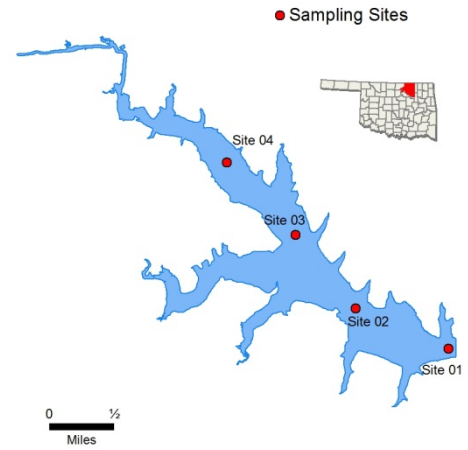


# Bluestem

Sample Period	Times Visited	Sampling Sites
November 2018 – August 2019	4	4

General	Location	Osage County
	Impoundment	1958
	Area	762 acres
	Capacity	17,000 acre-feet
	Purposes	Water Supply, Recreation



Parameters	In Situ	Parameter ( <i>Descriptions</i> )	Result	Notes/Comments
		Average Turbidity	20 NTU	14% of values > OWQS of 25 NTU (n=14)
		Average Secchi Disk Depth	58 cm	
		Water Clarity Rating	Average	
		Chlorophyll-a	4.62 mg/m <sup>3</sup>	
		Trophic State Index	46	Previous value = 48
	Trophic Class	Mesotrophic		
	Profile	Salinity	0.7 – 0.16 ppt	
		Specific Conductivity	148.1 – 345.5 µS/cm	
		pH	7.15 – 8.40 pH units	Neutral to slightly alkaline
		Oxidation-Reduction Potential	92.5 – 480.9 mV	
		Dissolved Oxygen	Up to 67% of water column < 2.0 mg/L in August	
	Nutrients	Surface Total Nitrogen	0.42 mg/L to 0.72 mg/L	
Surface Total Phosphorus		0.023 mg/L to 0.080 mg/L		
Nitrogen to Phosphorus Ratio		13:1	Phosphorus limited	

Beneficial Uses	<a href="#">Click to learn more about Beneficial Uses</a>	Turbidity	pH	Dissolved Oxygen	Metals	TSI	True Color	Sulfates	Chlorides	Total Dissolved Solids	En terro. & E. coli	Chlor-a
	Fish & Wildlife Propagation	NS	S	NEI	*							
	Aesthetics					S	*					
	Agriculture							N/A	N/A	S		
	Primary Body Contact Recreation										S	
	Public & Private Water Supply											
<i>S = Fully Supporting</i> <i>NS = Not Supporting</i> <i>NEI = Not Enough Information</i>		<b>Notes</b> *Standards revision, true color is for permitting purposes only. *50-70% range is undetermined for DO.										

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