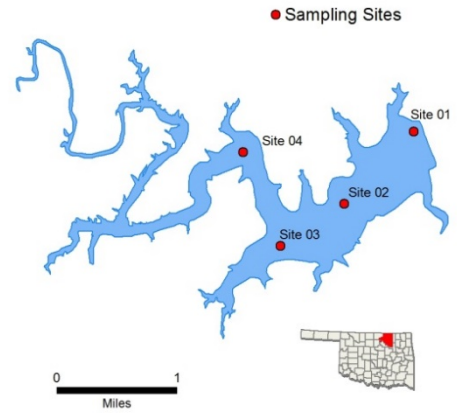


# Birch

Sample Period	Times Visited	Sampling Sites
November 2017- July 2018	4	4

General	Location	Osage County
	Impoundment	1977
	Area	1,137 acres
	Capacity	19,200 acre-feet
	Purposes	Water Supply, Recreation, Flood Control, Water Quality Control and Fish and Wildlife



Parameters		Parameter ( <i>Descriptions</i> )	Result	Notes/Comments
		In Situ	Average Turbidity	10 NTU
Average Secchi Disk Depth	101 cm			
Water Clarity Rating	Excellent			
Chlorophyll-a	7.25 mg/m <sup>3</sup>			
Trophic State Index	50		Previous value = 59	
Trophic Class	Mesotrophic			
Profile	Salinity	0.06 – 0.10 ppt		
	Specific Conductivity	127.7 – 218.3 μS/cm		
	pH	6.89 – 8.10 pH units		
	Oxidation-Reduction Potential	-0.90 to 499.8 mV		
	Dissolved Oxygen	Up to 55% of water column < 2.0 mg/L in summer		
Nutrients	Surface Total Nitrogen	0.54 mg/L to 0.79 mg/L		
	Surface Total Phosphorus	0.018 mg/L to 0.031 mg/L		
	Nitrogen to Phosphorus Ratio	28:1	Phosphorus limited	

Beneficial Uses	<a href="#">Click to learn more about Beneficial Uses</a>	Turbidity	pH	Dissolved Oxygen	Metals	TSI	True Color	Sulfates	Chlorides	Total Dissolved Solids	En & E. coli	Chlor-a
	Fish & Wildlife Propagation	NS	S	NS	S							
	Aesthetics					S	*					
	Agriculture							S	S	S		
	Primary Body Contact Recreation										S	
	Public & Private Water Supply											

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

**Notes** \*Standards revision, true color is for permitting purposes only.

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