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

**(Salt Front ~RM 83)**

**RIVER MILE 78**

**Quiet Cove, Poughkeepsie just north of Marist College**

**Carolyn Klocker and 3 other employees of Cornell Cooperative Extension of Duchess County, plus 4 youth employees from Poughkeepsie HS as part of NCLI**

**Robert Adams & and Wes from the DEC Fisheries Staff (2)**

**Skip Hoover, G. W. Krieger Elementary School (104) 5th grade students,**

**41.44°N and 73.56°W**

**Location:** Quiet Cove, Poughkeepsie, Dutchess County

**Area:** Grassy area with parking lot, beach like waterfront

**Surrounding Land Use:** Picnics, boating and fishing – 60% is beach with rip rap banks, 40% previous industrial site

**Sampling Site:** An old industrial area that has been turned into a park. Used by people for picnics, fishing. Shoreline rocky, banks altered with rip rap and wooden bulkhead, boat launch for kayaks and canoes

**Plants in area: none visible**

**Debris in area:** remnants of industrial site and some papers in the water

**Water depth**: 160 cm in the area with concrete embankments

**River Bottom** – muddy in beach area

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | ***Temperature*** | | ***Wind & Direction*** | ***Precipitation & Clouds*** |
| ***Physical*** |  | |  | |  |  |
| Air Temperature | 9:40AM | | 58 °F  14.4 °C | | Beaufort 4 /N | Partial cloud cover |
|  | 10:15 AM | | 58 °F  14.4 °C | |  | Partial cover/breaks of sun |
|  | 12:55 PM | | 64°F  17.8 °C | | Beaufort 2 /S | Light clouds |
| Cloud Cover | Clouds & sun | | | |  |  |
| Weather today | No precipitation | | | | | |
| Weather recently | The weather for the past three days has been mainly sunny temps. | | | | | |
| ***Water Temperature*** | 9:30 AM  10:15 AM  10:50 AM  12:15 PM  12:48 PM | 12°C  15  18  20  19 | | 53.6 °F  59  64.4  68  66 | |  |
| ***Turbidity – long site tube*** | 9:30 AM  10:10AM  12:15 PM  12:40 PM  1:00 PM | 15 cm  8 cm  30 cm  30 cm  28 cm | | 17 cm  11cm  26 cm  31 cm  25 cm | | 16 cm Avg  9.5 cm Avg  28 cm Avg  30.5 cm Avg  26.5 cm Avg |
| ***Chemical*** | **TIME** | **DO** | | **Temp** | | **%Saturation** |
| Salifert DO kit | 9:30 AM | NR | | 12 °C | | NR |
|  | 10:15 AM | NR | | 15°C | | NR |
|  | 10:50 AM | 12 ppm | | 18°C | | 115% |
|  | 12:15 PM | 12 ppm | | 20°C | | 130 % |
|  | 12:48 PM | 12 ppm | | 19°C | | 123% |
| **(LaMotte Estuary kit)** | **Time** | **PH** | |  | |  |
|  | 9:30 AM | 8 | |  | |  |
| ***Salinity - quantab*** | 1:15 PM | 82 ppm Cl- | | 148 ppm TS | |  |
| ***Fish Catch-*** 25 ft. – 5 pulls | ***Number Caught*** | ***Species*** | | ***Length of largest*** | | ***Seine -* beach seine** |
| ***9:00-12:30 AM*** | 3 | Striped Bass | | 10 cm | | **FISH DIV – 5**  **TOTALS - 25** |
|  | 10 | Spottail Shiner | | 10 cm | |  |
|  | 5 | Pumpkinseed | | 8 cm | |  |
|  | 2 | Smallmouth Bass | | 4.5 cm | |  |
|  | 1 | American Shad | | 9 cm | |  |
| **Macroinvert** | 1 | Bluecrab | | 1 cm | | ***DIV - 1***  ***TOTAL - 1*** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Tides –*** | ***Time*** | ***Top of water to top of pier*** | ***water depth*** | **Rising/Falling** |
|  | 9:40 AM | 2.7 m | 4 meters | set |
|  | 10:15 AM | 3 m | 2.3 meters | Falling |
|  | 10:55 AM | 3 m | 3 meters | unchanged |
|  | 12:20 PM | 2.7 m | NR | flood |
|  | 12:55 PM | 2.1 m |  | flood |
| ***Currents*** | ***TIME*** | ***sec/600 cm*** | ***Cm/sec*** | ***Direction*** |
|  | 9:40 AM |  |  | ebb |
|  | 10:15 AM | 678/600 | 1.13 cm/sec | ebb |
|  | 10:55 AM |  |  | Still |
|  | 12:55 PM | 32/600 | 0.05 cm/sec | flood |
| ***Traffic*** | 9:40 AM | Freight train |  | Southbound |
|  | 1:08 PM | Large Ship UBC cement | red | Southbound |