

**Snapshot Day 10/23/14 Data**  
**(Salt Front RM 61.1)**  
**RIVER MILE 25E**  
**Matthiessen Park, Irvington**  
**Philip Levine- Irvington Middle School**  
**180 students, 6<sup>th</sup> Grade**  
**supported by \*Joanna Morabito- Irvington High School AP Env. Sci.**  
**20 students, 11/12<sup>th</sup> graders**  
**Latitude 41° 2' 30" N Longitude 73° 52' 32" W**  
**\*High School Data Recorded and posted separately**



**Sampling Site:** Matthiessen Park, Irvington NY

**Surrounding Land Use:** Pier, forested, grassy, parking lot used for recreation: boating, jogging, fishing, picnics, playground

**Area:** 50% recreation, 30% commercial/industrial, 10% urban/residential, 5% forested, 5% beach

**Shoreline:** Beach, banks altered, riprap, wood bulkhead, pipe entering the water, area covered in vegetation

**Plants:** 80% grass, 15 % trees (not forest), 5% flowers & bushes

**Water Depth:** varied; depth increased as the day progressed

**River Bottom:** muddy, rocky

<i><b>ITEM</b></i>	<i><b>Times</b></i>	<i><b>Reading 1</b></i>	<i><b>Reading 2</b></i>	<i><b>Reading 3</b></i>
<i><b>Physical</b></i>				
Air Temperature	9:15 AM 10:00 AM 10:36 AM	39 F (4 C) 45 F (7 C) 45 F (7 C)		
Wind Speed	10:00 AM	6 (Beaufort Wind Scale)	North	
Cloud Cover	10:15 AM	>75%	Overcast	
Weather today	10:00 AM rain/drizzle			
Weather recently	Rainy, cold, windy			
<i><b>Water Surface</b></i>	choppy			
<i><b>TIMES</b></i>		9:15	9:30	9:50

<b>Water Temperature –</b>	9:30 AM 10:15 AM 11:00 AM	52 F 55 F 54 F	12 C 13 C 12 C	Taken in 1.5 ft. water depth – overcast day
<b>Turbidity – site tube</b>	9:30-11:00 AM	4.9 cm 5.8 cm 5.1 cm 5.3 cm	AVERAGE	5.3 cm - very turbid – not clear and dirty – lots of small things like leaves and rocks.
<b>Chemical</b>				
<b>DO</b> Estuary wide kits	9:30 AM 10:00 AM 10:30 AM	8 ppm 6 ppm 6 ppm	12 degrees C 10 degrees C 10 degrees C	74% saturated 35% saturated 37% saturated
pH – color match test kits	9:30 AM 10:00 AM 10:30 AM 10:45 AM	7 X 3 7 X 3 8,7,8 7.5, 8, 7.5	Averages	7 7 7.67 7.67
Salinity - hydrometer	9-11:30 AM	6 ppt		
<b>Fish Catch- 10:30-11:15 AM 30 ft. net</b>	<b>Species</b> At. Silversides Striped Bass Bay Anchovy	<b># Caught</b> 2 4 1	<b>Largest (inches)</b> 3 inches 7 inches 2 inches	<b>Totals</b> <b>Total Diversity: 3</b> <b>Total Catch: 7</b>
<b>Tides</b>	<b>Time</b> 9:30 AM 9:45 AM 10:00 AM 10:15 AM 10:30 AM	<b>H2O height</b> 20 cm 28 cm 42 cm 27.5 cm 24 cm	<b>Rise/Fall</b>  Rising Rising Falling Falling	<b>Rate of change</b>  8 cm/15 mins 14 cm/15 mins 14.5cm/15 mins 2.5 cm/15 mins
<b>Currents</b>	<b>Time</b> 9:30AM 9:40 AM 10:05 AM 10:30 AM	<b>m/60 sec</b> 10m/139 sec 10m/120 sec 10m/75 sec 10m/46 sec	<b>Cm/sec</b> 7.19 cm/sec 8.33 cm/sec 13.33 cm/sec 21.73 cm/sec	<b>Direction</b> Flood Flood Flood Ebb
<b>Core – 10:15 AM</b> Water depth 30 cm	<b>Length</b> 7 inches	<b>Rare</b> Leaves Brick Coal	<b>Common</b> Mud	<b>Abundant</b> Sand Gravel Pebbles
<b>Traffic- Commercial</b>	9:30 AM	US Coastguard	Red/White/Blue	Southbound/light
<b>Recreational</b>	10:50 AM	sailboat	Blue/white	Northbound/light
<b>Other Items</b>	Devils' heads (water chestnut seedpods) geese droppings, shells, geese, seagulls, small flies			