## ENVIRONMENTAL INDICATORS - Halsted Bay Annual Grades

### Three Factors in the Lake Grade

<table>
<thead>
<tr>
<th>THREE FACTORS IN THE LAKE GRADE</th>
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<tbody>
<tr>
<td><strong>Total Phosphorus (TP)</strong></td>
</tr>
<tr>
<td><strong>Chlorophyll-a (CLA)</strong></td>
</tr>
<tr>
<td><strong>Secchi Disk (SD)</strong></td>
</tr>
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</table>

### Environmental Indicators - Halsted Bay Annual Grades

**Year** | **TP (ug/L)** | **Grade** | **CLA (ug/L)** | **Grade** | **Secchi (m)** | **Grade** | **Final Grade** | **Numeric Grade** |
--- | --- | --- | --- | --- | --- | --- | --- | --- |
1969 | 98.3 | D | 32.4 | C | 0.5 | F | D | 1.00 |
1981 | 128.0 | D | 67.0 | D | 0.7 | D | D | 1.00 |
1996 | 95.7 | D | 29.5 | C | 2.2 | B | C | 2.00 |
1997 | 105.5 | D | 23.7 | C | 1.5 | C | C- | 1.67 |
1998 | 125.6 | D | 66.8 | D | 1.0 | D | D | 1.00 |
1999 | 118.5 | D | 32.1 | C | 1.4 | C | C- | 1.67 |
2000 | 99.6 | D | 48.9 | D | 1.3 | C | D+ | 1.33 |
2001 | 86.5 | D | 20.4 | C | 1.3 | C | C- | 1.67 |
2002 | 104.2 | D | 36.0 | C | 1.5 | C | C- | 1.67 |
2003 | 108.8 | D | 68.4 | D | 1.4 | C | D+ | 1.33 |
2004 | 127.9 | D | 41.4 | C | 1.6 | C | C- | 1.67 |
2005 | 79.0 | D | 38.7 | C | 1.4 | C | C- | 1.67 |
2006 | 67.1 | C | 44.9 | C | 1.0 | D | C- | 1.67 |
2007 | 90.5 | D | 67.8 | D | 0.8 | D | D | 1.00 |
2008 | 97.8 | D | 71.3 | D | 1.2 | C | D+ | 1.33 |
2009 | 98.3 | D | 63.9 | D | 1.0 | D | D | 1.00 |

**GPA** 1.42

**D+**

### Environmental Indicators

#### 1969 - 2009

- **TP (Total Phosphorus)**
- **CLA (Chlorophyll-a)**
- **Secchi Disk Transparency**

**10 Year Average = D+**

**10 Year Trend = Steady**
### General Description

**A's** (15%)  
9 lakes  

19 lakes  (21%)  
Crystal Clear, beautiful. These lakes are exceptional and are enjoyed recreationally without question or hesitation. No impairment.

**B's** (21%)  
13 lakes  

16 lakes  (17%)  
These lakes generally have good water quality, but algae may limit swimming, particularly toward the end of summer. Some impairment.

**C's** (36%)  
22 lakes  

26 lakes  (28%)  
Average quality. Swimming, boating and fishing may be undesirable relatively early in the season. Algae blooms occasionally. Impaired.

**D's** (25%)  
15 lakes  

22 lakes  (24%)  
These lakes have severe algae problems. People are generally not interested in recreation on these lakes. Severely impaired.

**F's** (3%)  
2 lakes  

9 lakes  (10%)  
Not enjoyable. Such lakes would have severe limitations to recreational use. Very limited uses.

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**COUNTYWIDE STATISTICS OF LAKES MONITORED**

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<td>A</td>
<td>9 lakes  (15%)</td>
<td>19 lakes  (21%)</td>
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<td>B</td>
<td>13 lakes  (21%)</td>
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<td>C</td>
<td>22 lakes  (36%)</td>
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<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>
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<td>2 lakes  (3%)</td>
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<td>Not enjoyable. Such lakes would have severe limitations to recreational use. Very limited uses.</td>
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**Diagram:**

- **2009 H.C. Lakes**
- **10 Yr Ave**
- **Standard Curve**

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**Legend:**

- **A's**
- **B's**
- **C's**
- **D's**
- **F's**