**Day in the Life of the Hudson River 10/10/13 Data**

**(Salt Front RM 69.3)**

**RIVER MILE 58a**

**Plum Point/Kowawese, New Windsor, Orange County, NY**

**Janet DeStefano, Vails Gate School**

**19, 3rd grade students, 7 adults**

**GPS Latitude 41°27’47.67”N Longitude 74°0'42.88"W**

**Location:** NorthernSandy beach at Plum Point, New Windsor, Orange County, Public Shore, Picnic Area

**Area:** Sandy beachbordered by forested area and parking lot. Used for picnic, fishing, kayaking

**Surrounding Land Use:** Beach 100%,

**Sampling Site:** sandy beach (cove), rip rap in area of sampling site, debris in the area such as broken concrete, docking

**Plants in area:** 5% of area has water chestnut

**Water depth**: 3 ft.

**River Bottom** – sandy, rocky

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | ***Reading 1*** | ***Reading 2*** | ***Comments*** | |
| ***Physical*** |  | |  |  |  | |
| Air Temperature | 11:45 AM | | 17°C  62°F |  |  | |
| Wind Speed | Beaufort #2 | |  |  |  | |
| Cloud Cover | overcast | |  |  | | |
| Weather today | 9:30-noon dry, 12:00 PM light drizzle | | | | | |
| Weather recently | Raining Monday, | | | | | |
| ***Water Surface*** | calm | | | | | |
| ***Water Temperature*** | \*Tom Lake 9:30 AM | 18.3°C  65°F | |  | |  |
|  | 12:30 PM | 20 °C  68 °F | |  | |  |
| ***Water Surface*** | Choppy |  | |  | |  |
| ***Turbidity***  *Long sight tube* | 12:30 AM | 41.75 cm | |  | |  |
| ***Chlorophyll*** | 2:00PM | 0.3 color chart | |  | |  |
| ***Chemical*** |  |  | |  | |  |
| DO  (drop kit) | TIME | Temp | | DO | | % Sat |
| DO – drop count test kits | 12:10 PM | 20 °C | | 8 | | 70% |
| pH – indicator | 12:27 PM | 8.0 | |  | |  |
| Salinity – Tom Lake reading | 9:30 AM |  | |  | | 2.25 ppt |
| Test strips | 1:00 PM |  | | 447 ppm Cl- | | 807 mg/L TS |
| ***Fish Catch***  35 ft. ‘ with ¼ inch mesh | ***Species*** | ***Count*** | | ***Size of largest*** | | ***Totals*** |
| 9:30-10:20 AM | Spottail Shiner | 2 | | 65-85 mm | | **DIVERSITY - 4** |
| 5 seines | White Perch | 1 | | 230 mm | | **TOTALS - 6** |
|  | Smallmouth Bass | 1 | | 200 mm | | **(Not include crab)** |
|  | American Shad | 2 | | 113 mm  (yearling) | |  |
|  | Blue Crab | 2 | | y-o-y – M  14-15mm | |  |
| ***Tides*** | **Time** | **Height in cm** | | **Rate of change** | | **Rising/falling** |
|  | 9:30 AM |  | | Falling | |  |
|  | 10:30 AM |  | | Falling | |  |
|  | 11:00 AM |  | | Falling | |  |
|  | 11:30 AM |  | | Rising | |  |
|  | 12:00 PM |  | | Rising | |  |
|  | 12:30 PM |  | | Rising | |  |
|  | 1:00 PM |  | | Rising | |  |
| ***Currents*** | 11:45 AM | 7.12 cm/sec | | North | | flood |
|  | 11:55 Am | 9.18 cm/sec | | North | | flood |
| ***Core*** | TIME | Description | | Common | | Rare |
|  | 10:30 AM | 7 cm  H2S smell | | Clay  Mud | | Sand |
| ***Shipping*** |  | Motorboat | | Northbound | | No cargo |
| ***Observations*** | Kettle of Turkey Vultures | Double-crested Cormorants | |  | |  |