**Day in the Life of the Hudson River 11/20/15 Data**

**RIVER MILE -7.5**

**Great Kills Gateway National Recreation Area, Staten Island**

**Mary Lee, St. Clare’s School, 78 Seventh graders and 27 adults**

**N 40**°**32.56’ - W-74**°**7.5 min**

**Location:** Beach, Great Kills Gateway National Recreation Area, Staten Island  
**Sampling Site:** Open beach, Shoreline is 100 % beach (urban park), <5% forested,  
**Surrounding Area:** beach and riprap, sandy and rocky

**Water Depth:2-3 ft.**

**River Bottom:** sandy, rocky

**Plants in area:** No plants

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | ***Readings*** |  | |  |
| ***Physical*** |  | |  |  | |  |
| Air Temperature | 9:30 AM  11:00 AM  11:12 AM  11:48 AM | | 20°C  20  19.8  22 | 68°F  68  64.4  71.6 | |  |
| Wind Speed | 11:54 AM | | Beaufort  4-7 | Anemometer mph | |  |
| Cloud Cover | 26-50 % | |  |  | |  |
| Weather today | Partly cloudy – no rain | | Warmed during day, windier | ***Water surface*** | | Very choppy |
| Weather recently | Very cold | | | | | |
| ***Water Temperature*** | 10:07 AM  10:37 AM  10:56 AM  11:17 AM | 12 °C  13  13  12/14/14 (average 13) | |  |  | |
| ***Turbidity***  ***Turbidity tube*** | 10:17 AM | 13.1 cm  19.4 cm  19 cm | | 17.1 cm avg |  | |
|  | 11:30 AM | 107 cm  68  90 | | 88 cm |  | |
| ***Chemical*** | **Time** | **ppm** | | **Temp** | **% Sat** | |
| DO – multiple readings – tablets -  Estuary Wide Monitoring Kit – | 10:07 AM  10:56 AM  12:30 PM | 6 ppm  8 ppm  8 ppm | | 12° C  13.6  14 | 55%  75%  78% | |
| pH  Indicator Solution | 10:05 AM  10:50 AM  11:57 AM | 7  7  7 | |  |  | |
| Salinity - hydrometer | 10:10 AM  11:10 AM  11:53 AM | 1.26 ppt  4.22  6.25 | | ? puzzling |  | |
| ***Fish Catch – seine 15 ft. net – 6 ft. pull*** | ***Time*** | ***Species*** | | ***Number*** |  | |
| ***3 seines – 10 fish*** | 10:00AM | Atlantic Silverside | | 5 | **DIV 2**  **TOTAL 10** | |
|  | 10:30 AM | Bay Anchovy | | 5 |  | |
| ***Macroinvertebrates*** | 11:00 AM | Comb Jellies | | 50 | **DIV 2** | |
|  |  | Glass Shrimp | | 1 | **TOTAL 51** | |
| ***Tides (from pier to water)*** | ***Time*** | ***Rising/Falling*** | | ***Height in cm*** | ***Rate of change*** | |
| LT 7:31 AM | 9:30 AM | Rising | | 40 cm | n/a | |
|  | 9:45 AM | Rising | | 50 cm | 0.67 cm/min | |
|  | 10:00 AM | Rising | | 58 cm | 0.53 | |
|  | 10:15 AM | Rising | | 65 cm | 0.47 | |
|  | 10:30 AM | Rising | | 72 cm | 0.47 | |
|  | 10:45 AM | Rising | | 84 cm | 0.53 | |
| \*removed pole due to rise of tide | 11:00 AM | Rising | | 90 cm | 0.4 | |
| ***Currents - Time*** | ***Cm/30sec*** | ***Cm/sec*** | | ***Knots*** | ***N/S Ebb/Flood*** | |
|  | NR |  | |  |  | |
| ***Core Sample*** | ***Length*** | ***Abundant*** | | ***Common*** |  | |
| Yes H2S smell  Oxidized top | 12 inches  1/3 muck at bottom  2/3 sand & gravel on top | Sand  Gravel  Pebbles | | Mud |  | |
| ***Shipping – Time*** | ***Type*** | ***Name*** | | ***Color*** | ***Direction*** | |
| N/R | Tug |  | |  |  | |
|  | Oil Riger |  | |  |  | |
|  | Barge | Cascade | | Brown/Blue | South | |
|  | Tugboat |  | | WHite | South | |