## Overholser

<table>
<thead>
<tr>
<th>Sample Period</th>
<th>Times Visited</th>
<th>Sampling Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 2016 – August 2017</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

### General

- **Location**: Oklahoma County
- **Impoundment**: 1919
- **Area**: 1,500 acres
- **Capacity**: 15,000 acre-feet
- **Purposes**: Water Supply, Recreation

### Parameters

#### In Situ

- **Average Turbidity**: 41 NTU
- **Average Secchi Disk Depth**: 27 cm
- **Water Clarity Rating**: Poor
- **Chlorophyll-a**: 46.35 mg/m³
- **Trophic State Index**: 68
- **Trophic Class**: Hypereutrophic

#### Profile

- **Salinity**: 0.49 – 0.69 ppt
- **Specific Conductivity**: 986.3 – 1390.1 µS/cm
- **pH**: 8.2– 8.6 pH units
- **Oxidation-Reduction Potential**: 117.5 – 417.2 mV
- **Dissolved Oxygen**: Not stratified during any sampling interval

#### Nutrients

- **Surface Total Nitrogen**: 1.22 mg/L to 1.74 mg/L
- **Surface Total Phosphorus**: 0.145 mg/L to 0.337 mg/L
- **Nitrogen to Phosphorus Ratio**: 7:1

#### Notes/Comments

- 90% of values > OWQS of 25 NTU (n=10)
- Previous value = 61
- Previously considered threatened by nutrients until studies can be conducted to confirm non-support status

### Beneficial Uses

<table>
<thead>
<tr>
<th>Fish &amp; Wildlife Propagation</th>
<th>Turbidity</th>
<th>pH</th>
<th>Dissolved Oxygen</th>
<th>Metals</th>
<th>TSI</th>
<th>True Color</th>
<th>Sulfates</th>
<th>Chlorides</th>
<th>Total Dissolved Solids</th>
<th>Enterro. &amp; E. coli</th>
<th>Chlor-a</th>
</tr>
</thead>
<tbody>
<tr>
<td>NS</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes

- The lake is listed in the WQS as a NLW indicating that the Aesthetics beneficial use is considered threatened by nutrients until studies can be conducted to confirm non-support status
- *Standards revision, true color is for permitting purposes only*

- **NTU** = nephelometric turbidity units
- **µS/cm** = microsiemens per centimeter
- **E. coli** = Escherichia coli
- **Chlor-a** = Chlorophyll-a
- **OWQS** = Oklahoma Water Quality Standards
- **mg/L** = milligrams per liter
- **µS/cm** = microsiemens/cm
- **ppt** = parts per thousand
- **En** = Enterococci

---


Bathy map available: [http://www.owrb.ok.gov/maps/PMG/owrbdata_Bathy.html](http://www.owrb.ok.gov/maps/PMG/owrbdata_Bathy.html)