Day in the Life of the Hudson River 10/12/17 Data
(Salt Front ~ RM 65)
RIVER MILE 61.2
Beacon Landing Park, City of Beacon, Dutchess County
Will Gunther, Nancy Fabrizio, Nancy Rypkema - Valley Central Middle School, 7th & 8th graders (95 students and 12 adults)
Latitude 41.507975, Longitude -73.986708

Location: Beacon Landing Waterfront Park, Beacon, Dutchess County NY
Area: The park at the end of Red Flynn Drive (past long dock park) near the Beacon train station – center at the park with stations all around it and fish in the cove at the end of the park - grassy lawns, forested around edges, parking lot to the side. Children’s play area, large riprap
Surrounding Land Use: Urban/residential 100% (Parkland)
Shoreline: A bridge, train station, covered in vegetation trees, concrete debris, dock
Sampling Site: beach, covered in vegetation, banks altered, rip rap
Plants in the water: no plants in the water
Water depth: <1 m
Bottom Surface: muddy

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Time</th>
<th>Reading 1</th>
<th>Reading</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Temperature</td>
<td>9:50 AM</td>
<td>14.2°C</td>
<td>58°F</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:09 AM</td>
<td>15</td>
<td>58.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:41 AM</td>
<td>15.4</td>
<td>59.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:00 AM</td>
<td>16.4</td>
<td>61.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:20 AM</td>
<td>17.8</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:42 AM</td>
<td>17</td>
<td>62.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12:09 PM</td>
<td>18.2</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12:42 PM</td>
<td>17</td>
<td>63.3</td>
<td></td>
</tr>
<tr>
<td>Wind Speed</td>
<td>Beaufort</td>
<td>#2</td>
<td>5 kts</td>
<td></td>
</tr>
<tr>
<td>Cloud Cover</td>
<td>Partly</td>
<td>26-50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weather</td>
<td>Cloudy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>today</td>
<td>No rain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weather recently</td>
<td>Rain on Monday, Warmer Tuesday and Wed. mid 70s,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Surface</td>
<td>Choppy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Temperature</td>
<td>Time</td>
<td>Degrees °C</td>
<td>Average</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9:46 AM</td>
<td>10°C</td>
<td>X3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:15 AM</td>
<td>12</td>
<td>X3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:40 AM</td>
<td>12</td>
<td>12,13,12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12:16 PM</td>
<td>14</td>
<td>X3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10°C average</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turbidity-long sight tube</td>
<td>12:00 PM</td>
<td>43 cm</td>
<td>41 cm average</td>
<td></td>
</tr>
<tr>
<td>Chemical</td>
<td>Time</td>
<td>DO</td>
<td>Temp</td>
<td>% saturation</td>
</tr>
<tr>
<td>DO (drop kit)</td>
<td>9:46 AM</td>
<td>9 ppm</td>
<td>10°C</td>
<td>80%</td>
</tr>
<tr>
<td>pH – litmus paper</td>
<td>11:51 AM</td>
<td>6</td>
<td>6.7 average</td>
<td></td>
</tr>
<tr>
<td>Salinity – QTs- HR</td>
<td>Time</td>
<td>Chloride reading Cl-</td>
<td>Total Salinity conversion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12:30 PM</td>
<td>546 ppm</td>
<td>986 ppm TS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>598 ppm</td>
<td>1080 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>654 ppm</td>
<td>1181 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish Catch seine 8X4feet</td>
<td>Number Caught</td>
<td>Species</td>
<td>Length</td>
<td></td>
</tr>
<tr>
<td>4X6 ft. pull</td>
<td>10</td>
<td>Shiner</td>
<td>7.5 cm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Striped Bass</td>
<td>12.7 cm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Sunfish</td>
<td>8.0 cm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Bluefish</td>
<td>20.5 cm</td>
<td></td>
</tr>
<tr>
<td>DIV</td>
<td>4</td>
<td>TOTAL</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Macroinvert</td>
<td>NONE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sed. Core</td>
<td>NR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tides</td>
<td>Time</td>
<td>Tide Stick</td>
<td>Flood/Ebb</td>
<td>Rate of change – cm/min</td>
</tr>
<tr>
<td></td>
<td>10:01 AM</td>
<td>30 cm</td>
<td>Falling</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>10:12 AM</td>
<td>30 cm</td>
<td>Unchanged</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:38 AM</td>
<td>28 cm</td>
<td>Falling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:54 AM</td>
<td>25 cm</td>
<td>Falling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:23 AM</td>
<td>25 cm</td>
<td>Unchanged</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:45 AM</td>
<td>23 cm</td>
<td>Falling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12:09 PM</td>
<td>20 cm</td>
<td>Falling</td>
<td>0.125</td>
</tr>
<tr>
<td></td>
<td>10:12 AM</td>
<td>30 cm</td>
<td>Falling</td>
<td>0.125</td>
</tr>
<tr>
<td></td>
<td>10:38 AM</td>
<td>28 cm</td>
<td>Falling</td>
<td>0.125</td>
</tr>
<tr>
<td></td>
<td>10:54 AM</td>
<td>25 cm</td>
<td>Unchanged</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>11:23 AM</td>
<td>25 cm</td>
<td>Falling</td>
<td>0.125</td>
</tr>
<tr>
<td>Currents</td>
<td>Time</td>
<td>Cm/30 secs</td>
<td>Cm/sec</td>
<td>knots</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>------------</td>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td></td>
<td>10:55 AM</td>
<td>152</td>
<td>2.5</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>11:45 AM</td>
<td>216</td>
<td>3.6</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>12:35 PM</td>
<td>162</td>
<td>2.7</td>
<td>0.05</td>
</tr>
</tbody>
</table>

There is a 15’ rock outcropping. We attempted to measure the current in the main channel of the Hudson beyond the outcrop.