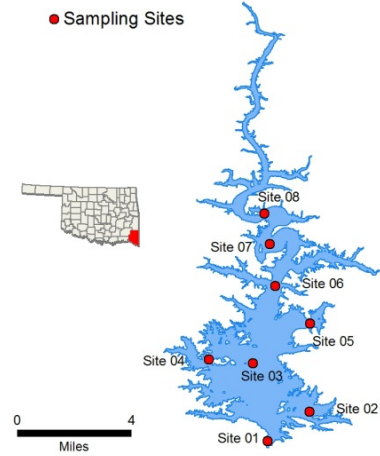


Broken Bow

| Sample Period | Times Visited | Sampling Sites |
|---------------------------|---------------|----------------|
| November 2017 – July 2018 | 4 | 8 |

| | | |
|---------|-------------|--|
| General | Location | McCurtain County |
| | Impoundment | 1970 |
| | Area | 14,200 acres |
| | Capacity | 918,070 acre-feet |
| | Purposes | Flood Control, Hydropower, Water Supply, Recreation, Fish & Wildlife |



| Parameters | | Parameter (<i>Descriptions</i>) | Result | Notes/Comments |
|---------------------------|-------------------------------|--|------------------------------|----------------|
| | | In Situ | Average Turbidity | 3 NTU |
| Average Secchi Disk Depth | 200 cm | | | |
| Water Clarity Rating | Excellent | | | |
| Chlorophyll-a | 4.44 mg/m ³ | | | |
| Trophic State Index | 45 | | Previous value = 46 | |
| Trophic Class | Mesotrophic | | | |
| Profile | Salinity | 0.01 – 0.02 ppt | | |
| | Specific Conductivity | 30.4 – 87.4 µS/cm | | |
| | pH | 4.44 – 7.58 pH units | 65% of values < 6.5 pH units | |
| | Oxidation-Reduction Potential | 126.4 – 376.7 mV | | |
| | Dissolved Oxygen | Up to 72% of water column < 2.0 mg/L in the summer | | |
| Nutrients | Surface Total Nitrogen | 0.14 mg/L to 0.46 mg/L | | |
| | Surface Total Phosphorus | 0.010 mg/L to 0.031 mg/L | | |
| | Nitrogen to Phosphorus Ratio | 22:1 | Phosphorus limited | |

| Beneficial Uses | Click to learn more about Beneficial Uses | Turbidity | pH | Dissolved Oxygen | Metals | TSI | True Color | Sulfates | Chlorides | Total Dissolved Solids | En & E. coli | Chlor-a |
|-----------------|---|-----------|-----|------------------|--------|-----|------------|----------|-----------|------------------------|--------------|---------|
| | Fish & Wildlife Propagation | S | NS* | NS | S | | | | | | | |
| | Aesthetics | | | | | S | * | | | | | |
| | Agriculture | | | | | | | S | S | S | | |
| | Primary Body Contact Recreation | | | | | | | | | | S | |
| | Public & Private Water Supply | | | | | | | | | | | |

Notes
S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

*Slightly acidic conditions are not unusual in this part of the state due to relatively low soil pH and lack of soluble bedrock.
 *Standards revision, true color is for permitting purposes only.

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