**Day in the Life of the Hudson River 10/10/13 Data**

**(Salt Front RM 69.3)**

**RIVER MILE 23**

**Kinnally Cove & MacEachron Waterfront Park, Hastings-on-Hudson**

**Melissa Shandroff, Hastings High School APES 11th-12th grade, 70 students, 4 adults**

**Latitude 40°59’52”N, Longitude 73°53.03”W**

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**Location:** Kinnally Cove, Hastings-on-Hudson, Westchester County

**Area:** Beach area with riprap shoreline, next to the park – used both spaces. Beach is totally covered during high tide.

**Surrounding Land Use:** 50% industrial/commercial (next to old Anaconda site) but mainly parking lot now, 15 % forested, 10% grassy, 25% beach

**Sampling Site:** beach, banks altered, riprap on shoreline, bulkhead

**Plants in area:** grass and weeds

**Water depth**:

**River Bottom** – sandy/rocky bottom

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical***  |   |  |  |  |
| Air Temperature | 1:55 PM | 62.8 °F17.12°C |  |  |
| Wind Speed | 1:58 PM Beaufort 2 | 7.2 kts | 28 °N |  |
| Cloud Cover | Overcast all day >75% |  |
| Weather today | 2:14 PM overcast and cool |
| Weather recently | Has been sunny and warm over the last 2 days  |
| ***Water Surface*** |  |
| ***Turbididty – long site tube*** | 1:22 PM | 35.0 cm40.0cm |  | Average 37.5 cm |
|  | 1:12 PM | 30 cm30 cm |  | Average 30 cm |
| ***Chlorophyll*** | 1:45 PM | 0.4 |  |  |
| ***Water temperature*** | 12:35 PM | 66.2 °F69.8 °F | 19°C21°C | **Avg:** 68°F20°C |
| *Very cloudy and hardly any sun* | 1:14 PM | 66.2°F67.1°F | 19°C19.5°C | 66.65F19.25°C |
|  | 1:50 PM | 64.4°F65.3°F | 18°C 18.5°C | 64.85°F18.25°C |
| ***Chemistry*** |  |  |  |  |
| *pH - -* 1:50 PM3 methods | StripsKit- WidePen | 667.6 | 6**7** | Average 6.5 |
| *DO*  | 1:18 PM | 10 ppm | 19.25°C | 106% saturation |
|  | 1:35 PM | 8 ppm | 16 | 80% |
|  | 2:08 PM | 8 ppm | 18.25 | 85% |
| *Salinity -* | 1:00 PM | HydrometerRefractometer | 11 ppt 12 ppt |   |
| *Nitrate – LaMotte Kits* | 2:03 PM | 2 ppm2 ppm |  |  |
| *Phosphate* | 2:18 PM | 1.5 ppm1 ppm |  |  |
| ***Fish Catch***Seine 9 ft. (20 ft. pull) Dip net, minnow trap | ***Number Caught -*** ***Sadly no fish caught*** | ***Species*** | ***Macro-invertebrates*** |  |
|  | PM |  | ScudCranefly2 Bluecrabs |  |
|  | 1:24 PM |  | ScudTruefly1 Bluecrab M |  |
| ***Sediment Cores*** | **Length/ description** | **Abundant** | **Common** | **Rare** |
|  | 12.8 cmno layersoil look | Sand | Gravel | Pebble |
| ***Tide*** | 1:20 PM |  | 90 cm |  |
|  | 1:35 PM | Falling | 89 cm | 0/067 cm/min |
| ***Currents*** |  |  |  |  |
| ***Time*** | ***Cm/60 secs*** | ***Cm/sec*** | ***Knots*** | ***N/S Ebb/Flood Still*** |
| 1:28 PM | 450 cm/30 sec | 15 cm/sec | 0.292 knots | Flood |
| ***Shipping*** | 2:10 PM | Couldn't see name | White | North - light |
| ***Observations***  |  A lot of rocks here seemed that they were placed rather than naturally occurring. Students noted that the tides and weather will affect the amount of fish in the netSaw seagulls! |