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

**RIVER MILE 61**

**(Saltfront Estimated RM 83)**

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

**Scenic Hudson**

**Heidi Gesson, Haldane Middle School, 7h grade (56), 9 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 | 9:50 AM  10:20 AM  10:55 AM  12:00 PM  12:30 PM | 15°C  16  17  19  19 |  | |  | |
| Wind Speed | 9:50 AM  10:20 AM  10:55 AM  12:00 PM  12:30 PM | 0-4  10-13  0-10  8  5 | km/hr  km/hr  km/hr  km/hr  km/hr | |  | |
| Cloud Cover | NR |  |  | |  | |
| Weather today | NR | | | | | |
| Weather recently | Warm and dry | | | | | |
| ***water*** | NR | | |  | | |
| ***Water Temp.*** | **Time** | **Test one** | |  | |  |
|  | 9:50 AM  10:30 AM  11:05 AM  12:10 PM  12:50 PM | 19°C  19  19  19.5  19.5 | |  | |  |
| ***Turbidity*** | **Time** | **NTU** | | **cm** | |  |
| ***long site tube converted NTU to cm*** | 9:50 AM  10:27 AM  11:01 AM  12:15 PM  12:40 PM | 28.5  14  30  35  40 | |  | |  |
| ***Chemical*** | ***Time*** | ***DO*** | | ***Temp*** | | ***Saturation*** |
| DO  (drop kit) | 9:50 AM  10:30 AM  11:05 AM  12:10 PM  12:50 PM | 7.5 ppm  7 ppm  8.5 ppm  8.5 ppm  8.5 ppm | | 19°C  19  19  19.5  19.5 | | 80%  75%  90%  92%  68% |
| pH –  ***color match(Hach)*** | 9:50 AM  10:30 AM  11:05 AM  12:10 PM  12:50 PM | 7.35  7.3  7.5  7.6  8.0 | |  | |  |
| **Salinity** | **Time** | **Quantab Reading** | | **Chloride** | | **Total Salinity** |
| Quantab LR & HR | 9:50 AM  10:30 AM  11:05 AM  12:10 PM  12:50 PM | LR topped out  HR 5.4  LR topped out  HR 5.6  LR topped out | | NA  1384 ppm  NR  1404 ppm  NR | | 2500 ppm  2536 ppm |
| ***Fish Catch***  *seine 30 feet* | ***Number Caught*** | ***Species*** | | ***Size of largest*** | | ***10 seines completed*** |
|  | 1 | Banded Killifish | | 4 cm | | **Diversity -7** |
|  | 2 | American Shad | | 7 cm | | **Total Catch -16** |
|  | 7 | Alewife | | 7 cm | |  |
|  | 1 | Menhaden | | 13 cm | |  |
|  | 2 | Pumpkinseed | | 12 cm | |  |
|  | 1 | Bluegill | | 10 cm | |  |
|  | 2 | Bluefish | | 22 cm | |  |
| ***Tides*** | ***Time*** | ***Repeat measure/cm*** | |  | | ***Average*** |
|  | 9:50 AM  10:20 AM  10:55 AM  12:00 PM  12:30 PM | 13, 12, 13 cm  15, 20, 23 cm  20, 27, 44 cm  70, 80, 85 cm  87, 95,100 cm | |  | | **12.6 cm**  **19.3**  **30.3**  **78.3**  **94** |
| ***Currents*** | ***Time*** | ***#1 cm/sec*** | | ***#2 cm/sec*** | | ***Average*** |
|  | 9:50 AM  10:20 AM  10:55 AM  12:00 PM  12:30 PM | 35.09 cm  5.5 cm  5 cm  40.79 cm  11.2 cm | | 22.28 cm  23.3 cm  5.3 cm  1 cm  1.76 cm | | 28.69 cm/sec  14.4 cm/sec  5.2 cm/sec  20.9 cm/sec  6.48 cm/sec |