**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 AM  12:00 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 AM  11:45 AM | | 52 F  57 F | | 10 C  13 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 AM  10:45 AM  11:30 AM  12:00 PM | | 7  6.5  7  6.5 | | = |  |
| Salinity - hydrometer | 11:00 AM | | 9 ppt average | |  |  |
| ***Fish Catch-***  *9:30-12:00 noon*  *30 ft. net* | ***Species***  At. Silversides  Bay Anchovy  White Perch  Smallmouth Bass  Winter Flounder  Striped Bass  Shiners  Porgy  American Eel | | | | ***# Caught***  10  7  3  1  1  1  3  1  2 | ***Totals***  ***Total Diversity:9***  ***Total Catch: 29*** |
| ***MacroInvert. Catch*** | Shrimp  Mud Crab  Blue Crab | | | | 3  2  4 |  |
| ***Tides*** | **Time**  8:30 AM  11:30 AM  11:50 AM  12:10 PM  12:30 PM | | **H20 height**  13 cm  15 cm  20 cm  28 cm  33 cm | | **Rise/Fall**  Falling->Rising  Rising  Rising  Falling  Falling | ***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**  Wood  Macro-Inv.  Living Vege | | **Common**  Clay  Gravel  Pebbles | **Abundant**  Sand  Mud |
| ***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. | | | | | |