**Day in the Life of the Hudson River 10/29/14 Data**

**(Salt Front RM 65.3)**

**RIVER MILE 61E**

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

**Katie, Scenic Hudson**

**Leah Horn, Haldane Middle School, 8h grade (35), 3 adults**

**Latitude 41°30’ Longitude 73°55’**

**Location:** Long Dock Park, Beacon, Dutchess County NY

**Area:** Long Dock Park - A former brownfield now public park used for fishing, launching kayaks, picnics, fieldtrips, enjoying scenic views of the Hudson River, Hudson Highlands and Hudson Valley. Most of the shoreline on the south side is lined with trees.

**Surrounding Land Use:** 25% forest, 15% beach, 60% other

**Sampling Site:** beach area rocky with lots of sand, water chestnut and grass

**Plants in water:** water chestnut

**Bottom Surface:** muddy, rocky bottom

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | ***Reading 1*** | ***Reading*** | | ***Comments*** |
| ***Physical*** |  |  |  | |  |
| Air Temperature | 9:40AM  10:46AM  12:03PM  12:45 PM | 16°C  18  21  21 |  | |  |
| Wind Speed | 9:45 AM  10:47AM  12:10 PM  12:50 PM | Beaufort#2  Beaufort#1  Beaufort#3  Beaufort#3 | South  South  West  Southwest | | Overcast 75%  Overcast 75%  Overcast 75%  Overcast 80% |
| Cloud Cover | overcast |  |  | |  |
| Weather today | Some light rain throughout the day | | | | |
| Weather recently | Cool and fall like – rain off and on | | | | |
| ***water*** | Choppy, rough and cold | | |  | |
| ***Water Temperature*** | **Time** | **Test one** | |  |  |
|  | 9:40AM  10:20 AM  11:40 AM  12:24 PM | 15°C  15.6  16  16.3 | |  |  |
| ***Turbidity*** | **Time** | **NTU/cm** | | **NTU/cm** | **NTU/cm** |
| ***long site tube converted NTU to cm*** | 9:26 AM  10:24AM  11:42 AM  12:23 PM | 16/39  11/49  10/52  14/42 | | 9/55  9/55  16/39  13/44.5 | 8/58.5  5/58.5  13/44.5  14/42 |
| ***Chemical*** | ***Time*** | ***DO*** | | ***Temp*** | ***Saturation*** |
| DO  (drop kit) | 9:40 AM  10:33 AM  11:40 AM  12:20 PM | 10 ppm  9 ppm  11 ppm  8 ppm | | 16°C  15.7  15  16 | 101%  95% Saturation  110%  95 |
| pH –  ***color match(Hach)*** | 9:40 AM  10:42 AM  11:42 AM  12:23 PM | \*  \*  7.4  7.4 | |  | \*kit put together incorrectly |
| Salinity – Quantab LR |  | 1.9 QT | | 53 ppm Chl- | 95.7 Total Salinity |
| ***Fish Catch***  *seine 30 feet* | ***Number Caught*** | ***Species*** | | ***Size of largest*** |  |
|  | 8 | Striped Bass | | 155 mm | **Diversity -6** |
|  | 19 | Alewife | | 100 mm | **Total Catch -58** |
|  | 10 | Blueback Herring | | 105 mm |  |
|  | 10 | Spottail Shiner | | 85 mm |  |
|  | 5 | White Perch | | 80 mm |  |
|  | 6 | Banded Killifish | | 70 mm |  |
| ***Tides*** | 9.47 AM  10:44 AM  12:03 PM  12:43 PM | 37 inches  36 inches  42 inches  21.5 inches\* | | **Did not use a tide stick, used two flags and measured the distance from the waters edge to the flag on shore.**  **\*Low tide on charts was at 10:36 AM for this area – this measure is a bit puzzling?** | |
| ***Currents – kts=***  ***Speed/51.4*** | 9:31 AM  10:32 AM  11:55 AM  12:34 PM | 0.4 kts - Flood  0.38 kts-Flood  0 kts - still  0.23 kts-Flood | | Calculated cm/sec from kts submitted | 20.56 cm/sec  19.53 cm/sec  0 cm/sec – still  11.82 cm/sec |
| ***Sediment Core*** | **Length - describe** | **Rare** | | **Common** | **Abundant** |
| ***9:45 AM*** | Not recorded | Sand | | Pebbles, gravel | Mud |
| ***10:30 AM*** |  | Mud | | Sand, Gravel, Pebbles |  |
| ***11:45 AM*** |  | Clay  Plant material | | Mud | Sand,  Gravel,  Pebbles |
| ***12:42 PM*** |  | Clay,  Sand | |  | Mud,  Gravel,  Pebbles |
| ***Shipping*** | No boat traffic noted | |  | |  |
| ***Observation:***  water chestnut seeds, rocks, sand, grass and shells.  Also see birds and squirrels | | | | | |