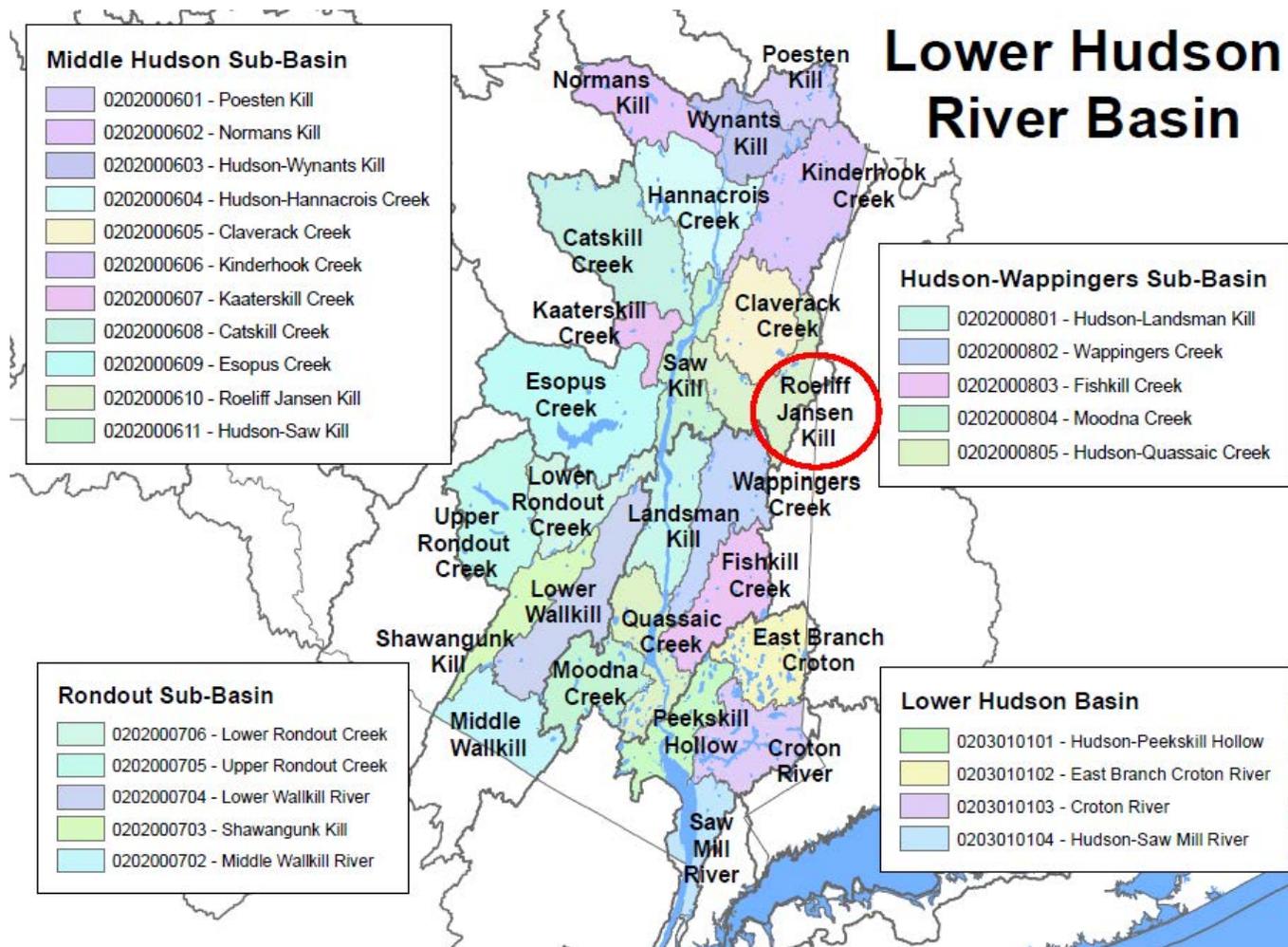


Lower Hudson River Basin



Roeliff Jansen Kill (0202000610)

Water Index Number

H-188
H-188
H-188
H-188- 2
H-188-18
H-188-18-P869
H-188-18-P869- 3-P870
H-188-18a-P871,P872
H-188-39
H-188-55-P887,P888,P889
H-188-56-P891
H-188-57
H-188-59
H-188-60-P901
H-188-63-P903
H-188-64-P904
H-188-P902

Waterbody Name

Roeliff Jan Kill, Lower, and minor tribs(1308-0010)
Roeliff Jan Kill, Mid, and minor tribs (1308-0011)
Roeliff Jan Kill, Upper, and tribs (1308-0002)
Klein Kill and tribs (1308-0012)
Doove Kill and tribs (1308-0013)
Lake Taghkanic (1308-0014)
Lily Pond (1308-0015)
Twin Lakes (1308-0016)
Shekomeko Creek and tribs (1308-0017)
Long Pond, Lower/Upper Rhoda Ponds (1308-0018)
Miller Pond (1308-0019)
Punch Brook and tribs (1308-0020)
Bash Bish Brook and tribs (1308-0021)
Snyder Pond (1308-0022)
Shaver Pond (1308-0023)
Goose Pond (1308-0024)
Robinson Pond (1308-0003)

Category

NoKnownImpct
NoKnownImpct
Need Verific
NoKnownImpct
MinorImpacts
UnAssessed
UnAssessed
UnAssessed
NoKnownImpct
UnAssessed
UnAssessed
UnAssessed
NoKnownImpct
UnAssessed
NoKnownImpct
UnAssessed
Impaired Seg

Roeliff Jan Kill, Lower, and minor tribs (1308-0010) NoKnownImpct

Waterbody Location Information

Revised: 06/03/2008

Water Index No: H-188
Hydro Unit Code: Str Class: C(T)
Waterbody Type: River
Waterbody Size: 143.1 Miles
Seg Description: stream and select tribs, from mouth to Silvernails
Drain Basin: Lower Hudson River
Reg/County: 4/Columbia Co. (11)
Quad Map: CLERMONT (M-25-3)

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

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 8 (No Known Use Impairment)
Verification Status: (Not Applicable for Selected RESOLVABILITY)
Lead Agency/Office: n/a
TMDL/303d Status: n/a
Resolution Potential: n/a

Further Details

Water Quality Sampling

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Roeliff Jansen Kill in Livingston, Columbia County, (at Dales Bridge Road) was conducted in 2003. 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 slightly impacted water quality conditions. Agricultural runoff were the likely source of the impacts. However nutrient biotic evaluation determined these effects ton the fauna to be minor. Water column sampling revealed only iron to be a parameter of concern. However, this substance is considered to be naturally occurring and not a source of water quality impacts. Bottom sediment sampling results revealed no contaminants to be exceeding the Threshold Effects level - levels at which adverse impacts occasionally occur. Toxicity testing of the water column showed no significant mortality or reproductive impacts. Based on the consensus of these established assessment methods, overall water quality at this site is considered to be fully supportive of the aquatic life and recreational uses. (DEC/DOW, BWAM/RIBS, January 2005)

Previous Sampling

A biological (macroinvertebrate) survey of Roeliff Jansen Kill at multiple sites from Linlithgo to Ancram was conducted in 1992. Sampling results indicated non-impacted water quality conditions for this entire reach. Similar results were found again in 1997 and 1998 at the downstream Linlithgo site.

Segment Description

This segment includes the portion of the stream and selected/smaller tribs from the mouth to Shekomeko Creek (-39) in Silvernails. The waters of this portion of the stream are Class C,C(T),C(TS). Tribs to this reach/segment, including Fall Kill (-34), Ham Brook (-37), are also Class C,C(T),C(T). Klein Kill (-2), Doove Kill (-18) and Shekomeko Creek (-39) are listed separately.

Roeliff Jan Kill, Mid, and minor tribs (1308-0011)

NoKnownImpct

Waterbody Location Information

Revised: 11/06/2007

Water Index No: H-188
Hydro Unit Code: Str Class: C(TS)
Waterbody Type: River
Waterbody Size: 90.0 Miles
Seg Description: stream and select tribs, fr Silvernails to Taconic Shrs

Drain Basin: Lower Hudson River
Reg/County: 4/Columbia Co. (11)
Quad Map: ANCRAM (M-26-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted

NO USE IMPAIRMNT

Severity

Problem Documentation

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 8 (No Known Use Impairment)

Verification Status: (Not Applicable for Selected RESOLVABILITY)

Lead Agency/Office: n/a

Resolution Potential: n/a

TMDL/303d Status: n/a

Further Details

Water Quality Sampling

A biological (macroinvertebrate) survey of Roeliff Jansen Kill at multiple sites from Linlithgo to Ancram was conducted in 1992. Sampling results indicated non-impacted water quality conditions for this entire reach. Similar results were found again in 1997 and 1998 at the downstream Linlithgo site. Based on these results, this reach is considered to have no known impacts and to fully support all uses. Due to the time since the most recent assessment and the use of sampling results downstream of this reach, the assessment of no known impacts to water quality is considered to be an evaluated assessment. (DEC/DOW, BWAM/RIBS, June 2005)

Segment Description

This segment includes the portion of the stream and selected/smaller tribs from Shekomeko Creek (-39) in Silvernails to Robinson Pond (P902) in Taconic Shores. The waters of this portion of the stream are Class C(T),C(TS). Tribs to this reach/segment, including Spaulding Furnace Brook (-40), Hoysradt Brook (-49) and Long Pond Outlet (-55), are Class C,C(T),C(T). Shekomeko Creek (-39), Punch Brook (-57) and Bash Bish Brook (-59) are listed separately.

Roeliff Jan Kill, Upper, and tribs (1308-0002)

Need Verific

Waterbody Location Information

Revised: 11/06/2007

Water Index No: H-188
Hydro Unit Code: 02020006/180 **Str Class:** C(TS)
Waterbody Type: River
Waterbody Size: 59.6 Miles
Seg Description: stream and tribs, above Taconic Shores/Robinson Pond

Drain Basin: Lower Hudson River
Middle Hudson River
Reg/County: 4/Columbia Co. (11)
Quad Map: HILLSDALE (M-26-2)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Stressed	Possible

Type of Pollutant(s)

Known: ---
Suspected: NUTRIENTS
Possible: D.O./Oxygen Demand, Pathogens

Source(s) of Pollutant(s)

Known: ---
Suspected: ON-SITE/SEPTIC SYST, Agriculture
Possible: ---

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 1 (Waterbody Nominated, Problem Not Verified)
Lead Agency/Office: DOW/Reg4
TMDL/303d Status: n/a

Resolution Potential: Medium

Further Details

Overview

Aquatic life support and recreational uses in this portion of the Roeliff Jansen Kill may experience minor impacts due to nutrient loadings from agricultural and other nonpoint sources. Due to the amount of time since this segment was last sampled, the segment is listed as needing verification of impacts.

Water Quality Sampling

Biological (macroinvertebrate) assessments of the Roeliff Jansen Kill near Hillsdale (at Black Grocery Road and at Route 22) were conducted in 1993. Sampling results indicated slightly impacted water quality at the upstream site and non-impacted water quality conditions below Hillsdale. Nutrient enrichment from nonpoint sources was identified as the most likely source of impacts. (DEC/DOW, BWAM/SBU, June 2005)

Previous Assessment

Previous concerns had been raised regarding inputs from failing and/or inadequate septic systems and agricultural activity in the area. Problems with on-site septic systems serving Hillsdale have been noted by the Columbia County Health Department as a public health nuisance and contribute to water quality concerns. The county has required both short-term actions to temporarily relieve the immediate public health concerns and a plan for wastewater collection and treatment to address the problem in the long-term. (DEC/DOW, Region 4 and Columbia County Health Department, 1996)

Another concern is agricultural runoff from manure-sprayed fields. A past fish kill in the creek was attributed to manure runoff. However, the practices at this particular site have been improved and there have been no recent incidents. Generally, the stream is considered a productive trout fishery, with both wild and stocked populations. (DEC/DFWMR, Region 4 Fisheries, December 1999)

Segment Description

This segment includes the portion of the stream and selected/smaller tribs above Robinson Pond (P902) in Taconic Shores. The waters of this portion of the stream are Class C(TS). Tribs to this reach/segment, including Renwick Brook (-72) and North Hillsdale Stream (-79), are Class C,C(T),C(T).

Shekomeko Creek and tribs (1308-0017)

NoKnownImpct

Waterbody Location Information

Revised: 11/06/2007

Water Index No: H-188-39
Hydro Unit Code: Str Class: C(TS)
Waterbody Type: River
Waterbody Size: 54.3 Miles
Seg Description: entire stream and tribs
Drain Basin: Lower Hudson River
Reg/County: 4/Columbia Co. (11)
Quad Map: PINE PLAINS (N-26-1)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 8 (No Known Use Impairment)
Verification Status: (Not Applicable for Selected RESOLVABILITY)
Lead Agency/Office: n/a
TMDL/303d Status: n/a
Resolution Potential: n/a

Further Details

Water Quality Sampling

A biological (macroinvertebrate) assessment of Shekomeko Creek in Pine Plains (off Rudd Road) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. The fauna was diverse and well-balanced. (DEC/DOW, BWAM/SBU, June 2005)

Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C(TS). Tribs to this reach/segment, including Bean River (-8) are Class C,C(TS).

Bash Bish Brook and tribs (1308-0021)

NoKnownImpct

Waterbody Location Information

Revised: 11/06/2007

Water Index No: H-188-59
Hydro Unit Code: Str Class: C(TS)
Waterbody Type: River
Waterbody Size: 34.6 Miles
Seg Description: entire stream and tribs
Drain Basin: Lower Hudson River
Reg/County: 4/Columbia Co. (11)
Quad Map: COPAKE (M-26-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 8 (No Known Use Impairment)
Verification Status: (Not Applicable for Selected RESOLVABILITY)
Lead Agency/Office: n/a
TMDL/303d Status: n/a
Resolution Potential: n/a

Further Details

Water Quality Sampling

A biological (macroinvertebrate) assessment of Bash Bish Brook in Copake Falls (at Valley View Road) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. The fauna was diverse and all screening criteria for waters having no known impacts were met. (DEC/DOW, BWAM/SBU, June 2005)

Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C(T),C(TS). Tribs to this reach/segment, including Norster Kill (-2) and Cedar Brook (-8), are Class C,C(T),C(TS).

contamination from organic compounds, metals or other inorganic pollutants have not been collected as part of the CSLAP monitoring program. Monitoring to assess public bathing use is generally the responsibility of state and/or local health departments.

Robinson Pond (1308-0003)

Impaired Seg

Waterbody Location Information

Revised: 05/01/2008

Water Index No: H-188-P902
Hydro Unit Code: 02020006/180 **Str Class:** B(T)
Waterbody Type: Lake
Waterbody Size: 113.7 Acres
Seg Description: entire lake

Drain Basin: Lower Hudson River
Middle Hudson River
Reg/County: 4/Columbia Co. (11)
Quad Map: COPAKE (M-26-3)

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

Use(s) Impacted	Severity	Problem Documentation
Public Bathing	Stressed	Known
Aquatic Life	Stressed	Possible
RECREATION	Impaired	Known
Aesthetics	Stressed	Known

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH, NUTRIENTS (phosphorus)
Suspected: - - -
Possible: D.O./Oxygen Demand

Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION
Suspected: AGRICULTURE, On-Site/Septic Syst
Possible: - - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: DEC/Reg4
TMDL/303d Status: 3a->1* **Resolution Potential:** Medium

Further Details

Overview

Recreational uses in Robinson Pond are considered to be impaired due to algal growth and low water transparency. Elevated nutrient (phosphorus) loads attributed to nonpoint sources are the primary contributor to recreational and aesthetic impacts. Agricultural activity and on-site (septic) systems are thought to be sources of these pollutants.

Water Quality Sampling

Robinson Pond has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1989 and continuing through 1993, and again in 2007. An Interpretive Summary report of the findings of this sampling was published in 2008. These data indicate that the lake continues to be best characterized as eutrophic, or highly productive, based on low water transparency, and high nutrient (primarily phosphorus) and algae levels. Phosphorus levels in the lake typically exceed the state phosphorus guidance value indicating impacted/stressed recreational uses. Corresponding transparency measurements occasionally fail to meet what is recommended for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5; occasional high pH does not appear to impact aquatic life. The lake water is usually weakly colored, however during most recent sampling color was high enough to influence transparency. (DEC/DOW, BWAM/CSLAP, February 2008)

Recreational Assessment

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This most recent assessment (2005) indicates recreational suitability of the lake to be somewhat unfavorable. The recreational suitability of the lake is described most frequently as "slightly" impacted for most recreational uses. The lake itself is most often described as having "not quite crystal clear" to having "definite algae greenness," an assessment that is consistent with measured water quality characteristics. Assessments have noted that aquatic plants typically grow to the lake surface, but plant coverage is dependent upon aquatic plant management activities in the lake. (DEC/DOW, BWAM/CSLAP, February 2008)

Lake Uses

This lake waterbody is designated class B(T), suitable for use as a public bathing beach, for general recreation and aquatic life support, but not as public water supply. Water quality monitoring by NYSDEC focuses primarily on support of general recreation and aquatic life. Samples to evaluate the bacteriological condition and bathing use of the lake or to evaluate contamination from organic compounds, metals or other inorganic pollutants have not been collected as part of the CSLAP monitoring program. Monitoring to assess potable water supply and public bathing use is generally the responsibility of state and/or local health departments. Section 303(d) Listing
Robinson Pond is currently included on the NYS 2008 Section 303(d) List of Impaired Waters. The lake is included on Part 3a of the List as a Water Requiring Verification of Impairment, however this updated assessment suggests that the suspected impairments to water quality and uses are verified and it is recommended that this listing for phosphorus in the lake be moved to Part 1 of the List, indicating a waterbody with an impairment requiring TMDL development. (DEC/DOW, BWAM/WQAS, May 2008)