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

**RIVER MILE 58.1**

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

**Janet DeStefano & Krista Espinoza, Vails Gate School**

**Jack Caldwell and Black Rock Forest**

**24, 3rd grade students, 12 adults**

**GPS Latitude 41.471 N Longitude -74.016 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 25%,Beach 75%,

**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**: beach and then grass behind

**River Bottom** – sandy, rocky

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | ***Reading 1*** | ***Reading 2*** | ***Comments*** | |
| ***Physical*** |  | |  |  |  | |
| Air Temperature | 9:36 AM  10:09 AM  10:39 AM  11:05 AM | | 16°C  16  16  17 | 60°F  60  60  62 |  | |
| Wind Speed | 10:00 AM | | Beaufort #2 |  |  | |
| Cloud Cover | Mostly cloudy | | 51-75% |  | | |
| Weather today | No rain but very overcast by afternoon | | | | | |
| Weather recently | Warmer than normal and dry | | | | | |
| ***Water Surface*** | choppy | | | | | |
| ***Water Temperature*** | 9:49 AM  10:26 AM  10:52 AM  11:16 AM | 19°C  17 °C  18  18 | |  | |  |
| ***Water Surface*** | Choppy |  | |  | |  |
| ***Turbidity***  *Long sight tube* | 10:07 AM | 13 cm  11 cm | | Average – 12 cm | |  |
| ***Chemical*** |  |  | |  | |  |
| DO  (drop kit) | 10:45AM | 18°C | | 12 | | 130% Sat |
| pH – indicator | 9:20 AM  10:11AM  10:40 AM  11:05 AM | 7.5  7.4  7.6  7.5 | |  | | Average 7.5 |
| Salinity – From Standardized | 11:35 AM | HR quantab 5.8 | | 1506 Cl- | | 2721 Total Salinity |
| ***Fish Catch***  48” X20 ft. with ¼ inch mesh | ***Species*** | ***Count*** | | ***Size of largest*** | | ***Totals*** |
| **Fish**  12:30 PM | Bay Anchovy | 2 | | 5 cm | | **DIV – 6**  **TOTAL - 13** |
| \*reported as Striped Killi | \*Banded Killi | 3 | | 5 cm | |  |
|  | American Shad | 2 | | 8 cm | |  |
|  | Striped Bass | 3 | | 58 cm | |  |
|  | Shiner | 1 | | 5 cm | |  |
|  | Yellow Perch | 2 | | 10 cm | |  |
| ***Tides*** | **Time** | **Height in cm** | | **Rate of change** | | **Rising/falling** |
|  | 9:26 AM  10:04 AM  10:35 AM  11:02 AM | 61 cm  66 cm  69 cm  79 cm | | Start  1.7 cm/min  2.23 cm/min  2.93 cm/min | | Start  Rising  Rising  Rising |
| ***Currents*** | NR |  | |  | |  |
| ***Core*** | ***Time*** | ***Description*** | | ***Common*** | | ***Rare*** |
|  | NR |  | |  | |  |
| ***Shipping – commercial*** | NR |  | |  | |  |
| ***Shipping – Recreational*** | NR |  | |  | |  |
| ***Observations*** | NR |  | |  | |  |