**Day in the Life of the Hudson River 10/20/16 Data**

**(Saltfront ~ RM 83)**

**RIVER MILE 58**

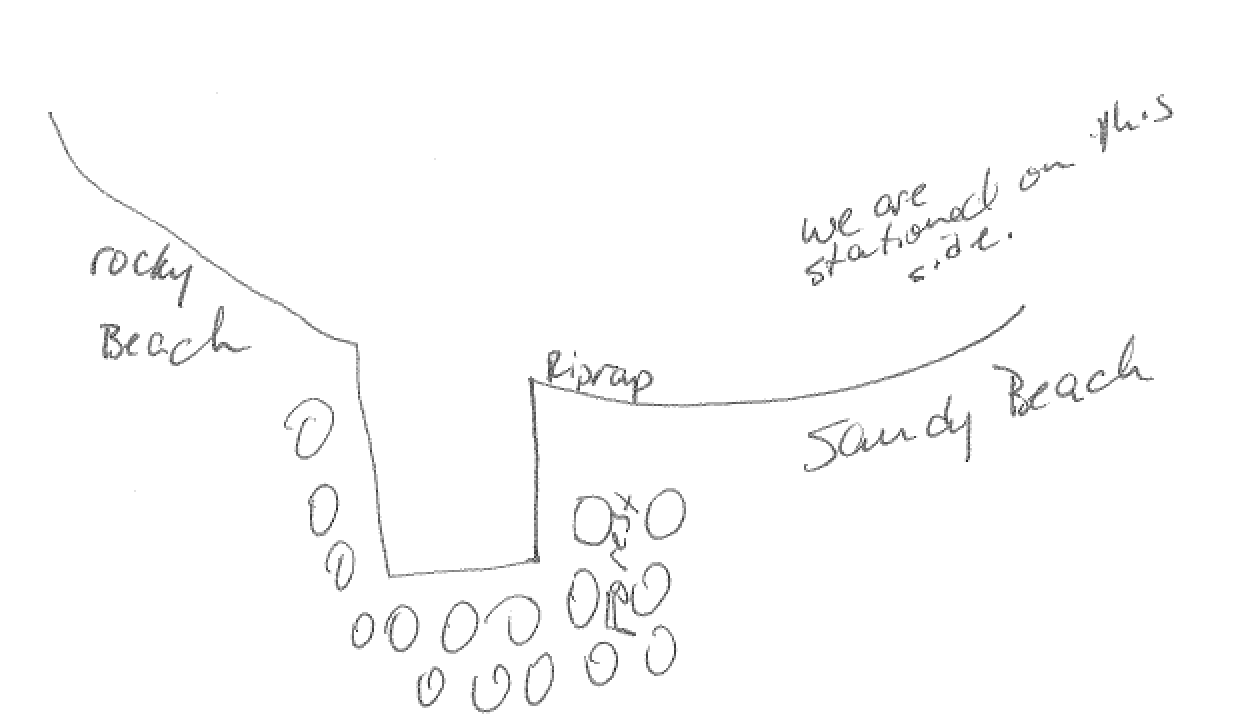
**Plum Point/Kowawese, New Windsor, Orange County, NY**

**Rebecca Foster-Faith, Bishop Dunn Memorial,**

**Jenny Brinker, Museum of the Hudson Highlands,**

**33 seventh graders , 3 adults**

**GPS Latitude 41.463 Longitude -74.015**

****

**Location:** SouthernSandy beach at Kowawese, Plum Point, New Windsor, Oran

ge County, Public Shore, Picnic Area

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

**Surrounding Land Use:** Beach 50%, Forested 50%

**Shoreline:** 75% rocky, 20% muddy, 5% sandy

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

**Plants in area:** < 50%, type not recorded

**Water depth**: NR

**River Bottom** – sandy, rocky

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | ***Reading 1*** | ***Reading 2*** | ***Comments*** | | |
| ***Physical*** |  | |  |  |  | | |
| Air Temperature | 9:34 AM  10:27 AM  11:52 AM | | 16.2°C  20.6  16.7 | 61°F  69  62 |  | | |
| Wind Speed | 9:52 AM  11:54 AM  12:30 PM | | Beaufort #1  Beaufort #3  Beaufort #3 | NR  8 mph  8.8 mph | North | | |
| Cloud Cover | Mostly cloudy | | 51%-75% | By 11:54AM overcast >75% | | | |
| Weather today | No rain | | | | | | |
| Weather recently | Very warm – unusually so – 70 degrees plus | | | | | | |
| ***Water Surface*** | choppy | | | | | | |
| ***Water Temperature*** | 10:25 AM | 14.5°C  58 °F | | 11:45 AM | | 15°C  59 °F | |
| ***Water Surface*** |  |  | |  | |  | |
| ***Turbidity***  *Short sight tube* | 10:02 AM | 60, 70, 40 | | 85 JTUs | | | |
| ***Chemical*** |  |  | |  | |  | |
| DO | TIME | Temp | | DO | | % Sat | |
| DO – drop count test kits  \*expect air bubble | 9:59 AM  10:55 AM  12:10 PM  12:56 PM | 20°C  17°C  17°C  17°C | | 11 ppm  15 ppm\*  9 ppm  12 ppm | | 120%  150 %  85%  125% | |
| pH – test strip | 9:42 AM | 6 | |  | |  | |
| ***Salinity – Quantab*** | ***Time*** | ***Quantab units*** | | ***Chloride*** | | ***Total Salinity*** | |
|  | 10:31AM  12:38 PM  12:06 PM | 9.6 units ?  5.8 units HR  5.4 units HR | | Assume LR  1506 ppm  1281 ppm | | Assume topped out  2721 ppm  2314 ppm | |
| ***Nitrates*** | AM readings | All below detection ‘0’ | |  | |  | |
| ***Fish Catch*** | ***Species*** | ***Count*** | | ***Size of largest*** | | ***Totals*** | |
| **FISH** | Spottail Shiner | 8 | |  | | **DIVERSITY 4**  **TOTALS -18** | |
|  | Herring | 2 | |  | |  | |
|  | Striped Bass | 4 | |  | |  | |
|  | Darter | 4 | |  | |  | |
| **MACRO** | Blue Crab – M | 2 | |  | | **DIVERSITY – 1**  **TOTALS - 2** | |
| ***Tides*** | 9:27 AM  9:45 AM  10:20 AM  11:46 AM  12:27 PM | 39.6  36.6  42.67  85.34  94.5 | | Set point  Falling  Rising  Rising  Rising | |  | |
| ***Currents*** | ***Time*** | ***Cm/30 sec*** | | ***cm/sec*** | | ***Kts*** | ***N/S/F*** |
|  | 9:30 AM  10:23AM  11:40 AM  12:30 PM | 792.5  45.72  396.24  396.27 | | 26.4  1.52  13.2  13.21 | | 0.51  0.03  0.26  0.26 | Flood  Ebb  Flood  Flood |
| ***Shipping Recreational*** | 12:27 PM  12:47 PM | Paddleboat  Sailboat | |  | | Northbound  Southbound | |