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

**RIVER MILE 152.2**

**Hudson Shores Park, Watervleit, NY**

**Amy Parks/Stacey Shepard, North Colonie CSD**

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

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

|  |  |
| --- | --- |
| **Banded Killifish Identification** | **Dissolved Oxygen Sampling** |

**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** |
|  | 10:09 AM | | 52 | 11 |  |
|  | 10:40 AM | | 53 | 12 |  |
|  | 12:31 PM | | 58 | 14 |  |
| **Wind Speed:** | **Time** | | **Beaufort** | **Anemometer** | **Direction** |
|  |  | |  |  |  |
| **Cloud Cover** | **Clear (<25%)** | | **Partly Cloudy (26-50%)** | **Mostly Cloudy (51-75%)** | **Overcast (>75%)** |
| Morning |  | |  |  | ✓ |
| Afternoon |  | | ✓ |  |  |
| **Precipitation** | **Time** | | **Rain** | **Describe** |  |
|  | Morning | | ✓ |  |  |
| **Weather last 3 days** | Last three day windy and cool. | | | | |
| ***Water Temperature*** | **Time** | | **ºC** | **ºF** | **Average** |
|  | 10:34 am | | 15 | 60 |  |
|  | 12;04 PM | | 14 | 57 |  |
|  | 12:22 PM | | 14 | 57 |  |
| ***Turbidity – long site tube*** | **Reading 1** | | **Reading 2** | **Reading 3** | **Average** |
| 10:02AM | 108.5 cm | |  |  |  |
| 11:58 am | 111.5 cm | |  |  |  |
| 12:20 pm | 112.5 cm | |  |  |  |
| ***Chemical*** | **Time** | | **mg/L** | **Water Temp** | **% Saturation** |
| ***DO (Hach Drop count)*** | 10:34 am | | 17\* | 15 | 160% |
| ***\* must be an error – too high*** | 12;04 PM | | 16\* | 14 | 152% |
| 12:22 PM | | 19\* | 14 | 170% |
| **pH** – color match test kit | 10:15 AM | | 7.0 | 7.5 |  |
|  | 12:01 PM | | 7.5 | 7.4 |  |
|  | 12:20 PM | | 7.4 | 6.9 |  |
|  |  | |  |  |  |
| ***Salinity - quantab*** | 10:49 AM  12:04 PM  12:30 PM | | 28 ppm  28 ppm  28 ppm | Chl | 51 TS  51  51 |
| ***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 -***  ***\*calculate by: change in elevation/change in time*** | ***Time*** | | ***Water height*** |  | ***\*Rate of change*** |
| 8:15 AM | | 155 cm |  |  |
| 9:50 AM | | 180 cm | falling |  |
| 10:40 am | | 170 cm |  |  |
|  | 11:53 am | | 287.02 cm | Rising\*\* |  |
| In the afternoon at 12:20 PM in a different location students measured the water’s edge and noted it had gone down 420 cm from the high tide line. | | | | |
| ***Currents -*** | **cm/30 sec** | **Cm/sec** | **Knots** | **Flood/Edd** |  |
| 9:50 AM | 88 | 2.9 | .06 kts | Flood |  |
| 12:35 PM | 78 | 2.7 | .05 | Ebb |  |