**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 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 | | | | | |
| ***Water Surface*** | choppy | |  | |  |  |
| ***TIMES*** |  | | 9:15 | | 9:30 | 9:50 |
| ***Water Temperature –*** | 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 |
| ***Turbidity –***  *site tube* | 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. |
| ***Chemical*** |  | |  | |  |  |
| ***DO***  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 | |  |  |
| ***Fish Catch-***  *10:30-11:15 AM*  *30 ft. net* | ***Species***  At. Silversides  Striped Bass  Bay Anchovy | | ***# Caught***  2  4  1 | | ***Largest (inches)***  3 inches  7 inches  2 inches | ***Totals***  ***Total Diversity: 3***  ***Total Catch: 7*** |
| ***Tides*** | **Time**  9:30 AM  9:45 AM  10:00 AM  10:15 AM  10:30 AM | | **H20 height**  20 cm  28 cm  42 cm  27.5 cm  24 cm | | **Rise/Fall**  Rising  Rising  Falling  Falling | ***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 AM  10:05 AM  10:30 AM | | **m/60 sec**  10m/139 sec  10m/120 sec  10m/75 sec  10m/46 sec | | **Cm/sec**  7.19 cm/sec  8.33 cm/sec  13.33 cm/sec  21.73 cm/sec | **Direction**  Flood  Flood  Flood  Ebb |
| ***Core –*** *10:15 AM*  *Water depth 30 cm* | **Length**  7 inches | | **Rare**  Leaves  Brick  Coal | | **Common**  Mud | **Abundant**  Sand  Gravel  Pebbles |
| ***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 | | | | | |