



Middle East Branch Delaware River Watershed (0204010204)

Water Index Number	Waterbody Segment	Category
D-70 (portion 3)/P358a	Pepacton Reservoir (1403-0002)	Impaired Seg
D-70-43 thru 78	Pepacton Reservoir (Minor) Tribs(1403-0093)	UnAssessed
D-70-49	Fall Clove Brook and Tribs (1403-0094)	NoKnownImpct
D-70-49-3	Terry Clove Brook (1403-0104)	NoKnownImpct
D-70-49-P362	Brydon Lake (1403-0095)	UnAssessed
D-70-56	Tremper Kill and Tribs (1403-0096)	NoKnownImpct
D-70-59-P366	Perch Lake (1403-0097)	UnAssessed
D-70-60-P367	Mud/Laurel Lake (1403-0098)	UnAssessed
D-70-63	Mill Brook and tribs (1403-0039)	NoKnownImpct

Pepacton Reservoir (1403-0002)

Impaired Seg

Waterbody Location Information

Revised: 11/07/02

Water Index No:	D-70 (portion 3)/P358a	Drain Basin:	Delaware River
Hydro Unit Code:	02040102/010	Str Class:	AA(T)
Waterbody Type:	Lake(R)	Reg/County:	4/Delaware Co. (13)
Waterbody Size:	5695.9 Acres ()	Quad Map:	DOWNSVILLE (M-21-4)
Seg Description:	entire reservoir		

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

Source(s) of Pollutant(s)

Known: - - -
Suspected: ATMOSPHERIC DEPOSITION
Possible: Agriculture, Municipal

Resolution/Management Information

Issue Resolvability:	1 (Needs Verification/Study (see STATUS))	
Verification Status:	4 (Source Identified, Strategy Needed)	
Lead Agency/Office:	ext/NYCW	Resolution Potential: High
TMDL/303d Status:	2b,3,4a (Multiple Segment/Categorical Water, Fish Consumption)	

Further Details

Fish consumption in the Pepacton Reservoir is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of larger smallmouth bass (over 15 inches) because of elevated mercury levels. The likely source of the mercury is atmospheric deposition. NYC DEP routinely monitors the water supply reservoirs for mercury however, mercury in the environment is very insoluble and generally not found in water analysis, although it can bio-accumulate to appreciable levels in aquatic organisms. (2000-01 NYS DOH Health Advisories).

The Pepacton Reservoir is the largest reservoir (nearly 145 billion gallon capacity) of the of the New York City water supply reservoir system. The watershed is nearly mostly forested with some agricultural land use and a few small villages and town centers. NYC DEP routinely monitors water quality in both the reservoir and tributary streams and reports generally high water quality. In addition to the use threats outlined above, the segment is considered a highly valued water resource due to its drinking water supply classification. The reservoir is used as drinking water supply for nearly half the population of the state. The inclusion of this waterbody on the DEC/DOW Priority Waterbodies List as having threats to water quality is a reflection of the value of this resource, rather than any specifically identified threats. (DEC/DOW, BWAR, December 2000)

NYC DEP, in partnership with Watershed communities, has developed and entered into a Watershed Agreement which sets forth programs and funding to address water quality issues. Programs to address and improve water quality in the

Pepacton Watershed include agricultural BMPs, upgrading of municipal WWTPs, remediating failing and/or inadequate on-site septic systems (or connecting these systems to municipal WWTPs), and improved urban stormwater controls. NYCDEP funded upgrades of the Margaretville and Mountainside Farms WWTPs are complete. DEP funded community sewer system development is underway for villages of Andes and Fleischmanns and the hamlet of Roxbury. A Phase II TMDL for phosphorus for all the NYC reservoirs including the Pepacton was approved by USEPA in October 2000. The Phase II TMDL indicates that reservoir phosphorus concentrations are well below acceptable limits. (NYC DEP, April 2002)

The reservoir is included on the NYS 2002 Section 303(d) List of Impaired Waters. The reservoir was included on both Part 2b of the List due to the impairment to fish consumption and Part 3 of the List as a Water Requiring Verification of impairments due to pathogens. However the more recent assessment discussed here found no evidence of impacts due to pathogens (note these impacts were listed as "poorly document" in previous assessments). As a result, and assuming no further change in water quality with respect to pathogens, it is appropriate to de-list the reservoir for impacts due to pathogens in the next Section 303(d) List. (DEC/DOW, BWAR and BWM, October 2002)

Segment includes the entire reservoir between the Downsville Dam and Margaretville.

Fall Clove Brook and Tribs (1403-0094)

NoKnownImpct

Waterbody Location Information

Revised: 11/06/02

Water Index No:	D-70-49	Drain Basin:	Delaware River
Hydro Unit Code:	02040102/010	Str Class:	C(TS)
Waterbody Type:	River	Reg/County:	4/Delaware Co. (13)
Waterbody Size:	25.0 Miles (Low Flow)	Quad Map:	DOWNSVILLE (M-21-4)
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 IMPAIRMENT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential:

Further Details

A biological (macroinvertebrate) assessment of Fall Clove Stream at the mouth was conducted in 1999. Field sampling results indicated non-impacted water quality conditions the site. The sample satisfied field screening criteria and was returned to the stream. (DEC/DOW, BWAR/SBU, June 2001)

This waterbody segment is located within the New York City Water Supply system watershed. As a result many water quality concerns are being actively monitored and managed by NYCDEP in cooperation with watershed communities, as set forth in the NYC Watershed Agreement. (NYCDEP, October 2002)

This segment includes the entire stream and all tribs. The waters of the stream are Class C(TS). Tribs to this reach, including John L. Little Stream (-5) and Clove Hollow Brook (-6), are Class C(T),C(TS). Terry Clove Brook (-3) is listed separately. (December 2000)

Terry Clove Brook (1403-0104)

NoKnownImpct

Waterbody Location Information

Revised: 11/06/02

Water Index No:	D-70-49-3	Drain Basin:	Delaware River
Hydro Unit Code:	02040102/010	Str Class:	C(TS)
Waterbody Type:	River	Reg/County:	4/Delaware Co. (13)
Waterbody Size:	25.0 Miles (Low Flow)	Quad Map:	HAMDEN (M-21-1)
Seg Description:	entire stream and tribs		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted
NO USE IMPAIRMENT

Severity

Problem Documentation

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential:

Further Details

A biological (macroinvertebrate) assessment of Terry Brook at the mouth was conducted in 1999. Field sampling results indicated non-impacted water quality conditions the site. The sample satisfied field screening criteria and was returned to the stream. (DEC/DOW, BWAR/SBU, June 2001)

This waterbody segment is located within the New York City Water Supply system watershed. As a result many water quality concerns are being actively monitored and managed by NYCDEP in cooperation with watershed communities, as set forth in the NYC Watershed Agreement. (NYCDEP, October 2002)

This segment includes the entire stream and all tribs. The waters of the stream are Class C(TS). Tribs to this reach, including Basin Clove (-4), are Class C,C(TS). (December 2000)

Tremper Kill and Tribs (1403-0096)

NoKnownImpct

Waterbody Location Information

Revised: 11/04/02

Water Index No:	D-70-56	Drain Basin:	Delaware River
Hydro Unit Code:	02040102/010	Str Class:	A(T)
Waterbody Type:	River	Reg/County:	4/Delaware Co. (13)
Waterbody Size:	52.6 Miles (Low Flow)	Quad Map:	ANDES (M-21-2)
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 IMPAIRMENT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential:

Further Details

A biological (macroinvertebrate) assessment of Tremper Kill in Wolf Hollow/Andes was conducted in 1999. Field sampling results indicated non-impacted water quality conditions. The sample satisfied field screening criteria and was returned to the stream. (DEC/DOW, BWAR/SBU, June 2001)

This waterbody segment is located within the New York City Water Supply system watershed. As a result many water quality concerns are being actively monitored and managed by NYCDEP in cooperation with watershed communities, as set forth in the NYC Watershed Agreement. (NYCDEP, October 2002)

The New York City Watershed Memorandum of Agreement specifically identifies communities that "may be experiencing water quality problems due to failing septic systems in close proximity to streams and other watercourses or where such failures are likely to occur in the future." The MOA initially provided that NYC provide funding to address such deficiencies. As a result, NYCDEP is funding a new community sewer system in the currently unsewered Village of Andes. (DEC/DOW, Region 4, October 2002)

This segment includes the entire stream and all tribs. The waters of the stream are Class A(TS) in lower reaches (to trib -3) and C(TS) in upper reaches. Tribs to this reach, including Shaver Hollow Brook (-1), Bussey Hollow Brook (-2), Wolf Hollow Stream (-3), State Road Stream (-5), Bullet Hole Brook (-6), Campbell Hollow Stream (-8), Liddle Brook/Turnpike Stream (-9), Reservoir Brook (-10), Farmers Hill Brook (-11) and Front Gladstone Brook (-11-1-1),

are Class A(T), C(T) and C(TS). (December 2000)

Mill Brook and tribs (1403-0039)

NoKnownImpct

Waterbody Location Information

Revised: 09/18/02

Water Index No:	D-70-63	Drain Basin:	Delaware River
Hydro Unit Code:	02040102/010	Str Class:	A(TS)
Waterbody Type:	River	Reg/County:	4/Delaware Co. (13)
Waterbody Size:	40.7 Miles (Low Flow)	Quad Map:	ARENA (M-22-4)
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 IMPAIRMENT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential:

Further Details

A biological (macroinvertebrate) assessment of Mill Brook in Arena was conducted in 1999. Field sampling results indicated non-impacted water quality conditions. The sample satisfied field screening criteria and was returned to the stream. (DEC/DOW, BWAR/SBU, June 2001)

This waterbody segment is located within the New York City Water Supply system watershed. As a result many water quality concerns are being actively monitored and managed by NYCDEP in cooperation with watershed communities, as set forth in the NYC Watershed Agreement. (NYCDEP, October 2002)

This segment includes the entire stream and all tribs. The waters of the stream are Class A(TS) in lower reaches (to trib -2) and C(TS) in upper reaches. Tribs to this reach not in Forest Preserve are Class A, C, C(T) and C(TS). (December 2000)