**Day in the Life of the Hudson River 10/4/13 Data**

**(Salt Front RM 69.3)**

**RIVER MILE 78**

**Quiet Cove, Poughkeepsie**

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

**Robert Adams & and another DEC Fisheries Staff**

**Skip Hoover, G. W. Krieger Elementary School (27) 4th & (26) 5th grade students,**

**41.44°N and 73.56°W**

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**Inspiration from Quiet Cove Waters**

 **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*** | ***Reading 1*** | ***Wind Speed*** | ***Precipitation & Clouds*** |
| ***Physical***  |   |  |  |  |
| Air Temperature | 10:14 AM | 56°F°C | 1-3 mph N | heavy cloud cover |
|  | 10:38 AM | 56°F°C | 4-6 mph N | heavy cloud cover |
|  | 11:34AM | 54°F°C | 7-10 mph N | heavy cloud cover |
|  | 1:01 PM | 56°F°C | 7-10 mph N | heavy cloud cover |
| Wind Speed |  |  |  |  |
| Cloud Cover | cloudy |  |  |
| Weather today | Cool and cloudy |
| Weather recently | Mostly sunny temps in the high 60s |
| ***Water Description*** |  |  |  |  |
| ***Water Temperature*** | 1:15 PM | 17°C  |  |  |
| ***Turbidity – long site tube*** | 10:00AM10:30 AM11:00 AM12:30 PM | 30 cm31 cm34 cm24 cm | 32 cm34 cm23 cm | 30 cm Avg31.5 cm Avg34 cm Avg23.5 cm Avg |
| ***Chlorophyll*** |  |  |  |  |
| ***Chemical*** | **TIME** | **DO (LaMotte elementary kit tablets)** | **Temp** | **%Saturation** |
|  | 9:51 AM | <4 ppm | 16 °C  | 37% saturated |
|  | 10:30 AM | <4 ppm | 16 °C  | 37% saturated |
|  | 11:10 AM | <2 ppm | 16 °C  | 12% saturated |
|  | 12:35 PM | <4 ppm | 22 °C  | 37% saturated |
| **(LaMotte kit color match )** | **Time** | **PH** | **NITRATES** | **PHOSPHATES** |
|  | 9:30 AM | 8 | <5 ppm | <1 ppm |
|  | 10:25 AM | 8 | <5 ppm | 2 ppm |
|  | 11:05 AM | 8 | <5 ppm | 2 ppm |
|  | 11:40 AM | 7.5 | <5 ppm | <2 ppm |
| Salinity |  |  |  |  |
| ***Fish Catch-*** 25 ft. – 3 pulls  | ***Number Caught*** | ***Species*** | ***Length of largest*** | ***Seine -* beach seine** |
| ***9:30-11:00 AM*** | 2 | Banded Killi  | 5 cm |  |
|  | 1 | Spottail Shiner |  |  |
| ***Total seine count*** | ***3*** | ***Total diversity - 2*** |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Tides –***  | ***Time*** | ***Top of water to top of pier***  | ***water depth*** | **Rising/Falling** |
|  | 10:00 AM | 79 cm | 215 cm |  |
|  | 10:36 AM | 35 cm  | 185 cm | falling |
|  | 11:21 AM | 45 cm | 185 cm | falling |
|  | 12:44 AM | 40 cm | 198 cm  | Nearly unchanged |
| ***Currents*** | ***TIME*** |  ***Time over 15 meters*** | ***Cm/sec*** | ***Direction*** |
|  | 10:00 AM | 52 secs | 3.47 cm/sec | Ebb |
|  | 10:36 AM | 47 secs  | 3.13 cm/sec | Ebb  |
|  | 11:21 AM | 67 secs | 4.46 cm/sec | Ebb |
|  | 12:44 AM | 143 secs | 9.53 cm/sec | Flood |
| ***Traffic*** | 9:55 AM | Sailboat |  | Southbound |
|  | 10:44 AM | Speedboat |  | Northbound |
| ***Sediment Core – student descriptions*** | The mud was fun to play with. It smells like clay dough and smells like iron,  | The mud feels squishy with little rocks. It smelled like mold. | . |