

North Chuctanunda Cr, Middle, and tribs (1201-0106)

MinorImpacts

Waterbody Location Information

Revised: 04/02/2010

Water Index No: H-240- 69
Hydro Unit Code: 02020004/320 **Str Class:** C
Waterbody Type: River (Low Flow)
Waterbody Size: 39.7 Miles
Seg Description: stream and tribs, from Hagaman to Galway Lake

Drain Basin: Mohawk River
Reg/County: 5/Fulton Co. (18)
Quad Map: AMSTERDAM (J-24-1)

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

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE, Urban/Storm Runoff
Possible: - - -

Resolution/Management Information

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

Resolution Potential: Medium

Further Details

Overview

Aquatic life and recreational uses in this portion of North Chuctanunda Creek may experience minor impacts due to nutrient loads attributed to agricultural nonpoint sources. This assessment is based on monitoring downstream on this reach that is believed to be reflective of conditions in this segment, but that need to be verified.

Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of North Chuctanunda Creek a few miles below this reach in Amsterdam (at Willow Street) was conducted in 2005 and 2006. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, toxicity testing, sediment assessment and macroinvertebrate tissue analysis. Biological (macroinvertebrate) sampling indicated slightly impacted conditions. In such samples the community is slightly altered from natural conditions. Some sensitive species are not present and the overall abundance of macroinvertebrates is lower. However, the effects on the fauna appear to be relatively minor and overall water quality is considered to be good. However the nutrient biotic index and impact source determination indicate some enrichment in the stream and fauna that is most similar to communities influenced by nonpoint nutrients and agricultural sources. Water column chemistry indicates elevated levels of pathogens (coliform) that constitute a parameter of concern. Toxicity testing using water from this location detected no significant mortality or reproductive effects on the test organism. Sediment screening

for acute toxicity indicated some sediment toxicity and no porewater toxicity was indicated. Bottom sediments analysis based on sediment quality guidelines developed for freshwater ecosystems revealed overall sediment quality is not likely to cause chronic toxicity to sediment-dwelling organisms, although elevated levels of metals, PAHs and pesticides were noted. Based on the consensus of these established assessment indicators, overall water quality at this site was noted as having minor impacts to uses. (DEC/DOW, BWAM/RIBS, January 2010)

A biological (macroinvertebrate) assessment of North Chuctanunda Creek at the mouth in Amsterdam was conducted in 2000. Field sampling results indicated non-impacted water quality conditions. The sample satisfied field screening criteria and was returned to the stream. Though this sampling location is just below the described segment, it is considered indicative of conditions in this reach. (DEC/DOW, BWAR/SBU, July 2002)

Fishery Assessment

A conservation release from Galway Lake may benefit water quality in the stream. The stream supports a warm water fishery. Though the stream may not be suitable for trout the stream is not designated a trout stream and is considered to fully support an appropriate fishery resource. Some sections may have been stocked with trout by sportsmen in the past. (DEC/DFWMR, Region 4, June 2002)

Other Issues

Possible nonpoint agricultural impacts are a concern raised by the Fulton County SWCD/WQCC. Runoff from a tree nursery causes excessive turbidity in a (Caneys Brook (-9) during major rain events. (DEC/DOW, Region 5, May 2002)

Segment Description

This segment includes the portion of the stream and all tribs from Harrower Pond (P556) in Hagaman to Galway Lake (P563). The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Healy Kill (-8) and Caneys Brook (-9), are primarily Class C,C(T); with one trib designated Class D.