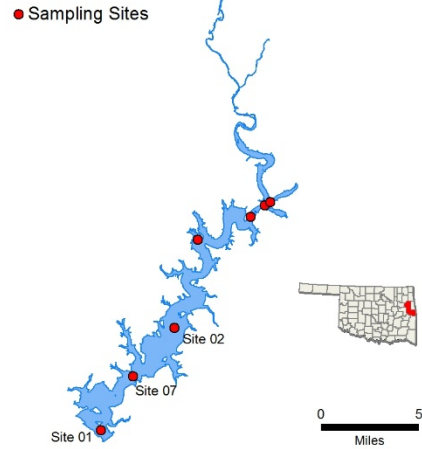


Tenkiller (1,2,7)



Sample Period	Times Visited	Sampling Sites
October 2016 – July 2017	4	7

General	Location	Sequoyah County
	Impoundment	1953
	Area	12,900 acres
	Capacity	654,100 acre-feet
	Purposes	Flood Control, Hydropower

Parameters	In Situ	Parameter (<i>Descriptions</i>)	Result	Notes/Comments
		Average Turbidity	3 NTU	100% of values < OWQS of 25 NTU
		Average Secchi Disk Depth	215 cm	
		Water Clarity Rating	Excellent	
		Chlorophyll-a	7.77 mg/m3	
		Trophic State Index	51	Previous value = 56
	Trophic Class	Eutrophic		
	Profile	Salinity	0.08 – 0.12 ppt	
		Specific Conductivity	165.1 – 254.9 µS/cm	
		pH	6.48– 8.71 pH units	
		Oxidation-Reduction Potential	68.9-465.5 mV	
		Dissolved Oxygen	Up to 79% of water column < 2 mg/L	
	Nutrients	Surface Total Nitrogen	0.25 mg/L to 0.99 mg/L	
		Surface Total Phosphorus	0.010 mg/L to 0.021 mg/L	
		Nitrogen to Phosphorus Ratio	31:1	Possibly co-limited for this sample year

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

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

Notes

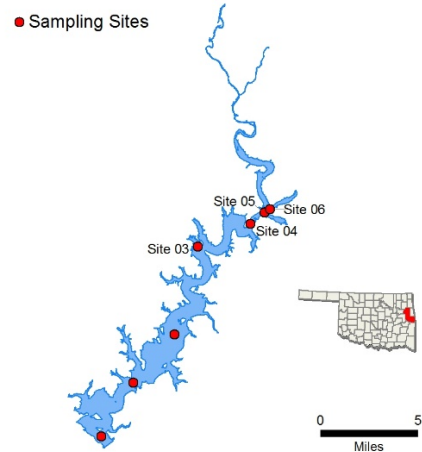
*The lake is listed in the WQS as a NLW indicating that the Aesthetics beneficial use is considered threatened by nutrients until studies can be conducted to confirm non-support status.
 *N/A – parameters not collected in current sample year.

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

Tenkiller, Illinois River Arm (3-6)

Sample Period	Times Visited	Sampling Sites
October 2016 – July 2017	4	7

General	Location	Sequoyah County
	Impoundment	1953
	Area	12,900 acres
	Capacity	654,100 acre-feet
	Purposes	Flood Control, Hydropower



Parameters	In Situ	Parameter (<i>Descriptions</i>)	Result	Notes/Comments
		Average Turbidity	28 NTU	19% of values > OWQS of 25 NTU
		Average Secchi Disk Depth	66 cm	
		Water Clarity Rating	Average	
		Chlorophyll-a	21.7 mg/m ³	
		Trophic State Index	61	Previous value = 59
	Trophic Class	Hypereutrophic		
	Profile	Salinity	0.07 – 0.15 ppt	
		Specific Conductivity	154.4 – 316 µS/cm	
		pH	6.81 – 8.9 pH units	
		Oxidation-Reduction Potential	98.2-422.3 mV	
		Dissolved Oxygen	Up to 70% of water column < 2 mg/L at site 3.	
	Nutrients	Surface Total Nitrogen	0.33 mg/L to 2.49 mg/L	
		Surface Total Phosphorus	0.022 mg/L to 0.232 mg/L	
		Nitrogen to Phosphorus Ratio	14:1	Possibly co- limited for this sample year

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	NEI							
	Aesthetics					NEI	*					
	Agriculture							S	S	S		
	Primary Body Contact Recreation										S	
	Public & Private Water Supply					NEI						NS
	<i>S = Fully Supporting</i> <i>NS = Not Supporting</i> <i>NEI = Not Enough Information</i>	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.									

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