**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 AM10:09 AM10:39 AM11:05 AM | 16°C 161617 | 60°F606062 |  |
| 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 AM10:26 AM10:52 AM11:16 AM | 19°C 17 °C1818 |  |  |
| ***Water Surface*** | Choppy |  |  |  |
| ***Turbidity*** *Long sight tube* | 10:07 AM | 13 cm11 cm | Average – 12 cm  |  |
| ***Chemical*** |  |  |  |  |
| DO (drop kit) | 10:45AM | 18°C | 12 | 130% Sat |
| pH – indicator | 9:20 AM10:11AM10:40 AM11:05 AM | 7.57.47.67.5 |  | 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 AM10:35 AM11:02 AM | 61 cm66 cm69 cm79 cm | Start1.7 cm/min2.23 cm/min2.93 cm/min | StartRisingRisingRising |
| ***Currents*** | NR |  |  |  |
| ***Core***  | ***Time*** | ***Description*** | ***Common*** | ***Rare*** |
|  | NR |  |  |  |
| ***Shipping – commercial***  | NR |  |  |  |
| ***Shipping – Recreational*** | NR |  |  |  |
| ***Observations*** | NR |  |  |  |