

**Snapshot Day 10/14/10 Data
(Salt Front RM 36)**

RIVER MILE 18.5 - Boat

Aboard the Clearwater, docking Alpine NJ, sampling Center of Hudson

Maija Niemisto, Hudson River Sloop Clearwater

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The Elisabeth Morrow School

Englewood, NJ – 5th grade – 50 students (and 6 parents)

Latitude 40°57' Longitude 73°55'

Location: Docking at Alpine Boat Basin with sampling on the Hudson

Area: Channel Sampling, Rocky Shore

Surrounding Land Use: On the river – East 33% trees, 33% business; West 80% forested; 5% boats, marina; 15% rocks

Sampling Site: 70 % forested, 30% dock. There are rock and timber bulkheads forming the shoreline. The Marina is made of some stationary and some floating docks. Parking lot, cliff, base, picnic area, boating and fishing with rocky shoreline

Plants in area: The shoreline is planted with trees (98%), poison ivy (2%).

Water depth: At Alpine - 3.5 fathoms (one fathom is equal to 6 feet OR 1.83 meters) @ 11 AM; at 1:30 PM 24 ft., 4 fathoms (24 ft.) at 2:30 PM; 42 ft (no time noted), no time noted 44 ft.

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<i>Physical</i>				
Air Temperature				
Wind Speed	9:30 AM AM	Beaufort #4	North	
	2:30 PM	Beaufort #2 gusts 4-5	4-6 kts. with Gusts 13-19 kts	North wind
	3:15 PM		10 mph	
Cloud Cover	Beautiful – few clouds in the east	Warm & a breezier during the day		
Weather yesterday	10/7 - Rainy and windy yesterday		10/6 - Sunny cool day before	
Water	choppy			
<i>Water Temperature</i>	10:55 AM	50 ° F	10 ° C	
	No time noted	53° F 51° F 52° F		Average 52.5° F 11.4 ° C

		54° F		
	No time noted	56° F 54° F	14° C 14° C	
	11:00 AM	58° F 58	14.4° C 14.4° C	0 ft.
<i>Turbidity</i>	<i>Site tube</i>	<i>1st reading</i>	<i>2nd reading</i>	<i>Average</i>
Secchi disk	10:59 AM	39 cm		39 cm
	1:30 PM	46 cm	42.6 cm	44.3 cm
	2:00 PM	49.4	40.4	44.9 cm
	2:40 PM	46	54	50 cm
	3:54 PM	47.8 cm		47.8 cm
<i>Chlorophyll</i>	10:45 AM	0.1	2:00PM	0.1
<i>Chemical</i>			2:45 PM	0.5
DO (drop count kit)	10:58 AM	8 mg/L	18° C	80% saturated
	11:10 AM	6 mg/L	17° C	65 %
	11:45 AM	9 mg/L	Temp 17° C	90%
	11:58 AM	9 mg/L	18° C	90%
	2:58 PM	8 mg/L	12.5 ° C	75%
	3:15 Pm	8 mg/L	12.5 ° C	75%
pH	10:49 AM	7.5		
	11:00 AM	7.5	1:30 PM	8.0
	11:58 AM	7.5	2:00 PM	7.7
Salinity	<i>Time</i>	<i>Method</i>	<i>Reading</i>	
most sampling times – same result	11:00 AM	Refractometer	0 ppt*	*unable to detect with this method
	1:30 PM		1.0 ppt	
<i>Trawl</i>	<i>TIME</i>	<i>Species</i>	<i>Number</i>	<i>Max. Length</i>
<i>Fish</i>	10:50	Bay Anchovy	5	
	11:10 AM	Bay Anchovy	3	1.5 inch
		Crab	1	1 inch
	11:15 AM	Smallmouth Bass	5	2 inch
	New AM Group	Striped Bass	4	3 inch
	11:58 AM	Killifish	1	
		Crab	1	Size of a quarter
	1:30 PM	Sea Robin	1	1 inch
		White perch	3	8 inch

		Striped Bass	7	4 inch
		Hog choker	8	3 inch
		Mummichog	1	3 inch
		Herring	1	2 inch
		Blue crabs	25	8 inch
		Brine Shrimp	12	1 inch
Tides	9:33 AM	20 ft. on dock		
	1:30 PM	24 ft. on dock	Rising	
	2:35 PM	Flood tide		
Currents – <i>9:36 AM</i>	45 ft/36 secs	420 inches/ 36 secs	1067 cm/ 36 secs	29.63 cm/sec
<i>1:35 PM</i>	flood			31 cm/sec
2:35 PM	35 ft/18 secs	470 inches/18 sec	966 cm/18 sec	53.66 cm/sec
Traffic	10:55 AM	3 barges - stationary	Green color Yellow color White color	anchored
	11:20 AM	3 barges	Black	Northbound/empty
	No time noted	3 barges 1 barge Riverkeeper		Anchored/empty Docked being loaded of unloaded Northbound
	11:30 AM	3 Barges	Black	stationary
	12:00 PM	3 barges	Black	2 northbound (1 full, 1 empty) 1 southbound (full)
	1:30 PM	4 barges & tugs 1 barge cruise ship	White	Anchored Docked being unloaded (?) Southbound/empty
Other –	Note – 1:30 PM – Awesome tide			