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 AM  10:12 AM  10:45 AM  11:40 AM | 15°C  15.6  15.6  16.1 | | 59°F  60  60  61 | |  | | |
| *Turbidity- long sight tube* | 9:48 AM | 31 cm  37  31.7 | |  | | Average 33.2 cm | | |
| *Long sight tube* | 10:39 AM | 35 cm  28 cm  31 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 ppt  4.2  4.2 |  | | 4.3 ppm Cl- | | 777 ppm T.S. | | |
| *Fish Catch*  *seine 8X4feet* | *Number Caught* | *Species* | | *Length* | | ***DIV 3***  ***Total 34*** | | |
| 20 ft. pull  20 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 AM  9:56 AM  10:03 AM  10:17 AM  10:34 AM  10:49 Am | 12 cm  11 cm  11cm  10 cm  6.5 cm  0 | | Start  Falling  Unchanged  Falling  Falling  Falling | | At 10:49 AM it had reached the bottom of the stick | | |
| *Currents* | *Time* | *Cm/30 secs* | | *Cm/sec* | | *knots* | *Ebb Flood* | |
|  | 9:48 AM  10:05 AM  10:30 AM  11:00 AM | 106  80  206  137.16 | | 3.53  2.67  6.85  4.07 | | 0.069  0.05  0.13  0.08 | N – F  N – F  N- F  N- F | |
|  | 11:20 AM | 100 | | 1.6 | | 0.3 | Flood | |
|  | 11:50 AM | 100 | | 1.6 | | 0.3 | Flood | |
| *Shipping* | Insufficient information | | | | | | | |