**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 Units  1.2 Units | 33 ppm Chl  33 ppm Chl | 60 ppm TS  60 ppm TS |
| ***Fish Catch -*** | ***ID*** | | ***Total*** | ***Length*** |  |
| 1 Seine | Spot-Tail Shiner  Banded killifish | | 2  2 | 2 inch  2.5 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 Bass  2 Catfish  Yellow Perch  Walleye  Smallmouth Bass  Orange 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 |