

Cushing Municipal

Sample Period	Times Visited	Sampling Sites
October 2016 - July 2017	4	5

General	Location	Payne County
	Impoundment	1950
	Area	591 acres
	Capacity	3,304 acre-feet
	Purposes	Water Supply, Recreation



Parameters	Parameter (<i>Descriptions</i>)		Result	Notes/Comments
	In situ	Average Turbidity	59 NTU	75% of values > OWQS of 25 NTU
		Average Secchi Disk Depth	29 cm	
		Water Clarity Rating	Poor	
		Chlorophyll-a	11.05 mg/m ³	
		Trophic State Index	54	Previous value = 50
		Trophic Class	Eutrophic	
	Profile	Salinity	0.11 – 0.21 ppt	
		Specific Conductivity	244 – 440.9 µS/cm	
		pH	7.31– 8.33 pH units	Neutral to slightly alkaline
		Oxidation-Reduction Potential	229 to 436.1 mV	
		Dissolved Oxygen	Up to 9% of water column < 2 mg/L in July	
	Nutrients	Surface Total Nitrogen	0.65 mg/L to 1.62 mg/L	
		Surface Total Phosphorus	0.084 mg/L to 0.257 mg/L	
		Nitrogen to Phosphorus Ratio	6:1	Possibly co- limited

Beneficial Uses	Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	TSI	True Color	Sulfates	Chlorides	Total Dissolved Solids	Enterro. & E. coli	Chlor-a
	Fish & Wildlife Propagation	NS	S	S	S							
	Aesthetics					S	*					
	Agriculture							S	S	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>		Notes *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