Olean Creek, Upper, and tribs (0201-0050) MinorImpacts

Waterbody Location Information

Revised: 05/28/2008

Water Index No:	Pa-53-54			**Drain Basin:**	Allegheny River
Hydro Unit Code:	05010001/100	**Str Class:**	A		Upper Allegheny
Waterbody Type:	River			**Reg/County:**	9/Cattaraugus Co. (5)
Waterbody Size:	58.0 Miles			**Quad Map:**	OLEAN (M-07-4)
Seg Description:	stream and tribs, from Baldwin Heights to Hinsdale				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: NUTRIENTS (phosphorus), PATHOGENS
Suspected: - - -
Possible: - - -

Source(s) of Pollutant(s)

Known: MUNICIPAL (Cuba WWTP)
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/Hlth **Resolution Potential:** High
TMDL/303d Status: n/a

Further Details

Drinking water use of Olean Creek is known to experience stress/threats due to the susceptibility of the water supply to possible pathogen contamination and elevated nutrient loads 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 potentially threatened. However the very high susceptibility to contamination, as determined by the NYSDOH Source Water Protection Program (SWAP), results in an assessment of the waterbody as Stressed.

Drinking water for the City of Olean is taken from Olean Creek as well as area wells. These sources serve a population of 15,500 people. Although there are no known water quality impacts to the drinking water use of Olean Creek, a Source Water Assessment by the NYSDOH found an elevated (very high) susceptibility to contamination from pathogens due to the number of point sources (permitted municipal wastewater discharges) and nonpoint agricultural activity and pastureland in the watershed. Olean Creek is one of only a handful of surface water supplies in the state that received assessments as high as "very high" susceptibility. (NYSDOH, SWAP, October 2004)

Biological (macroinvertebrate) assessments of Olean Creek in above Olean (at Hastings Road) was sampled in 2002. Sampling results indicated slightly impacted water quality conditions, with evidence of nutrient enrichment. Previous sampling in 1995 and 1996 revealed non-impacted water quality. A site downstream of this reach in Olean was assessed as non-impacted in 2001. Although there is indication of slightly impacted conditions for some sampling, aquatic life is considered to be fully supported in the stream. (DEC/DOW, BWAM/SBU, June 2005)

Two larger municipal wastewater treatment facilities (Cuba (v) and Franklinville (v)) are located in the watershed above this reach. Of greater concern is the potential impact from the Cuba WWTP because of high infiltration and inflow to the collection system which results in documented periodic overflows and by-passes of raw wastewater at the treatment plant. A village engineering report notes the occurrence of wastewater discharges from manholes during wet weather events. The village has undertaken collection system inspections and flow monitoring to identify sources of excess inflow and infiltration. The village is also pursuing funding to support collection system and treatment facility improvements. (DEC/DOW, Reg 9, April 2008)

This segment includes the portion of the stream and all tribs from/including Blakeslee Hollow Creek (-2) in Baldwin Heights to the confluence of Ischua and Oil Creeks in Hinsdale. The waters of this portion of the stream are Class A. Tribs to this reach/segment, including Blakeslee Hollow Creek (-2), Scot Branch (-7) and Gulf Brook (-8), are also Class A. Lower Olean Creek is listed separately.

Oil Creek, Lower, and tribs (0201-0056) MinorImpacts

Waterbody Location Information

Revised: 05/28/2008

Water Index No:	Pa-53-54-11			**Drain Basin:**	Allegheny River
Hydro Unit Code:	05010001/100	**Str Class:**	A		Upper Allegheny
Waterbody Type:	River			**Reg/County:**	9/Cattaraugus Co. (5)
Waterbody Size:	23.5 Miles			**Quad Map:**	CUBA (M-07-2)
Seg Description:	stream and tribs, from mouth to Cuba Lake Outlet				

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:	Pathogens
Possible:	- - -

Source(s) of Pollutant(s)

Known:	MUNICIPAL (Cuba WWTP)
Suspected:	AGRICULTURE
Possible:	On-Site/Septic Syst

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 is known to experience minor impacts due to nutrient enrichment from nonpoint sources. Impacts from bypasses at municipl treatment facilities is also a concern.

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Oil Creek in Hinsdale, Cattaraugus County, (at Old State Road) was conducted in 2002. Sampling of the water column, sediments, and invertebrate tissues was conducted, as well as macroinvertebrate community analysis. Biological (macroinvertebrate) sampling indicated slightly impacted water quality at this site. Water column sampling revealed iron and lead to be parameters of concern. Toxicity testing of water column, sediment assessment and macroinvertebrate tissue analysis showed no significant impacts. Toxicity testing of sediments indicated some possible impacts; and arsenic was found to exceed the Threshold Effects level at which adverse impacts occasionally occur. (DEC/DOW, BWAM/RIBS, January 2005)

A biological survey of Oil Creek at multiple sites between the mouth at Hinsdale and Cuba was also conducted in 2002.

Sampling results indicated slightly impacted water quality conditions at all four sites. Three of these sites are in this reach. The most downstream site was also sampled in 2001 during RIBS screening of the Allegheny Basin and found to be slightly impacted. Nonpoint source nutrient enrichment was determined to be the primary source of the impacts. (DEC/DOW, BWAM/SBU, June 2005)

Also of concern are impacts from the Cuba WWTP because of high infiltration and inflow to the collection system which results in documented periodic overflows and by-passes on raw wastewater at the treatment plant. A city engineering report notes the occurrence of wastewater discharges from manholes during wet weather events. The village has undertaken collection system inspections and flow monitoring to identify sources of excess inflow and infiltration. The village is also pursuing funding to support collection system and treatment facility improvements. (DEC/DOW, Reg 9, April 2008)

This segment includes the portion of the stream and all tribs from the mouth to Cuba Lake Outlet. The waters of this portion of the stream are Class A. Tribs to this reach/segment are also Class A. Cuba Lake Outlet (-5) is listed separately.