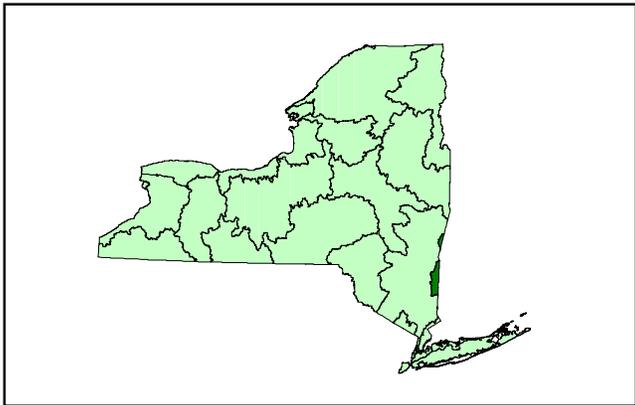
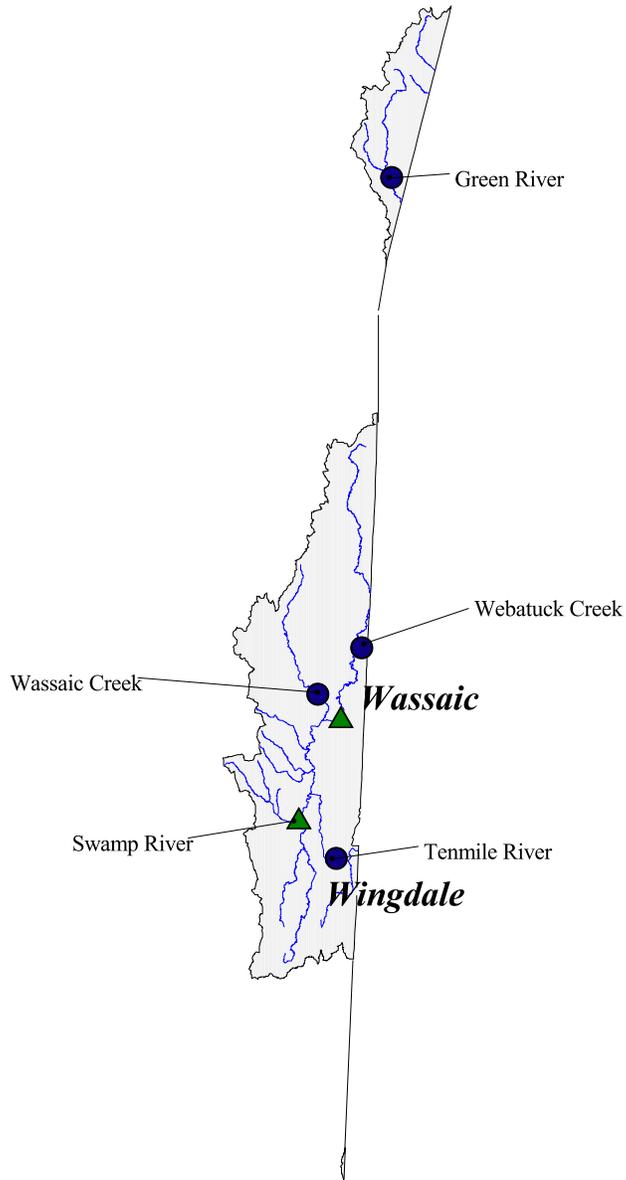


Housatonic River Drainage Basin



Water Quality Assessment based on Resident Macroinvertebrates

- non-impacted
- ▲ slightly impacted
- moderately impacted
- ◆ severely impacted



HOUSATONIC RIVER DRAINAGE BASIN SAMPLING SITES, 1972-2002

<u>STATION</u>	<u>LOCATION</u>		<u>YEAR SAMPLED</u>
GREEN RIVER (GREE)			
01	Green River, below Rte 71 bridge		02
MILL RIVER (MLLR)			
01	Dover Furnace, below Rte 26 bridge		02
SWAMP RIVER (SWMP)			
01	Dover Plains, Route 6	92	02
TENMILE RIVER (TEN)			
01	Below Wassaic, Sinpatch Road bridge	92	
02	Dover Plains, Main Street	92	
03	Below Dover Plains, Lime Kiln Road	92	
04	Above South Dover, single lane bridge	92	
05	Webatuck, Lake Ellis Road	92	02
WASSAIC CREEK (WASS)			
01	Wassaic, above Rte 81		02
WEBATUCK CREEK (WEBA)			
01	Leedsville, Amenia Union Road	92	02
04	Wassaic, above Sinpatch Rd bridge		02

ASSESSMENTS OF WATER QUALITY OF STREAMS IN THE HOUSATONIC RIVER DRAINAGE BASIN,
 BASED ON MACROINVERTEBRATE COMMUNITIES

<u>Site/Reach</u>	<u>Water Quality Assessment</u>	<u>Change from 1992</u>
Green River, Green River	non-impacted	no prior data
Mill River, Dover Furnace	[unassessed]	no prior data
Swamp River, Dover Plains	slightly impacted	DECLINED
Tenmile River, Webatuck	non-impacted	no change
Wassaic Creek, Wassaic	non-impacted	no prior data
Webatuck Creek, Leedsville	non-impacted	no change
Webatuck Creek, Wassaic	slightly impacted	no prior data

REPORTS OF MACROINVERTEBRATE SURVEYS WITHIN THE HOUSATONIC RIVER
WATERSHED

STREAM	YEAR OF SURVEY	REPORT
Housatonic River		MWRC,1974
Tenmile River Basin	1984	MDEQ,1984
Tenmile River	1992	SBU,1993
Watershed Streams	1991-1992	RIBS,1994

AVON	Avon Pollution Investigations Unit, Div. of Fish & Wildlife, NYS DEC
DOH	New York State Department of Health
MDEQ	Massachusetts Department of Environmental Quality
MWRC	Massachusetts Water Resources Commission
RIBS	Rotating Intensive Basin System, Statewide Waters Assessment Section, NYS DEC
SBU	Stream Biomonitoring Unit, Division of Water, NYS DEC

Green River

Water quality was assessed as non-impacted for this tributary of the Housatonic River, based on macroinvertebrate sampling near the village of Green River in 2002. The site was field-assessed, and the sample has not yet been processed. No prior data were available for the stream.

Mill River

This stream was first sampled in 2002 in Dover Furnace. As determined by the fauna and confirmed by a local resident, the stream flow is intermittent, carrying water only after significant rainfall. However, in the interest of determining what types of organisms inhabited such a stream, the sample was processed. The fauna was heavily dominated by two species of aquatic worms. Other organisms included riffle beetles, stoneflies, midges, and aquatic millipedes. Because of the extreme intermittent flow in the stream, water quality was not assessed, and the site is dropped from further monitoring.

Swamp River

The Swamp River was sampled for macroinvertebrates in Dover Plains in 2002 above Route 6. The substrate habitat was good, although diatoms, macrophytes, and filamentous algae were abundant. The macroinvertebrate fauna was dominated by filter-feeding midges and algal-feeding riffle beetles. Nonpoint source nutrient enrichment was clearly indicated. Water quality was assessed as slightly impacted, indicating a decline compared to conditions documented at this site in 1992. Furthering sampling is recommended to monitor this trend.

Tenmile River

Non-impacted water quality was assessed for the Tenmile River, based on macroinvertebrate sampling in 2002 in Webatuck at the most downstream site. The fauna was well-balanced and carried a diverse assemblage of clean-water mayflies, stoneflies, caddisflies, and hellgrammites. Conditions were similar to those documented for the site in 1992.

Wassaic Creek

Water quality was assessed as non-impacted for Wassaic Creek, based on macroinvertebrate sampling in 2002 in Wassaic, approximately one mile upstream of the confluence with Webatuck Creek. Stream habitat was adequate, and the fauna was dominated by caddisflies, riffle beetles, and mayflies, with several species of stoneflies present. No prior data were available for the stream.

Webatuck Creek

Water quality in Webatuck Creek currently ranges from non-impacted to slightly impacted, based on 2002 macroinvertebrate sampling. The upstream site in Leedsville was assessed as non-impacted, with a fauna dominated by riffle beetles and mayflies. Metrics were similar to those obtained at this site in 1992. Downstream at Wassaic, approximately 0.1 miles upstream of the confluence with Wassaic Creek, water quality was slightly impacted by nonpoint source nutrient enrichment and siltation. The water appeared turbid compared to the Leedsville site, likely from two sand and gravel mines located upstream of the site. No prior data were available for this site.



Figure 16-1. Sample processing and organism identification in the Stream Biomonitoring Unit laboratory.