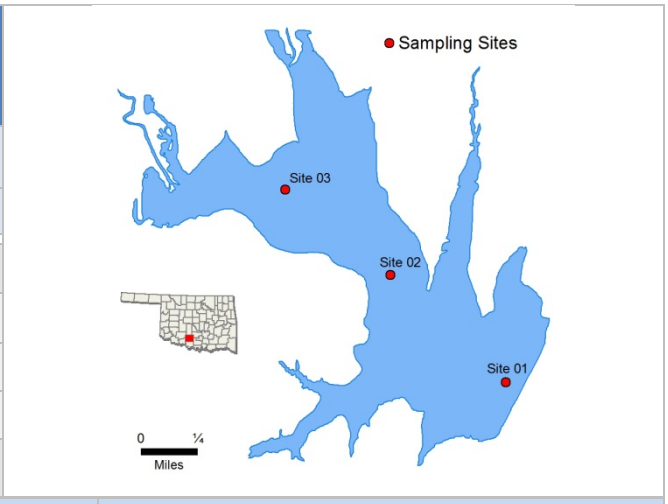
Humphreys

Sample Period	Times Visited	Sampling Sites
October 2018 – July 2019	4	3



General

Location	Stephens County
Impoundment	1958
Area	882 acres
Capacity	14,041 acre-feet
Purposes	Water Supply, Flood Control, Recreation

Parameters

	Parameter (Descriptions)	Result	Notes/Comments
In Situ	Average Turbidity	7 NTU	100% of values < OWQS of 25 NTU (n=12)
	Average Secchi Disk Depth	115 cm	
	Water Clarity Rating	Excellent	
	Chlorophyll-a	17.39 mg/m3	
	Trophic State Index	59	Previous value = 62
	Trophic Class	Eutrophic	
Profile	Salinity	0.26 – 0.33 ppt	
	Specific Conductivity	542.9 – 680.5 µS/cm	
	pH	7.23 – 8.36pH units	Neutral to slightly alkaline
	Oxidation-Reduction Potential	-74.10 – 4442.4 mV	
	Dissolved Oxygen	Up to 53% of water column < 2.0 mg/L in July	
Nutrients	Surface Total Nitrogen	0.70 mg/L to 1.01 mg/L	
	Surface Total Phosphorus	0.020 mg/L to 0.061 mg/L	
	Nitrogen to Phosphorus Ratio	24:1	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	S	S	S							
Aesthetics					NEI	*					
Agriculture							N/A	N/A	S		
Primary Body Contact Recreation										S	
Public & Private Water Supply											NS

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

Notes

*Standards revision, true color is for permitting purposes only. *Based on the TSI this lake will be further reviewed to determine the need to be considered as an NLW water body.

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

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