**Day in the Life of the Hudson River 11/20/16 Data**

**(Salt Front ~ RM 83)**

**RIVER MILE -11.2**

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

**Mary Lee, St. Clare’s School, 70 Seventh graders and 10 adults**

**N 40**°**32.33.7’ - W-74**°0**7.30.7 min**

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**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. Debris on the beach (plastic and Styrofoam)

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

**River Bottom:** sandy

**Plants in area:** No plants

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | ***Readings*** |  |  |
| ***Physical*** |  | |  |  |  |
| Air Temperature | 10:30 AM  12:03 PM | | 21°C  20 | 70°F  68 |  |
| Wind Speed | Throughout AM - **NE** | | Beaufort  3 and 4 | OR  8-12 mph | Anemometer 17 mph |
| Cloud Cover | Overcast >75 % | |  |  |  |
| Weather today | Predicted rain for the day | | Increasing cloud cover during day | ***Water surface*** | Very choppy |
| Weather recently | Warmer than normal, dry | | | | |
| ***Water Temperature*** | 10:10 AM  10:35 AM 11:07 AM  11:37 AM  11:50 AM | 20 °C  20  20  20  20 | | 68°F  68°F  68°F  68°F  68°F |  |
| ***Turbidity***  ***Turbidity tube*** | 10:09 AM  10:38 AM | 12 cm  6.5 cm | | 8.25 cm avg |  |
| ***Chemical*** | **Time** | **ppm** | | **Temp** | **% Sat** |
| DO – multiple readings – tablets -  Estuary Wide Kit – | 11:00 AM | 4, 6, 5, 4, 4 ppm | | 20° C | 50% |
| pH  tablets - LaMotte | 10:10 AM | 7 X 3 | | 7 average |  |
| Salinity - hydrometer | 11:09 AM | 27.5 ppt  27.5  31.0  27.5  29.0 | | 28.5 ppt |  |
| ***Fish Catch – seine 15 ft. net – 6 ft. pull*** | ***Time*** | ***Species*** | | ***Number*** |  |
| ***Macroinvertebrates*** |  | Blue crabs  Mussels  HS crabs  Calico crab  Spider crab  Slipper shells  Angel wings | | ***All specimen dead at tide line – nothing living collected*** |  |
| ***Tides (from pier to water)*** | ***Time*** | ***Rising/Falling*** | | ***Height in cm*** | ***Rate of change*** |
|  | 9:45 AM | Rising | | 40 cm | n/a |
|  | 10:07AM | Rising | | 45 cm | 5 cm/15 min |
|  | 10:23AM | Rising | | 50 cm | 5 cm/15 min |
|  | 10:38 AM | Rising | | 70 cm | 20 cm/15 min |
|  | 10:55 AM | Rising | | 80 cm | 10 cm/15 min |
|  | 11:05 AM | Rising | | 90? |  |
| \*tide pole lost due to incoming tide | 11:24 AM | Rising | |  |  |
| ***Currents - Time*** | ***Cm/30sec*** | ***Cm/sec*** | | ***Knots*** | ***Ebb/Flood*** |
| 10:15 AM | 500 | 16.7 | | 0.32 | F |
| 10:31 AM | 900 | 30 | | 0.58 | F |
| 10:45 AM | 440 | 14.7 | | 0.29 | F |
| 11:05 AM | 250 | 8.3 | | 0.16 | F |
| 11:34 AM | 2220 | 74 | | 1.44 | F |
| 12:05 PM | 440 | 30.03 | | 0.59 |  |
| ***Core Sample*** | ***Length*** | ***Abundant*** | | ***Common*** |  |
| 11AM  2 ft. water depth | 16.5 cm | Sand  Gravel | |  |  |
| ***Shipping – Time*** | ***Type*** | ***Name*** | | ***Color*** | ***Direction*** |
| 11:10 AM | MCP | Container | | Southbound | Loaded |
| 12:00 PM |  | Container | | Southbound | Loaded |