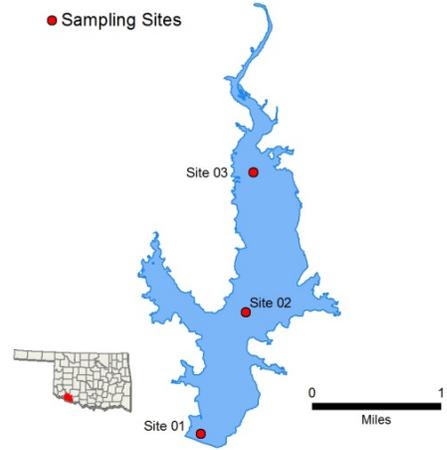


Frederick

● Sampling Sites



Sample Period	Times Visited	Sampling Sites
October 2017 – July 2018	4	3

General	Location	Tillman County
	Impoundment	1974
	Area	925 acres
	Capacity	9,526 acre-feet
	Purposes	Water Supply, Recreation and Flood Control

Parameters	In Situ	Parameter (<i>Descriptions</i>)	Result	Notes/Comments
		Average Turbidity	50 NTU	92% of values > OWQS of 25 NTU
		Average Secchi Disk Depth	26 cm	
		Water Clarity Rating	Poor	
		Chlorophyll-a	7.94 mg/m ³	
		Trophic State Index	51	Previous Value= 50
	Trophic Class	Mesotrophic		
	Profile	Salinity	0.12– 0.23 ppt	
		Specific Conductivity	263.4 – 507.0 μS/cm	
		pH	7.49 – 8.62 pH units	Neutral to slightly alkaline
		Oxidation-Reduction Potential	98.2 – 475.6 mV	
		Dissolved Oxygen	Up to 9% of water column < 2 mg/L in July	
	Nutrients	Surface Total Nitrogen	0.615 mg/L to 0.9 mg/L	
		Surface Total Phosphorus	0.041 mg/L to 0.117 mg/L	
		Nitrogen to Phosphorus Ratio	11:1	Phosphorus limited

Beneficial Uses	Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	TSI	True Color	Sulfates	Chlorides	Total Dissolved Solids	Enteroc. & 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