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

**(Salt Front ~ RM 83)**

**RIVER MILE 61.2 E**

**Beacon Landing Park, City of Beacon, Dutchess County**

**Nancy Rypkema and total of 16 adults/teachers - Valley Central Middle School,**

**7th & 8th graders (85 students and 10 adults)**

**Latitude 41.508531, Longitude -73.98634**

Location: Beacon Landing Waterfront Park, Beacon, Dutchess County NY

Area: Park area near the Beacon train station – center at the park with stations all around it and fish in the cove at the end of the park - grassy lawns, forested around edges, parking lot to the side. Children’s play area

Surrounding Land Use: Urban/residential 100% (Parkland)

Shoreline: A bridge, train station, covered in vegetation trees, concrete debris, dock

Sampling Site: beach, covered in vegetation, banks altered, rip rap

Plants in the water: No plants

Water depth: <1 m

Bottom Surface: muddy

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *ITEM* | *Time* | *Reading 1* | *Reading* | | *Comments* | | |
| *Physical* |  |  |  | |  | | |
| Air Temperature | 9:20 AM  12:06 PM | 17.2°C  19.3 | 61.7°F  66.8 | |  | | |
| Wind Speed | Beaufort | #2 | 2.3 kts | | NW | | |
| Cloud Cover | Mostly cloudy | 56-75% |  | |  | | |
| Weather today | Small amount of precipitation | | | | | | |
| Weather recently | Warm and dry | | | | | | |
| *Water Surface* | Choppy | |  | | | | |
| *Water Temperature* | Time | Degrees °C | |  | |  | | |
|  | 10:13 AM  11:15 AM  12:06 PM | 20°C  20  21 | | 68°F  68  70 | |  | | |
| *Turbidity- long sight tube* | 10:15 AM | 24.8 cm | |  | |  | | |
| *Chemical* | *Time* | *DO* | | *Temp* | | *% saturation* | | |
| DO  (drop kit) | 10:00 AM | 9 ppm | | 20°C | | 95% | | |
| pH –  litmus paper | 10:15 AM | *7*  *7*  *7.5* | |  | | 7.2 | | |
| *Nitrates* | 11:30 AM | 20 ppm X 3 | | ?? | |  | | |
| *Salinity –QTs- Time* | *Chloride reading* | *Quantab Average* | |  | | *Total Salinity conversion* | | |
| 9:00-12:00 PM  Quantabs | 1390 ppm Cl-  1390 ppm  1390 ppm |  | |  | | 2511 ppm TS  2511 ppm  2511 ppm | | |
| *Fish Catch*  *seine 8X4feet* | *Number Caught* | *Species* | | *Length* | | ***Fish******DIV 6***  ***Total 24*** | | |
| 4X6 ft. pull | 14 | Spottail shiner | | 13 cm | |  | | |
|  | 1 | Common Carp | | 6.5 cm | |  | | |
|  | 2 | Killifish | | 2.5 cm | |  | | |
|  | 1 | Bay Anchovy | | 5 cm | |  | | |
|  | 2 | Striped Bass | | 15 cm | |  | | |
|  | 2 | Golden Shiner | | 7.6 cm | |  | | |
|  | 1 | Black Crappie | | 5 cm | |  | | |
|  | 1 | Yellow Perch | | NR | |  | | |
| ***Macroinvert*** | 2 | Mud Crab | |  | | ***Macro DIV 2***  ***Total 9*** | | |
|  | 6 | Blue Crab | |  | |  | | |
|  |  |  | |  | |  | | |
| Sediment Core | NR |  | |  | |  | | |
| *Tides* | *Time* | *Tide Stick* | | *Flood/Ebb Still* | | *Rate of change* | | |
|  | 9:53AM  10:04 AM  10:30 AM  10:56 AM  11:27 AM  12:10 PM | 18 cm  20 cm  25cm  35 cm  52 cm  70 cm | | Rising  Rising  Rising  Rising  Rising  Rising | |  | | |
| *Currents* | *Time* | *Cm/30 secs* | | *Cm/sec* | | *knots* | *Ebb Flood* | |
|  | 10:00 AM  10:45 AM  11:15 AM  11:45 AM  12:30 PM | 260  30  535  290  250 | | 4.3  0.5  8.9  4.9  4.16 | | 0.836 | N | |