**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 AM11:00 AM11:12 AM11:48 AM | 20°C2019.822 | 68°F6864.471.6 |  |
| 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 AM10:37 AM10:56 AM11:17 AM | 12 °C131312/14/14 (average 13) |  |  |
| ***Turbidity******Turbidity tube*** | 10:17 AM | 13.1 cm19.4 cm19 cm | 17.1 cm avg |  |
|  | 11:30 AM | 107 cm6890 | 88 cm |  |
| ***Chemical*** | **Time**  | **ppm** | **Temp** | **% Sat** |
| DO – multiple readings – tablets -Estuary Wide Monitoring Kit –  | 10:07 AM10:56 AM12:30 PM | 6 ppm8 ppm8 ppm | 12° C13.614 | 55%75%78% |
| pHIndicator Solution | 10:05 AM10:50 AM11:57 AM | 7 77 |  |  |
| Salinity - hydrometer | 10:10 AM11:10 AM11:53 AM | 1.26 ppt4.226.25 | ? 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 smellOxidized top  | 12 inches1/3 muck at bottom2/3 sand & gravel on top | SandGravelPebbles | Mud |  |
| ***Shipping – Time*** | ***Type*** | ***Name*** | ***Color*** | ***Direction*** |
| N/R | Tug |  |  |  |
|  | Oil Riger |  |  |  |
|  | Barge | Cascade | Brown/Blue | South |
|  | Tugboat |  | WHite | South |