## Coalgate City

<table>
<thead>
<tr>
<th>Sample Period</th>
<th>Times Visited</th>
<th>Sampling Sites</th>
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</thead>
<tbody>
<tr>
<td>December 2014 – September 2015</td>
<td>4</td>
<td>3</td>
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</tbody>
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### General

- **Location**: Coal County
- **Impoundment**: 1965
- **Area**: 352 acres
- **Capacity**: 3,437 acre-feet
- **Purposes**: Water Supply, Recreation and Flood Control

### Parameters

#### In Situ
- **Average Turbidity**: 34 NTU
- **Average Secchi Disk Depth**: 38 cm
- **Water Clarity Rating**: Poor
- **Chlorophyll-a**: 11 mg/m³
- **Trophic State Index**: 54
- **Trophic Class**: Eutrophic

#### Profile
- **Salinity**: 0.04 – 0.06 ppt
- **Specific Conductivity**: 92.7 – 136.6 µS/cm
- **pH**: 6.64 – 7.69 pH units
- **Oxidation-Reduction Potential**: 133.7 to 422.9 mV
- **Dissolved Oxygen**: Up to 50% of water column < 2 mg/L in June

#### Nutrients
- **Surface Total Nitrogen**: 0.65 mg/L to 1.09 mg/L
- **Surface Total Phosphorus**: 0.030 mg/L to 0.087 mg/L
- **Nitrogen to Phosphorus Ratio**: 16:1

### 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>Enterococci &amp; E. coli</th>
<th>Chlor-a</th>
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<tbody>
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<td>Fish &amp; Wildlife Propagation</td>
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<td>Primary Body Contact Recreation</td>
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<td>Public &amp; Private Water Supply</td>
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**Notes/Comments**
- 75% of values > OWQS of 25 NTU
- Previous value = 47
- Phosphorus limited

**Click to learn more about Beneficial Uses**

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

**NTU = nephelometric turbidity units**
**µS/cm = microsiemens per centimeter**
**E. coli = Escherichia coli**
**OWQS = Oklahoma Water Quality Standards**
**mg/L = milligrams per liter**
**µS/cm = microsiemens/cm**
**En = Enterococci**

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

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