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

RIVER MILE 61.1 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°30’ 22” N - Longitude 73°59’ 07” W

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 except water chestnut

Water depth: <1 m

Bottom Surface: sandy, silty

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *ITEM* | *Time* | *Reading 1* | *Reading*  | *Comments* |
| *Physical*  |   |  |  |  |
| Air Temperature | 9:25 AM | 13°C | 54.7°F |  |
| Wind Speed | Beaufort | #1-3 | SE |  |
| Cloud Cover | 26-50% |  |  |  |
| Weather today | No rain |
| Weather recently | Cold, cloudy, windy  |
| *Water Surface* | Calm |  |
| *Water Temperature* | Time | Degrees °C |   |  |
|  | 9:35 AM10:12 AM10:45 AM11:40 AM | 15°C15.615.616.1 | 59°F606061 |  |
| *Turbidity- long sight tube* | 9:48 AM | 31 cm3731.7 |  | Average 33.2 cm |
| *Long sight tube* | 10:39 AM  | 35 cm28 cm31 cm |  | 32 cm |
| *Chlorophyll* | 10:50 AM | 1.0 |  |  |
| *Chemical* | *Time* | *DO* | *Temp* | *% saturation* |
| DO (drop kit) | 10:00 AM | 10 ppm | 15.6°C | 100% |
| pH – meter | 11;20 AM | *8.,76**8.95**8.72* |  | *Probe Average*8.81 |
| *Nitrates* | 11:30 AM | 20 ppm X 3 | ?? |  |
| *Salinity –QTs- Time* | *Quantab reading* | *Quantab Average* | *Chloride reading* | *Total Salinity conversion* |
| 11:00 AM | 5.6 ppt4.24.2 |  | 4.3 ppm Cl- | 777 ppm T.S. |
| *Fish Catch**seine 8X4feet* | *Number Caught* | *Species* | *Length* | ***DIV 3******Total 34*** |
| 20 ft. pull20 seines | 30 | Spottail shiner | 7 cm |  |
|  | 3 | Banded Killifish | 7 cm |  |
|  | 1 | American Eel | 13 cm |  |
| Sediment Core  | NR  |  |  |  |
| *Tides* | *Time* | *Tide Stick* | *Flood/Ebb Still* | *Rate of change* |
|  | 9:48 AM9:56 AM10:03 AM10:17 AM10:34 AM10:49 Am | 12 cm11 cm11cm10 cm6.5 cm0 | StartFallingUnchangedFallingFallingFalling | At 10:49 AM it had reached the bottom of the stick  |
| *Currents* | *Time* | *Cm/30 secs* | *Cm/sec* | *knots* | *Ebb Flood* |
|  | 9:48 AM10:05 AM10:30 AM11:00 AM | 10680206137.16 | 3.532.676.854.07 | 0.0690.050.130.08 | N – FN – FN- FN- F |
|  | 11:20 AM | 100 | 1.6 | 0.3 | Flood |
|  | 11:50 AM | 100 | 1.6 | 0.3 | Flood |
| *Shipping* | Insufficient information |