# Ardmore City

## General

<table>
<thead>
<tr>
<th>Location</th>
<th>Carter County</th>
<th>Click map for site data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impoundment</td>
<td>1910</td>
<td></td>
</tr>
<tr>
<td>Area</td>
<td>142 acres</td>
<td></td>
</tr>
<tr>
<td>Capacity</td>
<td>600 acre-feet</td>
<td></td>
</tr>
<tr>
<td>Purposes</td>
<td>Recreation</td>
<td></td>
</tr>
</tbody>
</table>

## Sample Period

<table>
<thead>
<tr>
<th>Times</th>
<th>Sampling Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2006 - August 2007</td>
<td>4</td>
</tr>
</tbody>
</table>

## In Situ Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Result</th>
<th>Notes/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Turbidity</td>
<td>10 NTU</td>
<td>100% of values &lt; OWQS of 25 NTU</td>
</tr>
<tr>
<td>Average True Color</td>
<td>25 units</td>
<td></td>
</tr>
<tr>
<td>Average Secchi Disk Depth</td>
<td>106 cm</td>
<td></td>
</tr>
<tr>
<td>Water Clarity Rating</td>
<td>excellent</td>
<td></td>
</tr>
<tr>
<td>Trophic State Index</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Trophic Class</td>
<td>eutrophic</td>
<td></td>
</tr>
</tbody>
</table>

## Profile Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Result</th>
<th>Notes/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salinity</td>
<td>0.13 – 0.18 ppt</td>
<td></td>
</tr>
<tr>
<td>Specific Conductivity</td>
<td>278.6 – 365 µS/cm</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>7.16 - 8.85 pH units</td>
<td>Neutral to slightly alkaline</td>
</tr>
<tr>
<td>Oxidation-Reduction Potential</td>
<td>48 to 436 mV</td>
<td></td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>Up to 63% of water column &lt; 2 mg/L in August</td>
<td></td>
</tr>
</tbody>
</table>

## Nutrients

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Result</th>
<th>Notes/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Total Nitrogen</td>
<td>0.32 mg/L to 0.62 mg/L</td>
<td></td>
</tr>
<tr>
<td>Surface Total Phosphorus</td>
<td>0.009 mg/L to 0.035 mg/L</td>
<td></td>
</tr>
<tr>
<td>Nitrogen to Phosphorus Ratio</td>
<td>22:1</td>
<td>Phosphorus limited</td>
</tr>
</tbody>
</table>

## Beneficial Uses

<table>
<thead>
<tr>
<th>Beneficial Uses</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>Entero. &amp; E. coli</th>
<th>Chlor-a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish &amp; Wildlife Propagation</td>
<td>S</td>
<td>S</td>
<td>NEI</td>
<td>S</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Aesthetics</td>
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<tr>
<td>Agriculture</td>
<td>S</td>
<td>S</td>
<td>S</td>
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<tr>
<td>Primary Body Contact Recreation</td>
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<tr>
<td>Public &amp; Private Water Supply</td>
<td></td>
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</tbody>
</table>

*Standards revision, true color is for permitting purposes only.

**Notes:**
- S = Fully Supporting
- NS = Not Supporting
- NEI = Not Enough Information

**Units:**
- NTU = nephelometric turbidity units
- µS/cm = microsiemens per centimeter
- mg/L = milligrams per liter
- µV = millivolts
- µS/cm = microsiemens/cm
- ppt = parts per thousand
- En = Enterococci

[Sampling and Assessment by the Oklahoma Water Resources Board - 3800 Classen Blvd, Oklahoma City, OK, 73118 – 405.530.8800 – http://www.owrb.ok.gov](http://www.owrb.ok.gov)