**Day in the Life of the Hudson River 10/20/15 Data**

**RIVER MILE 58b**

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

**Janet DeStefano, Vails Gate School**

**33, 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:** Forested 50%,Beach 50%,

**Sampling Shoreline:** 75% sandy, 25% rocky

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

**Plants in area:** none in sampling area

**Shoreline:** pieces of brick, water chestnut seeds on beach, pieces of shells, full small zebra mussels

**River Bottom** – sandy, muddy, rocky

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | ***Reading 1*** | ***Reading 2*** | ***Comments*** | |
| ***Physical*** |  | |  |  |  | |
| Air Temperature | 10:07 AM  11:00 AM | | 14°C  16 | 56°F  60 |  | |
| Wind Speed | 10:00 AM | | Beaufort #3 | Anemometer 2.9m/s | South | |
| Cloud Cover | 26-50% | |  |  | | |
| Weather today | No rain | | | | | |
| Weather recently | Cold, heavy frost | | | | | |
| ***Water Surface*** | choppy | | | | | |
| ***Water Temperature*** | 10:17 AM  11:00 AM | 14°C  17 °C | | 58°F  62 °F | |  |
| ***Water Surface*** | Choppy |  | |  | |  |
| ***Turbidity***  *Long sight tube* | 10:40 AM | 14 cm  16 cm  14 cm | | Average – 15 cm | | Water was sandy/muddy-water had clay on bottom |
| ***Chemical*** |  |  | |  | |  |
| DO  (drop kit) | 10:20 AM  11:20 AM | 14°C  17°C | | 6  10 | | 58% Sat  100% |
| pH – indicator | 10:40 AM  11:00 AM | 6.7  6.6 | |  | |  |
| Salinity – | NR |  | |  | |  |
| ***Fish Catch***  35 ft. ‘ with ¼ inch mesh | ***Species*** | ***Count*** | | ***Size of largest*** | | ***Totals*** |
| **Fish**  11:00 AM | Spottail Shiner | 6 | | 8cm | | **DIV – 7**  **TOTAL - 48** |
|  | White Perch | 3 | | 15 cm | |  |
|  | Herring | 20 | | 8 cm | |  |
|  | Bay Anchovy | 12 | | 5 cm | |  |
|  | Striped Bass | 2 | | 15 cm | |  |
|  | Banded Killi | 4 | | 8 cm | |  |
|  | American eel - elver | 1 | | 13 cm | |  |
| **Macroinvert** | Blue Crab | 2 | | Males | | **DIV – 1**  **TOTALS - 2** |
| ***Tides*** | **Time** | **Height in cm** | | **Rate of change** | | **Rising/falling** |
|  | NR |  | |  | |  |
| ***Currents*** | 10:50 AM |  | |  | | ebb |
| ***Core*** | ***Time*** | ***Description*** | | ***Common*** | | ***Rare*** |
|  | 11:50 AM | 11.5 cm | | Clay  Sand | | Mud  Gravel |
| ***Shipping – commercial*** | 9:30 AM  9:30 AM  9:45 AM  11:00 AM | Barge  Tug boat  Ferry  Tug boat | | Brown  Blue  White  Blue | | North  North  North - light  North |
| ***Shipping – Recreational*** | 11:00 AM  12:30 PM | Speedboat  Sailboat | | White  White | | South  South - light |
| ***Observations*** | Eagle | caterpillar | |  | |  |