

Snapshot Day 10/2/07 Data
(Salt Front RM 78.2)
RIVER MILE 300
Henderson Lake/Hudson River
Sarah Fink, Minerva Central School District
10-12th graders, 10 students
44°05.467' N, 74°03.353'W

Location: Outflow of Henderson Lake and Calamity Brook.

Area:

Surrounding Land Use: Forested 100%; Interesting to note that ½ mile downstream is the mining (iron) site at Tahawus, where a dam used to support a small lake, and ½ mile upstream is a dam at Henderson Lake

Sampling Site: Covered with vegetation – brush and trees, some driftwood on shoreline, rocks

Plants in area: The shoreline is planted with trees, shrubs and flowers.

Water depth: 5cm in shallows to 150 cm in deep pools

River Bottom –rocky

Plants in water – none – only aquatic vegetation is a small amount of algae on the exposed rocks near shore

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<i>Physical</i>				
Air Temperature	9:45 AM	60° F 15.5° C		
Wind Speed	9:45AM	4-6 kts	Variable direction	
Cloud Cover	overcast			
Weather yesterday	Fairly cloudy to clear last 3 days, all temps in high 60's			
<i>Water Temperature</i>	9:45 AM	15.2° C 59.4 ° F		All 3 trials the same
	10:05 AM	15.4° C 59.7 ° F		All 3 trails the same
<i>Water surface</i>	Water choppy due to gradient not wind distrubance			
<i>Turbidity Large sight tube</i>	Found unlimited transparency to the water, even with a large sight tube. The water had very little sediment			
<i>Chlorophyll</i>	<i>Time</i>	<i>Chla/ug/L</i>	<i>Pheo ug/L</i>	<i>Location</i>
<i>Sample run by Darrin Freshwater Institute</i>	9:45 AM	1.03 ug/L 2.14 ug/L	0.90 ug/L 1.21 ug/L	Upper Hudson River
<i>Chemical</i>				
DO (ampules)	10:05 AM	7 mg/L shallow pool	Temp 15° C	70% saturated

	10:05 AM	10 mg/L deep pool	Temp 15° C	95% saturated
pH	<i>Time</i>	<i>Acid Rain Paper</i>	<i>Universal Ind. Soluton</i>	<i>pH test strips</i>
	10:15 AM	5.5	6.0	6.2
Phosphate	10:30 AM	No color change in test	0.0 mg/L	
Nitrate	10:30 AM	No color change in test	0.0 mg/L	
Alkalinity	n/a			
Salinity	<i>Time</i>	<i>Method</i>	<i>Reading</i>	
<i>Fish Catch</i>	<i>Number Caught</i>	<i>Species</i>		<i>Minnow traps</i>
<i>Kick nets & overturning rocks</i>	2	Dragonfly nymphs	Spent 30 minutes looking but it was a relatively, deep, fast- moving area	
<i>Tides</i>				
<i>Currents</i>	5700cm/60 secs	95cms/sec.	South/ebb	114 kts. In steep areas
	660cm/60 secs.	11cm/sec	South/ebb	13.2 kts in shallower areas
<i>Traffic</i>				