



# Chemung River/Tioga Watershed

(0205010409)

Water Index Number	Waterbody Segment	Category
Pa 3-57	Tioga River, Main Stem (0503-0004)	MinorImpacts
Pa 3-57- 1 thru 20	Minor Tribs to Tioga River (0503-0010)	UnAssessed
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

# Tioga River, Main Stem (0503-0004)

# Minor Impacts

## Waterbody Location Information

Revised: 02/05/2007

<b>Water Index No:</b>	Pa 3-57	<b>Drain Basin:</b>	Chemung River
<b>Hydro Unit Code:</b>	02050104/170	<b>Str Class:</b>	C
<b>Waterbody Type:</b>	River	<b>Reg/County:</b>	8/Steuben Co. (51)
<b>Waterbody Size:</b>	15.2 Miles	<b>Quad Map:</b>	ADDISON (M-12-4)
<b>Seg Description:</b>	from Painted Post to NY-Pa state line		

## 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

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

# Minor Tribs to Tioga River (0503-0010)

**UnAssessed**

## Waterbody Location Information

Revised: 05/26/2004

<b>Water Index No:</b>	Pa 3-57- 1 thru 20	<b>Drain Basin:</b>	Chemung River
<b>Hydro Unit Code:</b>	02050104/170	<b>Str Class:</b>	C
<b>Waterbody Type:</b>	River	<b>Reg/County:</b>	8/Steuben Co. (51)
<b>Waterbody Size:</b>	74.6 Miles	<b>Quad Map:</b>	ADDISON (M-12-4)
<b>Seg Description:</b>	total length of select tribs, mouth to NY-Pa state line		

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

Use(s) Impacted	Severity	Problem Documentation
UnAssessed Water		

### Type of Pollutant(s)

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

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

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

## Resolution/Management Information

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

**Resolution Potential:** n/a

## Further Details

This segment includes the total length of selected/smaller tribs to the Tioga River. Tribs within this segment, including Weaver Hollow Brook (-1), Mulholland Creek (-3), Ryer Creek (-12), Stowell Creek (-13), Cooks Creek (-14), Church Creek (-15), Morgan Creek (-16), Watson Creek (-18), and Steamtown Creek (-19), are Class C. Canisteo River (-5), Glendening Creek (-9), and Cowanesque River (-20) are listed separately. Tribs Pa 9 thru Pa 10 are also included in this segment.

# Glendening Creek/South Branch and tribs (0503-0033)

UnAssessed

## Waterbody Location Information

Revised: 05/26/2004

<b>Water Index No:</b> Pa 3-57-9	<b>Drain Basin:</b> Chemung River	
<b>Hydro Unit Code:</b> 02050104/170	<b>Str Class:</b> C	Tioga River
<b>Waterbody Type:</b> River	<b>Reg/County:</b> 8/Steuben Co. (51)	
<b>Waterbody Size:</b> 12.2 Miles	<b>Quad Map:</b> ADDISON (M-12-4)	
<b>Seg Description:</b> stream and selected tribs		

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
UnAssessed Water		

### Type of Pollutant(s)

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

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

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

## Resolution/Management Information

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

**Resolution Potential:** n/a

## Further Details

This segment includes the entire stream and selected/smaller tribs. The waters of the stream are Class C. Tribs to this reach/segment, including South Branch (-1), are also Class C. North Branch Glendening Creek (-2) is listed separately.

# North Branch Glendening Creek and tribs (0503-0034)

**UnAssessed**

## Waterbody Location Information

Revised: 05/26/2004

<b>Water Index No:</b>	Pa 3-57-9-2	<b>Drain Basin:</b>	Chemung River
<b>Hydro Unit Code:</b>	02050104/170	<b>Str Class:</b>	C
<b>Waterbody Type:</b>	River	<b>Reg/County:</b>	8/Steuben Co. (51)
<b>Waterbody Size:</b>	12.2 Miles	<b>Quad Map:</b>	ADDISON (M-12-4)
<b>Seg Description:</b>	entire stream and tribs		

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

<b>Use(s) Impacted</b>	<b>Severity</b>	<b>Problem Documentation</b>
UnAssessed Water		

### **Type of Pollutant(s)**

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

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

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

## Resolution/Management Information

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

**Resolution Potential:** n/a

## Further Details

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