Day in the Life of the Hudson River 10/20/15 Data
RIVER MILE 11.5 – Fort Washington Park
Katie White, Marymount School of New York
51 students 7th grade, 7 adults
Latitude 40°50’46.42444” N - Longitude -73°56’46.914”W

Location: Fort Washington Park just South of the George Washington Bridge
Area: Site is a sandy beach with rip rap adjacent to a paved jogging trail within a grassy park. Some trees on far side of jogging trail but none next to water. Very little aquatic vegetation.
Surrounding Land Use: : 14% forested, 85% grass park land, 1% beach,
Sampling Site: Park with a lot of trees, picnic tables, covered with vegetation, lots of riprap shore, collected wood debris. Large outflow pipe directly south of site
Plants in water: None
Water depth: mainly 0.5 meters or less but seined in 1.5 meter water
River Bottom –muddy but rocky closer to shore in some spots

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Time</th>
<th>Reading 1</th>
<th>Reading 2</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Temperature</td>
<td>9:58 AM</td>
<td>13°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:21 AM</td>
<td>14</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>10:50 AM</td>
<td>15</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>12:18 PM</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12:48 PM</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wind Speed – Frequent gusts 15-20 throughout day</td>
<td>Time</td>
<td>Beaufort</td>
<td>Speed (km/h)</td>
<td>Direction</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>------------</td>
<td>------------</td>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>10:02 AM</td>
<td>Beaufort 2</td>
<td>5</td>
<td>SSW</td>
<td></td>
</tr>
<tr>
<td>10:26 AM</td>
<td>Beaufort 2</td>
<td>5</td>
<td>SSW</td>
<td></td>
</tr>
<tr>
<td>10:55 AM</td>
<td>Beaufort 1</td>
<td>3</td>
<td>SSW</td>
<td></td>
</tr>
<tr>
<td>12:24 PM</td>
<td>Beaufort 3</td>
<td>6</td>
<td>SSW</td>
<td></td>
</tr>
<tr>
<td>12:52 PM</td>
<td>Beaufort 3</td>
<td>8</td>
<td>SSW</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Cloud Cover</th>
<th>Time</th>
<th>Condition</th>
<th>%</th>
<th>Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:06 AM</td>
<td></td>
<td>Partly cloudy</td>
<td>25-50</td>
<td>SSW</td>
</tr>
<tr>
<td>10:26 AM</td>
<td></td>
<td>Mostly</td>
<td>51-75</td>
<td>SSW</td>
</tr>
<tr>
<td>10:55 AM</td>
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<td>Mostly</td>
<td>51-75</td>
<td>SSW</td>
</tr>
<tr>
<td>12:24 AM</td>
<td></td>
<td>Clear</td>
<td>&lt;25</td>
<td>SSW</td>
</tr>
<tr>
<td>12:52 AM</td>
<td></td>
<td>Clear</td>
<td>&lt;25</td>
<td>SSW</td>
</tr>
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<table>
<thead>
<tr>
<th>Weather today</th>
<th>Time</th>
<th>Conditions</th>
</tr>
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<tbody>
<tr>
<td>No rain</td>
<td></td>
<td></td>
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<table>
<thead>
<tr>
<th>Weather last 3 days</th>
<th>Time</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold (highs mid to low 50s) , Clear, No precip</td>
<td></td>
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<table>
<thead>
<tr>
<th>Water</th>
<th>Time</th>
<th>Temperature (°C)</th>
<th>Water Temperature</th>
<th>Turbidity - Long site tube</th>
<th>Averages per rotation</th>
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<tbody>
<tr>
<td></td>
<td>9:49 AM</td>
<td>11°C</td>
<td></td>
<td>49 cm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:23 AM</td>
<td>12°C</td>
<td></td>
<td>51 cm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:48 AM</td>
<td>14°C</td>
<td></td>
<td>52 cm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12:18 PM</td>
<td>18°C</td>
<td></td>
<td>46 cm</td>
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<tr>
<td></td>
<td>12:51 PM</td>
<td>15°C</td>
<td></td>
<td>55 cm</td>
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<table>
<thead>
<tr>
<th>Chemical</th>
<th>Time</th>
<th>Value</th>
<th>% Saturation</th>
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<tbody>
<tr>
<td>DO</td>
<td>10:00 AM</td>
<td>11°C</td>
<td>90%</td>
</tr>
<tr>
<td>Hach Drop count</td>
<td>10:10 AM</td>
<td>12°C</td>
<td>110%</td>
</tr>
<tr>
<td></td>
<td>10:35 AM</td>
<td>14°C</td>
<td>95%</td>
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<tr>
<td></td>
<td>11:03 AM</td>
<td>18°C</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>12:38 PM</td>
<td>15</td>
<td>128%</td>
</tr>
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<table>
<thead>
<tr>
<th>pH color match test kit</th>
<th>Time</th>
<th>Value</th>
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<tbody>
<tr>
<td></td>
<td>9:58 AM</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td>10:29 AM</td>
<td>7.2</td>
</tr>
<tr>
<td></td>
<td>10:56 PM</td>
<td>7.3</td>
</tr>
<tr>
<td></td>
<td>12:27 PM</td>
<td>7.2</td>
</tr>
<tr>
<td></td>
<td>12:59 PM</td>
<td>7.2</td>
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<tr>
<th>Salinity</th>
<th>refractometer</th>
<th>hydrometer</th>
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<tr>
<td></td>
<td>17 ppt</td>
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<td>19</td>
<td>15</td>
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<tr>
<td></td>
<td>19</td>
<td>16</td>
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<table>
<thead>
<tr>
<th>Fish Catch – 9 ft. 20 seines</th>
<th>Time</th>
<th>Fish Species</th>
<th># caught</th>
<th>Length cm</th>
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</thead>
<tbody>
<tr>
<td>Seine #1</td>
<td>9:50 AM</td>
<td>Atlantic Silversides</td>
<td>1</td>
<td>8.0</td>
</tr>
<tr>
<td>#2</td>
<td>9:58 AM</td>
<td>Atlantic Silversides</td>
<td>17</td>
<td>8.5</td>
</tr>
<tr>
<td>#3</td>
<td>10:06 AM</td>
<td>Atlantic Silversides</td>
<td>1</td>
<td>8.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td>---</td>
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<td></td>
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<td></td>
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<tr>
<td>#4</td>
<td>10:20</td>
<td>Atlantic Silversides</td>
<td>12</td>
<td>11.5</td>
</tr>
<tr>
<td>#5</td>
<td>10:30</td>
<td>None</td>
<td>0</td>
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</tr>
<tr>
<td>#6</td>
<td>10:38</td>
<td>Atlantic Silversides</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>#7</td>
<td>10:40</td>
<td>Atlantic Silversides</td>
<td>7</td>
<td>10.5</td>
</tr>
<tr>
<td>#8</td>
<td>10:45</td>
<td>Atlantic Silversides</td>
<td>1</td>
<td>8.5</td>
</tr>
<tr>
<td>#9</td>
<td>10:55</td>
<td>None</td>
<td>0</td>
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<tr>
<td>#10</td>
<td>11:00</td>
<td>Striped Bass</td>
<td>2</td>
<td>10.5</td>
</tr>
<tr>
<td>#11</td>
<td>11:05</td>
<td>None</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>#12</td>
<td>12:15 PM</td>
<td>Atlantic Silversides</td>
<td>1</td>
<td>10.0</td>
</tr>
<tr>
<td>#13</td>
<td>12:20 PM</td>
<td>Atlantic Silversides</td>
<td>10</td>
<td>10.0</td>
</tr>
<tr>
<td>#14</td>
<td>12:22</td>
<td>None</td>
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<tr>
<td>#15</td>
<td>12:25</td>
<td>Atlantic Silversides</td>
<td>2</td>
<td>8.0</td>
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<tr>
<td>#16</td>
<td>12:47</td>
<td>None</td>
<td>0</td>
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</tr>
<tr>
<td>#17</td>
<td>12:48</td>
<td>None</td>
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<tr>
<td>#18</td>
<td>12:49</td>
<td>Atlantic Silversides</td>
<td>8</td>
<td>8.5</td>
</tr>
<tr>
<td>#19</td>
<td>12:54</td>
<td>None</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>#20</td>
<td>1:00 PM</td>
<td>None</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL DIV - 2</strong></td>
<td><strong>TOTAL CATCH 64</strong></td>
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</tr>
</tbody>
</table>

**Macroinvertebrates**

| Seine #1 | 9:50 AM | Mud Snail | 1 |   |
| Ctenaphore | 2 |   |
| #2 | 9:58 AM | Blue Crab | 1 | YOY Male |
| #2 |   | Shore Shrimp (Palaemonetes) | 1 |   |
| #3 | 10:06 | Blue Crab | 1 | YOY Male |
| #3 |   | Ctenaphore | 1 |   |
| #3 |   | Mud Snail | 1 |   |
| #6 | 10:30 | Ctenaphore | 4 |   |
| #7 | 10:38 | Ctenaphore | 4 |   |
| #8 | 10:45 | Ctenaphore | 5 |   |
| #9 | 10:55 | Ctenaphore | 5 |   |
| #11 | 11:05 | Blue Crab | 1 | YOY Male |
| #11 |   | Mud Snail | 4 |   |

**Macro – Div. 4 Totals 31**

<table>
<thead>
<tr>
<th>Tides</th>
<th></th>
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<tbody>
<tr>
<td>9:45AM</td>
<td>Rising</td>
<td>77 cm</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>10:01 AM</td>
<td>Rising</td>
<td>81 cm</td>
<td>0.25 cm/min</td>
<td></td>
</tr>
<tr>
<td>10:20 AM</td>
<td>Rising</td>
<td>88 cm</td>
<td>0.37</td>
<td></td>
</tr>
<tr>
<td>10:39 AM</td>
<td>Rising</td>
<td>99 cm</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Tide</td>
<td>Level</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>------</td>
<td>-------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>10:49 AM</td>
<td>Rising</td>
<td>102 cm</td>
<td>0.30 cm/sec</td>
<td></td>
</tr>
<tr>
<td>11:07 AM</td>
<td>Rising</td>
<td>106 cm</td>
<td>0.22 cm/sec</td>
<td></td>
</tr>
<tr>
<td>* meter stick got submerged so put in a new stick at a new location</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>12:15 PM</td>
<td>Rising</td>
<td>19 cm</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>12:31 PM</td>
<td>Rising</td>
<td>30 cm</td>
<td>0.69 cm/sec</td>
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### Currents

<table>
<thead>
<tr>
<th>Time</th>
<th>Currents</th>
<th>CM/60 secs</th>
<th>Cm/Sec</th>
<th>North/South</th>
<th>Ebb/Flood/Still</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:58 AM</td>
<td>Were able to throw the orange into the main channel so this is main channel current!</td>
<td>5.4 cm/sec</td>
<td>12.4 cm/sec</td>
<td>Flood</td>
<td></td>
</tr>
<tr>
<td>10:20 AM</td>
<td>Flood</td>
<td>9.5 cm/sec</td>
<td>Flood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00 AM</td>
<td>Flood</td>
<td>15.3 cm/sec</td>
<td>Flood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:23 PM</td>
<td>Flood</td>
<td>9.5 cm/sec</td>
<td>Flood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:55 PM</td>
<td>Flood</td>
<td>---</td>
<td>Flood</td>
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### Shipping – Commercial

<table>
<thead>
<tr>
<th>Time</th>
<th>Type</th>
<th>Vessel</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:03 AM</td>
<td>Barge</td>
<td>BMLP</td>
<td>S - Loaded</td>
</tr>
<tr>
<td>12:55 PM</td>
<td>Tug/Barge</td>
<td>Doubleskin 301</td>
<td>N - Light</td>
</tr>
</tbody>
</table>

### Recreational

<table>
<thead>
<tr>
<th>Time</th>
<th>Type</th>
<th>Vessel</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:59 AM</td>
<td>Unknown</td>
<td>N – N/A</td>
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</tr>
<tr>
<td>12:32 AM</td>
<td>UNKNOWN</td>
<td>S - NA</td>
<td></td>
</tr>
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</table>