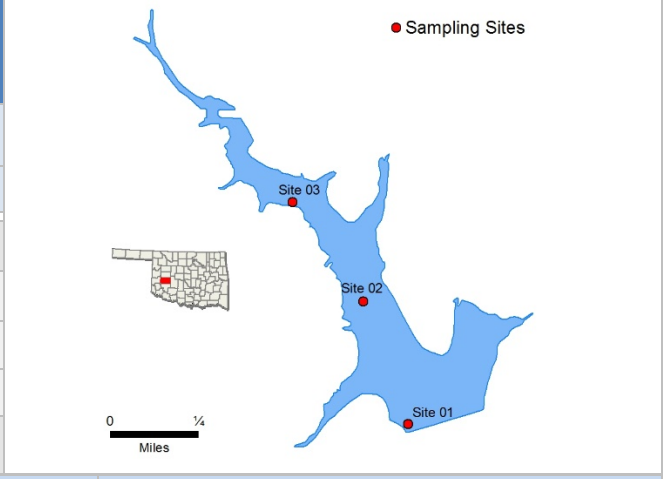
Vanderwork

Sample Period	Times Visited	Sampling Sites
October 2007 – July 2008	4	5



General

Location	Washita County
Impoundment	1968
Area	135 acres
Capacity	1,578 acre-feet
Purposes	Recreation

Parameters

	Parameter (Descriptions)	Result	Notes/Comments
	Average Turbidity	9 nephelometric turbidity units (NTU)	All values < 25 NTU
	Average True Color	17 units	All values < OWQS of 70
	Average Secchi Disk Depth	59 cm	
	Water Clarity Rating	good	
	Trophic State Index	64	Previous value = 60
	Trophic Class	hypereutrophic	
Profile	Salinity	0.83 - 1.01 ppt	
Profile	Specific Conductivity	1568 – 1896 µS/cm	
Profile	pH	7.2 – 8.18 pH units	Neutral to slightly alkaline
Profile	Oxidation-Reduction Potential	-116 to 530 mV	
Profile	Dissolved Oxygen	Up to 50% of water column < 2 mg/L in June	Occurred at site 1
Nutrients	Surface Total Nitrogen	0.87 mg/L to 1.75 mg/L	
Nutrients	Surface Total Phosphorus	0.041 mg/L to 0.100 mg/L	
Nutrients	Nitrogen to Phosphorus Ratio	18:1	Phosphorus limited

Beneficial Uses

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

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

Notes

The lake is listed as a Nutrient Limited Watershed (NLW) in the Oklahoma Water Quality Standards (WQS). This listing means that the lake is considered threatened from nutrients until a more intensive study can confirm the Aesthetics beneficial use non-support status.

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

Bathy map available: http://www.owrb.ok.gov/maps/PMG/owrbdata_Bathy.html