## ENVIRONMENTAL INDICATORS
### Spurzem Lake Annual Grades

<table>
<thead>
<tr>
<th>Year</th>
<th>TP (ug/L)</th>
<th>Grade</th>
<th>CLA (ug/L)</th>
<th>Grade</th>
<th>Secchi (m)</th>
<th>Grade</th>
<th>Final Grade</th>
<th>Numerical Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>89.0</td>
<td>D</td>
<td>35.0</td>
<td>C</td>
<td>1.0</td>
<td>D</td>
<td>D+</td>
<td>1.33</td>
</tr>
<tr>
<td>1991</td>
<td>212.3</td>
<td>F</td>
<td>26.6</td>
<td>C</td>
<td>1.0</td>
<td>D</td>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>1993</td>
<td>121.0</td>
<td>D</td>
<td>7.9</td>
<td>A</td>
<td>3.2</td>
<td>A</td>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>1995</td>
<td>94.8</td>
<td>D</td>
<td>32.1</td>
<td>C</td>
<td>1.8</td>
<td>C</td>
<td>C-</td>
<td>1.67</td>
</tr>
<tr>
<td>1996</td>
<td>71.0</td>
<td>C</td>
<td>14.6</td>
<td>B</td>
<td>1.5</td>
<td>C</td>
<td>C+</td>
<td>2.33</td>
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<tr>
<td>1997</td>
<td>136.4</td>
<td>D</td>
<td>36.3</td>
<td>C</td>
<td>1.8</td>
<td>C</td>
<td>C-</td>
<td>1.67</td>
</tr>
<tr>
<td>1998</td>
<td>123.0</td>
<td>D</td>
<td>11.3</td>
<td>B</td>
<td>2.4</td>
<td>B</td>
<td>C+</td>
<td>2.33</td>
</tr>
<tr>
<td>2003</td>
<td>100.9</td>
<td>D</td>
<td>69.3</td>
<td>D</td>
<td>0.9</td>
<td>D</td>
<td>D</td>
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</tr>
<tr>
<td>2004</td>
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<td>D</td>
<td>35.0</td>
<td>C</td>
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<td>C</td>
<td>C-</td>
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<tr>
<td>2005</td>
<td>116.8</td>
<td>D</td>
<td>66.2</td>
<td>D</td>
<td>1.5</td>
<td>C</td>
<td>D+</td>
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</tr>
<tr>
<td>2006</td>
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<td>67.3</td>
<td>D</td>
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<td>D</td>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>2007</td>
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<td>D</td>
<td>66.0</td>
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<td>D</td>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>2008</td>
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<td>C</td>
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<td>C</td>
<td>C-</td>
<td>1.67</td>
</tr>
<tr>
<td>2009</td>
<td>159.9</td>
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<td>D</td>
<td>1.0</td>
<td>D</td>
<td>D-</td>
<td>0.67</td>
</tr>
</tbody>
</table>

**GPA:** 1.55

### THREE FACTORS IN THE LAKE GRADE
- **Total Phosphorus (TP):** The total phosphorus measure. Increased phosphorus relates closely to increased algae, frequency of algae blooms and the increased quantity of blue-green algae.
- **Chlorophyll-a (CLA):** Chlorophyll-a or the green pigment in plants is essential to photosynthesis. A measure of its presence in water estimates algae abundance.
- **Secchi Disk (SD):** The Secchi disk transparency. The deeper the Secchi disk is visible, the clearer the water appears.

10 Year Average = D+
10 Year Trend = Slightly Declining
## Countywide Statistics of Lakes Monitored

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>9 lakes (15%)</td>
<td>19 lakes (21%)</td>
<td>Crystal Clear, beautiful. These lakes are exceptional and are enjoyed recreationally without question or hesitation. No impairment.</td>
</tr>
<tr>
<td>B</td>
<td>13 lakes (21%)</td>
<td>16 lakes (17%)</td>
<td>These lakes generally have good water quality, but algae may limit swimming, particularly toward the end of summer. Some impairment.</td>
</tr>
<tr>
<td>C</td>
<td>22 lakes (36%)</td>
<td>26 lakes (28%)</td>
<td>Average quality. Swimming, boating and fishing may be undesirable relatively early in the season. Algae blooms occasionally. Impaired.</td>
</tr>
<tr>
<td>D</td>
<td>15 lakes (25%)</td>
<td>22 lakes (24%)</td>
<td>These lakes have severe algae problems. People are generally not interested in recreation on these lakes. Severely impaired.</td>
</tr>
<tr>
<td>F</td>
<td>2 lakes (3%)</td>
<td>9 lakes (10%)</td>
<td>Not enjoyable. Such lakes would have severe limitations to recreational use. Very limited uses.</td>
</tr>
</tbody>
</table>

![Graph showing the distribution of lake grades](image-url)