



Indian/Black Creek Watershed (0415030302)

Water Index Number

SL-25- 7/P1- 3 (portion 3)
 SL-25- 7/P1- 3 (portion 4)
 SL-25- 7/P1- 3-30
 SL-25- 7/P1- 3-30
 SL-25- 7/P1- 3-42
 SL-25- 7/P1- 3-46-P20

Waterbody

Indian River, Middle, and minor tribs (0906-0030)
 Indian River, Middle, and minor tribs (0906-0031)
 Black Creek, Lower, and tribs (0906-0045)
 Black Creek, Upper, and tribs (0906-0046)
 Rockwell Creek and tribs (0906-0047)
 Dority Pond (0906-0048)

Category

UnAssessed
 UnAssessed
 MinorImpacts
 UnAssessed
 UnAssessed
 UnAssessed

Black Creek, Lower, and tribs (0906-0045)

MinorImpacts

Waterbody Location Information

Revised: 02/13/2009

Water Index No: SL-25- 7/P1- 3-30
Hydro Unit Code: 04150303/030 **Str Class:** C
Waterbody Type: River
Waterbody Size: 38.8 Miles
Seg Description: stream and tribs, from mouth to Reedville

Drain Basin: Saint Lawrence River
Indian River
Reg/County: 6/Jefferson Co. (23)
Quad Map: PHILADELPHIA (E-18-1)

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: NUTRIENTS, SILT/SEDIMENT
Possible: ---

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 support in this portion of Black Creek River is thought to experience minor impacts due to nutrient and silt/sediment loadings from agricultural and other nonpoint sources.

Water Quality Sampling

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Black Creek in Philadelphia, Jefferson County, (at Garden of Eden Road) was conducted in 2005. 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) sampling results indicated non- to slightly impacted water quality conditions. Mayflies and stoneflies were not observed in the sample in the field. However an impoundment was located immediately upstream of this site and may have affected sampling results. This sample was dominated by the facultative midge larvae *Polypedilum flavum*. The nutrient biotic index indicated eutrophic conditions due to phosphorus at both sites. Water column sampling revealed water temperature to be a parameter of concern. Macroinvertebrates collected at this site and chemically analyzed for selected metals, PAHs, PCBs, and organochlorine pesticides show an elevated level of chromium. The source of chromium is likely to be anthropogenic, but it has not been identified. Screening for acute toxicity indicated no sediment or porewater toxicity to be present, and chronic toxicity testing using water from this location showed no significant mortality or reproductive effects on the test organism. Sediments were not found to contain

any contaminants at levels of concern and, based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to cause chronic toxicity to sediment-dwelling organisms. Chronic toxicity testing using water from this location showed no significant mortality or reproductive effects on the test organism. Based on the consensus of these established assessment methods, overall water quality at this site shows that in spite of some concerns that should continue to be monitored (eutrophication, temperature, chromium), aquatic life is considered to be fully supported in the stream. (DEC/DOW, BWAM/RIBS, January 2009)

A biological (macroinvertebrate) assessment of the Black River, at Philadelphia (at Belile Road) was also conducted in 2004 during the RIBS Biological Screening effort in the basin. The sample revealed many clean water mayflies, caddisflies and stoneflies. (DEC/DOW, BWAM/SBU, December 2008)

Segment Description

This segment includes the portion of the stream and all tribs from the mouth to West Branch (-6) in Reedville. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment are primarily Class C. Upper Black Creek including West Branch is listed separately.