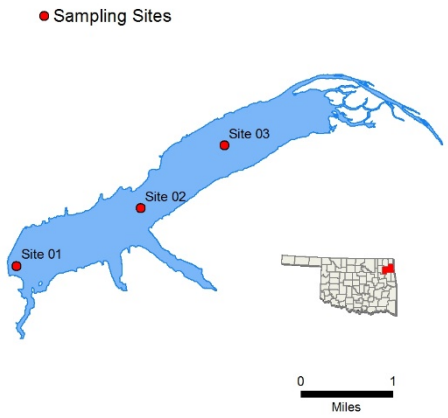
Spavinaw

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



General

Location	Mayes County
Impoundment	1924
Area	1,584 acres
Capacity	38,000 acre-feet
Purposes	Water Supply, Recreation, Fish & Wildlife

Parameters

	Parameter (Descriptions)	Result	Notes/Comments
In Situ	Average Turbidity	5 NTU	100% of values < OWQS of 25 NTU (n=12)
	Average Secchi Disk Depth	112.5 cm	
	Water Clarity Rating	Good	
	Chlorophyll-a	18.60 mg/m3	
	Trophic State Index	59	Previous value = 62
	Trophic Class	Eutrophic	
Profile	Salinity	0.07 – 0.13 ppt	
	Specific Conductivity	146.2 – 277.0 µS/cm	
	pH	6.82 – 8.88 pH units	
	Oxidation-Reduction Potential	-19.6 to 535.8 mV	
	Dissolved Oxygen	Up to 54% of water column < 2.0 mg/L in July	
Nutrients	Surface Total Nitrogen	0.56 mg/L to 1.63 mg/L	
	Surface Total Phosphorus	0.016 mg/L to 0.041 mg/L	
	Nitrogen to Phosphorus Ratio	32:1	Phosphorus limited

Beneficial Uses

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

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