



## Chemung River/Bennetts Creek Watershed

(0205010402)

Water Index Number	Waterbody Segment	Category
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

# Bennetts Creek, Lower, and minor tribs (0503-0007)

# MinorImpacts

## Waterbody Location Information

Revised: 02/05/2007

<b>Water Index No:</b>	Pa 3-57- 5-40	<b>Drain Basin:</b>	Chemung River
<b>Hydro Unit Code:</b>	02050104/040	<b>Str Class:</b>	C
<b>Waterbody Type:</b>	River	<b>Reg/County:</b>	8/Steuben Co. (51)
<b>Waterbody Size:</b>	34.2 Miles	<b>Quad Map:</b>	SOUTH CANISTEO (M-10-2)
<b>Seg Description:</b>	stream and selected tribs, from mouth to Bennetts		

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

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

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

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Bennetts Creek in Canisteo, Steuben County, (at Route 36) 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. 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)

# Minor Impacts

## Waterbody Location Information

---

Revised: 02/05/2007

<b>Water Index No:</b> Pa 3-57- 5-40	<b>Drain Basin:</b> Chemung River
<b>Hydro Unit Code:</b> 02050104/040	<b>Str Class:</b> C
<b>Waterbody Type:</b> River	<b>Reg/County:</b> 8/Steuben Co. (51)
<b>Waterbody Size:</b> 80.7 Miles	<b>Quad Map:</b> REXVILLE (M-10-4)
<b>Seg Description:</b> stream and tribs, above Bennetts	

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

---

<b>Use(s) Impacted</b> Habitat/Hydrology	<b>Severity</b> Stressed	<b>Problem Documentation</b> 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

---

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

## Further Details

---

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

<b>Water Index No:</b>	Pa 3-57- 5-40- 1	<b>Drain Basin:</b>	Chemung River
<b>Hydro Unit Code:</b>	02050104/040	<b>Str Class:</b>	C
<b>Waterbody Type:</b>	River	<b>Reg/County:</b>	8/Steuben Co. (51)
<b>Waterbody Size:</b>	42.4 Miles	<b>Quad Map:</b>	GREENWOOD (M-10-1)
<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>
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: Urban/Storm Runoff

## Resolution/Management Information

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