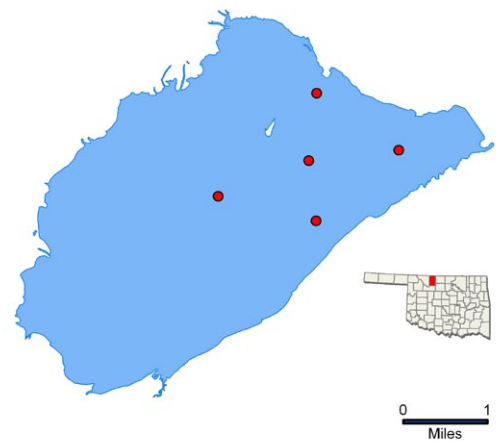


# Great Salt Plains

● Sampling Sites



Sample Period	Times Visited	Sampling Sites
October 2005 – July 2006	2	5

Lake Data	Location	Alfalfa County
	Impoundment	1941
	Area	8,690 acres
	Capacity	31,240 acre-feet
	Purposes	Flood Control, Conservation

Parameters	Parameter	Result	Notes/Comments	
	Average Turbidity	193 NTU	98% of values > OWQS of 25 NTU	
	Average True Color	62 units	17% of values > OWQS of 70	
	Average Secchi Disk Depth	10 cm		
	Water Clarity Rating	poor		
	Trophic State Index	71		
	Trophic Class	hypereutrophic		
	Profile	Salinity	0.02– 5.67 ppt	
		Specific Conductivity	494.6 – 10,016 μS/cm	
		pH	5.11 – 8.80 pH units	Only 6.4% of values < 6.5 pH units
		Oxidation-Reduction Potential	93 – 490 mV	
		Dissolved Oxygen		Not stratified at any sampling event
	Nutrients	Surface Total Nitrogen	0.75 mg/L to 2.85 mg/L	
		Surface Total Phosphorus	0.046 mg/L to 1.783 mg/L	
		Nitrogen to Phosphorus Ratio	6:1	Nitrogen limited or possibly co-limited

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

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

**Notes**  
 \*The lake is listed in the WQS as a NLW indicating that the Aesthetics beneficial use is considered threatened by nutrients until studies can be conducted to confirm non-support status.  
 \*\* Because the extremely high chloride conditions are due to natural conditions, the OWRB is looking into site-specific criteria for this waterbody.

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