Day in the Life of the Hudson River 10/22/19
PIER 1 GANTRY STATE PARK, LONG ISLAND CITY
RIVER MILE: 5.7
Salt Front: ~RM 53
P.S./I.S. 78Q- Jessica Batson, Alex Pistell
90 students 5th grade
New York State Parks- Devin Gorsen
Latitude 40.74497 N & Longitude – 73.95849 W

Location: Pier 1, Gantry Plaza State Park, Long Island City, East River, Queens, NY
Surrounding Land Use: 80% Urban; 15% Grassy; 5% Rocky
Sampling Site: Shoreline is rocky with some plants and piers
Time Frame: 9-11 AM

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Time</th>
<th>Reading</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Temperature</td>
<td>9-11 AM</td>
<td>59 °F</td>
<td></td>
</tr>
<tr>
<td>Wind Speed:</td>
<td>9-11 AM</td>
<td>Beaufort: 1</td>
<td>East</td>
</tr>
<tr>
<td>anemometer</td>
<td></td>
<td>1.1 mph</td>
<td>Northeast</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 mph</td>
<td>East</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 mph</td>
<td>North</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.1 mph</td>
<td>East</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.5 mph</td>
<td>North</td>
</tr>
<tr>
<td></td>
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<td>1.3 mph</td>
<td>Northeast</td>
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<td></td>
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<td>2.6 mph</td>
<td>East</td>
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<tr>
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<td></td>
<td>3 mph</td>
<td>Northeast</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.2 mph</td>
<td>East</td>
</tr>
<tr>
<td></td>
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<td>2 mph</td>
<td>North</td>
</tr>
<tr>
<td></td>
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<td>7 mph</td>
<td>East</td>
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<tr>
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<td>-</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>1 mph</td>
<td>East</td>
</tr>
<tr>
<td>Weather today</td>
<td>Overcast 100%</td>
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</tr>
<tr>
<td>Tides-</td>
<td></td>
<td>Rising, Falling, Unchanged</td>
<td>Height (cm)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Current-</td>
<td>m/second</td>
<td>Knots</td>
<td>North/South</td>
</tr>
<tr>
<td>9-11 AM</td>
<td>0.08</td>
<td>0.03</td>
<td>NA</td>
</tr>
<tr>
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<td>0.03</td>
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</tr>
<tr>
<td>Water Temperature</td>
<td>9-11 AM</td>
<td>16 °C</td>
<td>Avg: 15.2 °C</td>
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<td></td>
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<td>15 °C</td>
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<td></td>
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<td>15 °C</td>
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<tr>
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<td>15.5 °C</td>
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<td>15 °C</td>
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<td>15 °C</td>
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</tbody>
</table>
### Turbidity - long sight tube

<table>
<thead>
<tr>
<th>Time</th>
<th>Measurement</th>
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<tbody>
<tr>
<td>9-11 AM</td>
<td>50 cm, 31 cm, 37 cm, 46 cm, 38 cm, 41 cm, 50 cm, 39 cm, 41 cm, 44 cm</td>
</tr>
</tbody>
</table>

### Chemical

<table>
<thead>
<tr>
<th>Salinity- ppt</th>
<th>Refract- TS</th>
<th>Refractometer: density</th>
<th>Hydrometer</th>
<th>Refractometer Avg.</th>
<th>Hydrometer Avg:</th>
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</thead>
<tbody>
<tr>
<td>Time 9-11 AM</td>
<td>29000 22000 21000 20000 20000 22000 19500 20000</td>
<td>1.02 1.016 1.015 1.014 1.014 1.016 - - - - 1.013 1.014</td>
<td>20000 22000 21000 20000 19000 20000 21000 24000 20000</td>
<td>21687.5 ppm 20000</td>
<td>20,636 ppm</td>
</tr>
</tbody>
</table>

| DO –         | Time 9-11 AM | Temp 15° C - 16° C | ppm DO 5, 4, 4, 7, 5.5, 4, 5, 4, 5, 5, 5 | % saturation Avg: 4.86 ppm |
| pH –         | 9-11 AM      | 7.5, 7, 7.5, 6.5, 7, 7, 6.5, 6.5, 6.5, 6.5, 6.5, 6.5 | Avg: 6.75 |

### Fish

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Length of longest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Black Sea Bass</td>
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</tr>
</tbody>
</table>

**Fish Totals** TOTAL: 1 Diversity: 1

### Macroinvertebrates

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Length of longest</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Mud Crab</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Clam Worm</td>
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</tr>
<tr>
<td>2</td>
<td>Isopod</td>
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</tr>
<tr>
<td>1</td>
<td>Amphipod</td>
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</tbody>
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**Macroinvertebrate Totals** TOAL: 6 Diversity: 4