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

**RIVER MILE 152.2**

**(Salt Front ~ RM 83)**

**Hudson Shores Park, Watervleit, NY**

**Amy Parks/Stacey Shepard, North Colonie CSD Learning Enrichment Program**

**28 students, 5th grade students and 4 adults**

**Latitude 73\* 41’ 55” W** **Longitude** **42\* 43’ 41” N**

**Location:** Hudson Shores Park, Watervleit, Albany County, NY

**Area:** Rowing dock at park right on the river’s edge

**Surrounding Land Use:** Fishing launch,Rocky with weedy vegetation and a few small shrubs (gravelly)

**Sampling Site**: 10%beach at low tide,70% park/parking area, 20% planted/forested, - across the river land use100% Industrial/Commercial

**Shoreline:** rocky and muddy

**Plants in area:** none in the water

**Water depth**: sharp drop off 8-10 feet out, rocky bottom

**Water:** Calm

**River Bottom**: mixture of sand/mud, small rocks

**Note:** A sinking boat had to be rescued with some large cranes in the afternoon blocking access to the sampling area!

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical -*  Air Temperature** |  **Time** | **°F** | **°C** | **Average** |
|  | 9:00 AM | 61 | 17 |  |
|  | 12:05 PM | 66 | 18 |  |
| **Wind Speed:** | **Time** | **Beaufort** | **Anemometer** | **Direction** |
|  |  | **1** |  |  |
| **Cloud Cover** | **Clear (<25%)** | **Partly Cloudy (26-50%)** | **Mostly Cloudy (51-75%)** | **Overcast (>75%)** |
| Morning  |  |  |  | ✓ |
|  **Precipitation** | **Time** | **Rain** | **Describe**  |  |
| YES  | Starting at 12:15 PM steady rain | ✓ |  |  |
| **Weather last 3 days**  | Last three day nice and unseasonably warm  |
| **Water**  | calm |
| ***Water Temperature*** | **Time** | **ºC** | **ºF** | **Average** |
|  | 9:51 AM | 17 | 61 |  |
|  | 10:30 AM | 16 | 60 |  |
|  | 11:50 AM | 16 | 60 |  |
|  | 12:25 PM | 15 | 59 |  |
| ***Turbidity – long site tube*** | **Reading 1** | **Reading 2** | **Reading 3** | **Average**  |
| 9:45 AM | 95 cm | 122 cm | 122 cm | 116 cm |
| 10:15 AM | 122 cm | 122 cm | 122 cm | 122 cm  |
| 11:45 AM | 122cm | 122 cm | 122 cm | 122 cm |
| 12:20 PM | 109 cm | 100 cm | 110 cm | 106 cm |
| ***Chemical*** | **Time**  | **mg/L** | **Water Temp** | **% Saturation** |
| ***DO (Hach Drop count)***  | 9:51 AM | 10 | 17 | 105% |
|  | 10:30 AM | 9 | 16 | 95% |
| 11:50 AM | 9 | 16 | 95% |
|  | 12:25 PM | 9 | 15 | 95% |
| **pH** – **color match test kit** | **Reading 1** | **Reading 2** | **Reading 3** | **Average** |
| 10:15 AM | 7 | 7.5 | 7 | 7 |
| 10:50 AM | 7.5 | 7.5 | 7.5 | 7.5 |
| 12:00 PM | 7.5 | 7.5 | 7 | 7 |
| 12:45 PM | 7.5 | 7.5 | 7.5 | 7.5 |
| ***Salinity – quantab –*** ***Low Range*** | 9:51 AM 12:20 PM  | 1.2 Units1.2 Units | 33 ppm Chl33 ppm Chl | 60 ppm TS60 ppm TS |
| ***Fish Catch -***  | ***ID*** | ***Total*** | ***Length***  |  |
| 1 Seine | Spot-Tail ShinerBanded killifish | 22 | 2 inch2.5 inch |  |
| 2 Seine | Spot-Tail Shiner | 1 |  |  |
| **TOTALS** | **Abundance 5** | **Diversity 2** |  |  |
| In addition to seining the fisheries team brought some fish to ID – These included:3 Striped Bass2 CatfishYellow PerchWalleyeSmallmouth BassOrange Sucker |
| ***Tides –*** ***\*used an 8 inch homemade tide stick!***  | ***Time*** | ***Water height*** |  | ***Rate of change***  |
| 8:30 AM | 244 cm |  |  |
| 10:01 AM | 244 cm |  |  |
| 10:32 AM | 244 cm |  |  |
|  | 12:00 PM | 243 cm | falling |  |
|  | 12:30 PM | 232 cm | falling | 0.4 cm/min |
| ***Currents -*** | **cm/30 sec** | **Cm/sec** | **Knots** | **Flood/Edd** |  |
| 9:55 AM  | 104.8 | 3.5cm/s | 0.07 kts | S | E |
| 10:37 AM | 238 | 7.9cm/s | 0.15 | S | E |
| 12:07 PM | 237.5 | 7.9cm/s | 0.15 | S | E |