**Snapshot Day 10/10/13 Data**

**(Salt Front RM 69.3)**

**RIVER MILE 25E**

**Matthiessen Park, Irvington**

**Philip Levine- Irvington Middle School**

**170 students, 6th Grade - supported by:**

**\*Joanna Morabito- Irvington High School Marine Science Class**

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

**15 adult helpers**

**Latitude 41** ͦ **05’ N Longitude 73** ͦ **50’ 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:** 70% grass, 25 % trees (not forest), 5% flowers

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

**River Bottom**: sandy, muddy, rocky, weedy

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Times*** | ***Reading 1*** | | ***Reading 2*** | | ***Reading 3*** |
| ***Physical*** |  |  | |  | |  |
| Air Temperature | 9:00 AM  11:30 AM | 55 F (12.7 C)  60 F (15.6 C) | |  | |  |
| Wind Speed | 9-00 AM | 2 (Beaufort Wind Scale) | | 11:30 AM | | 4(Beaufort Wind Scale) |
| Cloud Cover | 9-11:30 AM | >75% | |  | |  |
| Weather today | 10-11:30 AM a little rain/drizzle | | | | | |
| Weather recently | Rainy, cooler, windy on Monday Night (.39 inch) | | | | | |
| ***Water Surface*** | Not calm but not choppy – ‘wavy’ | |  | |  |  |
| ***TIMES*** |  | | 9:15 | | 9:30 | 9:50 |
| ***Water Temperature –*** | 9-11:30 AM | | 55 F (12.7 C)  61 F (16.1 C) | |  | Taken in 3 ft. water depth – shady area |
| ***Turbidity –***  *site tube* | 9-11:30 AM | | 27 cm to  47 cm | |  |  |
| ***Chlorophyll*** |  | |  | |  |  |
| ***Chemical*** |  | |  | |  |  |
| ***DO***  Estuary wide kits | 9-11:30 AM | | 4 ppm  7 ppm | | 11 degrees C  17 degrees C | 35% saturated  70% saturated |
| pH – color match test kits | 9-11:30 AM | | 6.5 - 7 | |  |  |
| Salinity - hydrometer | 9-11:30 AM | | 10 – 12 ppt | |  | 11 average |
| ***Fish Catch-***  *\* reported as freshwater darter*  *\*\*reported as darter*  *#\* reported as black crappie* | ***Species***  Comb Jellies  White Perch  Hogchoker  North. Pipefish  At. Silversides  Striped Bass  Sum. Flounder  Bay Anchovy  Mullet\*  Naked Goby\*\*  Unidentified #\*  Blue Crab  Mud Crab | | ***# Caught***  3  6  2  2  5  6  1  4  1  2  1  3  1 | | ***Largest (cm)***  10  5  4  9  2 F, 1 M | ***Totals***  ***Total Diversity: 13***  ***Total Catch: 37*** |
| ***Tides*** | TIME (am)  8:30 AM  11:30 AM | | Water height  13.5 cm  77.5 cm | | Rise/Fall  Rising | ***Rate of change***  *64 cm/180 mins*  *.36 cm/min* |
| ***Currents*** | **Time**  9:00-10:30AM  10:30-11:30AM | | **Cm/60 sec** | | **Cm/sec** | **Direction**  Still  Ebb |
| ***Core –*** *9-11:30 AM*  *Water depth 3-4 ft.* | **Time**  *9-11:30 AM* | | **Rare**  Leaves  Wood  Shell  Brick  coal | | **Common**  Gravel  Pebbles | **Abundant**  Mud  Sand |
| ***Traffic- Commercial*** | 11:20 AM | | Barge | | Brown/rusty | Southbound/loaded |
| ***Recreational*** | 10:30 AM  10:57 AM  11:19 AM | | Speedboat  Speedboat  Equators X | | Blue/white  Black/white  Blue | Southbound/light  Southbound/light  Southbound/light |
| ***Other Items*** | Seagulls, Canadian geese, squirrels, chipmunks, 1 osprey | | | | | |