**Snapshot Day 10/20/15 Data**

**RIVER MILE 25E**

**Matthiessen Park, Irvington**

**Philip Levine- Irvington Middle School**

**145 students, 6th Grade, 20 adults**

**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**

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

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

**Area:** 60% recreation, 15% commercial/industrial, 5% urban/residential, 15% forested, 5% beach

**Shoreline:** Sandy, muddy, rocky **-** 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, sandy, rocky

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ITEM*** | ***Times*** | ***Reading 1*** | ***Reading 2*** | ***Reading 3*** |
| ***Physical***  |   |  |  |  |
| Air Temperature | 9:30 AM12:00 PM | 44 F (10 C)62 F (17 C) |  |  |
| Wind Speed | 10:30 AM | 2 (Beaufort Wind Scale) |  |  |
| Cloud Cover | 11:00 AM | 26-50% | Partly Cloudy  |  |
| Weather today | No rain |
| Weather recently | Dry, average temperatures  |
| ***Water Surface*** |  |  |  |  |
| ***TIMES*** |  | 9:15 | 9:30 | 9:50 |
| ***Water Temperature –***  | 9:30 AM11:45 AM | 52 F 57 F | 10 C13 C | Water shaded |
| ***Turbidity –*** *site tube* | 9:30-11:00 AM | 25 cm average |  |  |
| ***Chemical*** |  |  |  |  |
| ***DO*** elementary DO kits using color key | 9:30 AM | 8 ppm Avg.  | 10 degrees C | 70% saturated |
| pH – color match test kits | 9:30 AM10:45 AM11:30 AM12:00 PM | 7 6.576.5 | = |  |
| Salinity - hydrometer | 11:00 AM | 9 ppt average |  |  |
| ***Fish Catch-*** *9:30-12:00 noon* *30 ft. net* | ***Species***At. SilversidesBay AnchovyWhite Perch Smallmouth BassWinter FlounderStriped BassShinersPorgyAmerican Eel | ***# Caught*** 1073111312 | ***Totals*** ***Total Diversity:9******Total Catch: 29*** |
| ***MacroInvert. Catch*** | ShrimpMud CrabBlue Crab | 324 |  |
| ***Tides*** | **Time**8:30 AM11:30 AM11:50 AM12:10 PM12:30 PM | **H20 height** 13 cm15 cm20 cm28 cm33 cm | **Rise/Fall**Falling->RisingRising RisingFallingFalling | ***Rate of change****Shift in this time**Can’t calculate**5 cm/20 mins**8 cm/20 mins**5 cm/20 mins* |
| ***Currents - NR*** | **Time** | **m/60 sec** | **Cm/sec** | **Direction** |
| ***Core –***  | **Length** | **Rare**WoodMacro-Inv.Living Vege | **Common**ClayGravelPebbles | **Abundant** SandMud |
| ***Traffic- Commercial*** | 10:15 AM  | Buchanan | Red | North /Loaded |
| ***Other Items*** | Grasshoppers, turkey vultures, flies, ants, robins, seagulls, chipmonks, squirrels, Canadian geese, yellow jackets, redtail hawk, bees, house sparrows, peregrine falcon, pigeons, butterflies, moths.  |