

**Snapshot Day 10/18/11 Data**  
**(Salt Front RM 35.7)**  
**RIVER MILE 35 – Bowline Park, Haverstraw Waterfront**  
**Tom Lake, DEC helped with seining**  
**Chuck Barone, Nanuet High School – 12<sup>th</sup> grade – 20 students**  
**41.° 12'11" N 73.° 57' 48" W**



**Location:** Bowline Park, Haverstraw waterfront, Rockland County NY

**Area:** Parking lot, recreation, fishing

**Surrounding Land Use:** 15% beach, 75% Industrial/commercial, 10% other

**Sampling Site:** shoreline is sandy, muddy, rocky, small beach, bank altered, large rip rap, bulkhead, industrial tress spans the water to the north and east, bricks in the sand

**Piping coming into river**

**Plants in area:** water chestnut seed pods (devil-heads) in area 2% (traveled on waterway), uprooted vallisneria (water celery) 2%, trees 2%

**Water depth:** 1 meter/3 ft.

**River Bottom** –sandy, muddy, rocky

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<i>Physical</i>				
Air Temperature	8:45 am	53°F 11.8°C	Per Tom Lake	
	10:05 am	59.2°F 15.1°C		
	10:50 AM	68°F 20°C		
	11:56 AM	66°F 18°C		
Wind Speed	Beaufort #2	4-7 miles/hr	4-6 knots	NW shifting to S in the last rotations

Cloud Cover	Partly cloudy	Sunny and windy		
Weather today	No rain			
Weather last 3 days	No rain last few days	Overcast in AMs	Sunny during day	
<b>Water Temperature – depth 63 cm average</b>	8:45 AM	17.0°C	63°F	
	10:15 AM	17.5°C 19 18.5	65.25°F 66.5 67.5	Average 18.25°C 66.5°F
Depth 80 cm	11:17 AM	20°C	68°F	
	12:25 PM	20°C	68°F	
<b>Turbidity – secchi AND turbidity meter</b>	10:02 AM	22.2 cm 22.3 23.0	Student comment – relatively turbid	Average 22.5
	11:06 AM	20 cm	75.6 NTU	
	11:50	19.5 cm	99.5 NTU	
<b>Chlorophyll</b>	10:20 AM	0.9		
	10:56	0.7		
	12:07	0.7		
<b>Chemical</b>				
DO				
<i>Drop count</i>	11:30 am	20 C	9.6 PPM	105 % sat
	12:27 pm	20 C	4.6 PPM	50 % sat
pH				
<i>pH pen</i>	10:14 AM rotation	7.9 8.2 8.1 8.1		Average 8.1
	11:14 AM	7 6.9		6.95
	12:23 PM	7 7.1		7.05
Salinity				
<i>Titration strips – &amp; meter</i>	<b>Quantab</b>	<b>Chloride reading</b>	<b>Total Salinity conversion</b>	<b>Meter reading</b>
10:14 AM	Quantab strip 4.4	188 mg/L chloride	339.63 ppm	200 ppm
11:14 AM	1.4	35 mg/L	63.29 ppm	200 ppm
12:25 PM				200 ppm
<b>Fish Catch</b>	<b>Time</b>	<b>Number Caught</b>	<b>Species</b>	<b>Length of largest</b>
<b>Seine 12 ft. X 6ft.</b>	8:45 - 10AM	40	Blueback	60-65 mm;

<b>Mesh 0.25 inch</b>	w/ Tom Lake		herring	yoy
		12	American Shad	85-90 mm; yoy
		4	Gizzard Shad	80-85 mm; yoy
		6	Striped Bass	70-75 mm; yoy
	9:56 AM	2	Blueback herring	75 mm
		1	American shad	90 mm
	11:05 AM	1	Striped bass	14.3 cm
		3	Blueback herring	8.0 cm
	11:45 AM	1	Herring	
<b>Tides</b>	9:56 am	72.3 cm		
	10:26 am	85 cm	rising	
	10:50 am	100 cm	rising	
	12:15 PM	140 cm	rising	
<b>Currents</b>	<b>CM/60 secs</b>	<b>Cm/Sec</b>	<b>North/South Ebb/Flood/Still</b>	<b>Knots</b>
10:00 AM	1040/60 sec	17.3 cm/sec	Ebb* (recorded ebb but expect it should be flood)	0.34 Knots
10:50 AM	802/60 sec	13.4 cm/sec	Flood	0.26Knots
12:05 PM	700/60 sec	11.6 cm/sec	Ebb* (recorded ebb but expect it should be flood)	0.23 Knots
<b>Core – 3 cores</b>	<b>Length</b>	<b>Rare</b>	<b>Common</b>	<b>Abundant</b>
<b>10:25 AM – water depth 1.0 m</b>	7.9 cms – oxidized top 2.4 cm bottom 5.5 cm	Pebbles.	Clay Sand Gravel brick	
<b>10:59 AM – water depth 1 ft.</b>	*13 cm - no layers *one line says 13 cm and another says 6 cm	Mud Leaves wood		Clay Sand Gravel Pebbles brick
<b>12:10 PM</b>	11 cm – no layers – all rocks	Clay Mud brick	Gravel	pebbles
<b>Shipping</b>	12:20 PM	Sailboat	White	southbound

	12:21	Speedboat	White/black	Northbound
<b><i>Observations</i></b>	Giant industrial tresses for Bowline power plant. Plastic and glass along the shores and many bricks were along the beach showing how there were old brick factories in the area. Few birds flying over water – seagulls.			