**Day in the Life of the Hudson River 10/16/14**

**(Salt Front RM 69.5)**

**RIVER MILE 23.5**

**Dobbs Ferry, Waterfront NY**

**Stephen Fleming & Bill Livingston, EF Academy and 45 Junior Biology Students and 4 adults total**

**(41.009253 -73.880438)**

**Location:** Dobbs Ferry, Half-Moon Restaurant waterfront south of Waterfront Park

**Area:** South edge of parking lot of the Half Moon Restaurant

**Surrounding Land Use:** Commercial

**Sampling Site**: 10%beach at low tide,70% rip rap,

**Shoreline:** shore with bulkhead, area covered with vegetation

**Plants in area:** Trees, bushes and grasses

**Water**: Calm

**River Bottom**: sandy/rocky

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical -*  Air Temperature** | **Time** | | **°F** | **°C** | **Average** |
|  | 14:15 | |  | 18 | 18.5 |
|  | 14:30 | |  | 18 |  |
|  | 14:45 | |  | 19 |  |
|  | 15:00 | |  | 19 |  |
| **Wind Speed:** | **Time** | | **Beaufort** | **Anemometer** | **Direction** |
|  | 14:53 | |  | 4.8 m/s | **S** |
|  | 15:15 | |  | 3.5 m/s | **S** |
|  | 15:30 | |  | 4.5 m/s | **S** |
| **Cloud Cover** | **Clear (<25%)** | | **Partly Cloudy (26-50%)** | **Mostly Cloudy (51-75%)** | **Overcast (>75%)** |
| All Day |  | |  |  | ✓ |
|  |  | |  |  | ✓ |
|  |  | |  |  | ✓ |
|  |  | |  |  | ✓ |
| **Precipitation** | **Time** | | **Rain** | **Describe** |  |
|  | All Day | | Y | Light and moderate |  |
|  |  | | Y |  |  |
| **Weather last 3 days** | Warm, wind and rainy | | | | |
| ***Water Temperature*** | **Time** | | **ºC** | **ºF** | **Average** |
|  | 14:31 | | 17 |  | 18.5 |
|  | 14:35 | | 19 |  |  |
|  | 14:40 | | 19.5 |  |  |
| ***Turbidity – long site tube*** | **Reading 1** | | **Reading 2** | **Reading 3** | **Average** |
| 14:10 | 37cm | | 36 cm | 37 cm | 36.3 cm |
| ***Chemical*** | **Time** | | **mg/L** | **Water Temp** | **% Saturation** |
| ***DO (vernier data logger)*** | 14:35 | | 10 mg/L | 19 | 105% |
|  | 14:45 | | 10 mg/L | 19 | 105% |
|  | 13:15 pm | | 7 mg/L | 20 | 80% |
|  | 13:55 pm | | 9 mg/L | 20 | 95% |
| **pH** – color match test kit | 10:02 am | | 7.5 |  |  |
| 13:37 | 7.5 | | 7.5 | 7.4 | 7.5 |
| 13:55 | 7.5 | | 7.5 | 7.6 | 7.5 |
| 14:15 | 7.6 | | 7.5 | 7.5 | 7.5 |
| ***Salinity - quantab*** |  | |  |  |  |
| ***Fish Catch -*** | ***Time*** | | ***ID*** | ***Number*** | ***Longest*** |
| Seined | 14:30 | | silverside | 2 | 15 cm |
| Seined | 14:45 | | American eel | 1 | 33 cm |
| T**OTALS** |  | | **Diversity 2** | **Totals 3** |  |
| ***Tides -*** | ***Time*** | | ***Water height*** |  | ***\*Rate of change*** |
| 13:58 | | 24 cm | Base reading |  |
| 14:18 | | 26 cm | Rising | 0.1cm/sec |
| 14:28 | | 29 cm | Rising | 0.3 cm/sec |
| 14:35 | | 33 cm | Rising | 0.6 cm/sec |
| 14:40 | | 35 cm | Falling | 0.4 cm/sec |
| ***Currents -*** | **Feet** | **cm** | **cm/30 sec** | **Cm/sec** | **N/S** |
| 14:32 |  | 100 | 100cm/30 sec | 33.3cm/sec | S |
| 14:45 |  | 110 | 110cm/30 sec | 36.7cm/sec | S |
| 15:03 |  | 100 | 100cm/30 sec | 33.3 cm/sec | S |
| ***Boat Traffic:*** | 13:35 | Tug and Barge | Red | Northbound |  |