over 250 mg/l) have caused an impairment to the best usage of the receiving waters, specifically, aquatic life support. In addition to the high chlorides, there may have been algae in the brine ponds that also affected the water quality in the river. Results of biological studies by HydroQual (contracted by BPSI) tended to support this contention. However the facility has recently been sold and the new owners appear to be operating the facility in compliance with the consent order and permit requirements. (DEC/DOW, Region 8, January 2007)

This segment includes the portion of the stream and selected/smaller tribs from Mud Creek (-15) in Savona to Fivemile Creek (-28) in Kanona. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Eagle Valley Brook (-16), Harrisburg Hollow Brook (-25) and Knight Creek (-26), are Class C,C(T),C(TS). Mud Creek (-15), Smith Run/Freeman Hollow Brook (-18), Campbell Creek (-27), Fivemile Creek (-28) and other reaches of 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	Drain Basin:	Chemung River
Hydro Unit Code:	02050105/110	Str Class:	C(T)
Waterbody Type:	River	Reg/County:	8/Steuben Co. (51)
Waterbody Size:	26.9 Miles	Quad Map:	CAMPBELL (M-12-1)
Seg Description:	stream and selected tribs, from mouth to Meads Creek		

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: 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	Drain Basin:	Chemung River
Hydro Unit Code:	02050105/110	Str Class:	C(T)
Waterbody Type:	River	Reg/County:	8/Schuyler Co. (49)
Waterbody Size:	60.7 Miles	Quad Map:	BRADFORD (L-12-3)
Seg Description:	stream and tribs, above Meads Creek		

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: 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. (Schuyler 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	Drain Basin:	Chemung River
Hydro Unit Code:	02050105/110	Str Class:	C(TS)
Waterbody Type:	River	Reg/County:	8/Steuben Co. (51)
Waterbody Size:	32.5 Miles	Quad Map:	CORNING (M-12-2)
Seg Description:	entire stream and tribs		

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: 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.

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: 56.1 Miles
Seg Description: entire stream and tribs, mouth to Lamoka Lake

Drain Basin: 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.

Lamoka Lake and Mill Pond (0502-0001)

Impaired Seg

Waterbody Location Information

Revised: 02/07/2007

Water Index No: Pa 3-58-15-P47	Drain Basin: Chemung River
Hydro Unit Code: 02050105/100	Str Class: A
Waterbody Type: Lake	Reg/County: 8/Schuyler Co. (49)
Waterbody Size: 825.6 Acres	Quad Map: WAYNE (L-12-2)
Seg Description: entire lake	

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

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

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*	

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-leaved 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.

Waneta Lake (0502-0002)

Impaired Seg

Waterbody Location Information

Revised: 02/07/2007

Water Index No: Pa 3-58-15-P47- 4-P48	Drain Basin: Chemung River
Hydro Unit Code: 02050105/100 Str Class: A	Chemung River
Waterbody Type: Lake	Reg/County: 8/Schuyler Co. (49)
Waterbody Size: 780.8 Acres	Quad Map: WAYNE (L-12-2)
Seg Description: entire lake	

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*	

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 Schuyler 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.

Tobehanna Creek and tribs (0502-0007)

Need Verific

Waterbody Location Information

Revised: 05/11/2007

Water Index No:	Pa 3-58-15-P47- 6	Drain Basin:	Chemung River
Hydro Unit Code:	02050105/100	Str Class:	C
Waterbody Type:	River	Reg/County:	8/Schuyler Co. (49)
Waterbody Size:	30.5 Miles	Quad Map:	WAYNE (L-12-2)
Seg Description:	entire stream and tribs		

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 site has not been 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.

Stocking Creek and tribs (0502-0016)

NoKnownImpct

Waterbody Location Information

Revised: 02/06/2007

Water Index No: Pa 3-58-19	Drain Basin: Chemung River
Hydro Unit Code: 02050105/090	Str Class: C Chemung River
Waterbody Type: River	Reg/County: 8/Steuben Co. (51)
Waterbody Size: 75.5 Miles	Quad Map: BATH (L-11-3)
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/a	Resolution Potential: n/a
TMDL/303d Status: n/a	

Further Details

A biological (macroinvertebrate) assessment of Stocking Creek near Bath (at Eagle Valley Road) 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. (DEC/DOW, BWAM/SBU, June 2005)

Concern for the health of the trout habitat have drawn attention to the significant agricultural activity in the watershed. A large dairy operation which employs land application of septage, food waste, manure and composted municipal sludge on cultivated fields is located along the stream. The land spreading operation is regulated by NYSDEC through a Part 360 permit for transportation, storage and land application of municipal sewage sludge and septage. The operation had been cited by DEC for permit violations associated with sludge storage facilities and odor problems in the past, however more recently the operation has been in general compliance. (DEC/DOW, Region 8, January 2007)

The upstream portion of the segment is a Class C(T) trout stream. Downstream, Stocking Creek pools into Babcock Hollow Lake, a small lake used for fishing, boating and swimming. The lake contains sunfish, perch, carp and several varieties of bass. A campground (Babcock Hollow Campground) is located on the lake.

Sampling results from a 2006 Susquehanna River Basin Chemung River Subbasin Survey indicated slight impacts, but these may have been the result of degraded habitat conditions rather than water quality conditions. Sampling showed low percentage of mayflies and dominance of midges; but intolerant stoneflies and other sensitive species were noted in small numbers. (SRBC, March 2007)

This segment includes the entire stream and all tribs. The waters of the stream are Class C,C(T),C(TS). Tribs to this reach/segment, including Culver Creek (-1) and Gulf Creek (-3), are Class C.

Lake Salubria (0502-0011)

Impaired Seg

Waterbody Location Information

Revised: 02/07/2007

Water Index No: Pa 3-58-20-P51	Drain Basin: Chemung River
Hydro Unit Code: 02050105/120	Str Class: B Chemung River
Waterbody Type: Lake	Reg/County: 8/Steuben Co. (51)
Waterbody Size: 57.6 Acres	Quad Map: BATH (L-11-3)
Seg Description: entire lake	

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, NUTRIENTS (phosphorus)
 Suspected: - - -
 Possible: Pathogens

Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION
 Suspected: ON-SITE/SEPTIC SYST, Other Source (wildlife: geese), Urban/Storm Runoff
 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: 1 (Individual Waterbody Impairment Requiring a TMDL)	

Further Details

Recreational uses of Lake Salubria are impaired by high nutrient levels and excessive aquatic weed growth. The source of these impacts is inadequate onsite septic systems serving lakeshore residences. Public bathing use and aquatic life support are also considered to be impacted by these and other conditions in the lake.

Lake Salubria 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 2005. These data indicate that the lake continues to be best characterized as mesoeutrophic, or moderately to highly productive. Lake productivity has increased in the last several years, as manifested by lower water clarity and higher algae levels. Phosphorus levels in the lake regularly exceed the state guidance values indicating impacted recreational uses, however water transparency readings only occasionally fail to meet what is recommended for swimming beaches. Nutrient levels at the lake bottom are substantially higher than those at the lake surface. Although this has not resulted in any significant seasonal changes in water quality, it is likely that deepwater oxygen levels are depleted. Such deepwater oxygen depletion was identified as far back as the 1930s. Readings for pH regularly exceed

the NYS water quality standards (6.5 to 8.5), although elevated pH is common to this region of the state. (DEC/DOW, BWAM/CSLAP, November 2005)

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. These assessment also indicate recreational suitability of the lake has increasingly become less favorable; recreational assessments have shifted from "excellent" to "slightly" to "substantially" impacted for most uses over the last several years. The lake is regularly described as "not quite crystal clear," a somewhat more favorable than expected given the water quality conditions in the lake. Assessments have noted "excessive weed growth." Although these aquatic plants are reported to rarely grow to the lake surface they have noted impacts on recreational uses. Aquatic plant communities appear to be dominated by non-native species, primarily Eurasian water milfoil). Recreational use of the lake is maintained by mechanical weed harvesting, but this action does no address the underlying causes of water quality impacts. 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. (DEC/DOW, BWAM/CSLAP, November 2005)

Failing on-site septic systems as well as recycling of in-lake nutrients are the suspected and most likely sources of the nutrients. Lake Salubria Association has advocated for the sewerage of residences around the lake. The Town of Bath has initiated the process of forming a sewer district to convey wastewater to the Bath (v) WWTP. Considerable planning and design work has been completed. However this proposal is not embraced by all. Agricultural activities, urban runoff from Bath, and wildlife (geese) are also cited as sources. (Steuben County WQCC, August 2004)

Lake Salubria is included on the NYS 2006 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 attain water quality standards for phosphorus.

Campbell Creek, Upper, and tribs (0502-0032)

NoKnownImpct

Waterbody Location Information

Revised: 01/22/2007

Water Index No:	Pa 3-58-27	Drain Basin:	Chemung River
Hydro Unit Code:	02050105/080	Str Class:	C
Waterbody Type:	River	Reg/County:	8/Steuben Co. (51)
Waterbody Size:	34.4 Miles	Quad Map:	TOWLESVILLE (L-11-4)
Seg Description:	stream and tribs, above Knight Settlement		

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

A biological (macroinvertebrate) assessment of Campbell Creek at the downstream end of this segment in Knight Settlement (at Turnpike Road) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. A diverse fauna dominated by mayflies was present. A second site just downstream of this site was assessed as slightly impacted by siltation, but this was deemed to be influenced by bridge construction at the time and the upstream assessment is considered to be more representative on typical conditions in the stream. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs above unnamed trib (-3) near Knight Settlement. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment, including Maxwell Creek (-4), are Class C. Lower Campbell Creek is listed separately.

A fishery assessment found fish community metrics at this site reflected good water quality, with 3 of 4 metrics in the slightly impacted category. Tolerant species were dominant, including white sucker, bluntnose minnow, fathead minnow, and creek chub. Other species included mottled sculpin, tessellated darter, northern hog sucker, and largemouth bass. (DEC/DOW, BWAM/RIBS, January 2005)

A biological (macroinvertebrate) assessment of Fivemile Creek in Kanona (at Hemlock Road) was also conducted in 2002 as part of the RIBS Biological Screening effort. Sampling results indicated slightly impacted water quality conditions. Diatoms, macrophytes, filamentous algae and supersaturated midday dissolved oxygen levels were noted. Impact Source Determination indicated nonpoint source nutrient enrichment and/or pesticide runoff as the primary factor influencing this assessment in this agricultural area. Sewage effluent or animal wastes were also identified as possible sources of impacts. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs from the mouth to/including Waldo Creek (-13) at Beam Station. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Trout Run (-8), are also Class C. Upper Fivemile Creek is listed separately.

Fivemile Creek, Upper, and tribs (0502-0034)

NoKnownImpct

Waterbody Location Information

Revised: 01/22/2007

Water Index No: Pa 3-58-28
Hydro Unit Code: 02050105/050 **Str Class:** C
Waterbody Type: River
Waterbody Size: 64.1 Miles
Seg Description: stream and tribs, above Beam Station

Drain Basin: Chemung River
Reg/County: 8/Steuben Co. (51)
Quad Map: NAPLES (K-11-4)

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

A biological (macroinvertebrate) assessment of Fivemile Creek near Prattsburg (at Route 75) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. Clean-water mayflies, stoneflies and caddisflies were present in the sample. The fauna was diverse and all screening criteria for waters having no known impacts were met. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs above Waldo Creek (-13) at Beam Station. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Center Creek (-16) and Dabell Creek (-18), are also Class C. Lower Fivemile Creek is listed separately.

Cohocton River, Middle, and minor tribs (0502-0003)

Threatened

Waterbody Location Information

Revised: 02/02/2007

Water Index No:	Pa 3-58 (portion 3)	Drain Basin:	Chemung River
Hydro Unit Code:	02050105/070	Str Class:	C
Waterbody Type:	River	Reg/County:	8/Steuben Co. (51)
Waterbody Size:	68.1 Miles	Quad Map:	AVOCA (L-11-1)
Seg Description:	stream and selected tribs, from Kanona to Cohocton		

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

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Further Details

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

Biological (macroinvertebrate) assessment of the Cohocton River in Kanona (at Route 415) and Cohocton (at Route 415) at either end of this reach were conducted in 2002 and 2003. Sampling results indicated slightly to non-impacted water quality conditions. 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. Although aquatic life support is considered to be fully supported in the stream, sampling results 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)

Sampling results from a 2006 Susquehanna River Basin Chemung River Subbasin Survey indicated non-impacted

conditions with sensitive species present, but these species were low in number and the sample was dominated by riffle beetles. Water chemistry (elevated nitrogen) and habitat conditions suggest potential threats. (SRBC, March 2007)

This segment was originally listed due to the effect of the Pollio Dairy discharge in Cohocton (V) on fish survival in the river. However, this plant was closed in December 1990. Subsequent biological sampling by DEC (1992) and by Sutton (1994) found a dramatically improved macroinvertebrate community. Low dissolved oxygen measurements were noted. However, this condition is thought to be caused by an upstream swampy (wetland) area. (SBU 1988; RIBS/SBU 1992; B.Bode memo to Woodfield, 2/2/89) Previous mention of low D.O. attributed to heavy natural organic loads have also been noted. Additionally, several inches of organic sediment covers the stream bottom in and downstream of Cohocton (V). There is some suggestion that nonpoint sources may be contributing to the remaining slight biological impact (DEC). Sutton suggest that failing on-site septic systems may be a possible source as well. (DEC/DOW, BWAM/SBU and William L. Sutton, Biological Stream Assessment of the Cohocton River, March 1996)

This segment includes the portion of the stream and selected/smaller tribs from Fivemile Creek (-28) in Kanona to Davis Hollow Brook (-45) in Cohocton. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Cotton Creek (-34), Spaulding Creek (-35a), Fairbrothers Brook (-40), Cold Spring Brook (-40a), Lackawanna Brook (-40b), Erie Brook (-40c), Jones Brook (-41), Switzer Brook (-43) and Reynolds Creek (-44), are Class C,C(T),C(TS). Fivemile Creek (-28), Goff Creek (-31), Salmon Creek (-32), Tenmile Creek (-35), Neil Creek (-38), Twelvemile Creek (-39), Davis Hollow Brook (-45) and other reaches of Cohocton River are listed separately.

Cohocton River, Upper, and minor tribs (0502-0018)

Threatened

Waterbody Location Information

Revised: 02/02/2007

Water Index No: Pa 3-58 (portion 4) **Drain Basin:** Chemung River
Hydro Unit Code: 02050105/020 **Str Class:** C(T)* Chemung River
Waterbody Type: River **Reg/County:** 8/Steuben Co. (51)
Waterbody Size: 97.9 Miles **Quad Map:** NAPLES (K-11-4)
Seg Description: stream and selected tribs, above Cohocton

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

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

Type of Pollutant(s)

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

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

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

Biological (macroinvertebrate) assessment of the Cohocton River in Cohocton (at Route 415) and in Bowles Corners (at Route 21) were conducted in 2002 and 2003. Sampling results indicated slightly to non-impacted water quality conditions. 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. Although aquatic life support is considered to be fully supported in the stream, sampling results 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)

This segment includes the portion of the stream and selected/smaller tribs above Davis Hollow Brook (-45) in Cohocton.

The waters of this portion of the stream are primarily Class C(T),C(TS); with a small portion from Davis Hollow Brook to the Route 371 Bridge Class B(T). Tribs to this reach/segment, including Kirkwood Creek (-48), Spring Brook (-51), East Wayland/Black Creek (-53a), Pardee Hollow Creek (-53), Miller/Giles Hollow Brook (-54), are Class C,C(T),C(TS). Davis Hollow Brook and Middle/Lower Cohocton River are listed separately.

Goff Creek and tribs (0502-0013)

NoKnownImpct

Waterbody Location Information

Revised: 01/22/2007

Water Index No: Pa 3-58-31	Drain Basin: Chemung River
Hydro Unit Code: 02050105/070	Str Class: C(TS) Chemung River
Waterbody Type: River	Reg/County: 8/Steuben Co. (51)
Waterbody Size: 39.9 Miles	Quad Map: TOWLESVILLE (L-11-4)
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/a	Resolution Potential: n/a
TMDL/303d Status: n/a	

Further Details

A biological (macroinvertebrate) assessment of Goff Creek in Avoca (at Route 70A) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. A diverse and well-balanced fauna dominated by mayflies and midges was found in the stream. Similar conditions were noted in 1998 sampling at this site as well. (DEC/DOW, BWAM/SBU, June 2005)

Previous concerns about barnyard runoff and improper storage of manure from nearby dairy farms do not appear to be supported by the sampling results.

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 Boughton Creek (-4), Glen Rice Brook (-10) and Van Camper Creek (-12), are Class C,C(T).

Smith Pond (0502-0012)

Impaired Seg

Waterbody Location Information

Revised: 02/06/2007

Water Index No:	Pa 3-58-31- 7-P66	Drain Basin:	Chemung River
Hydro Unit Code:	02050105/070	Str Class:	B
Waterbody Type:	Lake	Reg/County:	8/Steuben Co. (51)
Waterbody Size:	44.7 Acres	Quad Map:	AVOCA (L-11-1)
Seg Description:	entire lake		

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

Use(s) Impacted	Severity	Problem Documentation
PUBLIC BATHING	Impaired	Suspected
RECREATION	Impaired	Suspected

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH, NUTRIENTS (phosphorus)
Suspected: Pathogens
Possible: - - -

Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION
Suspected: ON-SITE/SEPTIC SYST, Agriculture
Possible: Other Source (nutrient rich sediment)

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:	1*	

Further Details

Public bathing and other recreational uses in Smith Pond are thought to be impaired by elevated nutrient levels and algal blooms and aquatic weed growth. Onsite wastewater treatment systems serving shoreline residences and other nonpoint source loadings are the most likely source of nutrients.

Smith Pond has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 2003 and continuing through the present. 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 eutrophic, or highly productive. Phosphorus levels in the lake regularly exceed the state guidance values indicating impacted recreational uses, resulting in transparency measurements that fail to meet what is recommended for swimming beaches in about half of the samples collected. Sampling also reveal elevated pH readings in about 20% of samples, however it is not known if aquatic life impacts occur as a result of this condition. (DEC/DOW, BWAM/CSLAP, May 2006)

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. These assessment also indicate recreational suitability of the lake to be mostly unfavorable. The lake is frequently described as "slightly" to

"substantially" impaired for most uses. Lake assessments reflect high algal growth with the lake being described as having "definite algal greenness." Assessments have also noted that aquatic plants regularly grow to the lake surface and are frequently quite dense. Aquatic plant monitoring indicates the surface weed growth is associated with Eurasian milfoil. The impacts on the recreational uses of the lake are frequently attributed to poor water clarity and often the result of excessive weed growth. Mechanical harvesting has been used in the past to control weed, however due to poor access to the lake it is no longer conducted. (DEC/DOW, BWAM/CSLAP, September 2005)

This lake waterbody is designated class B, suitable for use as a public bathing beach, general recreation and aquatic life support but not as water supply. Water quality monitoring by NYSDEC focuses primarily on support of general recreation and aquatic life. Monitoring to assess public bathing use is generally the responsibility of state and/or local health departments. The Steuben County SWCD reports that pathogen monitoring results from 2004 are available.

Primary contribution of nutrients and pathogens is thought to be from on-site septic systems for cottages on the lakeshore. Substantial recent work has been done around the lake by individuals upgrading their own systems. Contributions from nutrient enriched sediments may contribute to water quality problems as well. (Steuben County WQCC, August 2004)

Demmons Pond (0502-0015)

Minor Impacts

Waterbody Location Information

Revised: 02/07/2007

Water Index No: Pa 3-58-31-10-P68	Drain Basin: Chemung River
Hydro Unit Code: 02050105/070	Str Class: B
Waterbody Type: Lake	Reg/County: 8/Steuben Co. (51)
Waterbody Size: 32.1 Acres	Quad Map: TOWLESVILLE (L-11-4)
Seg Description: entire lake	

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

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

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH
Suspected: - - -
Possible: Nutrients

Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION
Suspected: - - -
Possible: Agriculture, 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	Resolution Potential: Medium
TMDL/303d Status: n/a	

Further Details

Public Bathing and recreational uses and public bathing experience minor impacts due to aquatic weed growth and algal levels. Non-native species have been identified in the lake.

Demmons Pond has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1997 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, a finding that is consistent over the five years of CSLAP sampling. Phosphorus levels in the lake typically fall below the state guidance values indicating impacted/stressed recreational uses, though there are occasional exceedences. Transparency measurements meet what is recommended for swimming beaches, however at time water clarity is limited by the shallow lake depth. Readings for pH in the lake are typically within the 6.5 to 8.5 range, only very rarely dropping below 6.5. (DEC/DOW, BWAM/CSLAP, July 2002)

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. These assessment also indicate recreational suitability of the lake to be somewhat variable but favorable. The lake is described most frequently as

"excellent" or at times only "slightly" impacted for most uses. Assessments have occasionally noted aquatic plant growth that reaches the lake surface but are not characterized as dense. The perceived physical condition of the lake is typically described as either "not quite crystal clear" or having "definite algal greenness." The latter appears to be mostly consistent with the measured water clarity in the lake. Aquatic plant communities appear to be dominated by non-native species (Eurasian water milfoil). 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. (DEC/DOW, BWAM/CSLAP, November 2005)

The shoreline of Demmons Pond is fairly heavily developed with private residences and a Campfire Girls Camp (Camp Rathbone). The surrounding land use includes forests and agricultural activity. Mechanical weed harvesting by the Steuben County SWCD has been used in the past to maintain recreational uses at Camp Rathbone. Weed harvesting has not been conducted in recent years (coinciding with the closure of the camp), however, lakefront residents have requested that the harvesting program be resumed. (Steuben County WQCC, August 2004)

Tenmile Creek and tribs (0502-0038)

NoKnownImpct

Waterbody Location Information

Revised: 01/22/2007

Water Index No:	Pa 3-58-35	Drain Basin:	Chemung River
Hydro Unit Code:	02050105/040	Str Class:	C
Waterbody Type:	River	Reg/County:	8/Steuben Co. (51)
Waterbody Size:	28.6 Miles	Quad Map:	AVOCA (L-11-1)
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/a	Resolution Potential: n/a
TMDL/303d Status:	n/a	

Further Details

A biological (macroinvertebrate) assessment of Tenmile Creek near Avoca (at Route 7) was conducted in 2002. Fields sampling results indicated non-impacted water quality conditions. The fauna was diverse and all screening criteria for waters having no known impacts were met. (DEC/DOW, BWAM/SBU, June 2005)

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 West Creek (-2), are also Class C,C(TS).

Neil Creek and tribs (0502-0014)

NoKnownImpct

Waterbody Location Information

Revised: 01/22/2007

Water Index No: Pa 3-58-38
Hydro Unit Code: 02050105/030 **Str Class:** C(TS)
Waterbody Type: River
Waterbody Size: 67.9 Miles
Seg Description: entire stream and tribs

Drain Basin: Chemung River
Reg/County: 8/Steuben Co. (51)
Quad Map: AVOCA (L-11-1)

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

A biological (macroinvertebrate) assessment of Neils Creek in Bloomerville (at Route 415) was conducted in 2002. Fields 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 at this site in 1998 revealed similar conditions. (DEC/DOW, BWAM/SBU, June 2005)

This Cohocton tributary is a highly productive trout stream which contains a commercial fish farm and is the primary spawning area for the Cohocton River. This valuable fishery resource is vulnerable to possible impacts from surrounding agricultural activities, including some farms the require upland treatment. Other concerns includes excess nutrients from the fish hatchery and silt/sedimentation from gravel mining operations in the area.

This segment includes the entire stream and all tribs. The waters of the stream are Class C(TS). Tribs to this reach/segment, including Castle Creek (-1), Meadow Brook (-4) and Page Brook (-7), are Class C,C(T),C(TS).

Loon Lake (0502-0039)

Threatened

Waterbody Location Information

Revised: 02/07/2007

Water Index No: Pa 3-58-38..P79	Drain Basin: Chemung River	
Hydro Unit Code: 02050105/030	Str Class: B	Chemung River
Waterbody Type: Lake	Reg/County: 8/Steuben Co. (51)	
Waterbody Size: 166.3 Acres	Quad Map: HASKINVILLE (L-10-2)	
Seg Description: entire lake		

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

Use(s) Impacted Recreation	Severity Threatened	Problem Documentation Known
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Type of Pollutant(s)

Known: PROBLEM SPECIES (Eurasian milfoil)
Suspected: Algal/Weed Growth
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	Resolution Potential: Medium
TMDL/303d Status: n/a	

Further Details

Recreational uses in Loon Lake are known to experience minor threats due to excessive aquatic weed growth, primarily non-native Eurasian milfoil. Other indicators suggest non-impacted water quality.

Loon Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1994 and continuing through the present. 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, with very high water clarity reading in recent years. Phosphorus levels in the lake rarely exceed the state guidance values indicating impacted/stressed recreational uses. However there appears to be a weak trend toward increasing lake productivity during the summer, perhaps due to deepwater nutrient levels that are somewhat elevated and may enrich surface waters during the summer after the lake turns over. Elevated phosphorus levels were recorded in about 20% of all hypolimnetic samples. Transparency measurements are typically greater the 4 feet, meeting what is recommended for swimming beaches. Measurements of pH were within the 6.5 to 8.5 range in greater than 95% of the samples collected. (DEC/DOW, BWAM/CSLAP, November 2005)

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

recreational suitability of the lake to be "excellent." The lake is described as "slightly" impacted for most recreational uses about 25% of the time; and "substantially" impacted at a frequency of 5%. The lake is described as having "definite Algal greenness" at a frequency of 20%, but has at no time been described as having "severely high algae levels." The limited incidences of recreational use impacts appear to be more closely related to excessive weed growth or poor weather than to water quality problems. Assessments have noted that aquatic plants often (45% of the time) grow to the lake surface. Aquatic plant communities appear to be dominated by non-native species (Eurasian water milfoil). Aquatic vegetation is controlled by mechanical weed harvesting in order to facilitate recreational use of the lake. 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. (DEC/DOW, BWAM/CSLAP, November 2005)

Twelvemile Creek and tribs (0502-0040)

MinorImpacts

Waterbody Location Information

Revised: 01/23/2007

Water Index No: Pa 3-58-39	Drain Basin: Chemung River
Hydro Unit Code: 02050105/020	Str Class: C Chemung River
Waterbody Type: River	Reg/County: 8/Steuben Co. (51)
Waterbody Size: 56.2 Miles	Quad Map: AVOCA (L-11-1)
Seg Description: entire stream and tribs	

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: ---
 Possible: ---

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

Aquatic life support in Twelvemile Creek is known to experience minor impacts/threats due to nonpoint source nutrient loadings. Agricultural activities in the watershed are the likely source.

A biological (macroinvertebrate) assessment of Twelvemile Creek near Wallace (at Route 415) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. The fauna was dominated by filter-feeding caddisflies and algal-feeding riffle beetles. Impact Source Determination indicated nonpoint source nutrient enrichment as the primary factor influencing water quality. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates the level of eutrophication is sufficient to stress aquatic life support. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the entire stream and all tribs. The waters of the stream are Class C,C(T),C(TS). Tribs to this reach/segment, including Avery Hollow Brook (-3) and Lyons Creek (-9), are also Class C,C(T),C(TS).

Waterbody Inventory for The Tioga/Canisteo River Watershed

Water Index Number	Waterbody Segment	Category
Tioga River Watershed		
Pa 3-57	Tioga River, Main Stem (0503-0004)	MinorImpacts
Pa 3-57- 1 thru 20	Minor Tribs to Tioga River (0503-0010)	UnAssessed
Lower/Middle Canisteo River Watershed		
Pa 3-57- 5 (portion 1)	Canisteo River, Lower, and minor tribs (0503-0011)	NoKnownImpct
Pa 3-57- 5 (portion 2)	Canisteo River, Middle, and minor tribs (0503-0006)	MinorImpacts
Pa 3-57- 5 (portion 3)	Canisteo River, Middle, and minor tribs (0503-0012)	MinorImpacts
Pa 3-57- 5 (portion 4)	Canisteo River, Middle, and minor tribs (0503-0001)	Impaired Seg
Pa 3-57- 5- 5	Goodhue Creek and tribs (0503-0014)	UnAssessed
Pa 3-57- 5- 5-P27	Goodhue Lake (0503-0015)	UnAssessed
Pa 3-57- 5- 8	Tuscarora Creek, Lower, and tribs (0503-0016)	NoKnownImpct
Pa 3-57- 5- 8	Tuscarora Creek, Middle, and tribs (0503-0017)	NoKnownImpct
Pa 3-57- 5- 8	Tuscarora Creek, Upper, and tribs (0503-0018)	Need Verific
Pa 3-57- 5- 8-11	North Branch Tuscarora, Lower, and tribs (0503-0019)	NoKnownImpct
Pa 3-57- 5- 8-11	North Branch Tuscarora, Upper, and tribs (0503-0020)	UnAssessed
Pa 3-57- 5- 8-21	South Branch Tuscarora Creek and tribs (0503-0021)	UnAssessed
Pa 3-57- 5-19-P28	Cranberry Pond (0503-0022)	UnAssessed
Pa 3-57- 5-38	Colonel Bills Creek (0503-0023)	MinorImpacts
Pa 3-57- 5-40	Bennetts Creek, Lower, and minor tribs (0503-0007)	MinorImpacts
Pa 3-57- 5-40	Bennetts Creek, Upper, and tribs (0503-0024)	MinorImpacts
Pa 3-57- 5-40- 1	Purdy Creek and tribs (0503-0025)	MinorImpacts
Canacadea Creek Watershed		
Pa 3-57- 5-47	Canacadea Creek, Lower, and tribs (0503-0008)	MinorImpacts
Pa 3-57- 5-47	Canacadea Creek, Upper, and minor tribs (0503-0005)	MinorImpacts
Pa 3-57- 5-47- 4	Karr Valley Creek and tribs (0503-0026)	NoKnownImpct
Pa 3-57- 5-47- 9-P??	Ag Tech Lake (0503-0027)	UnAssessed
Pa 3-57- 5-47-P27c	Almond Lake (0503-0003)	Impaired Seg
Upper Canisteo River Watershed		
Pa 3-57- 5 (portion 5)	Canisteo River, Upper, and minor trbs (0503-0013)	NoKnownImpct
Pa 3-57- 5-48	Big Creek and tribs (0503-0028)	UnAssessed
Pa 3-57- 5-49	Seeley/Carrington Cr, Lower, and tribs (0503-0029)	NoKnownImpct
Pa 3-57- 5-49	Seeley/Carrington Cr, Upper, and tribs (0503-0030)	UnAssessed
Pa 3-57- 5-49-P34,P35,P36	Hornell Reservoirs (0503-0031)	UnAssessed
Pa 3-57- 5-52- 1-P??	Arkport Reservoir (0503-0032)	UnAssessed

...Tioga/Canisteo River Watershed

Water Index Number	Waterbody Segment	Category
Upper Tioga River Watershed		
Pa 3-57- 9	Glendening Creek/South Branch and tribs (0503-0033)	UnAssessed
Pa 3-57- 9- 2	North Branch Glendening Creek and tribs (0503-0034)	UnAssessed
Pa 3-57-21	Cowanesque River and tribs (0503-0035)	UnAssessed
Tribs to Pennsylvania		
Pa 11 thru 20	Minor Tribs to Pennsylvania (0503-0036)	NoKnownImpct
Pa 21 thru 29	Minor Tribs to Pennsylvania (0503-0037)	UnAssessed
Pa 25	Troups Creek, Lower, and tribs (0503-0009)	NoKnownImpct
Pa 25	Troups Creek, Upper, and tribs (0503-0038)	NoKnownImpct

Tioga River, Main Stem (0503-0004)

MinorImpacts

Waterbody Location Information

Revised: 02/05/2007

Water Index No: Pa 3-57
Hydro Unit Code: 02050104/170 **Str Class:** C
Waterbody Type: River
Waterbody Size: 15.2 Miles
Seg Description: from Painted Post to NY-Pa state line

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

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: SILT/SEDIMENT
Suspected: WATER LEVEL/FLOW, ACID/BASE (PH), Metals
Possible: - - -

Source(s) of Pollutant(s)

Known: Streambank Erosion
Suspected: HYDRO MODIFICATION (reservoir releases), OTHER SOURCE (acid mine drainage), Resource Extraction (acid mine drainage)
Possible: Landfill/Land Disp.

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 3 (Cause Identified, Source Unknown)
Lead Agency/Office: DOW/Reg8 **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support in Tioga River is thought to experience minor impacts due to various pollutants. The more significant impacts are in the upper reaches of the river, near the Pennsylvania border. Acid mine drainage and siltation have been suggested as sources of the impacts. The stream also experiences hydrologic/habitat impacts. Upstream reservoir releases and steep gradient, flashy tributary streams result in excessive streambank erosion and sediment loads.

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Tioga River in Presho, Steuben County, (at Presho-Lindley Road) 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 non-impacted water quality conditions although indicators of nutrient enrichment were present. Clean-water mayflies dominated the fauna and large hellgrammites were present. Crayfish collected for tissue analysis did not show metals, PCBs, or PAHs above levels of concern, but elevated levels of pesticides were present. Water column sampling revealed no substances to be parameters of concern. Coliform levels varied widely, with some very high counts. 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. A fishery assessment found fish community metrics at this site reflected good water quality, with 3 of 4 metrics in the slightly impacted category. Many tolerant species were present, including bluntnose minnow, central stoneroller, golden shiner, spotfin shiner, fathead minnow, creek chub, and white sucker. Also numerous were banded darter, shield darter, tessellated darter, smallmouth bass, and river chub. (DEC/DOW, BWAM/RIBS, January 2005)

Biological (macroinvertebrate) assessments of the Tioga River Black Creek in Gang Mills (at RR bridge off Lumber Street) and in Presho (at Presho-Lindley Road) were also conducted in 2002 as part of the RIBS Biological Screening effort. Sampling results at the downstream site in Gang Mills indicated non-impacted water quality conditions. The fauna was dominated by mayflies and included many clean-waters stoneflies, caddisflies and hellgrammites. All metrics were within the range on non-impacted. However the river was assessed as slightly impacted at the Presho site, and sampling over the past 10-15 years reveals a steady declining trend in water quality at this site. Impact Source Determination suggests siltation as the primary contributor to the impacts, however this needs to be verified. (DEC/DOW, BWAM/SBU, June 2005)

Sampling results from a 2006 Susquehanna River Basin Chemung River Subbasin Survey indicated no biological impacts and excellent habitat condition. Previous sampling at this site in 1998 found slight impacts. (SRBC, March 2007)

Acid mine drainage in the headwaters of the Tioga River (in Pennsylvania) contribute to poor water quality in the river. The Tioga-Hammond Reservoir acts to buffer some of the more serious effects of the acid mine drainage, however there is some evidence of continuing water quality impacts below the reservoir in New York State. Plans were designed to further reduce the effects of the low pH waters by mixing Tioga-Hammond Reservoir and the Cowanesque Reservoir waters. Initially, however, the location and operation of the release gate allowed high sediment loads to enter the stream. The Army Corps of Engineers has since (2000) addressed this issue. (DEC/DOW, BWAM & Region 8 and SRBC and Steuben County WQCC, 2004)

Additional bank erosion has also been reported in recent years. Losses were measured at 5-6 acres of agricultural land, 15-20 feet deep. This erosion is the result of upstream reservoir releases at the Cowanesque Dam. Prolonged high water levels saturate the silt loam banks are result in bank failures. Additional bank stress is caused by deposition of sediment loads at the mouths of steep gradient tributary streams (Steamtown Creek, Watson Creek, others) which diverts flows against opposite banks. (Steuben County WQCC, August 2004)

Previously the Lindley Landfill, an inactive hazardous waste disposal site (Site No. 8-51-008) on the South Branch of Glendening Creek had been suggested as a possible source of contamination. However all remediation work in conjunction with a 1998 Record of Decision was determined to have been completed in conformance with the ROD and the operation and maintenance (O&M) plan for the landfill has been implemented. There is ongoing long-term groundwater monitoring at the site to ensure that nearby private wells will not be impacted. Completion of the remedial action eliminated any direct contact exposure pathways. (DEC/DER, Environmental Site Remediation Database, 2006)

This segment includes the main stem of the river from the mouth at the confluence with the Cohocton River in Painted Post to NY-Pa state line near Lawrenceville. The waters of the stream are Class C. This segment was previously listed as 0501-0001. (The segment ID was changed to reflect the correct basin/sub-basin location).

Canisteo River, Lower, and minor tribs (0503-0011)

NoKnownImpct

Waterbody Location Information

Revised: 01/31/2007

Water Index No: Pa 3-57- 5 (portion 1) **Drain Basin:** Chemung River
Hydro Unit Code: 02050104/070 **Str Class:** C Tioga River
Waterbody Type: River **Reg/County:** 8/Steuben Co. (51)
Waterbody Size: 22.5 Miles **Quad Map:** ADDISON (M-12-4)
Seg Description: stream and selected tribs, from mouth to Addison

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

A biological (macroinvertebrate) assessment of Canisteo River in Erwins (at Route 73/Hills Road) was conducted in 2002. Field sampling results indicated non-impacted water quality conditions. The fauna was diverse and all screening criteria for waters having no known impacts were met. A sample taken just upstream of this segment in 2002 was laboratory-processed and found to be non-impacted 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, June 2005)

This segment includes the portion of the stream and selected/smaller tribs from the mouth in Erwins to Tuscarora Creek (-8) in Addison. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Cole Creek (-1), Beekman Hollow Creek (-3) and Reuben Brook (-6a), are also Class C. Goodhue Creek (-5) and Tuscarora Creek (-8) are listed separately.

Canisteo River, Middle, and minor tribs (0503-0006)

MinorImpacts

Waterbody Location Information

Revised: 02/05/2007

Water Index No: Pa 3-57- 5 (portion 2) **Drain Basin:** Chemung River
Hydro Unit Code: 02050104/070 **Str Class:** C Tioga River
Waterbody Type: River **Reg/County:** 8/Steuben Co. (51)
Waterbody Size: 70.1 Miles **Quad Map:** RATHBONE (M-11-2)
Seg Description: stream and selected tribs, from Addison to Cameron

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

Source(s) of Pollutant(s)

Known: STREAMBANK EROSION, Roadbank Erosion
Suspected: ---
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 Canisteo River are thought to experience minor impacts due to silt/sedimentation from streambank erosion.

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Canisteo River in Derby Switch, Steuben County, (at Newcomb Road) 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 non-impacted water quality conditions although indicators of nutrient enrichment were present. Abundant filamentous algae, but the fauna was diverse. Crayfish collected for tissue analysis did not show metals, PCBs, or PAHs above levels of concern, but elevated levels of pesticides were present. Water column sampling revealed iron to be a parameter of concern, exceeding its assessment criterion in three 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) assessments of Canisteo River in Derby Switch (at Route 73/Hills Road) and Cameron

(at Route 22) were also conducted in 2002 as part of the RIBS Biological Screening effort. Sampling results indicated non-impacted water quality conditions at the downstream site in Derby Switch. The most recent sampling prior to that was in 1997-98 when slightly impacted conditions were found. At the upstream site in Cameron, water quality was assessed as slightly impacted. Nutrient enrichment and siltation were the primary factors influencing the fauna. 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)

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. (One farm field in Rathbone lost 2 acres to erosion during a single flood event in 1996.) High sediment loads from Colonel Bills Creek and other tributaries also contribute to the problem. Agriculture and roadbank erosion are also cited as possible sources. 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 the erosion. (Steuben County WQCC, August 2004)

This segment includes the portion of the stream and all tribs from Tuscarora Creek (-8) in Addison to/including Cameron Creek (-22) in Cameron. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Catherine Creek (-10), Canatoga Creek (-12), Myers Creek (-14), Tracy Creek (-18) and Helmer Creek (-20), are also Class C. Tuscarora Creek (-8) is listed separately.

Canisteo River, Middle, and minor tribs (0503-0012)

MinorImpacts

Waterbody Location Information

Revised: 02/05/2007

Water Index No: Pa 3-57- 5 (portion 3) **Drain Basin:** Chemung River
Hydro Unit Code: 02050104/070 **Str Class:** C Tioga River
Waterbody Type: River **Reg/County:** 8/Steuben Co. (51)
Waterbody Size: 60.9 Miles **Quad Map:** CANISTEO (L-10-3)
Seg Description: stream and selected tribs, from Cameron to Canisteo

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

Source(s) of Pollutant(s)

Known: STREAMBANK EROSION, Roadbank Erosion
Suspected: ---
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 the Canisteo River are thought to experience minor impacts due to silt/sedimentation from streambank erosion.

A biological (macroinvertebrate) assessment of Canisteo River below Canisteo (at Carson bridge) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. Nutrient enrichment and siltation were the primary factors influencing the fauna. 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, and there are no other apparent water quality impacts to designated uses. (DEC/DOW, BWAM/SBU, June 2005)

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. Erosion of streambanks and agricultural property has occurred at various sites and multiple bank failures have been noted. High sediment loads from other tributaries, including Colonel Bills Creek and Bennetts Creek, also contribute to the problem. 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 portion of the stream and selected/smaller tribs from Cameron Creek (-22) in Cameron to Bennetts Creek (-40) in Canisteo. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Mud Hollow Brook (-32), Baker Creek (-36), Taylor Hollow Creek (-36a) and Baker/Orbs Creek (-39), are Class C,C(T). Colonel Bills Creek (-38) and Bennetts Creek (-40) are listed separately.

Canisteo River, Middle, and minor tribs (0503-0001)

Impaired Seg

Waterbody Location Information

Revised: 02/05/2007

Water Index No: Pa 3-57- 5 (portion 4) **Drain Basin:** Chemung River
Hydro Unit Code: 02050104/070 **Str Class:** C Tioga River
Waterbody Type: River **Reg/County:** 8/Steuben Co. (51)
Waterbody Size: 57.5 Miles **Quad Map:** HORNELL (L-10-4)
Seg Description: stream and selected tribs, from Canisteo to Hornell

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

Use(s) Impacted	Severity	Problem Documentation
AQUATIC LIFE	Impaired	Known
HABITAT/HYDROLOGY	Impaired	Known

Type of Pollutant(s)

Known: WATER LEVEL/FLOW, RESTRICTED PASSAGE
Suspected: UNKNOWN TOXICITY, Thermal Changes
Possible: Chlorine, Silt/Sediment

Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION
Suspected: Urban/Storm Runoff
Possible: UNKNOWN SOURCE, Landfill/Land Disp., Municipal

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 2 (Problem Verified, Cause Unknown)
Lead Agency/Office: DOW/BWAM **Resolution Potential:** Medium
TMDL/303d Status: 1*

Further Details

Aquatic life support in this portion of the Canisteo River is impaired by unknown toxicity. Possible sources of this impact have been suggested but the actual source has yet to be verified. Nonpoint source nutrient enrichment from within and above the segment watershed may also contribute to water quality impacts. Hydrologic/habitat uses in this reach of the Canisteo River is also impaired by habitat modification related to flood control projects in the City of Hornell. The conflicting uses of the river for flood control and fishery habitat may be difficult to resolve.

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Canisteo River in Canisteo, Steuben County, (at Depot Street) 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, an improvement over moderate impacts noted in 2002 (see below). Tolerant worms continue to represent a substantial portion of the fauna, likely reflecting effects of the Hornell Water Pollution Control Facility discharge, approximately 3 miles upstream. Habitat may also be a factor at this site, with the substrate consisting of rock and silt. Crayfish collected for tissue analysis did not show metals, PCBs, or PAHs above levels of concern, but levels of some pesticides

were elevated. Water column sampling revealed iron, aluminum and mercury to be parameters of concern; these substances exceeded the respective assessment criterion in two to four of the ten samples collected. Coliform sampling was limited but did reveal some high counts. 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. Fish community metrics reflected very good water quality. The most numerous species were spotfin shiner and tessellated darter. Also present were chain pickerel, rosyface shiner, mimic shiner, banded darter, largemouth bass, smallmouth bass, and rock bass. (DEC/DOW, BWAM/RIBS, January 2005)

A biological (macroinvertebrate) assessment of Canisteo River in Canisteo (at Depot Street) was also conducted in 2002 as part of the RIBS Biological Screening effort. Sampling results indicated moderately impacted water quality conditions. A significant biological impact consistent with chlorinated sewage wastes, similar to results for 1988 sampling, was found. However, the Hornell plant is not required to disinfect its effluent, so it is not a likely source of chlorine toxicity. Most recently the plant has been consistently meeting its tertiary treatment permit limits. Similar but somewhat more impacted results were found in Hornell (at Ashbaugh Hill Road) in 1988 sampling. (DEC/DOW, BWAM/SBU, June 2005)

It had also been suggested that the impact in this segment may be due, in part, to poor water quality in Canacadea Creek which enters the Canisteo above this site. However, follow-up biological sampling in 1989 indicated that, at that time, water quality impacts from this tributary stream were not as significant as those found in the vicinity of the facility discharge (B.Bode memo to Butler, 2/2/90).

Possible contamination of the stream from the adjacent Conrail Demolition Landfill Hazardous Waste Site (Site No. 8-51-002) in Hornell has also been noted. Phase II Remediation Investigation of the site was completed in 1992. Analysis of surface and groundwater confirmed the migration of contaminants. Initial studies showed significant levels of lead in sediment and PCB and benzene in the water column. The site has also been noted as a source of excessive siltation. Two other hazardous waste sites are also located in the area: a (former) General Electric Inactive Hazardous Waste Site (Site No. 8-51-009) and the Hornell Street Extension Hazardous Substance Waste Disposal Site. (DEC/DER, Hazardous Waste Site database, 2006).

The flood control project in the City of Hornell impairs fishery habitat in portions of the Canisteo River, as well as lower Canacadea Creek, Chauncey Run and Crosby Creek. The project includes 2 miles of channel paving, nearly 4 miles of channel widening and realignment over 5 miles of concrete flood wall, 6 miles of earthen levees with riprap protection, 5 check dams, 4 drop structures and 4 weirs. These structures and their maintenance requirements (including periodic sediment removal from check dams, etc) reduce in-stream habitat, restrict fish passage and limit recreational access to the river. (Steuben County WQCC, August 2004)

This segment includes the portion of the stream and selected/smaller tribs from Bennetts Creek (-40) in Canisteo to the Seneca Street Bridge in Hornell. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Hammer Creek (-41), Cunningham Creek (-42), Crosby Creek (-45) and Chauncey Run (-46), are also Class C. Bennetts Creek (-40) and Canacadea Creek (-47) are listed separately.

Tuscarora Creek, Lower, and tribs (0503-0016)

NoKnownImpct

Waterbody Location Information

Revised: 01/19/2007

Water Index No: Pa 3-57- 5- 8
Hydro Unit Code: 02050104/060 **Str Class:** C
Waterbody Type: River
Waterbody Size: 44.2 Miles
Seg Description: stream and tribs, from mouth to above South Addison

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

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

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Tuscarora Creek in Addison, Steuben County, (at Orr Hill/South Road) 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 non-impacted water quality conditions. The fauna was dominated by clean-water mayflies. Crayfish collected for tissue analysis did not show metals, organochlorine pesticides, PCBs, or PAHs above levels of concern. Water column sampling revealed no substances to be parameters of concern. Bottom sediment sampling was not conducted at this site. Toxicity testing of the water column showed no significant mortality or reproductive impacts. Fish community metrics reflected very good water quality. The fish community was dominated by longnose dace, blacknose dace, central stoneroller, and mottled sculpin. Other species included cutlips minnow, pearl dace, yellow bullhead, brown bullhead, banded darter, shield darter, largemouth bass, smallmouth bass, and rock bass. (DEC/DOW, BWAM/RIBS, January 2005)

A biological (macroinvertebrate) assessment of Tuscarora Creek in Addison (at South Street) was conducted in 2002. Field sampling results indicated non-impacted water quality conditions. Although the site is in an agricultural area and the stream had considerable filamentous algae and supersaturated dissolved oxygen indicating high productivity, the

fauna was diverse and dominated by sensitive mayflies. All screening criteria for waters having no known impacts were met. A 1997 sample from a site just above this reach in South Addison was laboratory-processed and revealed a similar assessment. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs from the mouth in Addison to North Branch Tuscarora Creek above South Addison. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Elk Creek (-9), are also Class C. North Branch Tuscarora Creek (-11) is listed separately.

Tuscarora Creek, Middle, and tribs (0503-0017)

NoKnownImpct

Waterbody Location Information

Revised: 01/19/2007

Water Index No: Pa 3-57- 5- 8
Hydro Unit Code: 02050104/060 **Str Class:** C
Waterbody Type: River
Waterbody Size: 22.2 Miles
Seg Description: stream and tribs, from above South Addison to Woodhull

Drain Basin: Chemung River
Tioga River
Reg/County: 8/Steuben Co. (51)
Quad Map: BORDEN (M-11-3)

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

Biological (macroinvertebrate) assessments of Tuscarora Creek in East Woodhull (at Route 417) and in Woodhull (at Main Street) were conducted in 2002. Field sampling results indicated non-impacted water quality conditions. Although the site is in an agricultural area and the stream had considerable filamentous algae and supersaturated dissolved oxygen indicating high productivity, the fauna was diverse and dominated by sensitive mayflies. All screening criteria for waters having no known impacts were met. A 1997 sample from a site in South Addison (at Route 85) was laboratory-processed and revealed a similar assessment. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs from North Branch Tuscarora Creek above South Addison to South Branch Tuscarora Creek in Woodhull. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including East Lick Creek (-18), are also Class C. North Branch Tuscarora Creek (-11) and South Branch Tuscarora Creek (-21) are listed separately.

Tuscarora Creek, Upper, and tribs (0503-0018)

Need Verific

Waterbody Location Information

Revised: 02/05/2007

Water Index No: Pa 3-57- 5- 8
Hydro Unit Code: 02050104/060 **Str Class:** C
Waterbody Type: River
Waterbody Size: 39.1 Miles
Seg Description: stream and tribs, above Woodhull

Drain Basin: Chemung River
Tioga River
Reg/County: 8/Steuben Co. (51)
Quad Map: WOODHULL (M-11-4)

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: ---
Suspected: AESTHETICS, D.O./OXYGEN DEMAND, AMMONIA, NUTRIENTS
Possible: Pathogens

Source(s) of Pollutant(s)

Known: ---
Suspected: MUNICIPAL (Jasper WWTP)
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

Aquatic life support and recreational uses in this portion of Tuscarora Creek may experience impacts from the wastewater treatment facility in the Hamlet of Jasper.

Construction of a new USBF (Upflow Sludge Blanket Filtration) wastewater treatment plant to address failing residential onsite septic systems in Jasper began in early May 2005, and the WWTP went on-line on in December 2005. The plant receives an average of about 15,000 GPD. However during its first year of operation the WWTP has been unable to consistently meet SPDES permit limits for: BOD, total suspended solids (TSS) and ammonia. Personnel of MRB Group (the consultant engineering firm) and Purestream (the supplier of the major equipment within the plant), are working with the operators of the plant to identify and solve the causes of these exceedences. (DEC/DOW, Region 8, January 2007)

The plant is located at the end of Grange Street in the Hamlet of Jasper, and uses an Upflow Sludge Blanket Filtration process. The plant and collection system serve approximately 117 EDU's (equivalent dwelling units) and consist of approximately 13,000 feet of 8-inch diameter sewer pipe, 2,500 feet of 2-inch diameter forcemain pipe, manholes, pumping stations, and grinder type pumping units. Grants totaling 2.13 million dollars from the Governor's Office for

Small Cities, US Department of Agriculture (Rural Development Section), the Appalachian Regional Commission and the Environmental Facilities Corporation made this 3.28 million-dollar project possible. (DEC/DOW, Region 8, January 2007)

A biological (macroinvertebrate) assessment of Tuscarora Creek in Woodhull (at Main Street) was conducted in 2002. Field sampling results indicated non-impacted water quality conditions. Although the site is in an agricultural area and the stream had considerable filamentous algae and supersaturated dissolved oxygen indicating high productivity, the fauna was diverse and dominated by sensitive mayflies. All screening criteria for waters having no known impacts were met. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs above South Branch Tuscarora Creek in Woodhull. The waters of this portion of the stream are Class C. Tribs to this reach/segment are also Class C. South Branch Tuscarora Creek (-21) is listed separately.

Colonel Bills Creek (0503-0023)

MinorImpacts

Waterbody Location Information

Revised: 02/05/2007

Water Index No: Pa 3-57- 5-38	Drain Basin: Chemung River
Hydro Unit Code: 02050104/050	Str Class: C
Waterbody Type: River	Reg/County: 8/Steuben Co. (51)
Waterbody Size: 37.4 Miles	Quad Map: SOUTH CANISTEO (M-10-2)
Seg Description: entire stream and tribs	

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

Source(s) of Pollutant(s)

Known: STREAMBANK EROSION, Roadbank Erosion
 Suspected: ---
 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 Colonel Bills Creek are thought to experience minor impacts due to silt/sedimentation from 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. Sediment loads and deposition in this creek are among the most severe in the county. The municipal highway departments remove approximately 35,000 cubic yards of gravel from the lower reach of the stream annually. The stream is wide and shallow with multiple braided channels and no low flow channel. A road ditch assessment of this watershed by Upper Susquehanna Coalition/SWCD documents road bank erosion problems. Maintenance of flood control structures downstream of these sites require regular sediment removal by NYSDEC. (Steuben County WQCC, August 2004)

A biological (macroinvertebrate) assessment of Colonel Bill's Creek near Canisteo (at Route 36) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. The fauna was dominated by facultative midges that indicate nonpoint source nutrient enrichment. Some possible indications of toxicity were also noted. 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)

This segment includes the entire stream and all tribs. The waters of the stream are Class C. Tribs to this reach/segment, including Gravel Run (-4), Two Bridge Run (-5), Red Spring Run (-7), Rock Run (-8), Jefferson Creek (-9), Dennis Creek (-10) and Milwaukee Creek (-11), are also Class C.

biological (macroinvertebrate) assessment for the site indicated slightly impacted water quality conditions. Silt and algae were prominent, and stoneflies were not found at the site. 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. Crayfish collected for tissue analysis did not show metals, PCBs, or PAHs above levels of concern, although some elevated levels of pesticides were noted. Water column sampling revealed iron to be a parameter of concern, exceeding the assessment criterion in two 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. Fish community metrics at this site reflected very good water quality, based on 2003 sampling. The most numerous species were tessellated darter, bluntnose minnow, white sucker, and banded darter. Also present were fantail darter, mottled sculpin, spottail shiner, and smallmouth bass. (DEC/DOW, BWAM/RIBS, January 2005)

Biological (macroinvertebrate) assessments of Bennetts Creek in Canisteo (at Route 36) and in Bennetts (at Route 248) were also conducted in 2002 as part of the RIBS Biological Screening effort. Field sampling results at both sites indicated non-impacted water quality conditions. The fauna was diverse and all screening criteria for waters having no known impacts were met. Some agricultural effects were noted, including diatoms, filamentous algae and supersaturated dissolved oxygen levels. However, in spite of these observations, aquatic life support is considered to be fully supported in the stream. At site farther upstream in Greenwood was also field-assessed as non-impacted. (DEC/DOW, BWAM/SBU, June 2005)

For most of its length, Bennetts Creek flows through a mix of forest and agricultural lands, with scattered residential development. Near its mouth, the creek enters the Village of Canisteo where it is stabilized by two check dams and flanked by flood control levees.

This segment includes the portion of the stream and selected/smaller tribs from the mouth in Canisteo to/including Slate Creek (-6) in Bennetts. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Fall Creek (-2), Sugar Creek (-3) and Slate Creek (-6), are also Class C. Purdy Creek (-1) and Upper Bennetts Creek are listed separately.

Bennetts Creek, Upper, and tribs (0503-0024)

MinorImpacts

Waterbody Location Information

Revised: 02/05/2007

Water Index No: Pa 3-57- 5-40
Hydro Unit Code: 02050104/040 **Str Class:** C
Waterbody Type: River
Waterbody Size: 80.7 Miles
Seg Description: stream and tribs, above Bennetts

Drain Basin: Chemung River
Tioga River
Reg/County: 8/Steuben Co. (51)
Quad Map: REXVILLE (M-10-4)

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

Source(s) of Pollutant(s)

Known: STREAMBANK EROSION, Roadbank Erosion
Suspected: ---
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 Bennetts Creek are thought to experience minor impacts due to silt/sedimentation from 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. Erosion of streambanks and agricultural property has occurred at various sites (particularly near Greenwood) and multiple bank failures have been recorded. High sediment loads from other tributaries also contribute to the problem. 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. Maintenance of flood control structures downstream of these sites require regular sediment removal by NYSDEC. (Steuben County WQCC, August 2004)

Biological (macroinvertebrate) assessments of Bennetts Creek in Bennetts (at Route 248) and in Greenwood (at Route 248) were conducted in 2002. Field sampling results at both sites indicated non-impacted water quality conditions. The fauna was diverse and all screening criteria for waters having no known impacts were met. Some agricultural effects

including diatoms, filamentous algae and supersaturated dissolved oxygen levels were noted at the site in Bennetts. However, in spite of these observations, aquatic life support is considered to be fully supported in the stream. A site downstream near the mouth in Canisteo was also field-assessed as non-impacted. (DEC/DOW, BWAM/SBU, June 2005)

Sampling results from a 2006 Susquehanna River Basin Chemung River Subbasin Survey indicated more significant impacts, and habitat condition was considered supporting and not thought to be an influence on the sample. Water chemistry results revealed elevated nutrient (phosphorus) and temperature. (SRBC, March 2007)

While native reproduction of brown trout occurs in this segment, sedimentation, thermal changes and possible nutrient loadings are a concern below Greenwood. The primary source of the sediment is from erosion of streambanks. The channel is generally wide and shallow with little shading vegetation. Channel instability is revealed by areal photographs. (Steuben Co WQCC and Cohocton Chapter of Trout Unlimited, August 2004)

This segment includes the portion of the stream and all tribs above Slate Creek (-6) in Bennetts. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Colby Creek (-7), Erskin Hollow Brook (-8), Norton Hollow Brook (-10), Rock Creek (-11), Woodward Hollow Brook (-12), Cole Hollow Brook (-13) and Christian Hollow Brook (-14), are Class C,C(T),C(TS). Lower Bennetts Creek is listed separately.

Purdy Creek and tribs (0503-0025)

MinorImpacts

Waterbody Location Information

Revised: 02/05/2007

Water Index No: Pa 3-57- 5-40- 1	Drain Basin: Chemung River
Hydro Unit Code: 02050104/040 Str Class: C	Tioga River
Waterbody Type: River	Reg/County: 8/Steuben Co. (51)
Waterbody Size: 42.4 Miles	Quad Map: GREENWOOD (M-10-1)
Seg Description: entire stream and tribs	

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

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

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

Source(s) of Pollutant(s)

Known: STREAMBANK EROSION, Roadbank Erosion
Suspected: ---
Possible: Urban/Storm Runoff

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 Purdy Creek are thought to experience minor impacts due to silt/sedimentation from 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. These sediment loads necessitated the construction of a concrete debris dam in the creek as part of the Canisteo flood protection project. Erosion of streambanks and agricultural property has occurred at various sites (particularly near Greenwood) and multiple bank failures have been recorded. High sediment loads from other tributaries also contribute to the problem. 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. Maintenance of flood control structures downstream of these sites require regular sediment removal by NYSDEC. (Steuben County WQCC, August 2004)

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

above the provisional level of concern. Macroinvertebrate tissue analysis in 1997 did not reveal mercury to be elevated, but nickel as well as PAHs were at levels indicating parameters of concern. (DOW/BWAM, RIBS Unit, 1994.)

Sampling results from a 2006 Susquehanna River Basin Chemung River Subbasin Survey indicated more significant impacts, and habitat condition was considered supporting and not thought to be an influence on the sample. Water chemistry results revealed elevated aluminum and sodium which may contribute to the toxicity that was noted in the NYSDEC assessment. (SRBC, March 2007)

This segment includes the portion of the stream and all tribs from the mouth in Hornell to Almond Lake. The waters of this portion of the stream are Class C. Tribs to this reach/segment are also Class C. Almond Lake and Upper Canacadea Creek are listed separately.

but that also included a UV disinfection system. The WWTP is currently meeting SPDES effluent discharge limits and there are no reports of impacts related to the facility. Inadequate onsite septic systems serving homes in and around Alfred may also be contributing nutrients, and other pollutants to the stream. (DEC/DOW, Region 9, January 2007)

Numerous household direct discharges and failing on-site septic systems throughout the Canacadea Valley were also noted during surveys in the 1980s. If these have not been corrected, they may also contribute to elevated levels of coliform and other pollutants. (DEC/BWAM, WQ Evaluation, 1998)

This segment includes the portion of the stream and selected/smaller tribs above Almond Lake. The waters of this portion of the stream are Class C,C(TS). Tribs to this reach/segment are Class C,C(T). Karr Valley Creek (-4), Almond Lake and Lower Canacadea Creek are listed separately.

Karr Valley Creek and tribs (0503-0026)

NoKnownImpct

Waterbody Location Information

Revised: 01/23/2007

Water Index No: Pa 3-57- 5-47- 4
Hydro Unit Code: 02050104/030 **Str Class:** C
Waterbody Type: River
Waterbody Size: 46.6 Miles
Seg Description: entire stream and tribs

Drain Basin: Chemung River
Tioga River
Reg/County: 9/Allegany Co. (2)
Quad Map: ALFRED (L-09-3)

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

A biological (macroinvertebrate) assessment of Karr Valley Creek in Almond (at Route 21) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. The stream was dominated by facultative mayflies and midges indicating nonpoint source nutrient enrichment as the primary factor influencing water quality. Abundant algae was also noted in the stream. 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 and there are no other apparent water quality impacts to designated uses. (DEC/DOW, BWAM/SBU, June 2005)

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

Almond Lake (0503-0003)

Impaired Seg

Waterbody Location Information

Revised: 03/05/2007

Water Index No: Pa 3-57- 5-47-P27c	Drain Basin: Chemung River
Hydro Unit Code: 02050104/030	Str Class: B
Waterbody Type: Lake(R)	Reg/County: 9/Allegany Co. (2)
Waterbody Size: 480.1 Acres	Quad Map: HORNELL (L-10-4)
Seg Description: entire lake	

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

Use(s) Impacted	Severity	Problem Documentation
PUBLIC BATHING	Precluded	Known
Recreation	Stressed	Known

Type of Pollutant(s)

Known: SILT/SEDIMENT, Water Level/Flow
 Suspected: AESTHETICS (water clarity)
 Possible: Pathogens

Source(s) of Pollutant(s)

Known: HYDRO MODIFICATION, STREAMBANK EROSION
 Suspected: On-Site/Septic Syst
 Possible: - - -

Resolution/Management Information

Issue Resolvability: 5 (Not Resolvable, natural/conflicting use)	
Verification Status: (Not Applicable for Selected RESOLVABILITY)	
Lead Agency/Office: ext/WQCC	Resolution Potential: n/a
TMDL/303d Status: 4c (Impaired by Pollution, Not Pollutant(s), Not Listed)	

Further Details

Public bathing and recreational use in Almond Lake is impaired by conflict with its use for flood control. Sediment and flood debris is deposited in this flood control reservoir, limiting its use for public bathing.

Almond Lake is a flood control reservoir on Canacadea Creek that was constructed and is maintained by the US Army Corps of Engineers. When sediment filled the original impoundment, the lake level was raised an additional 5 feet in 1987. Recent (1997) bathometric surveys suggest the loss of about 25% of the volume within the existing lake over the last 10 years. Because the majority of the sediment accumulation occurs within the permanent impoundment, the impact on the flood storage capacity of the reservoir is minimal. Under normal operating conditions, the lake occupies about 160 acres. The 90-foot high Almond Dam is designed to provide a maximum flood control storage of 14,640 acre-feet. Under these conditions the lake would cover 660 acres. (Steuben County WQCC, August 2004)

A county park (Kanakadea Park) is located on the north shore of the reservoir. Many recreational activities (boating, fishing, hiking, picnicking) are supported in the park. However recreational use of the reservoir is often in conflict with its use for flood control. The public beach on the lake is closed to swimming (and has been since the 1980s) for reasons

that include the large amount of sediment and flood debris that has been deposited in the lake and high turbidity. Sediment loadings from upper Canacadea Creek are due at least in part to highly erodible soils resulting in some natural instability. However Army Corps of Engineers flood control maintenance in the reach of the stream above Almond Lake may be impacting (increasing) erosion in reaches upstream. (DEC/DFWMR and DMR, Region 9, January 2007)

Previously, coliform bacteria sampling in Canacadea Creek conducted by both the Allegany County Health Department and by Alfred University indicated that although there does not appear to be an overall bacteria problem, there are occasional "spikes" especially near the Alfred STP. However the Alfred WWTP underwent an upgrade primarily to add nitrification but that also included a UV disinfection system. The WWTP is currently meeting SPDES effluent discharge limits and there are no reports of impacts related to the facility. (DEC/DOW, Region 9, January 2007)

Numerous household direct discharges and failing on-site septic systems throughout the Canacadea Valley were also noted during surveys in the 1980s. If not corrected, these may also contribute to coliform violations. (DEC/BWM, H.Samide memo to J.Myers, 6/1/98)

See also Canacadea Creek (Segment ID 0503-0005).

Canisteo River, Upper, and minor trbs (0503-0013)

NoKnownImpct

Waterbody Location Information

Revised: 01/31/2007

Water Index No: Pa 3-57- 5 (portion 5) **Drain Basin:** Chemung River
Hydro Unit Code: 02050104/010 **Str Class:** C Tioga River
Waterbody Type: River **Reg/County:** 8/Steuben Co. (51)
Waterbody Size: 117.1 Miles **Quad Map:** ARKPORT (L-10-1)
Seg Description: stream and selected trbs, above Hornell

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

A biological (macroinvertebrate) assessment of Canisteo River above Hornell (at Route 65) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. Some signs of nutrient enrichment and siltation were noted. 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 and there are no other apparent water quality impacts to designated uses. (DEC/DOW, BWAM/SBU, June 2005)

See also segment 0503-0001 (Canisteo River, Middle, and trbs) regarding habitat modification impacts related to flood control projects in Hornell.

This segment includes the portion of the stream and selected/smaller trbs above the Seneca Street Bridge in Hornell. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment, including Hollis Creek (-51) and Marsh Ditch (-52), are also Class C. Big Creek (-48) and Seeley/Carrington Creek (-49) are listed separately.

Seeley/Carrington Cr, Lower, and tribs (0503-0029)

NoKnownImpct

Waterbody Location Information

Revised: 01/22/2007

Water Index No: Pa 3-57- 5-49 **Drain Basin:** Chemung River
Hydro Unit Code: 02050104/070 **Str Class:** C Tioga River
Waterbody Type: River **Reg/County:** 8/Steuben Co. (51)
Waterbody Size: 0.0 Miles **Quad Map:** HORNELL (L-10-4)
Seg Description: stream and selected tribs, mouth to Hornell Reservoirs

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

A biological (macroinvertebrate) assessment of Seeley Creek in North Hornell (at Seneca Street) 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. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and selected/smaller tribs from the mouth in Hornell to the outlet of the Hornell Water Supply Reservoirs. The waters of this portion of the stream are Class C. Tribs to this reach/segment are also Class C. Upper Seeley/Carrington Creek is listed separately.

Minor Tribs to Pennsylvania (0503-0036)

NoKnownImpct

Waterbody Location Information

Revised: 01/22/2007

Water Index No: Pa 11 thru 20
Hydro Unit Code: 02050104/130 **Str Class:** C
Waterbody Type: River
Waterbody Size: 25.8 Miles
Seg Description: total length of selected tribs (within NYS)

Drain Basin: Chemung River
Tioga River
Reg/County: 8/Steuben Co. (51)
Quad Map: BORDEN (M-11-3)

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

A biological (macroinvertebrate) assessment of Camp Brook near Osceola, PA, (off Route 127) was conducted in 2002. Field sampling results indicated non-impacted water quality conditions. The fauna was diverse and all screening criteria for waters having no known impacts were met. (DEC/DOW, BWAM/SBU, June 2005)

Camp 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.

This segment includes the total length of selected/smaller tribs to Pa (between the Tioga River and Troups Creek). Tribs within this segment, including Mapes Creek (-11), Strait Creek (-13), Camp Brook (-18), Holden Creek (-19), Redhouse Hollow Brook (-19a) and Buckley Brook (-20), are Class C. Troups Creek (Pa 25) is listed separately.

Troups Creek, Lower, and tribs (0503-0009)

NoKnownImpct

Waterbody Location Information

Revised: 02/09/2007

Water Index No: Pa 25
Hydro Unit Code: 02050104/110 **Str Class:** C
Waterbody Type: River
Waterbody Size: 50.8 Miles
Seg Description: stream and tribs, from state line to Troupsburg

Drain Basin: Chemung River
Tioga River
Reg/County: 8/Steuben Co. (51)
Quad Map: TROUPSBURG (M-10-3)

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

Biological (macroinvertebrate) assessments of Troups Creek in South Troupsburg (off Route 36) was conducted by the Susquehanna River Basin Commission in 2006. Sampling results were evaluated by NYSDEC as indicating slightly impacted water quality conditions. The fauna was dominated by midges, but mayflies, stoneflies and caddisflies were also present. A site farther downstream in Knoxville PA showed clearly non-impacted water quality. In spite of the minor impacts at the upstream site, aquatic life is considered to be fully supported in the stream and there are no other apparent water quality impacts. (DEC/DOW, BWAM/SBU, January 2007)

A new \$2.2 million Town of Troupsburg wastewater treatment plant and collection system went on-line in late May 2004. A total of 83 new service connections are hooked up to the new system, including the Jasper-Troupsburg Central School Building. This project addressed the widespread direct discharge of raw sewage and septic tank effluent from residences and public buildings in the hamlet. Although the WWTP had some initial problems with percent removals, ammonia, and TSS, it is currently operating well and meeting SPDES permit limits. The WWTP consists of a 35,000 gallon primary anaerobic treatment tank, an RBC unit, clarifier, dosing chamber, tertiary sand filters, post aeration tank, and outfall to Troup's Creek. This project has resulted in major public health benefits, as well as protection of Troups Creek. The project was made possible by a unique co-funding package that included a Rural Development Office grant,

(\$1.3M), a Governor's Office of Small Cities grant (\$400K) and NYS Department of State (\$150K). (DEC/DOW, Region 8, January 2007)

This segment includes the portion of the stream and all tribs from the NY-Pa state line to/including West Branch Troups Creek (-7) below Troupsburg. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Squab Hollow Brook (-5) and West Branch Troups Creek (-7), are Class C,C(TS). Upper Troups Creek is listed separately.

Troups Creek, Upper, and tribs (0503-0038)

NoKnownImpct

Waterbody Location Information

Revised: 01/22/2007

Water Index No: Pa 25	Drain Basin: Chemung River	
Hydro Unit Code: 02050105/110	Str Class: C	Chemung River
Waterbody Type: River	Reg/County: 8/Steuben Co. (51)	
Waterbody Size: 16.9 Miles	Quad Map: TROUPSBURG (M-10-3)	
Seg Description: stream and tribs, above Troupsburg		

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

A biological (macroinvertebrate) assessment of Troups Creek in Troupsburg (at Hopper Hill Road) was conducted in 2002. Field sampling results indicated non-impacted water quality conditions. The fauna was diverse and all screening criteria for waters having no known impacts were met. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs above West Branch Troups Creek (-7) below Troupsburg. The waters of this portion of the stream are Class C. Tribs to this reach/segment are also Class C. Lower Troups Creek is listed separately.

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Summary Listing of Priority Waters

Chemung River Basin

Priority Waterbodies List

Table 1

Water Index Number	Waterbody/Segment Name (ID) Use Impairment(s)	County	Seg Size	Type	Class	W.B.Category
Pa 3 (portion 1)	Chemung River, Lower, Main Stem (0501-0014) Water Supply KNOWN to be THREATENED	Chemung	10.3 Mile	River	A	Threatened
Pa 3-18	Seeley Creek and minor tribs (0501-0013) Habitat/Hydro KNOWN to be THREATENED	Chemung	38.7 Mile	River	C	Threatened
Pa 3-28	Newtown Creek, Lower, and tribs (0501-0003) Aquatic Life KNOWN to be STRESSED Habitat/Hydrology POSSIBLY STRESSED	Chemung	15.8 Mile	River	C	MinorImpacts
Pa 3-28- 6	Diven/Heller Creek and tribs (0501-0032) Aquatic Life SUSPECTED of being STRESSED	Chemung	12.4 Mile	River	C	MinorImpacts
Pa 3-28- 6-...P13a Section 303(d) Listed Water	Kopper Pond (0501-0012) Fish Consumption KNOWN to be IMPAIRED Recreation KNOWN to be IMPAIRED Aquatic Life SUSPECTED of being STRESSED	Chemung	10.0 Acre	Lake	C	Impaired Seg
Pa 3-58 (portion 2)	Cohocton River, Mid, and minor tribs (0502-0017) Aquatic Life KNOWN to be THREATENED	Steuben	42.1 Mile	River	C	Threatened
Pa 3-58 (portion 3)	Cohocton River, Mid, and minor tribs (0502-0003) Aquatic Life KNOWN to be THREATENED	Steuben	68.1 Mile	River	C	Threatened

Chemung River Basin

Priority Waterbodies List

Table 1

Water Index Number	Waterbody/Segment Name (ID) Use Impairment(s)	County	Seg Size	Type	Class	W.B.Category
Pa 3-58 (portion 4)	Cohocton River, Upp, and minor tribs (0502-0018) Aquatic Life KNOWN to be THREATENED	Steuben	97.9 Mile	River	C(T)*	Threatened
Pa 3-58- 3	Meads Creek, Lower, and minor tribs (0502-0008) Habitat/Hydro SUSPECT of being STRESSED	Steuben	26.9 Mile	River	C(T)	MinorImpacts
Pa 3-58- 3	Meads Creek, Upper, and tribs (0502-0019) Habitat/Hydro SUSPECT of being STRESSED	Schuyler	60.7 Mile	River	C(T)	MinorImpacts
Pa 3-58- 3- 3	Dry Run and tribs (0502-0020) Habitat/Hydro SUSPECT of being STRESSED	Steuben	32.5 Mile	River	C(TS)	MinorImpacts
Pa 3-58-15-P47	Lamoka Lake and Mill Pond (0502-0001) Recreation KNOWN to be IMPAIRED Public Bathing KNOWN to be STRESSED Aquatic Life POSSIBLY STRESSED	Schuyler	825.6 Acre	Lake	A	Impaired Seg
Pa 3-58-15-P47- 4-P48	Waneta Lake (0502-0002) Recreation KNOWN to be IMPAIRED Public Bathing KNOWN to be STRESSED Aquatic Life POSSIBLY STRESSED	Schuyler	780.8 Acre	Lake	A	Impaired Seg
Pa 3-58-20-P51	Lake Salubria (0502-0011) Recreation KNOWN to be IMPAIRED Public Bathing KNOWN to be STRESSED Aquatic Life SUSPECTED of being STRESSED	Steuben	57.6 Acre	Lake	B	Impaired Seg

Chemung River Basin**Priority Waterbodies List****Table 1**

Water Index Number	Waterbody/Segment Name (ID) Use Impairment(s)	County	Seg Size	Type	Class	W.B.Category
Pa 3-58-28	Fivemile Creek, Lower, and tribs (0502-0033) Aquatic Life KNOWN to be STRESSED	Steuben	73.8 Mile	River	C	MinorImpacts
Pa 3-58-31- 7-P66	Smith Pond (0502-0012) Public Bathing SUSPECT of being IMPAIRED Recreation SUSPECTED of being IMPAIRED	Steuben	44.7 Acre	Lake	B	Impaired Seg
Pa 3-58-31-10-P68	Demmons Pond (0502-0015) Recreation KNOWN to be STRESSED Public Bathing SUSPECT of being STRESSED	Steuben	32.1 Acre	Lake	B	MinorImpacts
Pa 3-58-38..P79	Loon Lake (0502-0039) Recreation KNOWN to be THREATENED	Steuben	166.3 Acre	Lake	B	Threatened
Pa 3-58-39	Twelvemile Creek and tribs (0502-0040) Aquatic Life KNOWN to be STRESSED	Steuben	56.2 Mile	River	C	MinorImpacts
Pa 3-57	Tioga River, Main Stem (0503-0004) Aquatic Life SUSPECTED of being STRESSED Habitat/Hydro SUSPECT of being STRESSED	Steuben	15.2 Mile	River	C	MinorImpacts
Pa 3-57- 5 (portion 2)	Canisteo River, Mid, and minor tribs (0503-0006) Habitat/Hydro SUSPECT of being STRESSED	Steuben	70.1 Mile	River	C	MinorImpacts

Chemung River Basin

Priority Waterbodies List

Table 1

Water Index Number	Waterbody/Segment Name (ID) Use Impairment(s)	County	Seg Size	Type	Class	W.B.Category
Pa 3-57- 5 (portion 3)	Canisteo River, Mid, and minor tribs (0503-0012) Habitat/Hydro SUSPECT of being STRESSED	Steuben	60.9 Mile	River	C	MinorImpacts
Pa 3-57- 5 (portion 4)	Canisteo River, Mid, and minor tribs (0503-0001) Aquatic Life KNOWN to be IMPAIRED Habitat/Hydrology KNOWN to be IMPAIRED	Steuben	57.5 Mile	River	C	Impaired Seg
Pa 3-57- 5-38	Colonel Bills Creek (0503-0023) Habitat/Hydro SUSPECT of being STRESSED	Steuben	37.4 Mile	River	C	MinorImpacts
Pa 3-57- 5-40	Bennetts Creek, Low, and minor tribs (0503-0007) Habitat/Hydro SUSPECT of being STRESSED	Steuben	34.2 Mile	River	C	MinorImpacts
Pa 3-57- 5-40	Bennetts Creek, Upper, and tribs (0503-0024) Habitat/Hydro SUSPECT of being STRESSED	Steuben	80.7 Mile	River	C	MinorImpacts
Pa 3-57- 5-40- 1	Purdy Creek and tribs (0503-0025) Habitat/Hydro SUSPECT of being STRESSED	Steuben	42.4 Mile	River	C	MinorImpacts
Pa 3-57- 5-47	Canacadea Creek, Lower, and tribs (0503-0008) Aquatic Life KNOWN to be STRESSED	Steuben	5.2 Mile	River	C	MinorImpacts
Pa 3-57- 5-47	Canacadea Creek, Upper, and minor tribs (0503-0005) Aquatic Life SUSPECTED of being STRESSED Recreation POSSIBLY STRESSED	Allegany	47.1 Mile	River	C	MinorImpacts

Chemung River Basin**Priority Waterbodies List****Table 1**

Water Index Number	Waterbody/Segment Name (ID) Use Impairment(s)	County	Seg Size	Type	Class	W.B.Category
Pa 3-57- 5-47-P27c	Almond Lake (0503-0003) Public Bathing KNOWN to be PRECLUDED Recreation KNOWN to be STRESSED	Allegany	480.1 Acre	Lake(R)	B	Impaired Seg
Pa 3-58 (portion 2)	Cohocton River, Mid, and minor tribs (0502-0017) Aquatic Life KNOWN to be THREATENED	Steuben	42.1 Mile	River	C	Threatened
Pa 3-58 (portion 3)	Cohocton River, Mid, and minor tribs (0502-0003) Aquatic Life KNOWN to be THREATENED	Steuben	68.1 Mile	River	C	Threatened
Pa 3-58 (portion 4)	Cohocton River, Upp, and minor tribs (0502-0018) Aquatic Life KNOWN to be THREATENED	Steuben	97.9 Mile	River	C(T)*	Threatened
Pa 3-58- 3	Meads Creek, Lower, and minor tribs (0502-0008) Habitat/Hydro SUSPECT of being STRESSED	Steuben	26.9 Mile	River	C(T)	MinorImpacts
Pa 3-58- 3	Meads Creek, Upper, and tribs (0502-0019) Habitat/Hydro SUSPECT of being STRESSED	Schuyler	60.7 Mile	River	C(T)	MinorImpacts
Pa 3-58- 3- 3	Dry Run and tribs (0502-0020) Habitat/Hydro SUSPECT of being STRESSED	Steuben	32.5 Mile	River	C(TS)	MinorImpacts

Chemung River Basin

Priority Waterbodies List

Table 1

Water Index Number	Waterbody/Segment Name (ID) Use Impairment(s)	County	Seg Size	Type	Class	W.B.Category
Pa 3-58-15-P47	Lamoka Lake and Mill Pond (0502-0001) Aquatic Life KNOWN to be IMPAIRED Public Bathing KNOWN to be STRESSED Recreation KNOWN to be STRESSED	Schuylers	825.6 Acre	Lake	A	Impaired Seg
Pa 3-58-15-P47- 4-P48	Waneta Lake (0502-0002) Recreation KNOWN to be IMPAIRED Public Bathing KNOWN to be STRESSED Aquatic Life POSSIBLY STRESSED	Schuylers	780.8 Acre	Lake	A	Impaired Seg
Pa 3-58-20-P51 Section 303(d) Listed Water	Lake Salubria (0502-0011) Recreation KNOWN to be IMPAIRED Public Bathing KNOWN to be STRESSED Aquatic Life SUSPECTED of being STRESSED	Steuben	57.6 Acre	Lake	B	Impaired Seg
Pa 3-58-28	Fivemile Creek, Lower, and tribs (0502-0033) Aquatic Life KNOWN to be STRESSED	Steuben	73.8 Mile	River	C	MinorImpacts
Pa 3-58-31- 7-P66	Smith Pond (0502-0012) Public Bathing SUSPECT of being IMPAIRED Recreation SUSPECTED of being IMPAIRED	Steuben	44.7 Acre	Lake	B	Impaired Seg
Pa 3-58-31-10-P68	Demmons Pond (0502-0015) Recreation KNOWN to be STRESSED Public Bathing SUSPECT of being STRESSED	Steuben	32.1 Acre	Lake	B	MinorImpacts
Pa 3-58-38..P79	Loon Lake (0502-0039) Recreation KNOWN to be THREATENED	Steuben	166.3 Acre	Lake	B	Threatened

Chemung River Basin

Priority Waterbodies List

Table 1

Water Index Number	Waterbody/Segment Name (ID) Use Impairment(s)	County	Seg Size	Type	Class	W.B.Category
Pa 3-58-39	Twelvemile Creek and tribs (0502-0040) Aquatic Life KNOWN to be STRESSED	Steuben	56.2 Mile	River	C	MinorImpacts

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The Waterbody Inventory Priority Waterbodies List Assessment Methodology

Assessment methodology refers to what monitoring approaches are used and how results are interpreted to determine use support and arrive at an assessment of water quality. The various aspects of assessment methodology include the type of monitoring data and water quality information used in the assessments, the source of the data/information, and the level of confidence in the data/information and the resulting assessment. What follows is an outline of specific criteria relating 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.

WI/PWL Water Uses

Water Supply
Shellfishing
Public Bathing
Fish Consumption
Aquatic Life
Recreation
Aesthetics

Waterbody Inventory/Priority Waterbodies List

NYS DEC maintains use support/impairment information for the waters of the state through its Waterbody Inventory/Priority Waterbodies List (WI/PWL) database. The assessment of New York State water resources contained in the WI/PWL is based on the ability of waters to support a range of specific designated uses (see box). The particular uses that a specific waterbody are expected to support is dependent upon the classification of that waterbody. For example, only specifically designated waterbodies are considered to have best uses of water supply, shellfishing and public bathing.

WI/PWL Severity of Use Impairment

PRECLUDED

Frequent/persistent water quality, or quantity, conditions and/or associated habitat degradation *prevents all aspects* of the waterbody use.

IMPAIRED

Occasional water quality, or quantity, conditions and/or habitat characteristics *periodically prevent* the use 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, but *occasional* water quality, or quantity, conditions and/or associated habitat degradation *periodically discourage* the use of the waterbody.

THREATENED

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, or;

Monitoring *data reveals a decrease in water quality* or the presence of toxics below the level of concern, or;

Waterbody uses are not restricted and no water quality problems exists, but the support of a specific and distinctive use makes the waterbody more susceptible to water quality threats.

The use support/impairment information in the WI/PWL database is generated from a variety of available sources including statewide ambient network monitoring data, monitoring of toxic substances in fish and wildlife, special intensive surveys, fisheries resource surveys, water quality complaints, beach closure reports, shellfish area closures, etc. Given the growing involvement of local agency and citizen volunteers in water quality monitoring, the WI/PWL updating process also includes a significant public participation and outreach component. This effort relies on a statewide network of local Water Quality Coordinating Committees and county Soil and Water Conservation Districts working in conjunction with the DEC Division of Water to capture additional available water quality information.

After available water quality information is collected, judgements and evaluations are made regarding:

- whether an impairment to a specific use is actually occurring,
- the severity of the impairment to the use, and
- the level of documentation indicating a use impairment.

The focus of a water quality assessment is based on a specific use being restricted. If this is the case, then the severity of use impairment is evaluated as either *precluded*, *impaired*, *stressed* or *threatened*. Based on the level of documentation, the impairment is also determined to be *known*, *suspected* or *possible*. The national use support categories used by USEPA to assess waters differ somewhat from those tracked in the NYS DEC Waterbody Inventory/Priority Waterbodies List system. The general relationship between the USEPA Designated Use Support

categories (fully supporting, partially supporting, not supporting) and the WI/PWL severity and documentation categories is shown in Table 1. More detailed relationships between specific monitoring and assessment results and various uses supported are outlined and discussed on the following pages.

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 - Anecdotal evidence, public perception and/or specific citizen complaints suggest 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 - 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.

Documentation of Waters with No Known Impairment

Historically, limited resources forced the NYS DEC monitoring effort to focus on waterbodies with known or suspected water quality problems and issues. Correspondingly, there was not much emphasis on the monitoring and documentation of waters with good (*fully supporting*) water quality. However, modifications to the NYS DEC Rotating Intensive Basin Studies (RIBS) Sampling Program to correct this bias were piloted in 1996 and began in earnest in 1998. The new RIBS strategy employs a tiered approach where rapid biological screening methods are applied at a large number of sites during the first year of a two-year study. This enables the program to document water quality in a greater percentage of all waters, not just those with known or potential problems. More intensive chemical monitoring is used in the second year to follow-up problems and issues identified by the biological screening effort. While resources are not currently available for a full-blown *probabilistic* monitoring network in the state, the wide coverage of the biological screening allows the RIBS Program to incorporate some of the main ideas behind the probabilistic approach and document good, as well as poor, water quality. However, until the biological screening is employed in a larger percentage of the state, waterbodies with no known use impairments will continue to be characterized as *nonimpacted/unassessed*.

Table 1 Relationships Between USEPA Designated Use Assessments and WI/PWL Severity/Documentation Categories			
Severity of Problem	Level of Problem Documentation		
	Known Problem	Suspected Problem	Possible Problem
Precluded	Not Supporting	N/A	N/A
Impaired	Partially Supporting	Partially Supporting	N/A
Stressed	Supporting, but Threatened	Supporting, but Threatened	Fully Supporting (needs verification)
Threatened	Supporting, but Threatened	Fully Supporting (needs verification)	Fully Supporting (<i>Special Protection</i>)
No Known Impairment	Fully Supporting		

Aquatic Life Use

The primary focus of the NYS DEC river and stream monitoring effort involves determining the degree to which waters support aquatic life. There are a number of reasons for this emphasis:

- Aquatic life is the most significant use of the large majority of the states rivers,
- Aquatic life use support can be assessed easily and economically using biological (macroinvertebrate) sampling techniques,
- Aquatic life use support is one of the most sensitive of the national use support categories.

The evaluation of Aquatic Life 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*. This was a reflection of the designated uses outlined in New York State standards. However, the change to the broader category of *Aquatic Life* better represents the results of the monitoring tools (primarily macroinvertebrate sampling) used to assess water quality. The change from *Fish Propagation/Survival* to *Aquatic Life* 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 other New England State's and the USEPA national use support category.

The relationship between biological (macroinvertebrate) sampling data and the impairment to *Aquatic Life* support is shown in Table 2.

Atmospheric Deposition (Acid Rain) Impacts on *Aquatic Life*

In addition to the biological (macroinvertebrate) assessment criteria outlined in Table 2, separate criteria to determine aquatic life support is applied to waterbodies, particularly lakes and ponds, that are subject to atmospheric deposition, or acid rain. Acid rain has long been a significant problem in New York State. Because of the extent and significance of this issue, extensive chemical sampling efforts to monitor the pH of lakes and ponds in the state have long been in place. The separate aquatic life use support/acid rain criteria takes advantage of the considerable amount of available chemical (pH) data. The relationship between chemical (pH) monitoring data and the impairment to aquatic life is shown in Table 3.

Table 2 Aquatic Life Use Assessment Criteria

Biological (Macroinvertebrate) Assessment		WI/PWL Use Impairment		EPA Designated Use Support
		Severity	Documentation	
Non-Impacted (Very Good)		No Known Impairment	Assessment Level: <i>Monitored</i>	Fully Supporting
Slightly Impacted* (Good)	No other indications of impairment	No Known Impairment	Assessment Level: <i>Evaluated</i>	Fully Supporting
	Other indications of impairment present	Stressed	Suspected or Known	Fully Supporting, but Threatened
Moderately Impacted (Poor)		Impaired	Known	Partially Supporting
Severely Impacted (Very Poor)		Precluded	Known	Not Supporting

* *Slightly Impacted* represents a broad category ranging from generally good water quality to minor impairment of use. Other water quality information and conditions are generally necessary to determine an appropriate level of *Documentation* and corresponding *USEPA Designated Use Support*.

Table 3 Acid Rain/Aquatic Life Assessment Criteria

Lake pH/Fishery Assessment	WI/PWL Use Impairment		EPA Designated Use Support
	Severity	Documentation	
pH less than 5.0	Precluded	Known	Not Supporting
pH between 5.0; and 6.0	Impaired	Known	Partially Supporting
pH greater than 6.0, but fishery surveys indicate no fish, and lake characteristics suggest acid rain as cause	Impaired*	Suspected*	Partially Supporting
other indications of acid rain**	Stressed	Suspected	Fully Supporting, but Threatened
No indications of acid rain effects	No Known Impairment	Assessment: <i>Evaluated</i>	Fully Supporting

* Actual use impairment and relationship to acid rain as a cause should be verified with additional monitoring.
 ** Lake characteristics may indicate possible acid rain effects, but no pH/fish data exists to support an impairment.

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).

Drinking Water Use

Drinking water use support is based on New York State Department of Health or local health department closures or advisories for drinking water supplies, the need for any additional treatment beyond “reasonable” levels, and monitoring data for contaminants that exceed criteria for the protection of human health. Only those waters specifically designated for drinking water use (i.e., Class A, AA, A/AA-Special waters) are evaluated for their support of this use. Furthermore, waterbodies designated for and used as sources of drinking water are considered highly valued resources deemed worthy of *Special Protection*. Even if such waters have no known impairment or imminent threat, these waters are included on the NYS DEC Priority Waterbodies List as *Special Protection* waters. The relationship between public water supply advisories and other monitoring information and the level of drinking water use support is outlined in Table 4.

Table 4 Drinking Water Use Assessment Criteria			
Criteria	WI/PWL Use Impairment		EPA Designated Use Support
	Severity	Documentation	
Frequent/Persistent Conditions Prevent Use <ul style="list-style-type: none"> One or more NYS DOH Drinking water supply closures resulting in closure of the supply for more than 30 days. 	Precluded	Known	Not Supporting
Occasional Conditions Prevent Use <ul style="list-style-type: none"> One or more NYS DOH drinking water supply closures resulting in closure of the supply for less than 30 days, or 	Impaired	Known	Partially Supporting
Frequent/Persistent Conditions Discourage Use <ul style="list-style-type: none"> Problems that do not require closure or advisories but adversely affect treatment costs and/or the quality of the finished water (e.g., taste/odors, color, excessive turbidity/dissolved solids, need for activated charcoal filters, etc.). Monitoring data exceeds contaminant criteria* more than 25% of time. 	Impaired	Known or Suspected	Partially Supporting
Occasional Conditions Discourage Use <ul style="list-style-type: none"> Monitoring data exceeds contaminant criteria* more than 10% of time. 	Stressed	Suspected	Full Support (Threatened)
Conditions Support Uses, Threats Noted <ul style="list-style-type: none"> Contaminants are present, but at levels sufficiently low that routine treatment results in acceptable drinking water. 	Threatened	Known or Suspected	Full Support or Full Support, (Threatened)
No Known Impairments or Imminent Threats <ul style="list-style-type: none"> No drinking water restrictions, and No additional treatment required, and No known contaminants present. 	<i>Special Protection Waters*</i>		Full Support

* Waterbodies designated as drinking water sources (Class A and higher) are considered highly valued resources deemed worthy of *Special Protection*. Regardless of impairment, these waters are included on the NYS DEC Priority Waterbodies List.

Fish Consumption Use

The assessment of fish consumption use is based on NYS DOH 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 NYS DEC Division of Fish Wildlife and Marine Resources routinely monitors contaminant levels in fish and game. Based on this monitoring data, NYS DOH issues advisories for specific waterbodies and species when contaminant levels in sportfish exceed the federal standards. These advisories are updated and published annually.

Because the general advisory for eating sportfish is precautionary and is not based on any actual contaminant monitoring data, it does not represent any documented impairment of fish consumption use. Consequently, the general statewide advisory is not reflected in this assessment of fish consumption use.

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 State freshwaters and some marine water at the mouth of the Hudson River. This general advisory is to protect against eating large amounts of fish that have not been

Table 5 Fish Consumption Use Assessment Criteria			
Criteria	WI/PWL Use Impairment		EPA Designated Use Support
	Severity	Documentation	
Frequent/Persistent Conditions Prevent Use <ul style="list-style-type: none"> • NYS DOH advisory recommends eating no fish (or none of sub-species) from specific waterbody. 	Precluded	Known	Not Supporting
Periodic/Occasional Conditions Prevent Use <ul style="list-style-type: none"> • NYS DOH advisory recommends limiting consumption of fish from a specific waterbody. • Monitoring of fish tissue show contaminant levels that exceed levels of concern, but NYS DOH advisory has not been issued. 	Impaired	Known or Suspected	Partially Supporting
Occasional (Other) Conditions Discourage Use <ul style="list-style-type: none"> • Monitoring of macroinvertebrate tissue or surficial bottom sediment show contaminant levels that exceed levels of concern. 	Stressed	Suspected	Fully Supporting (Threatened)
Conditions Support Use, Threats Noted <ul style="list-style-type: none"> • Monitoring of fish (known), macroinvertebrate tissue/bottom sediment (suspected) show contaminant levels present but not exceeding levels of concern. 	Threatened	Known or Suspected	Full Support or Full Support (Threatened)
No Known Impairment or Imminent Threats <ul style="list-style-type: none"> • No fish consumption advisory beyond the NYS DOH <i>General Advisory for Eating Gamefish</i>, and • Monitoring data revealing no contaminants in fish, macroinvertebrate tissue or surficial bottom sediment above background levels. 	No Known Impairment	Assessment Level: <i>Monitored</i>	Full Support

tested or that may contain unidentified contaminants. It does not apply to most marine waters. Because the general statewide advisory is precautionary and is not based on any actual contaminant monitoring data, it does not represent any documented impairment of fish consumption use. Consequently, the general statewide advisory is not reflected in the assessment of fish consumption use.

The relationship between the waterbody-specific fish consumption advisories and the severity and documentation of an impairment to fish consumption use is reflected in Table 5.

Shellfishing Use

Marine Resources staff from the NYS DEC Division of Fish Wildlife and Marine Resources (DFWMR) assess the quality of nearly 1,200,000 acres of marine waters for shellfishing purposes. DFWMR certification of shellfishing areas is based on bacteriological water quality and evaluation of potential pollution sources by shoreline surveys. Only those waters specifically classified for shellfishing use (i.e., Class SA waters) are evaluated for their support of this use.

Restrictions on shellfishing are based on either water quality (bacteriological) monitoring results and/or on the proximity to and expected impact of known discharges and potential sources of contamination.

The relationship between the shellfishing certification and the severity and documentation of an impairment to shellfishing use is reflected in Table 6.

Table 6 Shellfishing Use Assessment Criteria			
Criteria	WI/PWL Use Impairment		EPA Designated Use Support
	Severity	Documentation	
Frequent/Persistent Conditions Prevent Use <ul style="list-style-type: none"> • NYS DEC Division of Fish Wildlife and Marine Resources (DFWMR) has issued a year-round shellfishing closure for the water. 	Precluded	Known	Not Supporting
Periodic/Occasional Conditions Prevent Use <ul style="list-style-type: none"> • DFWMR has issued a seasonal or partial shellfishing closure for the water. 	Impaired	Known	Partially Supporting
Occasional (Other) Conditions Discourage Use <ul style="list-style-type: none"> • ??? 	Stressed	Known or Suspected	Full Support, Threatened
Conditions Support Use, but Threats Noted <ul style="list-style-type: none"> • Shellfish Land Certification monitoring reveals contaminant above background, but not sufficient to warrant shellfish bed closure. 	Threatened	Known	Full Support (Threatened)
No Known Impairment or Threat to Use <ul style="list-style-type: none"> • DFWMR has certified (opened) the water for direct market harvesting of shellfish, and • Shellfish Land Certification monitoring (DFWMR) reveals no contaminants above background levels. 	No Known Impairment	Assessment Level: <i>Monitored</i>	Full Support

Public Bathing and Recreation Uses

Swimming and public recreation are important and popular uses for the waters of the state. The assessment of these wide range of activities involves two separate use categories: *Public Bathing* and *Recreation*.

Table 7 Public Bathing/Recreation Use Assessment Criteria																			
Criteria	WI/PWL Use Impairment		EPA Designated Use Support																
	Severity	Documentation																	
Frequent/Persistent Conditions Prevent Uses <ul style="list-style-type: none"> State/local/county health department has closed beach/water to swimming for the entire season. 	Precluded	Known	Not Supporting																
Periodic/Occasional Conditions Prevent Uses <ul style="list-style-type: none"> State/local/county health department has issued temporary beach closure for the waterbody. Sufficient stream flow/water level necessary to support recreational uses are artificially restricted. 	Impaired	Known	Partially Supporting																
Frequent/Persistent Conditions Discourage Uses <ul style="list-style-type: none"> Recreational Uses of water require additional measures (e.g., weed harvesting/control). Monitoring data exceeds <i>Impaired</i> criteria* more than 10% (suspected) or 25% (known) of time. Observational criteria* for restricted use noted more than 75% of the time. 	Impaired	Known or Suspected																	
Occasional (Other) Conditions Discourage Uses <ul style="list-style-type: none"> Monitoring data exceeds <i>Stressed</i> criteria* more than 10% (suspected) or 25% (known) of time. Observational criteria* for restricted use noted more than 25% of the time. 	Stressed	Known or Suspected	Full Support (Threatened)																
Conditions Support Uses, but Threats Noted <ul style="list-style-type: none"> Data exceeds <i>Threatened</i> criteria* more than 10% (suspected) or 25% (known) of time. Observational criteria* for restricted use noted more than 10% of the time. 	Threatened	Known or Suspected	Full Support or Full Support, (Threatened)																
No Known Impairments or Threats to Uses <ul style="list-style-type: none"> Monitoring data does not exceed use restriction criteria more than 10% of time. Observational criteria* for restricted use noted less than 10% of the time. 	No Known Impairment	Assessment Level: <i>Monitored</i>	Full Support																
* Monitoring Data Criteria <table border="0"> <thead> <tr> <th></th> <th><i>Impaired</i></th> <th><i>Stressed</i></th> <th><i>Threatened</i></th> </tr> </thead> <tbody> <tr> <td>Total Phosphorus</td> <td>40 µg/l</td> <td>30 µg/l</td> <td>20 µg/l</td> </tr> <tr> <td>Chlorophyll a</td> <td>15 µg/l</td> <td>12 µg/l</td> <td>8 µg/l</td> </tr> <tr> <td>Clarity (Secchi Disc)</td> <td>1.2 m</td> <td>1.5 m</td> <td>2.0 m</td> </tr> </tbody> </table>		<i>Impaired</i>	<i>Stressed</i>	<i>Threatened</i>	Total Phosphorus	40 µg/l	30 µg/l	20 µg/l	Chlorophyll a	15 µg/l	12 µg/l	8 µg/l	Clarity (Secchi Disc)	1.2 m	1.5 m	2.0 m			
	<i>Impaired</i>	<i>Stressed</i>	<i>Threatened</i>																
Total Phosphorus	40 µg/l	30 µg/l	20 µg/l																
Chlorophyll a	15 µg/l	12 µg/l	8 µg/l																
Clarity (Secchi Disc)	1.2 m	1.5 m	2.0 m																
* Observational Data Criteria <p>Swimming/recreation are slightly (or more seriously) restricted by specifically identified causes (algae, clarity, odors, etc).</p>			(C=3,4 or 5) and (A=3,4,5 & D=1,2 >50%)																
Observational Criteria refers to responses to specific questions on <i>CSLAP Field Observation Forms</i> .																			

Evaluation of *Public Bathing* use is limited to only those waters classified by New York State for primary contact recreation (i.e., Class B, SB, or higher waters). This classification applies to waters specifically designated as public beaches and bathing areas, which have a higher level of swimming use and are more regularly monitored by public health agencies.

The broader *Recreation* use category tracks impairments to a more expansive list of recreational uses, such as fishing, boating, water skiing, and other primary/secondary contact activities, including swimming. The *Recreation* category addresses the federal Clean Water Act goal that all waters be “swimmable.” * 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 the varying levels of monitoring, *Public Bathing* waters are evaluated separately from other waters for *Recreation* uses.

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.

The assessment of *Public Bathing* and *Recreation* uses rely on various water quality indicators. For waters used as public bathing areas state and local/county health departments conduct regular bacteriological sampling programs and perform sanitary surveys. 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 stormwater runoff.

In addition to swimming restrictions due to bacteriological contamination, the swimming/recreation uses of some waters are discouraged by other water quality conditions. Excessive weed growth, silty/muddy lake bottoms, and poor water clarity all represent lesser impairment of waters for public bathing use.

The relationship between water quality monitoring and other indicators and the severity and documentation of an impairment to swimming/bathing use is reflected in Table 7.

Natural Resources Habitat/Hydrologic Use Support

In an effort to better incorporate wetlands and other natural resources concerns into the water quality assessment, the additional water use category of *Natural Resources Habitat/Hydrology* was recently added to the list of uses to be assessed. This broad category captures waterbodies where water quality may be satisfactory, but various activities result in degradation of natural resources (e.g., fish and wildlife populations, habitats) and/or impacts to 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 habitat/hydrologic use support, situation are more clearly defined by the cause or source of the problem, than by the use affected. Such causes/sources include dredging, draining, excavation/filling of wetlands, stream channels, lakes/ponds; stream widening; stream downcutting; sediment embeddedness; other losses of wetlands; habitat fragmentation; loss of riparian vegetation or upland buffer zones.

* 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.)

Specific criteria for *Natural Resources Habitat/Hydrology* use support have not yet been developed.

Aesthetic Use

An assessment of waterbody support of *aesthetics* is much more subjective than those for the other assessed uses. Consequently, there is no table of specific assessment criteria to determine support of aesthetics. Instead, the assessment of aesthetics use support will rely on the PWL definitions for the severity of impairment, level of documentation, and the relationship between severity/documentation and USEPA use support categories as outlined in Table 1.

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.

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Waterbody Inventory Data Sheets By County, Segment Name

Waterbody/Segment (ID)	Water Index Number	Category
Allegany County		
Ag Tech Lake (0503-0027)	Pa 3-57- 5-47- 9-P??	UnAssessed
Almond Lake (0503-0003)	Pa 3-57- 5-47-P27c	Impaired Seg
Canacadea Creek, Upper, and minor tribs (0503-0005)	Pa 3-57- 5-47	MinorImpacts
Karr Valley Creek and tribs (0503-0026)	Pa 3-57- 5-47- 4	NoKnownImpct
Chemung County		
Baldwin Creek, Lower, and tribs (0501-0022)	Pa 3-14	NoKnownImpct
Baldwin Creek, Upper, and tribs (0501-0023)	Pa 3-14	NoKnownImpct
Beaver Pond (0501-0025)	Pa 3-14-21-P16b	UnAssessed
Bentley Creek and tribs (0501-0026)	Pa 3-16	NoKnownImpct
Chemung River, Lower, Main Stem (0501-0015)	Pa 3 (portion 2)	NoKnownImpct
Chemung River, Lower, Main Stem (0501-0014)	Pa 3 (portion 1)	Threatened
Chemung River, Upper, Main Stem (0501-0016)	Pa 3 (portion 3)	NoKnownImpct
Cuthrie Run/Breed Hollow Brook and tribs (0501-0044)	Pa 3-39- 1	UnAssessed
Diven/Heller Creek and tribs (0501-0032)	Pa 3-28- 6	MinorImpacts
Eldridge Lake (0501-0033)	Pa 3-28- 6-P14	UnAssessed
Elmira Reservoir (0501-0039)	Pa 3-29-P19	UnAssessed
Goldsmith Creek and tribs (0501-0024)	Pa 3-14- 2	UnAssessed
Hendy Creek and tribs (0501-0041)	Pa 3-36	NoKnownImpct
Hoffman Brook, Lower, and tribs (0501-0037)	Pa 3-29	UnAssessed
Hoffman Brook, Upper, and tribs (0501-0038)	Pa 3-29	UnAssessed
Jackson Creek and tribs (0501-0036)	Pa 3-28-19	UnAssessed
Kopper Pond (0501-0012)	Pa 3-28- 6-...P13a	Impaired Seg
Latta Creek and tribs (0501-0034)	Pa 3-28-10	UnAssessed
Minor Tribs to Chemung River (0501-0040)	Pa 3-30 thru 56 (selected)	NoKnownImpct
Minor Tribs to Chemung River (0501-0021)	Pa 3- 7 thru 12	UnAssessed
Minor Tribs to Lower Chemung River (0501-0018)	Pa 3- 1 thru 5	UnAssessed
Minor Tribs to Lower Chemung River (0501-0027)	Pa 3-17 thru 27 (selected)	UnAssessed
Mudlick Creek and tribs (0501-0029)	Pa 3-18-10	NoKnownImpct
Newtown Creek, Lower, and tribs (0501-0003)	Pa 3-28	MinorImpacts
Newtown Creek, Middle, and minor tribs (0501-0007)	Pa 3-28	NoKnownImpct
Newtown Creek, Upper, and tribs (0501-0030)	Pa 3-28	NoKnownImpct
North Branch Newtown Creek and tribs (0501-0035)	Pa 3-28-13	Need Verific
Seeley Creek and minor tribs (0501-0013)	Pa 3-18	Threatened
Sing Sing Creek, Lower, and minor tribs (0501-0042)	Pa 3-39	NoKnownImpct
Sing Sing Creek, Upper, and tribs (0501-0043)	Pa 3-39	NoKnownImpct
South Creek and tribs (0501-0028)	Pa 3-18- 1	NoKnownImpct
Weyer/Brick Pond (0501-0031)	Pa 3-28- 4-P12	UnAssessed
Wynkoop Creek, Lower, and tribs (0501-0019)	Pa 3- 6	NoKnownImpct
Wynkoop Creek, Upper, and tribs (0501-0020)	Pa 3- 6	NoKnownImpct

Waterbody/Segment (ID)	Water Index Number	Category
Schuyler County		
Lamoka Lake and Mill Pond (0502-0001)	Pa 3-58-15-P47	Impaired Seg
Meads Creek, Upper, and tribs (0502-0019)	Pa 3-58- 3	MinorImpacts
Tobehanna Creek and tribs (0502-0007)	Pa 3-58-15-P47- 6	Need Verific
Tribs to Lamoka Lake and Mill Pond (0502-0028)	Pa 3-58-15-P47-	UnAssessed
Tribs to Waneta Lake (0502-0029)	Pa 3-58-15-P47- 4-P48-	UnAssessed
Waneta Lake (0502-0002)	Pa 3-58-15-P47- 4-P48	Impaired Seg
Steuben County		
Arkport Reservoir (0503-0032)	Pa 3-57- 5-52- 1-P??	UnAssessed
Bennetts Creek, Lower, and minor tribs (0503-0007)	Pa 3-57- 5-40	MinorImpacts
Bennetts Creek, Upper, and tribs (0503-0024)	Pa 3-57- 5-40	MinorImpacts
Big Creek and tribs (0503-0028)	Pa 3-57- 5-48	UnAssessed
Campbell Creek, Lower, and tribs (0502-0031)	Pa 3-58-27	NoKnownImpct
Campbell Creek, Upper, and tribs (0502-0032)	Pa 3-58-27	NoKnownImpct
Canacadea Creek, Lower, and tribs (0503-0008)	Pa 3-57- 5-47	MinorImpacts
Canisteo River, Lower, and minor tribs (0503-0011)	Pa 3-57- 5 (portion 1)	NoKnownImpct
Canisteo River, Middle, and minor tribs (0503-0006)	Pa 3-57- 5 (portion 2)	MinorImpacts
Canisteo River, Middle, and minor tribs (0503-0001)	Pa 3-57- 5 (portion 4)	Impaired Seg
Canisteo River, Middle, and minor tribs (0503-0012)	Pa 3-57- 5 (portion 3)	MinorImpacts
Canisteo River, Upper, and minor trbs (0503-0013)	Pa 3-57- 5 (portion 5)	NoKnownImpct
Chemung River, Upper, Main Stem (0501-0017)	Pa 3 (portion 4)	NoKnownImpct
Cinnamon Lake (0502-0021)	Pa 3-58- 3- 3-P38	UnAssessed
Cohocton River, Lower, and minor tribs (0502-0010)	Pa 3-58 (portion 1)	Need Verific
Cohocton River, Middle, and minor tribs (0502-0017)	Pa 3-58 (portion 2)	Threatened
Cohocton River, Middle, and minor tribs (0502-0003)	Pa 3-58 (portion 3)	Threatened
Cohocton River, Upper, and minor tribs (0502-0018)	Pa 3-58 (portion 4)	Threatened
Colonel Bills Creek (0503-0023)	Pa 3-57- 5-38	MinorImpacts
Cowanesque River and tribs (0503-0035)	Pa 3-57-21	UnAssessed
Cranberry Pond (0503-0022)	Pa 3-57- 5-19-P28	UnAssessed
Cutler Creek and tribs (0501-0048)	Pa 3-55	UnAssessed
Davis Hollow Creek and tribs (0502-0041)	Pa 3-58-45	UnAssessed
Demmons Pond (0502-0015)	Pa 3-58-31-10-P68	MinorImpacts
Dry Run and tribs (0502-0020)	Pa 3-58- 3- 3	MinorImpacts
Fivemile Creek, Lower, and tribs (0502-0033)	Pa 3-58-28	MinorImpacts
Fivemile Creek, Upper, and tribs (0502-0034)	Pa 3-58-28	NoKnownImpct
Glendening Creek/South Branch and tribs (0503-0033)	Pa 3-57- 9	UnAssessed
Goff Creek and tribs (0502-0013)	Pa 3-58-31	NoKnownImpct
Goodhue Creek and tribs (0503-0014)	Pa 3-57- 5- 5	UnAssessed
Goodhue Lake (0503-0015)	Pa 3-57- 5- 5-P27	UnAssessed
Hornell Reservoirs (0503-0031)	Pa 3-57- 5-49-P34,P35,P36	UnAssessed
Lake Salubria (0502-0011)	Pa 3-58-20-P51	Impaired Seg
Loon Lake (0502-0039)	Pa 3-58-38..P79	Threatened
Loucks Pond (0502-0037)	Pa 3-58-34-P71	UnAssessed
Meads Creek, Lower, and minor tribs (0502-0008)	Pa 3-58- 3	MinorImpacts
Michigan Creek and tribs (0502-0023)	Pa 3-58-11	UnAssessed
Minor Tribs to Pennsylvania (0503-0036)	Pa 11 thru 20	NoKnownImpct
Minor Tribs to Pennsylvania (0503-0037)	Pa 21 thru 29	UnAssessed
Minor Tribs to Tioga River (0503-0010)	Pa 3-57- 1 thru 20	UnAssessed
Mud Creek and tribs (0502-0025)	Pa 3-58-15	Need Verific
Mud Lake (0502-0035)	Pa 3-58-29-13-P63	UnAssessed
Neil Creek and tribs (0502-0014)	Pa 3-58-38	NoKnownImpct

Waterbody/Segment (ID)	Water Index Number	Category
Steuben County (con't)		
North Branch Glendening Creek and tribs (0503-0034)	Pa 3-57- 9- 2	UnAssessed
North Branch Tuscarora, Lower, and tribs (0503-0019)	Pa 3-57- 5- 8-11	NoKnownImpct
North Branch Tuscarora, Upper, and tribs (0503-0020)	Pa 3-57- 5- 8-11	UnAssessed
Peterson Lake (0502-0026)	Pa 3-58-15- 4-P42	UnAssessed
Post Creek, Lower, and tribs (0501-0047)	Pa 3-52	NoKnownImpct
Post Creek, Upper, and tribs (0501-0004)	Pa 3-52	NoKnownImpct
Purdy Creek and tribs (0503-0025)	Pa 3-57- 5-40- 1	MinorImpacts
Salmon Creek and tribs (0502-0036)	Pa 3-58-32	UnAssessed
Sanford, Van Keuren, Round Lakes (0502-0027)	Pa 3-58-15- 5-P43,P45,P46	UnAssessed
Seeley/Carrington Cr, Lower, and tribs (0503-0029)	Pa 3-57- 5-49	NoKnownImpct
Seeley/Carrington Cr, Upper, and tribs (0503-0030)	Pa 3-57- 5-49	UnAssessed
Smith Pond (0502-0012)	Pa 3-58-31- 7-P66	Impaired Seg
Smith Run/Freeman Hollow Br and tribs (0502-0030)	Pa 3-58-18	UnAssessed
South Branch Tuscarora Creek and tribs (0503-0021)	Pa 3-57- 5- 8-21	UnAssessed
Stocking Creek and tribs (0502-0016)	Pa 3-58-19	NoKnownImpct
Tenmile Creek and tribs (0502-0038)	Pa 3-58-35	NoKnownImpct
Thurston Pond (0502-0024)	Pa 3-58-11-P40	UnAssessed
Tioga River, Main Stem (0503-0004)	Pa 3-57	MinorImpacts
Troups Creek, Lower, and tribs (0503-0009)	Pa 25	NoKnownImpct
Troups Creek, Upper, and tribs (0503-0038)	Pa 25	NoKnownImpct
Tuscarora Creek, Lower, and tribs (0503-0016)	Pa 3-57- 5- 8	NoKnownImpct
Tuscarora Creek, Middle, and tribs (0503-0017)	Pa 3-57- 5- 8	NoKnownImpct
Tuscarora Creek, Upper, and tribs (0503-0018)	Pa 3-57- 5- 8	Need Verific
Twelvemile Creek and tribs (0502-0040)	Pa 3-58-39	MinorImpacts
Whisky Creek and tribs (0501-0046)	Pa 3-47	NoKnownImpct
Winfield Creek and tribs (0501-0045)	Pa 3-42	UnAssessed
Wolf Run and tribs (0502-0022)	Pa 3-58- 8	UnAssessed

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Waterbody Inventory Data Sheets By Segment Name

Waterbody/Segment (ID)	Water Index Number	Category
Ag Tech Lake (0503-0027)	Pa 3-57- 5-47- 9-P??	UnAssessed
Almond Lake (0503-0003)	Pa 3-57- 5-47-P27c	Impaired Seg
Arkport Reservoir (0503-0032)	Pa 3-57- 5-52- 1-P??	UnAssessed
Baldwin Creek, Lower, and tribs (0501-0022)	Pa 3-14	NoKnownImpct
Baldwin Creek, Upper, and tribs (0501-0023)	Pa 3-14	NoKnownImpct
Beaver Pond (0501-0025)	Pa 3-14-21-P16b	UnAssessed
Bennetts Creek, Lower, and minor tribs (0503-0007)	Pa 3-57- 5-40	MinorImpacts
Bennetts Creek, Upper, and tribs (0503-0024)	Pa 3-57- 5-40	MinorImpacts
Bentley Creek and tribs (0501-0026)	Pa 3-16	NoKnownImpct
Big Creek and tribs (0503-0028)	Pa 3-57- 5-48	UnAssessed
Campbell Creek, Lower, and tribs (0502-0031)	Pa 3-58-27	NoKnownImpct
Campbell Creek, Upper, and tribs (0502-0032)	Pa 3-58-27	NoKnownImpct
Canacadea Creek, Lower, and tribs (0503-0008)	Pa 3-57- 5-47	MinorImpacts
Canacadea Creek, Upper, and minor tribs (0503-0005)	Pa 3-57- 5-47	MinorImpacts
Canisteo River, Lower, and minor tribs (0503-0011)	Pa 3-57- 5 (portion 1)	NoKnownImpct
Canisteo River, Middle, and minor tribs (0503-0001)	Pa 3-57- 5 (portion 4)	Impaired Seg
Canisteo River, Middle, and minor tribs (0503-0006)	Pa 3-57- 5 (portion 2)	MinorImpacts
Canisteo River, Middle, and minor tribs (0503-0012)	Pa 3-57- 5 (portion 3)	MinorImpacts
Canisteo River, Upper, and minor trbs (0503-0013)	Pa 3-57- 5 (portion 5)	NoKnownImpct
Chemung River, Lower, Main Stem (0501-0014)	Pa 3 (portion 1)	Threatened
Chemung River, Lower, Main Stem (0501-0015)	Pa 3 (portion 2)	NoKnownImpct
Chemung River, Upper, Main Stem (0501-0016)	Pa 3 (portion 3)	NoKnownImpct
Chemung River, Upper, Main Stem (0501-0017)	Pa 3 (portion 4)	NoKnownImpct
Cinnamon Lake (0502-0021)	Pa 3-58- 3- 3-P38	UnAssessed
Cohocton River, Lower, and minor tribs (0502-0010)	Pa 3-58 (portion 1)	Need Verific
Cohocton River, Middle, and minor tribs (0502-0003)	Pa 3-58 (portion 3)	Threatened
Cohocton River, Middle, and minor tribs (0502-0017)	Pa 3-58 (portion 2)	Threatened
Cohocton River, Upper, and minor tribs (0502-0018)	Pa 3-58 (portion 4)	Threatened
Colonel Bills Creek (0503-0023)	Pa 3-57- 5-38	MinorImpacts
Cowanesque River and tribs (0503-0035)	Pa 3-57-21	UnAssessed
Cranberry Pond (0503-0022)	Pa 3-57- 5-19-P28	UnAssessed
Cuthrie Run/Breed Hollow Brook and tribs (0501-0044)	Pa 3-39- 1	UnAssessed
Cutler Creek and tribs (0501-0048)	Pa 3-55	UnAssessed
Davis Hollow Creek and tribs (0502-0041)	Pa 3-58-45	UnAssessed
Demmons Pond (0502-0015)	Pa 3-58-31-10-P68	MinorImpacts
Diven/Heller Creek and tribs (0501-0032)	Pa 3-28- 6	MinorImpacts
Dry Run and tribs (0502-0020)	Pa 3-58- 3- 3	MinorImpacts
Eldridge Lake (0501-0033)	Pa 3-28- 6-P14	UnAssessed
Elmira Reservoir (0501-0039)	Pa 3-29-P19	UnAssessed
Fivemile Creek, Lower, and tribs (0502-0033)	Pa 3-58-28	MinorImpacts
Fivemile Creek, Upper, and tribs (0502-0034)	Pa 3-58-28	NoKnownImpct
Glendening Creek/South Branch and tribs (0503-0033)	Pa 3-57- 9	UnAssessed
Goff Creek and tribs (0502-0013)	Pa 3-58-31	NoKnownImpct
Goldsmith Creek and tribs (0501-0024)	Pa 3-14- 2	UnAssessed
Goodhue Creek and tribs (0503-0014)	Pa 3-57- 5- 5	UnAssessed

Waterbody/Segment (ID)	Water Index Number	Category
Goodhue Lake (0503-0015)	Pa 3-57- 5- 5-P27	UnAssessed
Hendy Creek and tribs (0501-0041)	Pa 3-36	NoKnownImpct
Hoffman Brook, Lower, and tribs (0501-0037)	Pa 3-29	UnAssessed
Hoffman Brook, Upper, and tribs (0501-0038)	Pa 3-29	UnAssessed
Hornell Reservoirs (0503-0031)	Pa 3-57- 5-49-P34,P35,P36	UnAssessed
Jackson Creek and tribs (0501-0036)	Pa 3-28-19	UnAssessed
Karr Valley Creek and tribs (0503-0026)	Pa 3-57- 5-47- 4	NoKnownImpct
Kopper Pond (0501-0012)	Pa 3-28- 6-...P13a	Impaired Seg
Lake Salubria (0502-0011)	Pa 3-58-20-P51	Impaired Seg
Lamoka Lake and Mill Pond (0502-0001)	Pa 3-58-15-P47	Impaired Seg
Latta Creek and tribs (0501-0034)	Pa 3-28-10	UnAssessed
Loon Lake (0502-0039)	Pa 3-58-38..P79	Threatened
Loucks Pond (0502-0037)	Pa 3-58-34-P71	UnAssessed
Meads Creek, Lower, and minor tribs (0502-0008)	Pa 3-58- 3	MinorImpacts
Meads Creek, Upper, and tribs (0502-0019)	Pa 3-58- 3	MinorImpacts
Michigan Creek and tribs (0502-0023)	Pa 3-58-11	UnAssessed
Minor Tribs to Chemung River (0501-0021)	Pa 3- 7 thru 12	UnAssessed
Minor Tribs to Chemung River (0501-0040)	Pa 3-30 thru 56 (selected)	NoKnownImpct
Minor Tribs to Lower Chemung River (0501-0018)	Pa 3- 1 thru 5	UnAssessed
Minor Tribs to Lower Chemung River (0501-0027)	Pa 3-17 thru 27 (selected)	UnAssessed
Minor Tribs to Pennsylvania (0503-0036)	Pa 11 thru 20	NoKnownImpct
Minor Tribs to Pennsylvania (0503-0037)	Pa 21 thru 29	UnAssessed
Minor Tribs to Tioga River (0503-0010)	Pa 3-57- 1 thru 20	UnAssessed
Mud Creek and tribs (0502-0025)	Pa 3-58-15	Need Verific
Mud Lake (0502-0035)	Pa 3-58-29-13-P63	UnAssessed
Mudlick Creek and tribs (0501-0029)	Pa 3-18-10	NoKnownImpct
Neil Creek and tribs (0502-0014)	Pa 3-58-38	NoKnownImpct
Newtown Creek, Lower, and tribs (0501-0003)	Pa 3-28	MinorImpacts
Newtown Creek, Middle, and minor tribs (0501-0007)	Pa 3-28	NoKnownImpct
Newtown Creek, Upper, and tribs (0501-0030)	Pa 3-28	NoKnownImpct
North Branch Glendening Creek and tribs (0503-0034)	Pa 3-57- 9- 2	UnAssessed
North Branch Newtown Creek and tribs (0501-0035)	Pa 3-28-13	Need Verific
North Branch Tuscarora, Lower, and tribs (0503-0019)	Pa 3-57- 5- 8-11	NoKnownImpct
North Branch Tuscarora, Upper, and tribs (0503-0020)	Pa 3-57- 5- 8-11	UnAssessed
Peterson Lake (0502-0026)	Pa 3-58-15- 4-P42	UnAssessed
Post Creek, Lower, and tribs (0501-0047)	Pa 3-52	NoKnownImpct
Post Creek, Upper, and tribs (0501-0004)	Pa 3-52	NoKnownImpct
Purdy Creek and tribs (0503-0025)	Pa 3-57- 5-40- 1	MinorImpacts
Salmon Creek and tribs (0502-0036)	Pa 3-58-32	UnAssessed
Sanford, Van Keuren, Round Lakes (0502-0027)	Pa 3-58-15- 5-P43,P45,P46	UnAssessed
Seeley Creek and minor tribs (0501-0013)	Pa 3-18	Threatened
Seeley/Carrington Cr, Lower, and tribs (0503-0029)	Pa 3-57- 5-49	NoKnownImpct
Seeley/Carrington Cr, Upper, and tribs (0503-0030)	Pa 3-57- 5-49	UnAssessed
Sing Sing Creek, Lower, and minor tribs (0501-0042)	Pa 3-39	NoKnownImpct
Sing Sing Creek, Upper, and tribs (0501-0043)	Pa 3-39	NoKnownImpct
Smith Pond (0502-0012)	Pa 3-58-31- 7-P66	Impaired Seg
Smith Run/Freeman Hollow Br and tribs (0502-0030)	Pa 3-58-18	UnAssessed
South Branch Tuscarora Creek and tribs (0503-0021)	Pa 3-57- 5- 8-21	UnAssessed
South Creek and tribs (0501-0028)	Pa 3-18- 1	NoKnownImpct
Stocking Creek and tribs (0502-0016)	Pa 3-58-19	NoKnownImpct
Tenmile Creek and tribs (0502-0038)	Pa 3-58-35	NoKnownImpct
Thurston Pond (0502-0024)	Pa 3-58-11-P40	UnAssessed

Waterbody/Segment (ID)	Water Index Number	Category
Tioga River, Main Stem (0503-0004)	Pa 3-57	MinorImpacts
Tobehanna Creek and tribs (0502-0007)	Pa 3-58-15-P47- 6	Need Verific
Tribs to Lamoka Lake and Mill Pond (0502-0028)	Pa 3-58-15-P47-	UnAssessed
Tribs to Waneta Lake (0502-0029)	Pa 3-58-15-P47- 4-P48-	UnAssessed
Troups Creek, Lower, and tribs (0503-0009)	Pa 25	NoKnownImpct
Troups Creek, Upper, and tribs (0503-0038)	Pa 25	NoKnownImpct
Tuscarora Creek, Lower, and tribs (0503-0016)	Pa 3-57- 5- 8	NoKnownImpct
Tuscarora Creek, Middle, and tribs (0503-0017)	Pa 3-57- 5- 8	NoKnownImpct
Tuscarora Creek, Upper, and tribs (0503-0018)	Pa 3-57- 5- 8	Need Verific
Twelvemile Creek and tribs (0502-0040)	Pa 3-58-39	MinorImpacts
Waneta Lake (0502-0002)	Pa 3-58-15-P47- 4-P48	Impaired Seg
Weyer/Brick Pond (0501-0031)	Pa 3-28- 4-P12	UnAssessed
Whisky Creek and tribs (0501-0046)	Pa 3-47	NoKnownImpct
Winfield Creek and tribs (0501-0045)	Pa 3-42	UnAssessed
Wolf Run and tribs (0502-0022)	Pa 3-58- 8	UnAssessed
Wynkoop Creek, Lower, and tribs (0501-0019)	Pa 3- 6	NoKnownImpct
Wynkoop Creek, Upper, and tribs (0501-0020)	Pa 3- 6	NoKnownImpct