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

**RIVER MILE 100**

**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. 049457 , W-73.939081**

**Location:** Falling Waters South Cove

**Area:** Forested

**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

**Water:** Choppy

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | ***Readings*** |  |  |
| ***Physical*** |  | |  |  |  |
| Air Temperature | 10:47 AM | | 12.6°C | 54 °F |  |
| Wind Speed | 10:42 AM | | Beaufort 3 |  |  |
| Cloud Cover | 10:45 AM | | Mostly Cloudy | 51-75% |  |
| Weather today | Clear no rain, warm and windy | |  | ***Water surface*** |  |
| Weather recently | No rain for past 3 days. Sunday 10/18 unusually cold and windy. Monday 10/19 seasonal temperatures but still a bit windy. | | | | |
| ***Water Temperature*** | 10:51 AM  11:03 AM | 12°C  12°C | | 54 °F  54 °F | 1 ft. depth, |
| ***Turbidity*** | 10:51 AM | 40 cm  41 cm  38 cm | | 39.6 cm average | Water was very cloudy, with small black particles |
| ***Chemical*** | **Time** | **ppm** | | **Temp** | **% Sat** |
| DO  Drop count kit | 11:00 AM | 9 | | 12.2°C | 80% |
| pH  color match test | 10:53 AM  11:00 AM | 8  8 | |  |  |
| Salinity –titration strips | 11:57 AM  12:08 PM  12:14 PM | 1.6 strip  1.4  1.4 | | 34 ppm Chl | 61 ppm TS |
| ***Fish Catch*** | Time | Species | | # caught | Size |
|  | 11:15 AM | Blueback herring | | 5 | Y-o-y 4-5 cm |
| ***Tides - water depth*** | ***Time*** | ***Distance to water*** | | ***Rate of change*** | ***Flood or Ebb*** |
|  | 11:06 AM  11:08 AM  11:10 AM  11:11 AM 11:15 AM  11:18 AM | 15 cm  14 cm  13 cm  13 cm  11 cm  11 cm | | ebbing |  |
| ***Currents*** | ***Time*** | ***Cm/30 sec*** | | ***Cm/sec*** | ***Knots &***  ***Ebb/Flood*** |
|  | 10:50 AM | 60 cm | | 2 cm/sec | Ebb |
| ***Recreational Traffic*** | 10:55 AM | Pleasure boat | | Blue/white | Docked – carrying small sailboat |
|  | 11:21 AM | Luxury boat | | White | South - light |
| ***Observations*** | Bricks, spiders, water chestnut in the area. And lots of logs and valissneria (‘seaweed’) | | | | |