CHARLESTON HARBOR WATER QUALITY SITE

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Objective and Approach

Objective
• Establish a long-term water quality monitoring site in lower Charleston Harbor.
• Provide water quality data throughout Harbor Deepening.

SECOORA Focus Area
• Ecosystems: Water Quality and Living Marine Resources
• Stakeholders
  • Army Corps of Engineers,
  • SC State Ports Authority
  • Charleston Harbor Pilots
  • SC Department of Natural Resources
Accomplishments

• Started collecting data in November of 2017.
• Site destroyed August 30, 2018.
• Continued collaboration with US Army Corps of Engineers and SC Ports Authority among others to re-establish the site.

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Salinity</th>
<th>DO_pct</th>
<th>DO_mgl</th>
<th>Turbidity</th>
<th>pH</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.7</td>
<td>29.4</td>
<td>95.3</td>
<td>7.4</td>
<td>14</td>
<td>8.0</td>
<td>3.12</td>
</tr>
<tr>
<td>(3.1 - 31.3)</td>
<td>(9.8 - 35.6)</td>
<td>(61.2 - 146.1)</td>
<td>(4.1 - 11.7)</td>
<td>(3 - 2979)</td>
<td>(7.5 - 8.3)</td>
<td>(1.7 - 4.6)</td>
</tr>
</tbody>
</table>
Impact

- Data collection is stalled.
- Data can be used to assess potential changes in harbor water quality from harbor deepening, hurricanes, large flooding events, among other uses.
- Ultimately, we hope the USACE, SCSPA, Charleston Harbor Pilots, and SCDNR are data users.

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