

Day in the Life of the Hudson River 10/22/19

GARRISON LANDING

RIVER MILE: 51.5

Salt Front: _Rm53

Garrison School- Kevin Keegan, Lisa Mechaley, Karen Nelson, Mrs. O'Brien, Mr. Pete

16 students 7th-8th grade

Latitude 41.38207 N & Longitude – 73.94799 W

Location: Garrison Landing Park, Garrison, Putnam County, NY

Area: Waterfront beach area with a pier in front of grassy park primarily used for boating and picnics

Surrounding Land Use: 60% Forested; 20% Urban/Residential; 10% Industrial/Commercial; 10% Other

Sampling Site: Rocky shoreline, pier, shore with bulkhead, riprap, grassy, parking lot

Shoreline: Sandy, muddy

Plants in area: no plants in water area

Water: 3 feet deep, calm

River Bottom: muddy; sandy

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
Physical				
<i>Air Temperature</i>	NA			
<i>Wind Speed:</i>	9:54 AM	Beaufort 1	1-3 knots	South
	11:03 AM	Beaufort 1	2 knots	South
<i>Weather today</i>	Overcast 100%			
<i>Weather the past 3 days:</i>	Rainy			
Tides-	Time	Rising, Falling, Unchanged	Height (cm)	Rate of Tidal Change (cm/min)
Not sure how it rose so drastically and fell again	9:25 AM	-	52	-
	9:46 AM	Falling	35	0.81
	10:23 AM	Falling	22.5	0.34
	11:07 AM	Falling	6	0.375
	11:37 AM	Rising	19.68	0.456
	12:20 PM	Falling	16.5	0.07
Current-	cm/second	Knots	North/South	Ebb/Flood/Still
9:36 AM	14	.272	South	Ebb
9:42 AM	23.6	.4587	South	Ebb
10:53 AM	3.2	.0622	South	Ebb
Water Temperature	9:34 AM	15 ° C		
	11:38 AM	14.1 ° C		
	12:30 PM	15° C		
Turbidity -	NA			
Chemical				
<i>Salinity- Quantab</i>	<i>Time</i>	<i>Chloride ppm Cl</i>	<i>Total Sal. Ppm</i>	
	10:07 AM	53	95.75	
	10:45 AM	53	95.75	
	11:59 AM	32	57.81	
<i>DO – colorimetric</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
	9:53 AM	15.3 ° C	6 ppm	58%
	10:10 AM	18 ° C	6 ppm	60%
	11:10 AM	18 ° C	3 ppm	30%
<i>pH – color matching</i>	9:48 AM	6.3		
	11:00 AM	7.3		
	12:12 PM	7.5		
<i>Nitrates</i>	10:12 AM	0ppm		

	11:04 AM 11:53 AM	0 ppm 0 ppm		
<i>Phosphates</i>	10:50 AM 11:55 AM	300 ppm <i>*way too high, error in test?</i> 0 ppm		
<i>Fish</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	
10:02 AM	2	Spottail Shiner	7.3 cm	<i>Seining- 60 ft X 94.2 ft pull- 1/4 inch mesh</i>
11:40 AM	1	Striped Bass	5 cm	
	2	Hogchoker	10.5 cm	
	1	White Perch	12.5 cm	
	1	Pumpkin Seed	12 cm	
11:45 AM	2	Striped Bass	13 cm	
	2	White Perch	12.5 cm	
	1	Channel Catfish	42.5 cm	
	1	American Eel	13 cm	
	1	Brown Bullhead	8 cm	
	1	Spottail Shiner	7 cm	
	2	Smallmouth Bass	15 cm	
Fish Totals	TOTAL: 17	Diversity: 9		
<i>Macroinvertebrates</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	
11:45 AM	1	Blue Crab	Male	
Macroinvertebrate Totals	TOAL: 1	Diversity: 1		
<i>Boats</i>	<i>Time</i>	<i>Name</i>	<i>North/South</i>	<i>Loaded/Light</i>
Commercial	10:26 AM	NA	South	Light
Recreational	11:56 AM	NA	North	Light
Commercial	12:08 PM	RTC106	North	Loaded