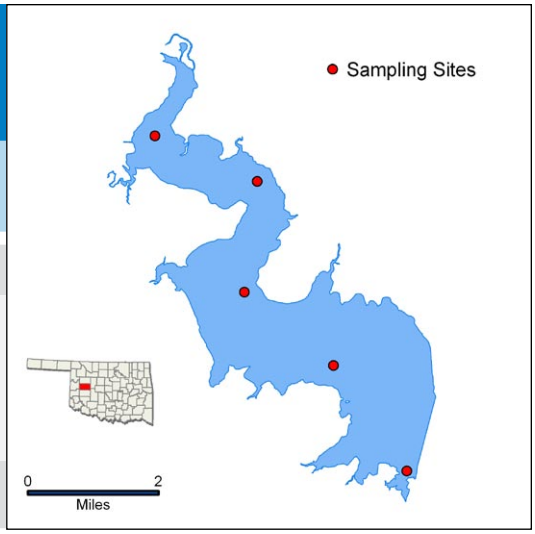
Beneficial Use Monitoring Program

Foss

Sample Period	Times Visited	Sampling Sites
September 2004 – June 2005	4	5



Lake Data

Location	Custer County
Impoundment	1961
Area	8,800 acres
Capacity	256,220 acre-feet
Purposes	Recreation

Parameters

	Parameter	Result	Notes/Comments
	Average Turbidity	9 NTU	100% of values < OWQS of 25 NTU
	Average True Color	8 units	100% of values < OWQS of 70
	Average Secchi Disk Depth	97 cm	
	Water Clarity Rating	average	
	Trophic State Index	52	
	Trophic Class	eutrophic	
Profile	Salinity	1.06– 1.24 ppt	
Profile	Specific Conductivity	1963 –2320 µS/cm	
Profile	pH	6.68 – 8.3 pH units	28% of recorded values > 9.0 pH units
Profile	Oxidation-Reduction Potential	357– 557mV	
Profile	Dissolved Oxygen		D.O. never below 2.0mg/L during study period
Nutrients	Surface Total Nitrogen	0.49 mg/L to 1.24 mg/L	
Nutrients	Surface Total Phosphorus	0.014 mg/L to 0.039 mg/L	
Nutrients	Nitrogen to Phosphorus Ratio	30:1	Phosphorus limited

Beneficial Uses

	Turbidity	pH	Dissolved Oxygen	Metals	TSI	True Color	Sulfates, Chlorides & TDS	En,ecal coli, & E. coli	Chlor-a
Fish & Wildlife Propagation	S	S	S	S					
Aesthetics					S	S			
Agriculture							S		
Primary Body Contact Recreation								NEI	
Public & Private Water Supply									

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

Notes

*Bacteriological not collected during sample year 2004-2005.

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