

**Snapshot Day 10/20/15  
RIVER MILE 13**



**Bloomers Beach @ Engelwood Boat Basin**  
**Jillian Decker, SUNY Rockland Community College, 10 students**  
**Natalie Macke – Pascack Hills High School Climate Stewards – 7 students, 10-12th**  
**N40.881361 -W73.943858**



**Location:** Bloomers Beach – north end  
**Area:** sandy beach, banks altered, pier with rip rap sections, wood bulkhead, collected wood/debris in area, piping approx. 30” located at sampling site, 2 stone breakwaters as well as on shoreline, + cement storm wall  
**Surrounding Land Use:** 25% forested; 25% beach; 50% Industrial/commercial  
**Bottom:** Muddy  
**Plants in area:** none in the water  
**Water Depth:** ~100 cm

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<b>Physical</b>				
Air Temperature	9:23 AM 10:30 AM 12:05 PM	11.8°C 14.3 16.1		
Wind Speed	9AM 10AM	Beaufort #4	6 kts	SSE
Cloud Cover	Clear			
Weather today	No precipitation - started out cloudy but cleared			
Weather recently	cool			
<b>Water</b>				
Choppy				
<b>Water Temperature</b>	9:10 AM	19°C	66.2 °F	
		19°C	66.2°F	
		19°C	66.2°F	
	11:10 AM	19°C	66.2 °F	
		19°C	66.2°F	
		19°C	66.2°F	
<b>Turbidity – long site tube</b>	11.30 AM	21 cm	~40 NTUs	
	12:00 PM	35 cm	cloudy looking	
<b>Chemical</b>				
DO –drop count	11:10AM	8.2 mg/L	19° C	85%
	11:30 PM	7.2 mg/L	19° C	80% saturated
pH – litmus paper	1:00 PM	8.0		
Nitrates – NO3	12:00 PM	0.25 mg/L		
Salinity (refractometer)	11:00 AM	15 ppt		
<b>Fish Catch</b>				
	<b>Count</b>	<b>Fish</b>	<b>Size of largest</b>	<b>Macros</b>
Minnow Trap	1	Atlantic Silverside		
Macroinverts	5	Grass Shrimp		
<b>Tides</b>				
	9:00 AM	Rising		
<b>Currents</b>				
11:15 AM	412/30secs	14cm/sec	0.27 kts	South
1:15 PM –	1245cm/30sec	41cm/sec	0.8 kts	North

very windy				
<b>Boat Traffic</b>	9:45 AM	Buchanan	Southbound	Light
<b>Beach Core – 1:25 PM</b>	<b>Length:</b> 8 inches 0.25' water depth taken right off beach south of pier.	<b>Other:</b> Little oil present. No Scent	<b>Common:</b> Clay, mud, sand	<b>Rare:</b> Pebbles

**Photos below from a second core (Natalie's Mackes students) Taken from ~0.5m of water. Clay and mud, no clear scent.**

