Waterbody Inventory for Rondout River Watershed

Water Index Number	Waterbody Segment	Category
Rondout River Watershed		
H-139 (portion 1)	Rondout River, Lower, Main Stem (1306-0030)	UnAssessed
H-139 (portion 2)	Rondout River, Lower, Main Stem (1306-0031)	UnAssessed
H-139- 2 thru 6	Minor Tribs to Lower Rondount River (1306-0032)	UnAssessed
H-139- 7	DeWitt Lake Outlet and tribs (1306-0033)	UnAssessed
H-139- 7-P449	DeWitt Lake (1306-0034)	UnAssessed
H-139- 7-P449-	Tribs to DeWitt Lake (1306-0035)	UnAssessed
H-139- 7-P449-P452,P452,P452a	Third, First Binnewater Lakes, Twin Lk (1306-0036)	UnAssessed
Lower Wallkill River Watershed		
H-139-13 (portion 1)/P453a	Sturgeon Pond (1306-0037)	UnAssessed
H-139-13 (portion 2)	Wallkill River, Lower, Main Stem (1306-0027)	**MinorImpacts**
H-139-13- 2	Swarte Kill and tribs (1306-0039)	UnAssessed
H-139-13- 3 thru 18	Minor Tribs to Lower Wallkill (1306-0040)	UnAssessed
H-139-13-10- 1	Unnamed Trib to Wallkill, Upp, and tribs (1306-0041)	UnAssessed
H-139-13-11	Unnamed Trib to Wallkill, and mnr tribs (1306-0042)	UnAssessed
H-139-13-11- 4	Kleine Kill and tribs (1306-0043)	UnAssessed
H-139-13-16	Platte Kill and tribs (1306-0044)	**NoKnownImpct**
Shawangunk River Watershed		
H-139-13-19	Shawangunk Kill, Lower, and minor tribs (1306-0045)	**NoKnownImpct**
H-139-13-19	Shawangunk Kill, Middle, and minor tribs (1306-0046)	**NoKnownImpct**
H-139-13-19	Shawangunk Kill, Middle, and tribs (1306-0047)	**NoKnownImpct**
H-139-13-19	Shawangunk Kill, Upper, and tribs (1306-0048)	UnAssessed
H-139-13-19- 1-P463a	Heddens Lake (1306-0049)	UnAssessed
H-139-13-19- 5	Palmaghatt Kill, Upper, and tribs (1306-0050)	UnAssessed
H-139-13-19- 5-P464a	Tillson Lake (1306-0051)	UnAssessed
H-139-13-19- 7	Dwaar Kill and tribs (1306-0052)	**MinorImpacts**
H-139-13-19- 9	Pakanasink Creek, Upper, and tribs (1306-0053)	UnAssessed
H-139-13-19-10	Verkeerder Kill Creek and tribs (1306-0054)	**NoKnownImpct**
H-139-13-19-10- 5-P471	Lake Maratanza (1306-0055)	UnAssessed
H-139-13-19-13-P471a	Pinebush Lake (1306-0056)	UnAssessed
H-139-13-19-15	Platte Kill/Halliday Brook and tribs (1306-0057)	UnAssessed
H-139-13-19-17-P473	Echo Lake (1306-0058)	UnAssessed
H-139-13-19-28	Little Shawangunk Kill and tribs (1306-0059)	**NoKnownImpct**
H-139-13-19-28-P491,P492	Shawangunk Lake/Highland Lake (1306-0060)	**Threat(Poss)**

...Rondout River Watershed

Water Index Number	Waterbody Segment	Category
Upper Wallkill River Watershed		
H-139-13 (portion 3)	Wallkill River, Middle, Main Stem (1306-0038)	MinorImpacts
H-139-13 (portion 4)	Wallkill River, Upper, and minor tribs (1306-0017)	MinorImpacts
H-139-13-20 thru 53	Minor Tribs to Middle Wallkill (1306-0061)	UnAssessed
H-139-13-24	Dwaar Kill, Lower, and tribs (1306-0062)	NoKnownImpct
H-139-13-24	Dwaar Kill, Middle and tribs (1306-0063)	UnAssessed
H-139-13-24	Dwaar Kill, Upper, and tribs (1306-0064)	UnAssessed
H-139-13-28	Latterette Creek, Upper, and tribs (1306-0065)	UnAssessed
H-139-13-31	Borden Creek, Upper, and tribs (1306-0066)	UnAssessed
H-139-13-31- 1a-P546	Lake Osiris Lake (1306-0067)	UnAssessed
H-139-13-33	Tin Brook, Lower, and tribs (1306-0068)	MinorImpacts
H-139-13-33	Tin Brook, Upper, and tribs (1306-0069)	UnAssessed
H-139-13-41	Mannayunk Kill and tribs (1306-0070)	NoKnownImpct
H-139-13-47	Milburn Creek, Upper, and tribs (1306-0071)	UnAssessed
H-139-13-51	Masonic Creek and tribs (1306-0072)	MinorImpacts
H-139-13-51-P579a	Silver Lake (1306-0073)	UnAssessed
H-139-13-52	Monhagen Brook and tribs (1306-0074)	Impaired Seg
H-139-13-52-P598	Monhagen Lake (1306-0075)	NoKnownImpct
H-139-13-53-P623	Goshen Reservoir (1306-0076)	UnAssessed
H-139-13-59	Quaker Creek and tribs (1306-0025)	Impaired Seg
H-139-13-59-P668	Glenmere Lake (1306-0077)	UnAssessed
H-139-13-61	Pochuck Creek and minor tribs (1306-0078)	NoKnownImpct
H-139-13-61- 9	Wawayanda Creek, Lower, and tribs (1306-0079)	MinorImpacts
H-139-13-61- 9	Wawayanda Creek, Upper, and minor tribs (1306-0015)	MinorImpacts
H-139-13-61- 9-15	Unnamed Trib to Wawayanda Cr, and tribs (1306-0080)	UnAssessed
H-139-13-61- 9-20	Warwick Reservoir Outlet, Upp, and tribs (1306-0081)	UnAssessed
H-139-13-61- 9-25	Long House Creek, Upper, and tribs (1306-0082)	UnAssessed
H-139-13-61- 9-P698	Wickham Lake (1306-0083)	UnAssessed
H-139-13-62	Rutgers Creek and minor tribs (1306-0006)	NoKnownImpct
H-139-13-62- 2	Catlin Creek and tribs (1306-0084)	UnAssessed
H-139-13-62- 3	Indigot Creek, Lower, and tribs (1306-0085)	NoKnownImpct
H-139-13-62- 3	Indigot Creek, Upper, and tribs (1306-0086)	UnAssessed
H-139-13-62-10-P743	Lochenhurst Pond (1306-0087)	UnAssessed
Lower Rondout Creek Watershed		
H-139-14 (portion 1)	Rondout Creek, Middle, Main Stem (1306-0088)	NoKnownImpct
H-139-14 (portion 2)	Rondout Creek, Middle, and minor tribs (1306-0089)	NoKnownImpct
H-139-14 (portion 3)/P812	Honk Lake (1306-0090)	UnAssessed
H-139-14 (portion 4)	Rondout Creek, Middle, and tribs (1306-0091)	NoKnownImpct
H-139-14- 4 thru 33 (selected)	Minor Tribs to Middle Rondout Creek (1306-0093)	UnAssessed
H-139-14- 5-P769	Williams/Fifth Binnewater Lake (1306-0094)	UnAssessed
H-139-14- 5-P770	Fourth Binnewater Lake (1306-0095)	UnAssessed
H-139-14- 9	Coxing Kill and tribs (1306-0096)	NoKnownImpct
H-139-14- 9- 3..P774	Mohonk Lake (1306-0097)	UnAssessed
H-139-14- 9-P775	Lake Minnewaska (1306-0098)	UnAssessed

...Rondout River Watershed

Water Index Number	Waterbody Segment	Category
Lower Rondout Creek Watershed (con't)		
H-139-14-12	Kripplebush Creek and tribs (1306-0099)	**NoKnownImpct**
H-139-14-16	Peters Kill and tribs (1306-0100)	**NoKnownImpct**
H-139-14-16- 2-P780	Mud Pond (1306-0101)	UnAssessed
H-139-14-16-P781	Lake Awosting (1306-0102)	UnAssessed
H-139-14-18	North Peters Kill, Lower, and tribs (1306-0103)	**NoKnownImpct**
H-139-14-18	North Peters Kill, Upper, and tribs (1306-0104)	UnAssessed
H-139-14-18-P783	Lyonsville Pond (1306-0105)	UnAssessed
H-139-14-19	Stony Kill and tribs (1306-0106)	UnAssessed
H-139-14-20	Rochester Creek and minor tribs (1306-0107)	**NoKnownImpct**
H-139-14-20- 2	Mill Brook and tribs (1306-0108)	**Need Verific**
H-139-14-20- 5- 1-P788	Roosa Lake (1306-0109)	UnAssessed
H-139-14-35	Vernoy Kill, Upper, and tribs (1306-0110)	**NoKnownImpct**
H-139-14-35- 1-P789a	Lyons Lake (1306-0111)	UnAssessed
H-139-14-37	Unnamed Trib to Rondout, Upp, and tribs (1306-0112)	UnAssessed
H-139-14-38	Sandburg Creek, Lower, and tribs (1306-0113)	**NoKnownImpct**
H-139-14-38	Sandburg Creek, Upper, and tribs (1306-0114)	UnAssessed
H-139-14-38- 1,-5,-6	Shingle Gully, North/South Gully, tribs (1306-0115)	UnAssessed
H-139-14-38- 3	Beer Kill and minor tribs (1306-0116)	**NoKnownImpct**
H-139-14-38- 3- 1	West Branch Beer Kill and tribs (1306-0117)	**NoKnownImpct**
H-139-14-38- 3- 1- 5-P792	Cranberry Lake (1306-0118)	UnAssessed
H-139-14-38- 3- 4-P799	Upper Ulster Lake (1306-0119)	UnAssessed
H-139-14-38- 3-P797a	Ulster Lake (1306-0120)	UnAssessed
H-139-14-38- 9	Leuren Kill and tribs (1306-0121)	UnAssessed
H-139-14-38-14	Homowack Kill and tribs (1306-0122)	**NoKnownImpct**
H-139-14-38-20-3-P806a	Katz Pond (1306-0123)	UnAssessed
H-139-14-38-P807	Silver/Woods Lake (1306-0124)	UnAssessed
H-139-14-40	Brandy Brook and tribs (1306-0125)	UnAssessed
Upper Rondout Creek/Rondout Reservoir Watershed		
H-139-14 (portion 5)/P815a	Rondout Reservoir (1306-0003)	**Impaired Seg**
H-139-14 (portion 6)	Rondout Creek, Upper, and minor tribs (1306-0026)	**NoKnownImpct**
H-139-14 (portion 7)	Rondout Creek, Upper, and minor tribs (1306-0092)	**MinorImpacts**
H-139-14-P815a-	Minor Tribs to Rondout Reservoir (1306-0014)	**MinorImpacts**
H-139-14-P815a-48	Chestnut Creek and tribs (1306-0009)	**NoKnownImpct**
H-139-14-P815a-48- 2-P818	Beaverdam Pond (1306-0126)	UnAssessed
H-139-14-P815a-53	East/Sundown Brook and tribs (1306-0127)	UnAssessed

This page intentionally left blank.

Wallkill River, Lower, Main Stem (1306-0027) MinorImpacts

Waterbody Location Information

Revised: 12/21/2007

Water Index No: H-139-13 (portion 2)
Hydro Unit Code: 02020007/080 **Str Class:** B
Waterbody Type: River
Waterbody Size: 17.1 Miles
Seg Description: from Sturgeon Pond to Tuthill

Drain Basin: Lower Hudson River
Rondout River
Reg/County: 3/Ulster Co. (56)
Quad Map: ROSENDALE (N-24-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Fish Consumption	Stressed	Possible
Aquatic Life	Stressed	Known
Recreation	Stressed	Known

Type of Pollutant(s)

Known: NUTRIENTS (phosphorus), SILT/SEDIMENT, Pesticides (DDT, dieldrin)
Suspected: - - -
Possible: - - -

Source(s) of Pollutant(s)

Known: AGRICULTURE, Habitat Modification, Hydro Modification
Suspected: Streambank Erosion, 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: DOW/Reg3 **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Overview
Aquatic life, recreational uses and hydrologic/habitat conditions in this portion of the Wallkill River are known to experience minor impacts due to nutrient and silt/sediment loads, the result of extensive agricultural activities in the watershed. Stream channelization and other channel modifications to support agricultural operations also effect water quality and use support. The impacts of pesticide use in the watershed also raises some concerns regarding fish consumption.

Water Quality Sampling
A biological (macroinvertebrate) assessment of the Wallkill River near New Paltz (at Libertyville Road) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. Sampling results at this site have been consistent over the years. Most of the impact at this site and in most of the Wallkill is considered to have minor impacts, the result of agricultural nonpoint sources. Crayfish tissue samples collected in 1997 revealed elevated concentrations of PAHs, likely reflecting impacts from urban runoff. (DEC/DOW, BWAM/SBU, June 2005)

Pesticide Concerns In 1997 NYSDEC conducted a monitoring effort on Hudson River tributaries as part of the Contamination Assessment and Reduction Project (CARP) to evaluate potential sources of toxic chemicals to the Hudson and New York Harbor. Results from this monitoring found the Wallkill to have the highest concentrations of DDT (by factor of 10) and dieldrin of all tribs tested. Follow-up monitoring indicate the DDT source is located in the "black dirt" area (see Wallkill River segment 1306-0017). The study (Toxics Organics Survey: Hudson, Wallkill and Hackensack Rivers, Litten et al, DEC/DOW, BWAM, October 1999) concludes that while the impact of this source on the Hudson is unclear, it does affect the entire length of the Wallkill. High DDT concentrations were also confirmed by bottom sediment coring in the Sturgeon Pool (below New Paltz). This monitoring also found the highest concentrations to be in the uppermost layer of sediments; suggesting (but not proving) DDT releases are continuing. (DEC/DOW, BWAM/Special Studies Section and Sediment Assessment Unit, September 1999).

Previous Sampling
An extensive 1994 Biological Assessment of the river found slight water quality impacts along most of the length of the river. Evaluation of the monitoring results indicated nonpoint agricultural sources and siltation to be the likely causes of the impacts. These conditions represented a significant improvement over moderate to severe impacts documented in 1972 prior to the upgrade of sewage treatment plants serving Middletown, Wallkill, Montgomery and Walden. This portion of the river has historically suffered from high turbidity which colors the water. Urban runoff also affects the river aesthetics. (Wallkill River Biological Assessment Report, Bode et al, DEC/DOW, BWAM, September 1995)

Segment Description
This segment includes the main stem of the Wallkill River from the inlet of Sturgeon Pond (P453a) to the Shawangunk Kill (-19) in Tuthill. The waters of this portion of the stream are Class B. Middle/Upper Wallkill River are listed separately.

Platte Kill and tribs (1306-0044) NoKnownImpct

Waterbody Location Information

Revised: 12/20/2007

Water Index No: H-139-13-16
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: C
Waterbody Type: River
Reg/County: 3/Ulster Co. (56)
Waterbody Size: 25.5 Miles
Quad Map: CLINTONDALE (O-24-2)
Seg Description: entire stream and tribs

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
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Platte Kill in Burlingham (at Route 61) 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. The sample was sorted in the lab to family level and results were found to support the field assessment. (DEC/DOW, BWAM/SBU, December 2004)

Segment Description
This segment includes the entire stream and all tribs. The waters of the stream are Class C. Tribs to this reach/segment, including..., are also C.

Shawangunk Kill, Lower, and minor tribs (1306-0045) NoKnownImpct

Waterbody Location Information

Revised: 06/03/2008

Water Index No: H-139-13-19 **Drain Basin:** Lower Hudson River
Hydro Unit Code: **Str Class:** B
Waterbody Type: River **Reg/County:** 3/Ulster Co. (56)
Waterbody Size: 39.5 Miles **Quad Map:** GARDINER (O-24-1)
Seg Description: stream and select tribs, from mouth to Pinebush

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 **Resolution Potential:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Shawangunk Kill in Ganahgote, Orange County, (at Route 9) 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 non-impacted water quality conditions. The fauna was diverse and well-balanced. 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 (has minor impacts, but is -or- is fully) s supportive of the water's aquatic life support and recreational use. (DEC/DOW, BWAM/RIBS, January 2005)

Biological (macroinvertebrate) assessments of Shawangunk Kill were conducted at three sites including Ganahgote (at Route 9) and Pine Bush (at Hardenburg Road) in 2002. Sampling results at these sites indicated non-impacted water quality conditions. The fauna was diverse and all screening criteria for waters having no known impacts were met. The

sample was sorted in the lab to family level and results were found to support the field assessment. (DEC/DOW, BWAM/SBU, December 2004)

Segment Description

This segment includes the portion of the stream and selected/smaller tribs from the mouth to near Pakanasink Creek (-9) near Pinebush. The waters of this portion of the stream are Class B. Tribs to this reach/segment, including Mara Kill (-1), are Class B,B(T),BT(S),C. Palmaghatt Kill (-5), Dwaar Kill (-7), Pakanasink Creek and Middle/Upper Shawangunk Creek are listed separately.

Shawangunk Kill, Middle, and minor tribs (1306-0046) NoKnownImpct

Waterbody Location Information

Revised: 12/20/2007

Water Index No: H-139-13-19 **Drain Basin:** Lower Hudson River
Hydro Unit Code: **Str Class:** B(T)*
Waterbody Type: River **Reg/County:** 3/Orange Co. (36)
Waterbody Size: 76.2 Miles **Quad Map:** PINE BUSH (O-23-3)
Seg Description: stream and select tribs, from Pinebush to New Vernon

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 **Resolution Potential:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
Biological (macroinvertebrate) assessments of Shawangunk Kill were conducted at three sites including Pine Bush (at Hardenburg Road) and Maple Glen (at Meyer Road) in 2002. Sampling results at these sites indicated non-impacted water quality conditions. The fauna was diverse and all screening criteria for waters having no known impacts were met. The sample was sorted in the lab to family level and results were found to support the field assessment. (DEC/DOW, BWAM/SBU, December 2004)

Segment Description
This segment includes the portion of the stream and selected/smaller tribs just below Pakanasink Creek (-9) near Pinebush to unnamed trib (-30) near New Vernon. The waters of this portion of the stream are Class A for the lower half mile and Class B(T) for the remainder of the reach. Tribs to this reach/segment, including Lower Pakanasink Kill (-9), Tomy Kill (-13), Todds/Macy Brook (-16), Smith Brook (-17) and Norris Brook (-21), are Class B,B(T) and C. Upper Pakanasink Creek (-9), Verkeerder Kill (-10), Platte Kill Brook (-15), Little Shawangunk Kill (-28) and Upper/Lower Shawangunk Kill are listed separately.

Shawangunk Kill, Middle, and tribs (1306-0047) NoKnownImpct

Waterbody Location Information

Revised: 12/20/2007

Water Index No: H-139-13-19 **Drain Basin:** Lower Hudson River
Hydro Unit Code: **Str Class:** B
Waterbody Type: River **Reg/County:** 3/Orange Co. (36)
Waterbody Size: 18.5 Miles **Quad Map:** OTISVILLE (P-22-2)
Seg Description: stream and tribs, from New Vernon to New Hope

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 **Resolution Potential:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
Biological (macroinvertebrate) assessments of Shawangunk Kill were conducted at three sites including one site in just below the reach in Maple Glen (at Meyer Road) in 2002. Sampling results at these sites indicated non-impacted water quality conditions. The fauna was diverse and all screening criteria for waters having no known impacts were met. The sample was sorted in the lab to family level and results were found to support the field assessment. Although this site is not in the reach, it is considered to be representative of the upstream reach. (DEC/DOW, BWAM/SBU, December 2004)

Segment Description: This segment includes the portion of the stream and all tribs from unnamed trib (-30) near New Vernon to Mill Pond (P517) near Mount Hope. The waters of this portion of the stream are Class B. Tribs to this reach/segment are Class B,C,C(T). Lower/Upper Shawangunk Kill are listed separately.

Dwaar Kill and tribs (1306-0052) MinorImpacts

Waterbody Location Information

Revised: 12/20/2007

Water Index No: H-139-13-19- 7
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: B(T)
Waterbody Type: River
Reg/County: 3/Ulster Co. (56)
Waterbody Size: 18.1 Miles
Quad Map: NAPANOCH (O-23-2)
Seg Description: entire stream and tribs

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: - - -
Suspected: D.O./OXYGEN DEMAND, NUTRIENTS
Possible: - - -

Source(s) of Pollutant(s)

Known: - - -
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/WQCC
Resolution Potential: Medium
TMDL/303d Status: n/a

Further Details

Overview
Aquatic life support and recreational uses in Dwaar Kill are thought to experience minor impacts due to nutrient and organic impacts from agricultural nonpoint sources.

Water Quality Sampling
A biological (macroinvertebrate) assessment of Dwaar Kill in Dwaarkill (at Red Mills Road) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. The fauna contained many sewage-tolerant worms, but also contained many mayflies. The sample suggested organic wastes as the source of impacts. Cattle upstream of the site and agricultural nonpoint sources in general were assumed to be the source of the impacts. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates the level of eutrophication is sufficient to stress aquatic life support. (DEC/DOW, BWAM/SBU, June 2005)

Segment Description
This segment includes the entire stream and all tribs. The waters of the stream are Class B(T). Tribs to this reach/segment are also Class B(T).

Verkeerder Kill Creek and tribs (1306-0054) NoKnownImpct

Waterbody Location Information

Revised: 12/20/2007

Water Index No: H-139-13-19-10
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: A(T)
Waterbody Type: River
Reg/County: 3/Ulster Co. (56)
Waterbody Size: 23.3 Miles
Quad Map: PINE BUSH (O-23-3)
Seg Description: entire stream and tribs

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
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Verkeerder Kill in Ulsterville (at Ulsterville 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. The sample was sorted in the lab to family level and results were found to support the field assessment. (DEC/DOW, BWAM/SBU, December 2004)

Segment Description
This segment includes the entire stream and all tribs. The waters of the stream are Class A(T),A(TS). Tribs to this reach/segment, including Berger Brook (-2), are Class A(TS).

Little Shawangunk Kill and tribs (1306-0059) NoKnownImpct

Waterbody Location Information

Revised: 12/20/2007

Water Index No: H-139-13-19-28
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: B
Waterbody Type: River
Reg/County: 3/Orange Co. (36)
Waterbody Size: 16.6 Miles
Quad Map: MIDDLETOWN (P-23-1)
Seg Description: entire stream and tribs

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
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Little Shawangunk Kill in Maple Glen (at Timothy Collard 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, December 2004)

Segment Description
This segment includes the entire stream and all tribs. The waters of the stream are Class B. Tribs to this reach/segment are also/primarily Class B.

Shawangunk Lake/Highland Lake (1306-0060) Threat(Poss)

Waterbody Location Information

Revised: 07/25/2008

Water Index No: H-139-13-19-28-P491,P492
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: AA
Waterbody Type: Lake
Reg/County: 3/Orange Co. (36)
Waterbody Size: 218.1 Acres
Quad Map: MIDDLETOWN (P-23-1)
Seg Description: total area of both lakes

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Possible

Type of Pollutant(s)

Known: - - -
Suspected: - - -
Possible: OTHER POLLUTANTS, Nutrients

Source(s) of Pollutant(s)

Known: - - -
Suspected: - - -
Possible: OTHER SOURCE

Resolution/Management Information

Issue Resolvability: 3 (Strategy Being Implemented)
Verification Status: 5 (Management Strategy has been Developed)
Lead Agency/Office: DEC/Reg3
Resolution Potential: High
TMDL/303d Status: n/a

Further Details

Overview
Water supply use in Shawangunk and Highland Lakes are considered to be threatened. The designation of this waterbody as a threatened water is reflective of a need to protect its particular resource value, rather than specifically identified threats.

Water Quality Sampling
Both Shawangunk and Highland Lakes have been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 2003 and continuing through the present. An Interpretive Summary report of the findings of the most recent sampling was published in 2006. These data indicate that the lake continues to be best characterized as mesotrophic, or moderately to highly productive. Phosphorus levels in the lake regularly exceed the state guidance values indicating threatened/stressed recreation. Corresponding transparency measurements typically meet what is recommended for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. The lake water is slightly colored, conditions that are not thought to impact transparency. (DEC/DOW, BWAM/CSLAP, February 2006)

Recreational Assessment

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This assessment indicates recreational suitability of the lake to be very favorable since the lake was first evaluated and continuing through the most recent assessment. The recreational suitability of Shawangunk Lake is described most frequently as "excellent" with the lake itself is most often described as "not quite crystal clear," an assessment that is slightly less favorable than suggested by measured water quality characteristics. The recreational suitability of Highland Lake is described most frequently as "excellent" to "slightly" impacted with the lake itself is most often described as between "not quite crystal clear" and "having "definite algal greenness," an assessment that is slightly more favorable than suggested by measured water quality characteristics. Assessments have noted that aquatic plants occasionally grow to the lake surface but do not appear to impact recreation. (DEC/DOW, BWAM/CSLAP, February 2006)

Lake Uses

These lake waterbodies are designated class AA, suitable for use as a water supply, public bathing beach, general recreation and aquatic life support. 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.

Source (Drinking) Water Assessment

Shawangunk Reservoir was assessed through the NYSDOH Source Waters Assessment Program (SWAP) which compiles, organizes, and evaluates information regarding possible and actual threats to the quality of public water supply (PWS) sources. The information contained in SWAP assessment reports assists in the oversight and protection of public water systems. It is important to note that SWAP reports estimate the potential for untreated drinking water sources to be impacted by contamination and do not address the quality of treated finished potable tap water. This assessment found no noteworthy risks to source water quality. Although there are no specific water quality impacts, the segment is considered a highly valued water resource due to its drinking water supply classification as a AA(T) water. The inclusion of this waterbody on the DEC/DOW Priority Waterbodies List as a Threatened water is a reflection of the particular resource value reflected in this designation and the need to provide additional protection, rather than any specifically identified threats. This water supply reservoir provides water to the City of Middletown. (NYSDOH, Source Water Assessment Program, 2005)

Wallkill River, Middle, Main Stem (1306-0038) MinorImpacts

Waterbody Location Information

Revised: 12/21/2007

Water Index No: H-139-13 (portion 3)
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: B
Waterbody Type: River
Reg/County: 3/Orange Co. (36)
Waterbody Size: 28.0 Miles
Quad Map: GARDINER (O-24-1)
Seg Description: from Tuthill to Middletown

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Fish Consumption	Stressed	Possible
Aquatic Life	Stressed	Known
Recreation	Stressed	Known

Type of Pollutant(s)

Known: NUTRIENTS (phosphorus), SILT/SEDIMENT
Suspected: Pesticides
Possible: - - -

Source(s) of Pollutant(s)

Known: AGRICULTURE, Habitat Modification, Hydro Modification
Suspected: Streambank Erosion, 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: DOW/Reg3
Resolution Potential: Medium
TMDL/303d Status: n/a

Further Details

Overview
Aquatic life, recreational uses and hydrologic/habitat conditions in this portion of the Wallkill River are known to experience minor impacts due to nutrient and silt/sediment loads, the result of extensive agricultural activities in the watershed. Stream channelization and other channel modifications to support agricultural operations also effect water quality and use support. The impacts of pesticide use in the watershed also raises some concerns regarding fish consumption.

Water Quality Sampling
A biological (macroinvertebrate) assessment of the Wallkill River near New Paltz (at Libertyville Road) just below this reach was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. Sampling results at this site have been consistent over the years. Though this sampling point is just below the described segment, it is considered representative of water quality in the upper reach. Most of the impact at this site and in most of the Wallkill is considered to have minor impacts, the result of agricultural nonpoint sources. Crayfish tissue samples collected in 1997 revealed elevated concentrations of PAHs, likely reflecting impacts from urban runoff. (DEC/DOW, BWAM/SBU, June

2005)

Pesticide Concerns
In 1997 NYSDEC conducted a monitoring effort on Hudson River tributaries as part of the Contamination Assessment and Reduction Project (CARP) to evaluate potential sources of toxic chemicals to the Hudson and New York Harbor. Results from this monitoring found the Wallkill to have the highest concentrations of DDT (by factor of 10) and dieldrin of all tribs tested. Follow-up monitoring indicate the DDT source is located in the "black dirt" area (see Wallkill River segment 1306-0017). The study (Toxics Organics Survey: Hudson, Wallkill and Hackensack Rivers, Litten et al, DEC/DOW, BWAM, October 1999) concludes that while the impact of this source on the Hudson is unclear, it does affect the entire length of the Wallkill. High DDT concentrations were also confirmed by bottom sediment coring in the Sturgeon Pool (below New Paltz). This monitoring also found the highest concentrations to be in the uppermost layer of sediments; suggesting (but not proving) DDT releases are continuing. (DEC/DOW, BWAM/Special Studies Section and Sediment Assessment Unit, September 1999).

Previous Sampling
An extensive 1994 Biological Assessment of the river found slight water quality impacts along most of the length of the river. Evaluation of the monitoring results indicated nonpoint agricultural sources and siltation to be the likely causes of the impacts. These conditions represented a significant improvement over moderate to severe impacts documented in 1972 prior to the upgrade of sewage treatment plants serving Middletown, Wallkill, Montgomery and Walden. This portion of the river has historically suffered from high turbidity which colors the water. Urban runoff also affects the river aesthetics. (Wallkill River Biological Assessment Report, Bode et al, DEC/DOW, BWAM/SBU, September 1995)

This segment includes the main stem of the Wallkill River from the Shawangunk Kill (-19) in Tuthill to Rio Grande (-53) near Middletown. The waters of this portion of the stream are Class B. Lower/Upper Wallkill River are listed separately.

Wallkill River, Upper, and minor tribs (1306-0017) MinorImpacts

Waterbody Location Information

Revised: 12/21/2007

Water Index No: H-139-13 (portion 4)
Drain Basin: Lower Hudson River
Hydro Unit Code: 02020007/060 **Str Class:** C
Rondout River
Waterbody Type: River
Reg/County: 3/Orange Co. (36)
Waterbody Size: 59.7 Miles
Quad Map: PINE ISLAND (P-23-4)
Seg Description: stream and select tribs, above Middletown

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Fish Consumption	Stressed	Possible
Aquatic Life	Stressed	Known
Recreation	Stressed	Known

Type of Pollutant(s)

Known: NUTRIENTS (phosphorus), SILT/SEDIMENT
Suspected: Pesticides (DDT)
Possible: - - -

Source(s) of Pollutant(s)

Known: AGRICULTURE, Habitat Modification, Hydro Modification
Suspected: Municipal (NJ), Streambank Erosion, Urban/Storm Runoff
Possible: Tox/Contam. Sediment

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: DOW/Reg3 **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Overview

Aquatic life, recreational uses and hydrologic/habitat conditions in this portion of the Wallkill River are known to experience minor impacts due to nutrient and silt/sediment loads, the result of extensive agricultural activities in the watershed. Stream channelization and other channel modifications to support agricultural operations also effect water quality and use support. The impacts of pesticide use in the watershed also raises some concerns regarding fish consumption. This area of the Wallkill watershed consists of a former lake bottom that was drained by canals and ditches to form the truck-farming region (primarily onions) generally referred to as the "black dirt" area. Within New York State, the region extends from the NY/NJ state border to the Pelletts Island area, just southeast of Middletown. The area has historically contributed considerable turbidity and sediment to the river. During periods of flooding/high flow, plant nutrients, fertilizers, and pesticides also likely enter the river.

Water Quality Sampling

A biological (macroinvertebrate) assessment of the Wallkill River near New Paltz (at Libertyville Road) just below this reach was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. Sampling results

at this site have been consistent over the years. Though this sampling point is just below the described segment, it is considered representative of water quality in the upper reach. Most of the impact at this site and in most of the Wallkill is considered to have minor impacts, the result of agricultural nonpoint sources. Crayfish tissue samples collected in 1997 revealed elevated concentrations of PAHs, likely reflecting impacts from urban runoff. (DEC/DOW, BWAM/SBU, June 2005)

Pesticide Concerns

In 1997 NYSDEC conducted a monitoring effort on Hudson River tributaries as part of the Contamination Assessment and Reduction Project (CARP) to evaluate potential sources of toxic chemicals to the Hudson and New York Harbor. Results from this monitoring found the Wallkill to have the highest concentrations of DDT (by factor of 10) and dieldrin of all tribs tested. Follow-up monitoring indicate the DDT source is located in the "black dirt" area (see Wallkill River segment 1306-0017). The study (Toxics Organics Survey: Hudson, Wallkill and Hackensack Rivers, Litten et al, DEC/DOW, BWAM, October 1999) concludes that while the impact of this source on the Hudson is unclear, it does affect the entire length of the Wallkill. High DDT concentrations were also confirmed by bottom sediment coring in the Sturgeon Pool (below New Paltz). This monitoring also found the highest concentrations to be in the uppermost layer of sediments. Fish tissue sampling in 1999 found contaminant levels did not exceeded criteria for the protection of human health but there are concerns regarding the protection of piscivorous wildlife. (DEC/DOW, BWAM/Special Studies Section and Sediment Assessment Unit and DEC/DFWMR, Habitat, September 1999).

Previous Sampling

An extensive 1994 Biological Assessment of the river found slight water quality impacts along most of the length of the river. Evaluation of the monitoring results indicated nonpoint agricultural sources and siltation to be the likely causes of the impacts. These conditions represented a significant improvement over moderate to severe impacts documented in 1972 prior to the upgrade of sewage treatment plants serving Middletown, Wallkill, Montgomery and Walden. This portion of the river has historically suffered from high turbidity which colors the water. Urban runoff and municipal discharges upstream and across the state line in New Jersey are also thought to impact water quality. (Wallkill River Biological Assessment Report, Bode et al, DEC/DOW, BWAM/SBU, September 1995)

Segment Description

This segment includes the portion of the stream and selected/smaller tribs above Rio Grande (-53) near Middletown. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Rio Grande, are also Class C. Quaker Creek (-59), Pochuck Creek (-61), Rutgers Creek (-62) and Lower/Middle Wallkill River are listed separately.

Dwaar Kill, Lower, and tribs (1306-0062) NoKnownImpct

Waterbody Location Information

Revised: 12/20/2007

Water Index No: H-139-13-24 **Drain Basin:** Lower Hudson River
Hydro Unit Code: **Str Class:** C
Waterbody Type: River **Reg/County:** 3/Ulster Co. (56)
Waterbody Size: 24.5 Miles **Quad Map:** WALDEN (O-24-4)
Seg Description: stream and tribs, from mouth to near Co Route 89

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 **Resolution Potential:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Dwaar Kill near Wallkill (at Bates 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. The sample was sorted in the lab to family level and results were found to support the field assessment. (DEC/DOW, BWAM/SBU, December 2004)

Segment Description
This segment includes the portion of the stream and all tribs from the mouth to a point 0.5 mile below unnamed trib (-9) near County Route 89. The waters of this portion of the stream are Class C. Tribs to this reach/segment are also Class C. Middle/Upper Dwaar Kill are listed separately.

Tin Brook, Lower, and tribs (1306-0068) MinorImpacts

Waterbody Location Information

Revised: 12/20/2007

Water Index No: H-139-13-33 **Drain Basin:** Lower Hudson River
Hydro Unit Code: **Str Class:** A
Waterbody Type: River **Reg/County:** 3/Orange Co. (36)
Waterbody Size: 11.4 Miles **Quad Map:** WALDEN (O-24-4)
Seg Description: stream and tribs, from mouth to Walden

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 (phosphorus), SILT/SEDIMENT
Possible: D.O./Oxygen Demand

Source(s) of Pollutant(s)

Known: - - -
Suspected: MUNICIPAL, URBAN/STORM RUNOFF
Possible: Industrial

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 3 (Cause Identified, Source Unknown)
Lead Agency/Office: DOW/Reg3 **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Overview
Aquatic life support in Tin Brook is thought to experience minor impacts/threats due to nutrient and organic inputs and siltation from point discharges and nonpoint urban runoff sources.

Water Quality Sampling
A biological (macroinvertebrate) assessment of Tin Brook in Walden (at Route 52) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. The fauna was dominated by facultative midges and scuds and Impact Source Determination indicated that municipal/industrial inputs and siltation were the most likely cause of the impacts. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates the level of eutrophication is sufficient to threaten aquatic life support. (DEC/DOW, BWAM/SBU, June 2005)

Segment Description
This segment includes the portion of the stream from the mouth to/including unnamed trib (-3) above Walden. The waters of this portion of the stream are Class C to the Walden STP pumping station overflow, and Class A for the remainder of the reach. Tribs to this reach/segment are Class B,C(T). Upper Tin Brook is listed separately.

Mannayunk Kill and tribs (1306-0070) NoKnownImpct

Waterbody Location Information

Revised: 12/20/2007

Water Index No: H-139-13-41
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: C
Waterbody Type: River
Reg/County: 3/Orange Co. (36)
Waterbody Size: 9.0 Miles
Quad Map: GOSHEN (P-23-2)
Seg Description: entire stream and tribs

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
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Overview
Water Quality Sampling
A biological (macroinvertebrate) assessment of Manayunk Kill in Kaisertown (at VanAmberg Road) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. Although the flow was very low at the time of sampling, the fauna was dominated by clean-water mayflies. The slight impacts noted are attributed to headwater effects. (DEC/DOW, BWAM/SBU, December 2004)

Segment Description
This segment includes the entire stream and all tribs. The waters of the stream are Class C. Tribs to this reach/segment are also Class C.

Masonic Creek and tribs (1306-0072) MinorImpacts

Waterbody Location Information

Revised: 12/18/2007

Water Index No: H-139-13-51
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: B
Waterbody Type: River
Reg/County: 3/Orange Co. (36)
Waterbody Size: 23.2 Miles
Quad Map: MIDDLETOWN (P-23-1)
Seg Description: entire stream and tribs

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: - - -
Suspected: NUTRIENTS, UNKNOWN TOXICITY, Silt/Sediment
Possible: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE, URBAN/STORM RUNOFF, Streambank Erosion
Possible: - - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 2 (Problem Verified, Cause Unknown)
Lead Agency/Office: ext/WQCC
Resolution Potential: Medium
TMDL/303d Status: n/a

Further Details

Overview
Aquatic life support in Masonic Creek are known to experience minor impacts due to nutrients and silt/sediment from nonpoint sources. Toxicity was also noted at the sampling site.

Water Quality Sampling
A biological (macroinvertebrate) assessment of Masonic Creek in Middletown (at Mud Mills Road) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. The fauna was heavily dominated by facultative midges and the stream contained significant amounts of silt-laden filamentous algae. Impact Source Determination suggested toxicity was the primary source of impact. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates the level of eutrophication is sufficient to stress aquatic life support. (DEC/DOW, BWAM/SBU, June 2005)

Segment Description
This segment includes the entire stream and all tribs. The waters of the stream are Class B. Tribs to this reach/segment are also Class B.

Monhagen Brook and tribs (1306-0074) Impaired Seg

Waterbody Location Information

Revised: 12/18/2007

Water Index No: H-139-13-52
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: C
Waterbody Type: River
Reg/County: 3/Orange Co. (36)
Waterbody Size: 25.9 Miles
Quad Map: MIDDLETOWN (P-23-1)
Seg Description: entire stream and tribs

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
AQUATIC LIFE	Impaired	Known
RECREATION	Impaired	Known
Aesthetics	Stressed	Known

Type of Pollutant(s)

Known: NUTRIENTS (phosphorus), Salts
Suspected: UNKNOWN TOXICITY, D.O./Oxygen Demand
Possible: - - -

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF
Suspected: Agriculture
Possible: Deicing (stor/appl), Other Sanitary Disch

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: DOW/Reg3
Resolution Potential: Medium
TMDL/303d Status: 1*

Further Details

Overview
Aquatic life support, recreational use and aesthetics in Monhagen Brook are impaired by a various pollutants from point and urban nonpoint sources.

Water Quality Sampling
A biological (macroinvertebrate) survey of Monhagen Brook at multiple sites in the vicinity of Middletown was conducted in 2004. Sampling results indicated slightly to moderately impacted water quality conditions. All sites revealed similar assessments that straddle the line between slight and moderate impacts. Water quality at the upstream sites were assessed as slightly impacted. These sites were littered with refuse and urban debris. Water quality decreased to moderately impacted downstream. Impact Source Determination indicated a range of causes, but nutrient enrichment and urban runoff sources are the most likely factors influencing water quality. A continuing rise in chlorides in the stream (specific conductednce increased by 250% between 1986 and 204) is indicative of increases in urban nonpoint loadings of pollutants. Such increases - also noted in other developing watersheds of the Lower Hudson River Basin - are of concern and warrant continued monitoring. (Monhagen Brook Biological Assessment Report, Bode et al.,

DEC/DOW, BWAM/SBU, February 2005)

Previous Sampling
Biological assessment reports were also conducted on Monhagen Brook in 1992 and 1986. These reports document the improvement in water quality from severely impacted in 1986, prior to the Middletown WWTP upgrade and re-routing of the effluent outfall to the Wallkill River in 1989. (DEC/DOW, BWAM/SBU, February 2005)

Section 303(d) Listing
Monhagen Brook is not currently included on the NYS 2006 Section 303(d) List of Impaired Waters. However this updated assessment suggests it is appropriate to include this waterbody on the 2008 List. It is recommended that the segment be added to Part 1 of the List as a waterbody segment requiring the development of a TMDL or other strategy to attain water quality standards for phosphorus.

Segment Description
This segment includes the entire stream and all tribs. The waters of the stream are Class C. Tribs to this reach/segment, including Draper Brook (-5), are primarily Class C; with unnamed trib (-2) designated Class B.

Monhagen Lake (1306-0075) NoKnownImpct

Waterbody Location Information

Revised: 04/25/2008

Water Index No: H-139-13-52-P598
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: AA
Waterbody Type: Lake
Reg/County: 3/Orange Co. (36)
Waterbody Size: 63.5 Acres
Quad Map: MIDDLETOWN (P-23-1)
Seg Description: entire lake

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
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
Monhagen Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 2003 and continuing through the present. An Interpretive Summary report of the findings of this sampling was published in 2006. These data indicate that the lake continues to be best characterized as mesotrophic, or moderately productive. Phosphorus levels in the lake were consistently above the state guidance values indicating impacted/stressed recreational uses in 2003 and 2004, but not in 2005. Corresponding transparency measurements meet what is recommended for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. The lake water is weakly colored, and color does not influence clarity of the lake. (DEC/DOW, BWAM/CSLAP, February 2006)

Recreational Assessment
Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This assessment indicates recreational suitability of the lake to be very favorable since the lake was first evaluated and continuing through the most recent assessment. The recreational suitability of the lake is described most frequently as "excellent." The lake itself is most often described as "not quite crystal clear," an assessment that is consistent with measured water quality characteristics. Assessments have noted that aquatic plants rarely grow to the lake surface and do not impact lake use.

(DEC/DOW, BWAM/CSLAP, February 2006)

Lake Uses

This lake waterbody is designated class A, suitable for use as a water supply, public bathing beach, general recreation and aquatic life support. 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.

Quaker Creek and tribs (1306-0025) Impaired Seg

Waterbody Location Information

Revised: 12/17/2007

Water Index No: H-139-13-59
Hydro Unit Code: 02020007/060 **Str Class:** C
Waterbody Type: River
Waterbody Size: 41.5 Miles
Seg Description: entire stream and tribs

Drain Basin: Lower Hudson River
Rondout River
Reg/County: 3/Orange Co. (36)
Quad Map: MONROE (P-24-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
AQUATIC LIFE	Impaired	Known
Aesthetics	Stressed	Suspected

Type of Pollutant(s)

Known: - - -
Suspected: D.O./OXYGEN DEMAND, WATER LEVEL/FLOW, NUTRIENTS, Silt/Sediment
Possible: Pesticides

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE (muckland farms), HYDRO MODIFICATION, Municipal (Florida WWTP)
Possible: Streambank Erosion

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 2 (Problem Verified, Cause Unknown)
Lead Agency/Office: DOW/BWAR **Resolution Potential:** Medium
TMDL/303d Status: 3b (Waterbody Requiring Verification of Cause/Pollutant)

Further Details

Overview
Aquatic life support and aesthetics of Quaker Creek are thought to be impacted by low dissolved oxygen in the stream. Significant biological impacts were noted. Some of the impacts are thought to be exacerbated by low flow/hydromodification and sluggish stream currents.

Water Quality Sampling
A biological (macroinvertebrate) survey of Quaker Creek was conducted at multiple sites between Snufftown and Florida in 1994 and 1995. Both surveys indicated moderately to severely impacted water quality in some reaches of the creek. Sampling during drought conditions in 1995 found daytime D.O. to be as low as 3.1 mg/l. The biological impact was reflective of municipal discharges, in this case from the Florida (v) WWTP. However, the plant had been upgraded in 1993 and all indications are that it is operating properly. Other hydrologic conditions such as the slow-moving sluggish flow of the creek, the withdrawal of water for irrigation and the low flow/drought conditions are thought to exacerbate the effect of the sewage effluent, and hinders the recovery of the creek. (Quaker Creek Biological Assessment Report, Bode et al, DEC/DOW, BWAM, January 1996)

Source Assessment
The stream flows through a muckland area where onion farming is intensive. Soil erosion and other agricultural runoff from the onion farming along creek affects water clarity and aesthetics and influence water quality. (DEC/DOW, Region 3, 1996)

Section 303(d) Listing
Quaker Creek is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is included on Part 3b of the List as a Water Requiring Verification of Cause/Pollutant because the specific cause of the low dissolved oxygen have not been identified.

Segment Description
This segment includes the entire stream and all tribs. The waters of the stream are Class C. Tribs to this reach/segment, including Stony Creek (-3), are also Class C.

Pochuck Creek and minor tribs (1306-0078) NoKnownImpct

Waterbody Location Information

Revised: 12/17/2007

Water Index No: H-139-13-61 **Drain Basin:** Lower Hudson River
Hydro Unit Code: **Str Class:** C
Waterbody Type: River **Reg/County:** 3/Orange Co. (36)
Waterbody Size: 16.4 Miles **Quad Map:** PINE ISLAND (P-23-4)
Seg Description: stream and select tribs, from mouth to NY-NJ state line

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 **Resolution Potential:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Pochuck Creek in Newport (at Newport Bridge 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, December 2004)

Segment Description
This segment includes the portion of the stream and all tribs from the mouth to the NY-NJ state line. The waters of this portion of the stream are Class C. Tribs to this reach/segment are also Class C. Wawayanda Creek (-9) is listed separately.

Wawayanda Creek, Lower, and tribs (1306-0079) MinorImpacts

Waterbody Location Information

Revised: 12/17/2007

Water Index No: H-139-13-61- 9 **Drain Basin:** Lower Hudson River
Hydro Unit Code: **Str Class:** C(T)
Waterbody Type: River **Reg/County:** 3/Orange Co. (36)
Waterbody Size: 36.2 Miles **Quad Map:** WAWAYANDA, NJ (Q-23-1)
Seg Description: stream and tribs, from NY-NJ state line to Warwick

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

Source(s) of Pollutant(s)

Known: AGRICULTURE, URBAN/STORM RUNOFF
Suspected: MUNICIPAL (Warwick WWTP)
Possible: - - -

Resolution/Management Information

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

Further Details

Overview
Aquatic life support in this portion of Wawayanda Creek are known to experience minor impacts due to nutrients and other effects of nonpoint sources and municipal discharges. Water quality in the stream has significantly improved following the 1994 upgrade of the Warwick WWTP.

Water Quality Sampling
Biological (macroinvertebrate) assessments of Wawayanda Creek in New Milford (at Covered Bridge Road and Ryerson Road) were conducted in 2002. Sampling results indicated slightly impacted water quality conditions. Sampling at the upstream site nearer the Warwick WWTP revealed greatly improved water quality over sampling results in 1989 that showed severe impacts. Following the WWTP upgrade in 1994 water quality showed stead improvement in sampling from 1994, 1995 and 2002. (DEC/DOW, BWAM/SBU, December 2004)

Segment Description
This segment includes the portion of the stream and selected/smaller tribs from the NY-NJ state line to/including unnamed trib (-21) above Warwick. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Double Kill (-9), are Class C,C(T),C(TS). Unnamed trib (-15), upper unnamed trib (-20) and Upper

Wawayanda Creek are listed separately.

Wawayanda Creek, Upper, and minor tribs (1306-0015) MinorImpacts

Waterbody Location Information

Revised: 12/17/2007

Water Index No:	H-139-13-61- 9			**Drain Basin:**	Lower Hudson River
Hydro Unit Code:	02020007/050	**Str Class:**	B(T)*		Rondout River
Waterbody Type:	River			**Reg/County:**	3/Orange Co. (36)
Waterbody Size:	21.2 Miles			**Quad Map:**	WARWICK (P-23-3)
Seg Description:	stream and select tribs, above Warwick				

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:	Silt/Sediment
Possible:	- - -

Source(s) of Pollutant(s)

Known:	- - -
Suspected:	AGRICULTURE, URBAN/STORM RUNOFF
Possible:	Construction (resident.develop.), Municipal (Warwick WWTP), On-Site/Septic Syst

Resolution/Management Information

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

Further Details

Overview
Aquatic life support in this portion of Wawayanda Creek are known to experience minor impacts due to nutrients from nonpoint sources.

Water Quality Sampling
A biological (macroinvertebrate) assessment of Wawayanda Creek in Warwick (at River Street) was conducted last conducted in 1995. Sampling results indicated slightly impacted water quality conditions. This assessment is consistent with sampling conducted at the site in 1994 and 1989. Impact Source Determination indicated that nonpoint sources of nutrients were the likely factors influencing the sample. Sampling of the stream below this reach have shown a steady improvement in water quality attributed to the 1994 upgrade of the Warwick WWTP. In spite of some/these minor impacts, aquatic life is considered to be fully supported in the stream. (DEC/DOW, BWAM/SBU, December 2004)

Previous Assessment
Previously agricultural (livestock) runoff, urban inputs, golf course runoff, and failing/inadequate on-site septic systems were identified as possible nonpoint sources. Runoff from residential construction and other land development projects in the Warwick Valley may also contribute to water quality impairment. One additional point source discharge, Town

of Warwick SD#1, is also located upstream. Poor natural habitat is another factor limiting the biological community in portions of the creek. The sand and gravel substrate and lower current velocity in the stream are not ideal for macroinvertebrates. (Wawayanda Creek Biological Assessment Report, Novak et al, DEC/DOW, BWAM, March 1996)

Local school-based volunteer monitors are currently studying the creek as well. (Orange County SWCD, December 1999)

Segment description
This segment includes the portion of the stream and selected/smaller tribs above unnamed trib (-21) above Warwick. The waters of this portion of the stream are Class B(T) to just below unnamed trib (-25), Class A(T) to Long House Creek (-25), and Class B(T) for the remainder of the reach. Tribs to this reach/segment, including Lower Long House Creek (-25), are primarily Class B,B(T),B(TS); with a short portion of Lower Long House Creek designated Class A(T). Upper Long House Creek and Lower Wawayanda Creek are listed separately.

Rutgers Creek and minor tribs (1306-0006) NoKnownImpct

Waterbody Location Information

Revised: 12/13/2007

Water Index No: H-139-13-62
Hydro Unit Code: 02020007/060 **Str Class:** C*
Waterbody Type: River
Waterbody Size: 80.1 Miles
Seg Description: entire stream and select tribs

Drain Basin: Lower Hudson River
Rondout River
Reg/County: 3/Orange Co. (36)
Quad Map: UNIONVILLE (P-22-3)

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 **Resolution Potential:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Rutgers Creek in Johnson (at Ridgebury 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. The sample was sorted in the lab to family level and results were found to support the field assessment. (DEC/DOW, BWAM/SBU, December 2004)

Segment Description
This segment includes the entire stream and selected/smaller tribs. The waters of the stream are Class C. Tribs to this reach/segment are primarily Class C; with one unnamed tribs (-20) designated Class B. Catlin Creek (-2) and Indigot Creek (-3) are listed separately.

Indigot Creek, Lower, and tribs (1306-0085) NoKnownImpct

Waterbody Location Information

Revised: 12/13/2007

Water Index No: H-139-13-62- 3 **Drain Basin:** Lower Hudson River
Hydro Unit Code: **Str Class:** C
Waterbody Type: River **Reg/County:** 3/Orange Co. (36)
Waterbody Size: 30.7 Miles **Quad Map:** UNIONVILLE (P-22-3)
Seg Description: stream and tribs, from mouth to near Mount Orange Road

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 **Resolution Potential:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Indigot Creek in Millsburg (at Millsburg 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. The sample was sorted in the lab to family level and results were found to support the field assessment. (DEC/DOW, BWAM/SBU, December 2004)

Segment Description
This segment includes the portion of the stream and all tribs from the mouth to unnamed trib (-11) near Mount Orange Road. The waters of this portion of the stream are Class C. Tribs to this reach/segment are also Class C. Upper Indigot Creek is listed separately.

Rondout Creek, Middle, Main Stem (1306-0088) NoKnownImpct

Waterbody Location Information

Revised: 12/13/2007

Water Index No: H-139-14 (portion 1)
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: B
Waterbody Type: River
Reg/County: 3/Ulster Co. (56)
Waterbody Size: 25.3 Miles
Quad Map: ROSENDALE (N-24-3)
Seg Description: from Wallkill River to Wawarsing

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
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) survey of Rondout Creek at multiple sites between Rosendale and Peekamoose was conducted in 2002. Sampling results indicated non-impacted to slightly impacted water quality conditions along the stream. The assessments of the stream at the four sites along this reach showed the stream to gradually recover from slight impacts (attributed to municipal discharges above the reach) to non-impacted conditions at Accord. Extensive agricultural activity is evident along this portion of the Rondout but conditions remained non-impacted in Alligerville and Rosendale. Nutrient biotic evaluation determined the effects on the fauna at these site to be minor. Aquatic life support is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses. (Rondout Creek Biological Assessment Report, Bode, et al., DEC/DOW, BWAM/SBU, October 2003)

Segment Description
This segment includes the waters of the main stem of the Rondout Creek from the mouth at Wallkill River (-14) to the Vernooy Kill (-35). The waters of this portion of the stream are Class B,B(T). Tribs to this reach/segment are listed separately.

Rondout Creek, Middle, and minor tribs (1306-0089) NoKnownImpct

Waterbody Location Information

Revised: 12/13/2007

Water Index No: H-139-14 (portion 2) **Drain Basin:** Lower Hudson River
Hydro Unit Code: **Str Class:** C(T)
Waterbody Type: River **Reg/County:** 3/Ulster Co. (56)
Waterbody Size: 9.2 Miles **Quad Map:** KERHONKSON (N-23-3)
Seg Description: stream and select tribs, from Wawarsing to Honk Lake

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 **Resolution Potential:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) survey of Rondout Creek at multiple sites between Rosendale and Peekamoose was conducted in 2002. Sampling results indicated non-impacted to slightly impacted water quality conditions along the stream. An assessment of the stream in East Wawarsing (at Port Ben Road) on this reach of the Rondout was assessed as slightly impacted. This decline relative to conditions upstream is attributed to upstream municipal discharges from the Ellenville (via Sandburg Creek) and Napanoch WWTPs. Agricultural impacts may also contribute to the slight decline. However although results at this site represent a decline from very high water quality upstream, nutrient biotic evaluation determined the effects on the fauna at the East Wawarsing site to be minor. Aquatic life support is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses. (Rondout Creek Biological Assessment Report, Bode, et al., DEC/DOW, BWAM/SBU, October 2003)

Segment Description
This segment includes the portion of the stream and all tribs from Vernooy Kill (-35) to Honk Lake (P812). The waters of this portion of the stream are Class C(T). Tribs to this reach/segment are primarily Class C; with one small reach Class B(T). Vernooy Kill, Honk Lake, Sandburg Creek (-38) and other reaches of the Rondout are listed separately.

Rondout Creek, Middle, and tribs (1306-0091) NoKnownImpct

Waterbody Location Information

Revised: 12/13/2007

Water Index No: H-139-14 (portion 4) **Drain Basin:** Lower Hudson River
Hydro Unit Code: **Str Class:** C(TS)
Waterbody Type: River **Reg/County:** 3/Ulster Co. (56)
Waterbody Size: 5.1 Miles **Quad Map:** RONDOUT RESERVOIR (N-23-4)
Seg Description: stream and tribs, from Honk Lake to Rondout Reservoir

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 **Resolution Potential:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) survey of Rondout Creek at multiple sites between Rosendale and Peekamoose was conducted in 2002. Sampling results indicated non-impacted to slightly impacted water quality conditions along the stream. An assessment of the stream in Lackawack (at Sportsman Road) on this reach of the Rondout fell within the range of non-impacted. No noticeable impoundment effects were noted in the sample; in fact, the fauna at this site indicated the highest water quality in the creek with all metrics well into the range indicating non-impacted conditions. Aquatic life is considered to be fully supported in the stream, and there are not other indications of impacts to uses. (Rondout Creek Biological Assessment Report, Bode, et al., DEC/DOW, BWAM/SBU, October 2003)

Segment Description
This segment includes the portion of the stream and all tribs from Honk Lake (P812) to Merriman Dam at Rondout Reservoir. The waters of this portion of the stream are Class C(TS). There are no tribs to this reach/segment. Honk Lake, Brandy Brook (-40) and other reaches of the Rondout are listed separately.

Coxing Kill and tribs (1306-0096) NoKnownImpct

Waterbody Location Information

Revised: 12/13/2007

Water Index No: H-139-14- 9
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: C(T)
Waterbody Type: River
Reg/County: 3/Ulster Co. (56)
Waterbody Size: 23.5 Miles
Quad Map: ROSENDALE (N-24-3)
Seg Description: entire stream and tribs

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
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Coxing Kill in High Falls (at School Hill Road) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. The sample was dominated by clean-water mayflies, stoneflies, caddisflies and hellgrammites. Aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts. (DEC/DOW, BWAM/SBU, December 2004)

Segment Description
This segment includes the entire stream and all tribs. The waters of the stream are Class C(T). Tribs to this reach/segment, including Mossy Brook (-3), are Class C.

Kripplebush Creek and tribs (1306-0099) NoKnownImpct

Waterbody Location Information

Revised: 12/13/2007

Water Index No: H-139-14-12
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: C(T)
Waterbody Type: River
Reg/County: 3/Ulster Co. (56)
Waterbody Size: 29.0 Miles
Quad Map: MOHONK LAKE (N-24-4)
Seg Description: entire stream and tribs

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
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Kripplebush Creek in Kripplebush (at Route 209) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. However the identified impacts are likely due to poor habitat composed largely of gravel and negligible current. The sample, though sparse, was dominated by clean-waters mayflies. Aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts. (DEC/DOW, BWAM/SBU, December 2004)

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 are also Class C(T),C(TS).

Peters Kill and tribs (1306-0100) NoKnownImpct

Waterbody Location Information

Revised: 12/13/2007

Water Index No: H-139-14-16
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: B(T)
Waterbody Type: River
Reg/County: 3/Ulster Co. (56)
Waterbody Size: 13.2 Miles
Quad Map: MOHONK LAKE (N-24-4)
Seg Description: entire stream and tribs

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
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Peters Kill in St. Josen (at Rock Hill Road) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. However the identified impacts are likely due to the abundant moss on the rocks of the riffle that was sampled. Moss is known to harbor many midge species, resulting in a skewed biological sample. Though the sample was dominated by facultative midge larvae, clean-water mayflies, stoneflies and caddisflies were also present. Aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts. (DEC/DOW, BWAM/SBU, December 2004)

Segment Description
This segment includes the entire stream and all tribs. The waters of the stream are Class B(T). Tribs to this reach/segment, including Fly Brook (-2), are Class B(T),C(T).

North Peters Kill, Lower, and tribs (1306-0103) NoKnownImpct

Waterbody Location Information

Revised: 12/13/2007

Water Index No: H-139-14-18 **Drain Basin:** Lower Hudson River
Hydro Unit Code: **Str Class:** A(T)
Waterbody Type: River **Reg/County:** 3/Ulster Co. (56)
Waterbody Size: 7.3 Miles **Quad Map:** MOHONK LAKE (N-24-4)
Seg Description: stream and tribs, from mouth to above Whitfield

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 **Resolution Potential:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of North Peters Creek in Whitfield (at Canyon Lake Road) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. Despite sluggish flow, the fauna was dominated by clean-water mayflies. Stoneflies, caddisflies, hellgrammites and riffle beetles were also present.

Segment Description
This segment includes the portion of the stream and all tribs from the mouth to/including unnamed trib (-6) above Whitfield. The waters of this portion of the stream are Class A(T). Tribs to this reach/segment are also Class A(T).

Rochester Creek and minor tribs (1306-0107) NoKnownImpct

Waterbody Location Information

Revised: 12/13/2007

Water Index No: H-139-14-20
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: A(TS)
Waterbody Type: River
Reg/County: 3/Ulster Co. (56)
Waterbody Size: 56.5 Miles
Quad Map: MOHONK LAKE (N-24-4)
Seg Description: entire stream and select tribs

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
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Rochester Creek in Mill Hook (at Mettacahonts 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. The sample was sorted in the lab to family level and results were found to support the field assessment. (DEC/DOW, BWAM/SBU, December 2004)

Segment Description
This segment includes the entire stream and selected/smaller tribs. The waters of the stream are Class A(TS). Tribs to this reach/segment, including Mettacahonts Creek (-7) and Beaver Dam Creek (-8), are Class A,A(T),A(TS). Mill Brook (-2) is listed separately.

Mill Brook and tribs (1306-0108) Need Verific

Waterbody Location Information

Revised: 12/12/2007

Water Index No: H-139-14-20- 2
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: A(TS)
Waterbody Type: River
Reg/County: 3/Ulster Co. (56)
Waterbody Size: 33.4 Miles
Quad Map: KERHONKSON (N-23-3)
Seg Description: entire stream and tribs

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 (phosphorus)
Possible: - - -

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Further Details

Overview
Aquatic life support in Mill Brook may experience minor impacts due to nutrient enrichment. Nonpoint sources are the suspected source.

Water Quality Sampling
A biological (macroinvertebrate) assessment of Mill Brook in Mill Hook (at Round Valley Resort) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. The fauna contained many clean-water mayflies, but was dominated by filter feeding caddisflies. Further sampling is necessary to determine if impacts rise to the level of stressed water quality. Nonetheless, aquatic life support is considered to be fully supported in the stream. (DEC/DOW, BWAM/SBU, June 2005)

Segment Description
This segment includes the entire stream and all tribs. The waters of the stream are Class A(TS). Tribs to this reach/segment are Class A(T).

Vernoy Kill, Upper, and tribs (1306-0110) NoKnownImpct

Waterbody Location Information

Revised: 12/12/2007

Water Index No: H-139-14-35
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: A(TS)
Waterbody Type: River
Reg/County: 3/Ulster Co. (56)
Waterbody Size: 28.3 Miles
Quad Map: KERHONKSON (N-23-3)
Seg Description: stream and tribs, above Wawarsing

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
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Vernooy Kill in Wawarsing (at Route 209) 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. Lab analysis to the family level confirmed this field assessment. (DEC/DOW, BWAM/SBU, June 2005)

Segment Description
This segment includes the portion of the stream and all tribs above/including Lyon Creek (-1). The waters of this portion of the stream are Class A(TS). Tribs to this reach/segment, including Lyon Creek and West Branch Vernoy Kill (-4), are Class A,A(T). Lower Vernot Kill is included with Minor Tribs to Rondout Creek.

Sandburg Creek, Lower, and tribs (1306-0113) NoKnownImpct

Waterbody Location Information

Revised: 12/12/2007

Water Index No: H-139-14-38 **Drain Basin:** Lower Hudson River
Hydro Unit Code: **Str Class:** B(T)
Waterbody Type: River **Reg/County:** 3/Ulster Co. (56)
Waterbody Size: 13.7 Miles **Quad Map:** ELLENVILLE (O-23-1)
Seg Description: stream and tribs, from mouth to Spring Glen

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 **Resolution Potential:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Sandburg Creek in Ellenville (at Canal Street) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. The fauna was dominated by mayflies and all metrics were within the range for assessment as non-impacted. (DEC/DOW, BWAM/SBU, June 2005)

Segment Description
This segment includes the portion of the stream and selected/smaller tribs from the mouth to Homowack Kill (-14) in Spring Glen. The waters of this portion of the stream are Class B(T),B(TS). Tribs to this reach/segment, including Fantine Kill (-2), Lower North Gully (-55), Lower South Gully (-6), are Class B,B(T). Shingle Gully (-2), Beer Kill (-3), Upper North Gully (-5), Upper South Gully (-6) and Leuren Kill (-9) are listed separately.

Beer Kill and minor tribs (1306-0116) NoKnownImpct

Waterbody Location Information

Revised: 12/12/2007

Water Index No: H-139-14-38- 3
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: B(TS)
Waterbody Type: River
Reg/County: 3/Ulster Co. (56)
Waterbody Size: 25.7 Miles
Quad Map: ELLENVILLE (O-23-1)
Seg Description: entire stream and select tribs

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
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Beer Kill in Ellenville (at Route 209) 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 selected/smaller tribs. The waters of the stream are Class C(T) for a short reach from the mouth to the west boundary of Ellenville, and Class B(TS) for the remainder of the reach. Tribs to this reach/segment, including Botsford Brook (-4), are Class B,B(T). West Branch Beer Kill (-1) is listed separately.

West Branch Beer Kill and tribs (1306-0117) NoKnownImpct

Waterbody Location Information

Revised: 12/12/2007

Water Index No: H-139-14-38- 3- 1
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: B(TS)
Waterbody Type: River
Reg/County: 3/Ulster Co. (56)
Waterbody Size: 25.4 Miles
Quad Map: ELLENVILLE (O-23-1)
Seg Description: entire stream and tribs

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
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of West Beer Kill in Ellenville (at Old Greenfield 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. Results from lab processing to the family level confirmed this field assessment. (DEC/DOW, BWAM/SBU, June 2005)

Segment Description
This segment includes the entire stream and all tribs. The waters of the stream are Class B(TS). Tribs to this reach/segment, including Braden Brook (-6) are Class B,B(T).

Homowack Kill and tribs (1306-0122) NoKnownImpct

Waterbody Location Information

Revised: 12/12/2007

Water Index No: H-139-14-38-14
Drain Basin: Lower Hudson River
Hydro Unit Code:
Str Class: B(T)
Waterbody Type: River
Reg/County: 3/Sullivan Co. (53)
Waterbody Size: 19.2 Miles
Quad Map: ELLENVILLE (O-23-1)
Seg Description: entire stream and tribs

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
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Homowack Creek in Phillipsport (at Doolittle Road) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. The fauna was diverse and well-balanced. The sample was processed to the family level and all 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 B(T). Tribs to this reach/segment are Class B(T),C,C(T).

Rondout Reservoir (1306-0003) Impaired Seg

Waterbody Location Information

Revised: 05/29/2008

Water Index No: H-139-14 (portion 5)/P815a
Hydro Unit Code: 02020007/110
Waterbody Type: Lake(R)
Waterbody Size: 2023.8 Acres
Seg Description: entire reservoir
Str Class: AA(TS)
Drain Basin: Lower Hudson River
Rondout River
Reg/County: 3/Ulster Co. (56)
Quad Map: RONDOUT RESERVOIR (N-23-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Possible
FISH CONSUMPTION	Impaired	Known

Type of Pollutant(s)

Known: METALS (mercury)
Suspected: - - -
Possible: Nutrients, Silt/Sediment

Source(s) of Pollutant(s)

Known: ATMOSPH. DEPOSITION
Suspected: - - -
Possible: Streambank Erosion

Resolution/Management Information

Issue Resolvability: 3 (Strategy Being Implemented)
Verification Status: 5 (Management Strategy has been Developed)
Lead Agency/Office: ext/NYC
Resolution Potential: Medium
TMDL/303d Status: 2b->4a

Further Details

Overview
Fish consumption in Rondout Reservoir is considered to be impaired due to mercury contamination thought to be the result of atmospheric deposition. Water supply uses are also noted as being potentially threatened.

Fish Consumption Advisories
Fish consumption in Rondout Reservoir is impaired due to a NYSDOH health advisory that recommends eating no more than one meal per month of larger (over 16 inches) smallmouth bass because of elevated mercury levels. The source of mercury is considered to be atmospheric deposition, as there are no other apparent sources in the lake watershed. Mercury, even at low levels tends to bio-accumulate in the aquatic food chain. However, because of its low solubility mercury is not generally found in water and consequently there is no additional impact on the water supply. The advisory for this lake was first issued in 1999-2000. (2007-08 NYSDOH Health Advisories and DEC/DFWMR, Habitat, December 2007).

Water Supply Use
The water supply use of the Rondout Reservoir is fully supported. A Phase II Phosphorus Total Maximum Daily Load

(TMDL) for Reservoirs in the New York City Water Supply Watershed was established in June 2000. This TMDL identified this reservoir as having a current phosphorus load that well below the allowable load. Average phosphorus concentrations in the reservoir at the time the TMDL was less than 10 ug/l, well below the applicable 15 ug/l criterion established for source water reservoirs. (DEC/DOW, BWAM/WQAS, July 2007)

New York City Watershed

The Rondout Reservoir is a part of the Catskill/Delaware System of New York City water supply reservoirs. The Catskill/Delaware System provides about 90% of New York City water supply, the other 10% is supplied by the Croton System. The Rondout Reservoir receives water from the 95 square mile watershed of the Upper Rondout River and serves as a collecting reservoir for the water from the three other reservoirs (Cannonsville, Pepacton and Neversink) in the Delaware system. Water quality in these upstream reservoirs influences water quality in the Rondout Reservoir. The safe yield of the entire Delaware water system is 610 MGD. Water from the Rondout Reservoir travels through the Delaware Aqueduct to the West Branch Reservoir in the Croton System. In order to protect the New York City water supply, a comprehensive long-range watershed protection program is in place. These protections enable the city to receive a series of waivers from a federal requirement to filter water from the Catskill/Delaware supply. (NYCDEP, July 2006)

Section 303(d) Listing

Rondout Reservoir is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is included on Part 2b of the List as a Fish Consumption Water/Atmospheric Deposition (Acid Rain). However, the mercury impairment was addressed in the Northeast Regional Mercury TMDL that was established in 2007. Therefore the listing for mercury for the lake are not included in the 2008 NYS Section 303(d) List of Impaired/TMDL Waters. (DEC/DOW, BWAM/WQAS, March 2008)

Rondout Creek, Upper, and minor tribs (1306-0026) NoKnownImpct

Waterbody Location Information

Revised: 12/13/2007

Water Index No: H-139-14 (portion 6)
Drain Basin: Lower Hudson River
Hydro Unit Code: 02020007/110 **Str Class:** A(TS)
Rondout River
Waterbody Type: River
Reg/County: 3/Sullivan Co. (53)
Waterbody Size: 18.7 Miles
Quad Map: CLARYVILLE (N-22-2)
Seg Description: stream and select tribs, fr reservoir to E.Mountain Rd.

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
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) survey of Rondout Creek at multiple sites between Rosendale and Peekamoose was conducted in 2002. Sampling results indicated non-impacted to slightly impacted water quality conditions along the stream. The assessments of sites on this reach of the Upper Rondout fell within the range of non-impacted. Farther upstream slight impacts due to acid rain impacts were noted, but these impacts were not evident in this reach. Aquatic life is considered to be fully supported in the stream, and there are not other indications of impacts to uses. (Rondout Creek Biological Assessment Report, Bode, et al., DEC/DOW, BWAM/SBU, October 2003)

New York City Watershed
This creek feeds the Rondout Reservoir, which is a terminal reservoir of the Catskill/Delaware System of New York City water supply reservoirs (see Rondout Reservoir, Segment 1306-0003). A Watershed Agreement is in place between NYCDEP and the Croton Watershed communities which sets forth programs and funding for watershed protection. NYCDEP has reported average pH values (6.4) for the Upper Rondout Creek that fall outside the criteria for pH outlined in Addendum E of the agreement between NYC and NYSDEC for protection of the New York City water supply. (NYCDEP, July 1999)

Segment Description

This segment includes the portion of the stream and selected/smaller tribs from the Rondout Reservoir to/including unnamed trib (-50) near East Mountain Road. The waters of this portion of the stream are Class A(TS). Tribs to this reach/segment, including Sugarloaf Brook (-49), are Class A(TS),B(T),B(TS),C,C(TS). Chestnut Creek (-48) is listed separately.

Rondout Creek, Upper, and minor tribs (1306-0092) MinorImpacts

Waterbody Location Information

Revised: 12/13/2007

Water Index No: H-139-14 (portion 7) **Drain Basin:** Lower Hudson River
Hydro Unit Code: **Str Class:** C(T)
Waterbody Type: River **Reg/County:** 3/Ulster Co. (56)
Waterbody Size: 38.9 Miles **Quad Map:** PEEKAMOOSE MOUNTAIN (N-23-1)
Seg Description: stream and select tribs, above East Mountain Road

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: ACID/BASE (PH)
Suspected: - - -
Possible: - - -

Source(s) of Pollutant(s)
Known: ATMOSPH. DEPOSITION
Suspected: - - -
Possible: - - -

Resolution/Management Information

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

Further Details

Overview
Aquatic life support in this portion of Upper Rondout Creek is thought to experience minor impacts due to low pH, the result of atmospheric deposition (acid rain).

Water Quality Sampling
A biological (macroinvertebrate) survey of Rondout Creek at multiple sites between Rosendale and Peekamoose was conducted in 2002. Sampling results indicated non-impacted to slightly impacted water quality conditions along the stream. The assessments of sites on the Upper Rondout fell mostly within the range of non-impacted, with the uppermost site reflecting slight impacts due to acid rain impacts. In spite of these minor impacts, aquatic life is considered to be fully supported in the stream. (Rondout Creek Biological Assessment Report, Bode, et al., DEC/DOW, BWAM/SBU, October 2003)

New York City Watershed
This creek feeds the Rondout Reservoir, which is a terminal reservoir of the Catskill/Delaware System of New York City water supply reservoirs (see Rondout Reservoir, Segment 1306-0003). A Watershed Agreement is in place between NYCDEP and the Croton Watershed communities which sets forth programs and funding for watershed protection.

NYCDEP has reported average pH values (6.4) that fall outside the criteria for pH outlined in Addendum E of the agreement between NYC and NYSDEC for protection of the New York City water supply. (NYCDEP, July 1999)

Segment Description

This segment includes the portion of the stream and all tribs above unnamed trib (-50) near East Mountain Road. The waters of this portion of the stream are Class C(T),C(TS) from unnamed tribs (-50) to unnamed trib (-57a), and Class B(TS) for the remainder of the reach. Tribs to this reach/segment, including High Falls Brook (-55), Stone Cabin/Bull Run Brook (-56), Bear Hole Brook (-57), Buttermilk Falls Brook (-58), Pickett Brook (-60), are Class C,C(T),C(TS),B(T) and with some portion in the forest preserve. East/Sundown Brook (-53) is listed separately.

Minor Tribs to Rondout Reservoir (1306-0014) MinorImpacts

Waterbody Location Information

Revised: 05/29/2008

Water Index No: H-139-14-P815a-
Hydro Unit Code: 02020007/110 **Str Class:** A
Waterbody Type: River
Waterbody Size: 15.6 Miles
Seg Description: total length of select tribs, to Rondout Reservoir

Drain Basin: Lower Hudson River
Rondout River
Reg/County: 3/Ulster Co. (56)
Quad Map: RONDOUT RESERVOIR (N-23-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Stressed	Suspected
Aquatic Life	Stressed	Suspected

Type of Pollutant(s)

Known: - - -
Suspected: ACID/BASE (PH)
Possible: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: ATMOSPH. DEPOSITION
Possible: - - -

Resolution/Management Information

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

Further Details

Overview
Water supply use and aquatic life in Trout Creek (also Sawkill Brook) are thought to experience minor impacts due to low pH attributable to atmospheric deposition (acid rain).

Water Quality Sampling
NYCDEP has reported low average pH values that fall is outside the criteria for pH outlined in Addendum E of the agreement between NYC and NYS DEC for protection of the New York City water supply. The fishery may also be affected by the low pH, but no biologic assessment has been conducted. (NYCDEP, July 1999)

New York City Watershed
This creek feeds the Rondout Reservoir, the terminal reservoir of the Delaware System of New York City water supply reservoirs (see Rondout Reservoir, Segment 1306-0003). A Watershed Agreement is in place between NYCDEP and the Delaware Watershed communities which sets forth programs and funding for watershed protection. (NYCDEP, July 1999)

Segment Description

This segment includes the total length of selected/smaller tribs to Rondout Reservoir. Tribs within this segment, including Trout Creek (-44), Deeper Kill (-46), are Class A,A(T),A(TS). Chestnut Creek (-48) and Upper Rondout Creek are listed separately.

Chestnut Creek and tribs (1306-0009) NoKnownImpct

Waterbody Location Information

Revised: 12/12/2007

Water Index No: H-139-14-P815a-48
Hydro Unit Code: 02020007/110 **Str Class:** A(T)
Waterbody Type: River
Waterbody Size: 48.9 Miles
Seg Description: entire stream and tribs

Drain Basin: Lower Hudson River
Rondout River
Reg/County: 3/Sullivan Co. (53)
Quad Map: GRAHAMSVILLE (N-22-3)

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 **Resolution Potential:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Chestnut Creek in Grahamsville (at Route 42) was conducted in 1998 and 2002. Sampling results indicated non-impacted water quality conditions. Slightly lower metrics in 1998 were attributed to headwater effects. The 2002 sampling found the fauna to be diverse and all screening criteria for waters having no known impacts were met. (DEC/DOW, BWAM/SBU, June 2005)

NYC Water Supply
Chestnut Creek is tributary to the Catskill/Delaware System of New York City water supply reservoirs (see also Rondout Reservoir, Segment 1306-0003). A Watershed Agreement is in place between NYCDEP and the Delaware Watershed communities which sets forth programs and funding for watershed protection. NYCDEP has conducted routine chemical monitoring of the stream and although these results indicate acceptable water quality, impacts from failing and/or inadequate on-site septic systems - some of which have been documented - are of some concern. (NYCDEP, July 1999)

Segment Description
This segment includes the entire stream and all tribs. The waters of the stream are Class A(T). Tribs to this reach/segment, including Weston Brook (-1), Red Brook (-2), Bullet Brook (-3), Pepacton Brook (-5), Birch Brook (-6),

Scott Brook (-7), are Class A(T),B(T),B(TS),C,C(TS).

This page intentionally left blank.