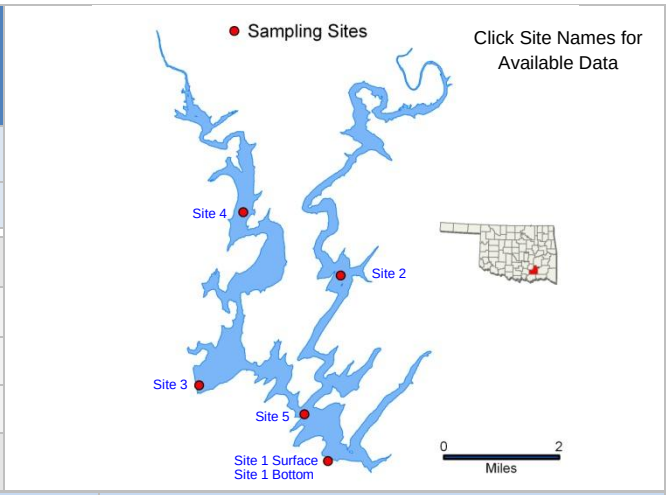
McGee Creek

Sample Period	Times Visited	Sampling Sites
December 2014 – September 2015	4	5



General

Location	Atoka County	Click map for site data
Impoundment	1987	
Area	3,810 acres	
Capacity	113,930 acre-feet	
Purposes	Water Supply, Recreation, Water Quality Control, Flood Control, Fish & Wildlife	

Parameters

	Parameter (Descriptions)	Result	Notes/Comments
In Situ	Average Turbidity	6 NTU	10% of values < OWQS of 25 NTU (n=20)
	Average Secchi Disk Depth	96 cm	
	Water Clarity Rating	Excellent	
	Chlorophyll-a	7 mg/m3	
	Trophic State Index	50	Previous value = 49
	Trophic Class	Mesotrophic	
Profile	Salinity	0.02 – 0.07 ppt	
	Specific Conductivity	48 – 146.1 µS/cm	
	pH	6.04 – 7.71 pH units	39% of values < 6.5 pH units
	Oxidation-Reduction Potential	29.7 to 519.3 mV	
	Dissolved Oxygen	Up to 76% of water column < 2.0 mg/L in August	Occurred at site 1, the dam
Nutrients	Surface Total Nitrogen	0.36 mg/L to 0.74 mg/L	
	Surface Total Phosphorus	0.005 mg/L to 0.033 mg/L	
	Nitrogen to Phosphorus Ratio	31:1	Phosphorus limited

Beneficial Uses

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

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

Notes

*Slightly acidic conditions are not unusual in this part of the state due to relatively low soil pH and lack of soluble bedrock. Because of these conditions it is likely that the low pH values may be due to natural causes; therefore the Water Board is looking at the applicability of developing site-specific criteria for waters in the southeastern portion of the state
** Standards revision, true color is for permitting purposes only

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