**Snapshot Day 10/23/14 Data**

**(Salt Front RM 61.1)**

**RIVER MILE 25E**

**Matthiessen Park, Irvington**

**Philip Levine- Irvington Middle School**

**180 students, 6th Grade**

**supported by \*Joanna Morabito- Irvington High School AP Env. Sci.**

**20 students, 11/12th graders**

**Latitude 41** ͦ **2’ 30” N Longitude 73** ͦ **52’ 32” W**

**\*High School Data Recorded and posted separately**

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**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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ITEM*** | ***Times*** | ***Reading 1*** | ***Reading 2*** | ***Reading 3*** |
| ***Physical***  |   |  |  |  |
| Air Temperature | 9:15 AM10:00 AM10:36 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  |
| ***Water Surface*** | choppy |  |  |  |
| ***TIMES*** |  | 9:15 | 9:30 | 9:50 |
| ***Water Temperature –***  | 9:30 AM10:15 AM11:00 AM | 52 F 55 F54 F | 12 C13 C12 C | Taken in 1.5 ft. water depth – overcast day |
| ***Turbidity –*** *site tube* | 9:30-11:00 AM | 4.9 cm 5.8 cm5.1 cm5.3 cm | AVERAGE | 5.3 cm - very turbid – not clear and dirty – lots of small things like leaves and rocks. |
| ***Chemical*** |  |  |  |  |
| ***DO*** Estuary wide kits | 9:30 AM10:00 AM10:30 AM | 8 ppm 6 ppm6 ppm | 12 degrees C10 degrees C10 degrees C | 74% saturated35% saturated37% saturated |
| pH – color match test kits | 9:30 AM10:00 AM10:30 AM10:45 AM | 7 X 37 X 38,7,87.5, 8, 7.5 | Averages | 777.677.67 |
| Salinity - hydrometer | 9-11:30 AM | 6 ppt |  |  |
| ***Fish Catch-*** *10:30-11:15 AM**30 ft. net* | ***Species***At. SilversidesStriped BassBay Anchovy | ***# Caught*** 241 | ***Largest (inches)***3 inches7 inches2 inches | ***Totals*** ***Total Diversity: 3******Total Catch: 7*** |
| ***Tides*** | **Time**9:30 AM9:45 AM10:00 AM10:15 AM10:30 AM | **H20 height** 20 cm28 cm42 cm27.5 cm24 cm | **Rise/Fall**Rising RisingFallingFalling | ***Rate of change****8 cm/15 mins**14 cm/15 mins**14.5cm/15 mins**2.5 cm/15 mins* |
| ***Currents*** | **Time**9:30AM 9:40 AM10:05 AM 10:30 AM | **m/60 sec**10m/139 sec10m/120 sec10m/75 sec10m/46 sec | **Cm/sec**7.19 cm/sec8.33 cm/sec13.33 cm/sec21.73 cm/sec | **Direction**FloodFloodFloodEbb |
| ***Core –*** *10:15 AM**Water depth 30 cm* | **Length**7 inches | **Rare**LeavesBrickCoal | **Common**Mud | **Abundant** SandGravelPebbles |
| ***Traffic- Commercial*** | 9:30 AM  | US Coastguard | Red/White/Blue | Southbound/light |
| ***Recreational*** | 10:50 AM | sailboat | Blue/white | Northbound/light |
| ***Other Items*** | Devils’ heads (water chestnut seedpods) geese droppings, shells, geese, seagulls, small flies |