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

**RIVER MILE 23**

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

**Melissa Shandroff, Hastings High School APES 11th-12th grade, 65 students, 4 adults**

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

**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*** | ***9:30 AM*** | ***1:30 PM*** | |  | | ***Comments*** |
| ***Physical*** |  |  | |  | |  |
| Air temperature | 54 °F  12.2°C | 67.5°F  19.7°C | |  | |  |
| Wind Speed | 10.2 mph | 6.5 mph | |  | |  |
| Cloud Cover | Partly cloudy 26-50% | | | | |  |
| Weather today | Part clouds no rain | | | | | |
| Weather recently | cool over the last few days, | | | | | |
| ***Water Surface*** | calm | | | | | |
| ***ITEM*** | ***9:30 AM*** | | ***1:30 PM*** | |  | ***Comments*** |
| ***Turbidity – long site tube*** | 3.2 cm | | 8 cm | |  | \*This site has a muddy embayment |
| ***Turbidity – short tube*** | 100 jtu | | 90 jtu | |  |  |
| ***Water temperature*** | 13°C | | 15°C | |  |  |
| ***Chemistry*** |  | |  | |  |  |
| *pH -* Pen | 7.2 | | 7.2 | |  |  |
| *pH strips* | 6.5 | | 7 | |  |  |
| *pH LaMotte kit* | 6.8 | | 6.8 | |  |  |
| *DO – Hach kit* | 8 ppm | | 10 ppm | |  |  |
| *% saturation* | 75% | | 97% | |  |  |
| *Salinity -hydrometer* | 8 ppt | | 11 ppt | |  |  |
| *Salinity – Refractometer* | 9 ppt | | 10 ppt | |  |  |
| *Nitrate – LaMotte Kits* | 1 ppm | | 2ppm | |  |  |
| *Phosphate – LaMotte kit* | 2 ppm | | 2ppm | |  |  |
| ***Fish Catch***  Seine 30 ft. net | 8 Atlantic Silversides  2 Striped Bass  1 Mummichog | | 13 Atlantic Silversides  10 Striped Bass  3 Mummichog  1 Banded killi | |  | ***DAY TOTAL***  ***FISH Diversity 4***  ***TC – 38***  ***MACRO***  ***Diversity 2***  ***TC - 21*** |
| ***Fish Only*** | **Diversity 3** | | **Diversity 4** | |  |  |
| ***Total Catch*** | **T.C. 11** | | **T.C. 27** | |  |  |
| ***Macros*** | 1 Blue Crab (M)  4 shrimp | | 1 Blue Crab (M)  15 shrimp | |  |  |
|  | **Diversity 2** | | **Diversity 2** | |  |  |
| ***Total Catch*** | **T.C. 5** | | **T.C. 16** | |  |  |
| ***Sediment Cores*** | **Not Collected** | |  | |  |  |
| ***Tide*** | NR | |  | |  |  |
| ***Currents*** | Ebb | | Flood | |  |  |
|  | 0.5 kts | | 4.74 kts | |  |  |