**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 AM11:30 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 C17 degrees C | 35% saturated70% 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 JelliesWhite PerchHogchokerNorth. PipefishAt. SilversidesStriped BassSum. FlounderBay AnchovyMullet\*Naked Goby\*\*Unidentified #\*Blue CrabMud Crab | ***# Caught*** 3622561412131 | ***Largest (cm)***105492 F, 1 M | ***Totals*** ***Total Diversity: 13******Total Catch: 37*** |
| ***Tides*** | TIME (am)8:30 AM11:30 AM | Water height 13.5 cm77.5 cm | Rise/FallRising  | ***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**StillEbb |
| ***Core –*** *9-11:30 AM**Water depth 3-4 ft.* | **Time** *9-11:30 AM* | **Rare**LeavesWoodShellBrickcoal | **Common**GravelPebbles | **Abundant** MudSand |
| ***Traffic- Commercial*** | 11:20 AM  | Barge | Brown/rusty | Southbound/loaded |
| ***Recreational*** | 10:30 AM10:57 AM11:19 AM | SpeedboatSpeedboatEquators X | Blue/whiteBlack/whiteBlue | Southbound/lightSouthbound/lightSouthbound/light |
| ***Other Items*** | Seagulls, Canadian geese, squirrels, chipmunks, 1 osprey |