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

**(Salt Front RM 69.3)**

**RIVER MILE -10**

**South Beach Wolf Park, Staten Island**

**N 40**°**44.375’ W-74**°**0.1820’**

**Steve Stanne, HREP, NYSDEC**

**Mary Lee, St. Clare’s School, 70 Seventh graders and 15 adults**

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**Location:** South Beach of Wolf Park, Staten Island

**Area:** Beachfront – see student sketches (attached)

**Surrounding Land Use:** 90% beach,10% Boardwalk/Park

**Sampling Site:** Beach area with bulkhead, concrete broken in area

**River Bottom:** Sandy

**Plants in area:** No plants

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | ***Readings*** |  | |  |
| ***Physical*** |  | |  |  | |  |
| Air Temperature | 10:00 AM  10:52 AM | | 18.3°C  15°C | 65°F  59.3°F | |  |
| Wind Speed | Beaufort #4 | | 3.6 mph | East | |  |
| Cloud Cover | 12:15 PM  12:46 PM  1:03 PM  1:33 PM | | 100%  100%  100%  100% |  | |  |
| Weather today | Cold & damp, overcast | | Became colder as day progressed | ***Water surface*** | | Very choppy – high waves |
| Weather recently | Windy, cool, some rain | | | | | |
| ***Water Temperature*** | 10:03 AM  10:08 AM  10:13 AM | 20°C  19°C  18°C | | 68°F  64°F  60°F | Weather grew colder during day | |
| ***Turbidity***  ***Turbidity tube*** | 10:45 AM | 20.0 cm  27.1  22.5 | | 23 cm avg |  | |
| ***Chemical*** | **Time** | **ppm** | | **Temp** | **% Sat** | |
| DO  Estuary wide monitoring Kit – | 10:10 AM  10:19 AM  10:36 AM  10:58 AM  11:13 AM  11:30 AM | 8 ppm  7  7  8  10  8 | | 15° C  15°C  15°C  16°C  17°C  17°C | 80%  70%  70%  80%  100%  90% | |
| pH  Litmus Paper | 10:00 AM  10:25 AM  10:45 AM  11:03 AM  11:19 AM  11:35 AM | 6  6  6.5  5.5  6.5  6 | | 6 average |  | |
| Salinity - hydrometer | 10:07 AM  10:27 AM  10:46 AM  11:05 AM  11:21 AM  11:40 AM | 32 ppt  30 ppt  28 ppt  27.75 ppt  29 ppt  28 ppt | | 29 ppt | Specific gravity 1.028 | |
| ***Fish Catch – seine 50ft. net – 20-30 ft. pull*** | ***Time*** | ***Species*** | | ***Number*** |  | |
|  | 10:00-11:30 AM | Hermit Crab  Mole Crab  Mussels  Spider Crab  Comb Jellies | | 1  16  15  3  8 | No fish but macro-invertebrates also netted 1 blue crab claw | |
| ***Tides (from pier to water)*** | ***Time*** | ***Distance to water*** | | ***Rate of change*** | ***Flood or Ebb*** | |
|  | 10:02 AM  10:15 AM  10:30 AM  10:45 AM  11:00 AM  11:15 AM  \*stick float away | 50 cm  60 cm  70 cm  80 cm  90 cm  90cm | | Start point  6.6cm/min  6.6cm/min  6.6cm/min  6.6cm/min  0 cm/min | Baseline  Flooding  Flooding  Flooding  Flooding  Unchanged | |
| ***Currents - Time*** | ***Cm/30sec*** | ***Cm/sec*** | | ***Knots*** | ***N/S Ebb/Flood*** | |
| 10:05 AM | 258 | 8.6 | | 0.2 | N - F | |
| 10:24 AM | 540 | 18 | | 0.4 | N- F | |
| 10:46 AM | 600 | 20 | | 0.4 | N-F | |
| 11:03 AM | 0 | 0 | | 0 | 0 | |
| 11;16 AM | 62 | 2.1 | | 0.04 | N-F | |
| 11:30 AM | 0 | 0 | | 0 | 0 | |
| ***Core Sample*** | ***Length*** | ***Abundant*** | | ***Common*** |  | |
|  |  | Sandy | | Gravel  pebbles |  | |
| ***Shipping – Time*** | ***Type*** | ***Name*** | | ***Color*** | ***Direction/ light or loaded*** | |
| 10:02 AM | Cargo | Zim | | R/W/B | N loaded | |
| 10:24 AM | Cruise | Seastruck | | B/W | S loaded | |
| 10:30 AM | Cargo |  | |  | S | |
| 10:33 AM | Speedboat |  | |  | S | |
| 10:38 AM | Cruiseship | AIDA | |  | N loaded | |
| 10:38 AM | Cargo |  | | R/B | N loaded | |
| 11:20 AM | Tanker |  | | R | N loaded | |
| 11:32 AM | Sailboat |  | | W | W | |
| 11:34 AM | Cargo | Harbor Fashion | | R/B | N loaded | |