

**Snapshot Day 10/18/11 Data  
(Salt Front RM 35.7)  
RIVER MILE 61.1 E**

**Beacon Waterfront Train Station Park, City of Beacon, Dutchess County  
Nancy Rypkema, Christine O'Shea, and 6 adult helpers/teachers - Valley Central  
Middle School, 7<sup>th</sup> & 8<sup>th</sup> graders (76 students )  
Latitude 41°30' 22" N - Longitude 73°59' 07" W**



**Location:** Waterfront Park, Beacon, Dutchess County NY

**Area:** Park area near the Beacon train station - grassy lawns, forested around edges, parking lot to the side. Children's play area

**Surrounding Land Use:** Park/grassy 60%, Urban/residential 10%; Forested 20%; shoreline/beach 10%

**Student assessment:** There is a bridge, transit station (train) and trees,

**Sampling Site:** beach, covered in vegetation, banks altered, rip rap

**Plants in area of sampling:** oak trees 10%; willow trees 10%; Grass 60%; maple trees 20%

**Water depth:**

**Bottom Surface:** sandy, rocky bottom

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading</i>	<i>Comments</i>
<i>Physical</i>				
Air Temperature	11AM – 12:45 PM	16.2°C 20.1 18.2	60°F 69 64.5	
Wind Speed	11 AM	Beaufort #2	SW	4-7 km/hr; 4-6 kts
Cloud Cover	Mostly cloudy			
Weather today	Overcast			
Weather	Dry for past 3 days – unusually wet fall			

recently				
<i>water calm</i>	Choppy			
<b>Water Temperature</b>	<b>Time</b>	<b>Test one</b>		
<i>Taken in 1 ft. of water</i>	11:00 - 12:45 PM	15.8°C	60 °F	
		16.8°C	62	
		16.3°C	61	
<b>Turbidity</b>	<b>Time</b>	<b>Secchi Disk</b>	<b>Turbidity Tube</b>	<b>Average</b>
	10:40 AM	27 cm	16.8 cm	<b>Secchi disc</b> 27.3 cm
	10:46 AM	35 cm	17.2 cm	<b>Turbidity Tube</b> 18.25 cm
	11:48 AM	20 cm	21 cm	
<b>Secchi disk in inches</b>	Noon	13 inches	2:00 PM	13 inch
<b>Short site tube</b>	11:25 AM	60 JTU	Noon	80 JTU
<b>Chlorophyll</b>	10:22 AM 10:44	0.0 0.0	11:13 AM 11:36 AM 11:53 AM	0.3 0.7 0.7
<b>Chemical</b>	<b>Time</b>	<b>DO</b>	<b>Temp</b>	<b>% saturation</b>
DO (drop kit)	10:43 AM 12:07 PM 1:00 PM	9ppm 8 7	15C 15C 15C	90% 80% 70%
pH – <i>meter</i>	10:35 AM 10:51 AM 11:23 AM 12:38 AM	8:24/6.5 8.26 8:35/8:37 8:43		*6.5 reading seems to be an error – huge variance from others & very low
Salinity –	Time	Quantab reading	Chloride reading	Total Salinity conversion
	10:42 AM 10:54 AM 11:03 AM 11:23 AM	1.0 X 2 1.2 X 2 1.2 X 2 1.2 X 2	≤ 29 ppm Cl-	≤ 52.39 ppm salinity
<b>Fish Catch seine 9X4feet</b>	<b>Number Caught</b>	<b>Species</b>	<b>CPUE</b>	<b>MACROs</b>
noon	8	Shiner	6 cm	
	1	White Perch	25 cm	
<b>Tides</b>	<b>Time</b>	<b>Tide Stick</b>	<b>Flood/Ebb Still</b>	<b>Rate of change</b>
	10:03AM	20 cm		
	10:30AM	20 cm	Still	

	10:45AM	20 cm	Still	0 cm/42 mins
	11:15AM	35cm	Flood	15 cm/30 mins
	11:41AM	47 cm	Flood	12 cm/26 mins
	12:53PM	75 cm	Flood	28 cm/72 mins
<b><i>Currents</i></b>	<b><i>Time</i></b>	<b><i>Cm/60 secs</i></b>	<b><i>Cm/sec</i></b>	<b><i>knots</i></b>
	10:13AM	200 cm/60	3.3 cm/sec	0.06 kts
	10:33AM	100 cm/60	1.4 cm/sec	0.03 kts
	10:53AM	100 cm/60	1.4 cm/sec	0.03 kts
	11:05AM	100 cm/60	1.4 c/sec	0.03 kts
<b><i>Core</i></b>	<b><i>Length</i></b>	<b><i>Rare</i></b>	<b><i>Common</i></b>	<b><i>Abundant</i></b>
	12 cm - 9 cm top 4 cm bottom			Large grain size Plant material
<b><i>Shipping</i></b>	None noted			
<p><b><i>Observation:</i></b> There is a blue heron sitting on a rock in the water. Canadian geese swimming, and seagulls flying. “The sky is cloudy and it may rain today. If it rained hard enough the water level would rise.” (anonymous) “On this field trip there have been many cool things that I’ve learned that I didn’t already know. I learned that seahorses can actually come from the Atlantic Ocean and live in the Hudson River. I also learned that moss always grows toward the north.” (Dominic)</p>				