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

**(Saltfront ~RM 83)**

**RIVER MILE 100.5**

**South Cove at Falling Waters, Glasco, Ulster County**

**Brian Robinson, Saugerties High School, 13 AP Env. Sci. 11th-12th grade students and 2 adults**

**N 42. 046752, W-73.939081**

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**Location:** Falling Waters protected area, South Cove, Glasco, Ulster County

**Area:** Forested, cove with a shallow beach

**Surrounding Land Use:** 100% forested

**Sampling Site:** Parkland, beach covered in vegetation, concrete bulkhead

**Shoreline:** Sandy, muddy, rocky

**Depth:** could not see bottom

**Plants in area:** water is 40% covered with water chestnut

**Site Observations:** Old brick pieces on the ground names on bricks are Wasburn, Lent, …Bury, lots of old washed up logs, seaweed

**Bottom:** Sandy, muddy

**Water:** Choppy

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | ***Readings*** |  |  |
| ***Physical*** |   |  |  |  |
| Air Temperature | 10:45 AM | 17°C | 62 °F |  |
| Wind Speed | 10:42 AM | Beaufort 3  |  |  |
| Cloud Cover |  | Overcast  | >75% |  |
| Weather today | Cloudy |  | ***Water surface*** |  |
| Weather recently | Warm and dry  |
| ***Water Temperature*** | 10:45 AM | 17.6°C | 63.7 °F | 2 ft. depth,  |
| ***Turbidity*** | NR |  |  |  |
| ***Chemical*** | **Time**  | **ppm** | **Temp** | **% Sat** |
| DO Drop count kit  | 11:10 AM | 17.6 ppm\* | 20°C | \*Too high – must have been an air bubble |
| pHcolor match test | 10:45 AM | 8  |  |  |
| Salinity –titration strips | 10:45 AM | 1.2 strip | 32 ppm Chl | 58 ppm TS |
| Alkalinity | 10:45 AM | 80 ppm |  |  |
| Nitrates | 10:51 AM | 8.8 mg/L |  |  |
| Phosphates | 11:00 AM  | 2 mg/L |  |  |
| ***Fish Catch – 30 ft.*** | Species | # caught | Length of largest | TOTALS |
| 11:00 AM  | Blueback herring | 1 | 45 mm | **DIV 6****TOTAL 9** |
|  | Spottail Shiner | 1 | 40 mm |  |
|  | White Perch  | 1 | 90 mm |  |
|  | Bluegill Sunfish | 2 | 80 mm |  |
|  | Pumpkinseed Sunfish | 3 | 130 mm |  |
|  | Tesselated Darter | 1 | 60 mm |  |
| ***Tides - water depth***  | ***Time*** | ***Distance to water***  | ***Rate of change*** | ***Flood or Ebb***  |
|  | 10:44 AM11:10 AM | 13 cm6 cm | 7 cm drop  | Ebb |
| ***Currents*** | ***Time*** | ***Cm/30 sec*** | ***Cm/sec*** | ***Knots &******Ebb/Flood*** |
|  | NR |  |  |  |
| ***Commercial Shipping***  | 11:00 AM | UBC Ship |  | Southbound |
|  | 11:10 AM | Barge & Tug |  | Northbound |
| ***Observations***  | Beach area with rocks scattered around and lots of chestnut seeds on the shoreline. Pair of mallards |