**Day in the Life of the Hudson River 10/23/14 Data**

**(Salt Front RM 61.1)**

**RIVER MILE 58a**

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

**Jennifer Merriam, Orange County Community College**

**9 Undergraduate Students, 1 Adult**

**GPS Latitude 41°27’46.49”N Longitude 74°00'42.75"W**

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**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 50%, Forested 50%

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

**Plants in area:** No plants in the water

**Water depth**: sampling in 50 cm depth

**River Bottom** – sandy, rocky

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | ***Reading 1*** | ***Reading 2*** | ***Comments*** | |
| ***Physical*** |  | |  |  |  | |
| Air Temperature | 8:40 AM | | 9.5°C |  |  | |
| Wind Speed | Beaufort #5 | | North |  |  | |
| Cloud Cover | overcast | |  |  | | |
| Weather today | Steady rain | | | | | |
| Weather recently | Steady rain last 12 hrs. - cool temperatures | | | | | |
| ***Water Surface*** | choppy | | | | | |
| ***Water Temperature*** | 8:35 AM | 10.7°C | |  | |  |
|  | 9:14 AM | 10.9 °C | |  | |  |
| ***Water Surface*** | Choppy |  | |  | |  |
| ***Turbidity***  *Short sight tube* | 9:00 AM | 40 JTU | |  | |  |
| ***Chlorophyll*** | 8:50 AM | 1.5 | |  | |  |
| ***Chemical*** |  |  | |  | |  |
| DO | TIME | Temp | | DO | | % Sat |
| DO – drop count test kits | 8:30 AM | 10.7 °C | | 11 | | 100% |
| pH – colormetric | 9:05 AM | 7  7 | |  | |  |
| Salinity – Quantab | 9:14 AM | 98 ppm Cl- | |  | | 177 ppm TS |
| ***Fish Catch***  20 ft. ‘ with ¼ inch mesh | ***Species*** | ***Count*** | | ***Size of largest*** | | ***Totals*** |
| 3 pulls – 9:30 AM | Spottail Shiner | 12 | |  | | **DIVERSITY 10** |
|  | White Perch | 6 | |  | | **TOTALS - 66** |
|  | Channel Catfish | 14 | |  | |  |
|  | Striped Bass | 18 | |  | | ***CPUE = 3.67*** |
|  | Pumpkinseed Sunfish | 9 | |  | | 18 m total used to compute CPUE |
|  | Red-breatsed sunfish | 1 | |  | |  |
|  | Golden Shiner | 1 | |  | |  |
|  | American Eel | 3 | |  | |  |
|  | Herring | 1 | |  | |  |
|  | Catfish (not channel) | 1 | |  | |  |
| ***Tides*** | **Time** | **Height in cm** | | **Rate of change** | | **Rising/falling** |
|  | 8:28 AM |  | |  | | Rising |
|  | 8:58 AM | 5 cm | | 0.166 cm/min | | Rising |
| ***Currents*** | 8:45 AM | 4 cm/sec | | 0.08 kts. | | North/Flood |