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

**(Salt front ~ RM 83)**

**RIVER MILE 102**

**Saugerties Light House, Town of Saugerties, Ulster Co.**

**Marie Daniels, Jennifer Reid & Matthew, Woodstock Day School**

**Grades 3rd & 7th, 18 students and 8 adults**

**42.04**°**N, 73.92** °**W**

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**Sampling Site – by Madeline**

**Location:** Saugerties Light house @ northern bank of peninsula – Beach opposite the floating dock with porta potty on it

**Area:** Pier of sorts, boating, fishing, swimming beach, picnics, hiking, walking

**Surrounding Land Use:** Forested/Marsh 80%, Beach 20%

**Sampling Site:** beach, bulkhead altered banks years ago, covered with vegetation, collected wood/debris in area, shoreline riprap at lighthouse, shoreline is sandy, muddy, rocky

**River Bottom:** muddy, sandy

**Plants in area**: Total plant make up 50% water chestnut, and 30% water celery, 20 % reeds

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | ***Reading 1*** | ***Reading 2*** | ***Comments*** | |
| ***Physical*** |  | |  |  |  | |
| Air Temperature | 10:48 AM  11:27 AM  11:17 AM | | 8°C  5°C  15°C | 46° F  41° F  57 F | Avg – 9.3°C  49° F | |
| Wind Speed | 11:30 AM  11:15 AM | | Beaufort #1  Beaufort #2 |  |  |
| Cloud Cover | 11:30 AM | | overcast | 76-100% cloud |  | |
| Weather today | No rain | | | | |
| Weather recently | Warm 80 degree temps | | | | |
| ***Water Temperature*** | 10:30 AM  11:50 AM  11:55 AM | 10 °C  15°C  15°C | | 2 ft. water  3 ft. water  2 ft. water |  | |
| ***Water Calm or Choppy*** | calm |  | |  |  | |
| ***Turbidity***  Long site tube | 11:05 AM  11:36 AM | 39 cm  31.2 cm | |  | Average – 35.1 cm | |
|  | 11:00 AM | 26 cm  32  35 | | Average 31 cm |  | |
|  | 11:28 AM | 26  34  25 | | Average – 28.3 cm |  | |
|  | 12:01 PM | 26 cm  27  29 | | Average 27 cm |  | |
| ***Chemical*** |  |  | |  |  | |
| DO  (ampules) | NR |  | |  |  | |
| pH – color match kit | NR |  | |  |  | |
| Salinity Quantabs | NR |  | |  |  | |
| ***Fish – 50 ft. net*** | **Time** | **Species** | | **# caught** | **Length of largest** | |
| ***Tides*** | **Time** | **Height** | | **Falling/Rising** |  | |
|  | NR |  | |  |  | |
| ***Currents*** | **Time** | **Cm/30 secs** | | **Cm/sec** | **N/S - E/F/S** | |
|  | 11:00 AM  11:10 AM  11:48 AM | 208cm/30 sec  250 cm/30  200 cm/30 | | 7 cm/sec  8.3 cm/sec  6.6 cm/sec |  | |
| ***Sediment Core -***  ***Length*** | **Observation** | **Rare** | | **Common** | **Abundant** | |
| ***10:50 AM -*** | No length | leaves | | Mud  sand |  | |
| ***11:15 AM*** | No length | Leaves  Macroinvert | |  | Sand | |
| ***11:30 AM*** | No length |  | |  | Sand | |
| ***12:05 PM*** | No length |  | |  | Mud  Sand  Wood | |
| ***Shipping***  ***Commercial (C)*** | 10:48 AM  11:00 AM  11:30 AM  11:35 AM | Red Yellow  White  Grey  Red | | UBC - Seattle  Tugboat  NR  tugboat | S- Light  S- Light  N – Loaded  SE | |
| ***Recreational (R)*** | 10:47 AM  11:50 AM  11:55 AM | Black  NR  Black | | Sailboat  Speedboat | S -Light  N- People  S - People | |
| ***Observations*** | Lots of rocks, Brick, Water Chestnut devil heads, lumps of coal  Crow,  Large boats going through the river can push the water towards the shore – does this impact the fish by pushing them too? Water Chestnut are draining the oxygen from the water | | | | | |