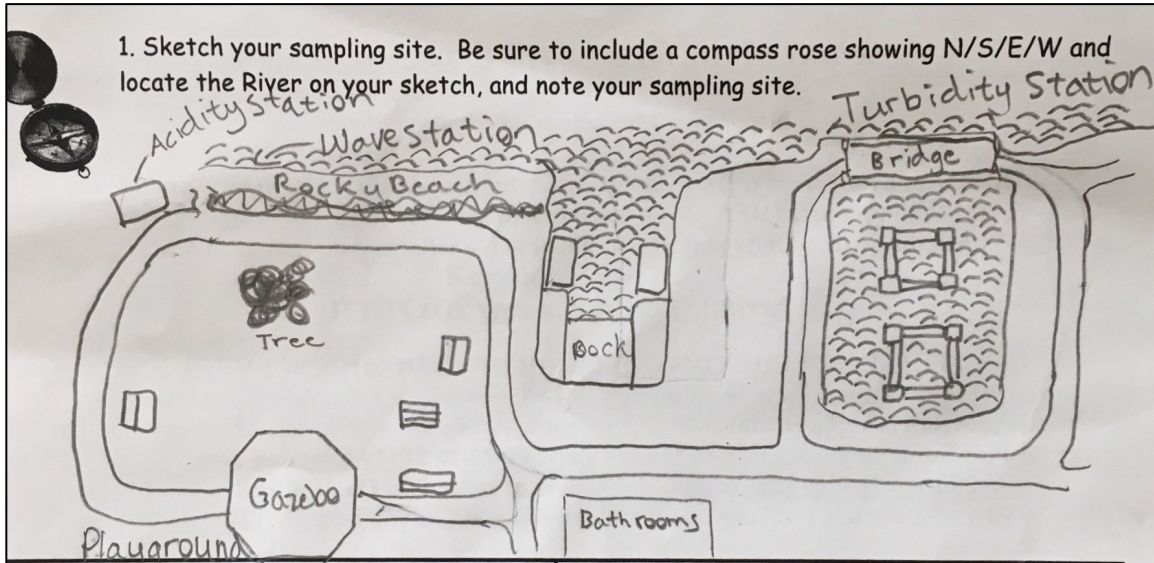


Day in the Life of the Hudson River 10/12/17 Data
(Salt Front Estimated ~ RM 65)
RIVER MILE 38

Haverstraw Bay County Park, Haverstraw Waterfront
Beth Michaluk –21 students, 11th & 12th graders in RCC course on Environmental Pollution, 3 adults



Location: North beach, dock and walking pier, Haverstraw Bay Park, Haverstraw waterfront, Rockland County NY

Area: Parking lot, recreation, fishing

Surrounding Land Use: 20% parkland, 40% Industrial/commercial, 30% urban/residential

Sampling Site: small beach, bank altered, large rip rap, bulkhead, concrete bulkhead, covered in vegetation

Water depth: 5 to 18 inches

Shoreline & River Bottom – 20% muddy, 40% sandy, 40% rocky

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<i>Physical</i>				
Air Temperature	9:40 AM 10:30 AM 11:15 AM	15.7°C 17 17.2	59.7°F 62.6 63	
Wind Speed - <i>Anemometer</i>	9:42 AM 10:36 AM 11:15 AM	4.4 mps 2.8 mps 4.5 mps	9.8 mph 6.3 mph 10:00 mph	Avg 3.9 mps /8.7 mph North Beaufort 1-2
Cloud Cover	Mostly cloudy	51-75%		
Weather today	Overcast	No rain		
Weather last 3 days	Rain			
<i>Water</i>	calm			

Water Temp. avg. depth 2.5 ft	9:59 AM 10:50 AM 11:24 AM	20°C 18 18	68°F 64 64	
Turbidity – Long site tube	9:30 AM 10:30 AM 11:30 AM	27cm 35 cm 43 cm		
Chemical				
DO <i>Drop count</i>	10:24 AM 11:12 AM 11:40 AM	20°C 18 18	10 ppm 12 ppm 13 ppm	110 % sat. 125 % sat. 125 % sat.
pH - <i>color match test kit</i>	9:45 AM 10:57 AM 11:28 AM	7.6 7.4 7.5		
Salinity: <i>Quantabs HR</i>	9:57 AM 10:50 AM 11:22 AM		3782 ppm Cl- 3782 ppm Cl- 3782 ppm Cl-	6832 ppm TS 6832 ppm TS 6832 ppm TS
<i>Hydrometer</i>	9:57 AM 10:50 AM 11:22 AM	8 ppt 6 ppt 6 ppt		Average 6.7 ppt
Turbidity - secchi	9:45 AM 10:40 AM 11:25 AM	60, 60, 60, 70, 40, 70 cm 50, 50, 50, 60, 50, 50 cm 50, 50, 50, 50, 50, 50 cm		Avg. 60 cm Avg. 52 cm Avg. 50 cm
Turbidity – long sight tube	9:55 AM 10:50 AM 11:30 AM	30, 28, 38, 35, 34 cm 35, 32, 24, 22, 22, 22, 24 cm 32, 26, 25, 46, 23 cm		Avg. 33 cm Avg. 26.5 cm Avg. 30.4 cm
Water very turbid, dark, cloudy, wavy, murky				
Fish	Count	Species	Length largest	
Net 20 feet	11	Atlantic Silversides	6 cm	DIV - 1
	5	Atlantic Silversides	5 cm	TOTAL 16
Tides	9:40 AM 10:00 AM 10:20 AM 10:40 AM 11:00 AM 11:26 AM 12:52 AM	50 cm 40 cm 36 cm 35 cm 35 cm 37cm 55 cm		Set Falling Falling Falling Still Flooding Flooding
Currents	CM/30 secs	Cm/Sec	North/South Ebb/Flood/	Knots
9:50 AM 11:00 AM 12:45 PM	32.15 cm/30s 21 cm/30s 56 cm/30s	1.1 cm/sec 0.7 cm/sec 1.9 cm/sec	Ebb Ebb Ebb	.02 kts .01 kts .04 kts
Core –	Properties	Rare	Common	Abundant
16 cm long	No smell, oil or oxidation	Clay Pebbles		Sand

		Wood		
<i>Shipping – Commercial</i>				
12:02 PM	Barge	Brown/Red	Southbound	Loaded
12:57 PM	Tug/Fish boat	White	Northbound	Loaded
<i>Shipping Recreational</i>				
10:12 AM	Sailboat	White	Southbound	Light
11:40 AM	Sailboat	White	Southbound	Light
12:00 PM	Sailboat	White	Northbound	Light
<i>Observations</i>	Many bricks, coal, crab shells, rocks, sand and devil's heads in the area. Remnants of past brickyard industry, coal transport and use, local industrial pollution. Many birds, chipmunks, bees, butterflies and flies, deer, dead turtle, seagulls			