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

**(Salt Front RM 69.3)**

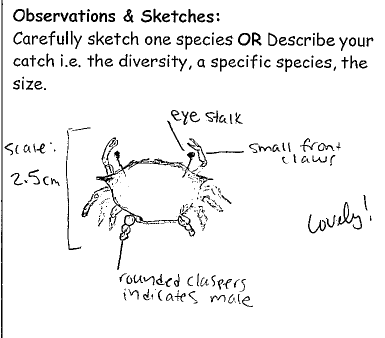
**RIVER MILE 23**

**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 °F  17.12°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 cm  40.0cm | |  | Average 37.5 cm |
|  | 1:12 PM | 30 cm  30 cm | |  | Average 30 cm |
| ***Chlorophyll*** | 1:45 PM | 0.4 | |  |  |
| ***Water temperature*** | 12:35 PM | 66.2 °F  69.8 °F | | 19°C  21°C | **Avg:** 68°F  20°C |
| *Very cloudy and hardly any sun* | 1:14 PM | 66.2°F  67.1°F | | 19°C  19.5°C | 66.65F  19.25°C |
|  | 1:50 PM | 64.4°F  65.3°F | | 18°C  18.5°C | 64.85°F  18.25°C |
| ***Chemistry*** |  |  | |  |  |
| *pH - -* 1:50 PM  3 methods | Strips  Kit- Wide  Pen | 6  6  7.6 | | 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 | Hydrometer  Refractometer | | 11 ppt  12 ppt |  |
| *Nitrate – LaMotte Kits* | 2:03 PM | 2 ppm  2 ppm | |  |  |
| *Phosphate* | 2:18 PM | 1.5 ppm  1 ppm | |  |  |
| ***Fish Catch***  Seine 9 ft. (20 ft. pull) Dip net, minnow trap | ***Number Caught -***  ***Sadly no fish caught*** | ***Species*** | | ***Macro-invertebrates*** |  |
|  | PM |  | | Scud  Cranefly  2 Bluecrabs |  |
|  | 1:24 PM |  | | Scud  Truefly  1 Bluecrab M |  |
| ***Sediment Cores*** | **Length/ description** | **Abundant** | | **Common** | **Rare** |
|  | 12.8 cm  no layers  oil 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 net  Saw seagulls! | | | | |