Day in the Life of the Hudson River 10/16/18 Data

VETERANS’ MEMORIAL PIER, BROOKLYN

RIVER MILE: -5

Salt Front: ~RM 24

International School of Brooklyn- Alicia Smith
27 students 5th grade, 4 adults
Latitude 40.6397 N & Longitude – 74.0387 W

Location: American Veterans’ Memoria Pier, Brooklyn, NY
Area: Veteran’s Pier by the highway; bulkhead- mainly concrete & wood; 2 parks- Owl’s head and Shore Road Park; 2 water treatment plants < 0.5 miles to the NE, ferry dock present, highway present, park near by

Surrounding Land Use: 85% Urban/Residential; 5% Industrial/Commercial; 5% Park; 5% Highway

Sampling Site: Saltwater bay; Recreational pier with bulkhead- rocks near the edge, banks altered/riprap; all hard edged, steep wall dividing water from land; pipe entering water from treatment plant.

Shoreline: Rocky

Plants in area: 25% of rocks on the shoreline are covered in vegetation

Water: 9-10 foot depth, choppy

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Time</th>
<th>Reading</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Temperature:</td>
<td>10:55 AM</td>
<td>12.4 °C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:38 AM</td>
<td>11.5 °C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:54 AM</td>
<td>15 °C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:49 AM</td>
<td>16 °C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:11 AM</td>
<td>19 °C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:35 AM</td>
<td>18 °C</td>
<td></td>
</tr>
<tr>
<td>Wind Speed:</td>
<td>11:38 AM</td>
<td>Beaufort 4</td>
<td>16 knots</td>
</tr>
<tr>
<td>Weather Today:</td>
<td>No Rain; Overcast (75%+)</td>
<td></td>
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<tr>
<td>Weather Previous:</td>
<td>Rain the night before; rain over the weekend prior; cool</td>
<td></td>
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</tr>
<tr>
<td><strong>Water Temperature</strong></td>
<td>10:49 AM</td>
<td>16 °C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:11 AM</td>
<td>19 °C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:35 AM</td>
<td>18 °C</td>
<td></td>
</tr>
<tr>
<td>Turbidity - Long sight tube</td>
<td>11:00-12:00 PM</td>
<td>53.7 cm</td>
<td></td>
</tr>
</tbody>
</table>

| **Chemical** | | | |
| Salinity- hydrometer | 10:49 AM | 16 ppt | |
| | 11:11 AM | 16 ppt | |
| | 11:35 AM | 16 ppt | |
| DO – drop count kit | | | |
| | 11:11 AM | 19 °C | 5 | 52% |

| pH - meter | | | |
| 10:49 AM | 7.6 | |
| 11:11 AM | 7.59 | |
| 11:35 AM | 7.5 | |

<p>| Nitrates | 10:49-11:48 AM | &lt;5 ppm | LaMotte Estuary |</p>
<table>
<thead>
<tr>
<th>Phosphates</th>
<th>Time</th>
<th>Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10:49-11:11 AM</td>
<td>&lt;1 ppm</td>
<td>LaMotte Estuary wide kit is low resolution</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tides- dock to water</th>
<th>Time</th>
<th>Rising, Falling, Still</th>
<th>Height (cm)</th>
<th>Rate of Tidal Change (cm/min)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10:55 AM</td>
<td>-</td>
<td>212.5</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>11:13 AM</td>
<td>Still</td>
<td>212.5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>11:37 AM</td>
<td>Falling</td>
<td>200</td>
<td>0.521</td>
</tr>
<tr>
<td></td>
<td>11:55 AM</td>
<td>Still</td>
<td>200</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Currents</th>
<th>Time</th>
<th>Cm/second</th>
<th>Knots</th>
<th>North/South</th>
<th>Ebb/Flood/Still</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10:55 AM</td>
<td>12.19</td>
<td>0.237</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:17 AM</td>
<td>26.42</td>
<td>0.512</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boats</th>
<th>Time</th>
<th>Name</th>
<th>Color</th>
<th>North or South</th>
<th>Loaded or Light</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11:26 AM</td>
<td>Cruise ship</td>
<td></td>
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<tr>
<td></td>
<td>11:26 AM</td>
<td>Ferry</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>11:26 AM</td>
<td>Cargo</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>11:26 AM</td>
<td>Tugboat</td>
<td></td>
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<tr>
<td></td>
<td>11:54 AM</td>
<td>Water Taxi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12:00 PM</td>
<td>Water Taxi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:54 AM</td>
<td>Speed boats</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12:00 PM</td>
<td>Speed boats</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Observations</th>
<th>2 people fishing</th>
</tr>
</thead>
</table>