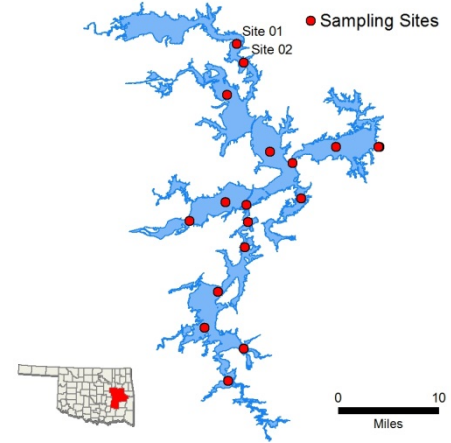


# Eufaula, Deep Fork Arm (1-2)



Sample Period	Times Visited	Sampling Sites
October 2016 – July 2017	4	17

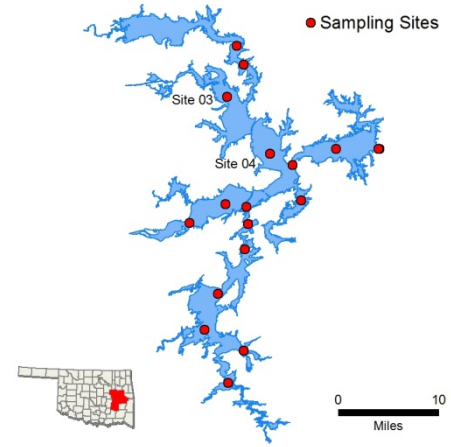
General	Location	Haskell County
	Impoundment	1964
	Area	105,000 acres
	Capacity	2,314,600 acre-feet
	Purposes	Water Supply, Flood Control, Hydropower, Sediment Control

Parameters	In Situ	Parameter ( <i>Descriptions</i> )	Result	Notes/Comments
		Average Turbidity	32 NTU	63% of values > OWQS of 25 NTU
		Average Secchi Disk Depth	33 cm	
		Water Clarity Rating	Poor	
		Chlorophyll-a	7.15 mg/m <sup>3</sup>	
		Trophic State Index	50	Previous value = 51
	Trophic Class	Mesotrophic		
	Profile	Salinity	0.09 – 0.21 ppt	
		Specific Conductivity	185.7 – 445.6 µS/cm	
		pH	7.05 – 8.32 pH units	Neutral to slightly alkaline
		Oxidation-Reduction Potential	349.2 – 490.6 mV	
		Dissolved Oxygen	Up to 57% of water column <2 mg/L in August	
	Nutrients	Surface Total Nitrogen	0.49 mg/L to 0.84 mg/L	
		Surface Total Phosphorus	0.063 mg/L to 0.111 mg/L	
		Nitrogen to Phosphorus Ratio	7:1	Possibly co-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	NEI	NEI							
	Aesthetics					S	*					
	Agriculture							N/A	N/A	S		
	Primary Body Contact Recreation										NEI	
	Public & Private Water Supply											
<i>S = Fully Supporting</i> <i>NS = Not Supporting</i> <i>NEI = Not Enough Information</i>		<b>Notes</b> **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

# Eufaula, N. Canadian Arm (3-4)



Sample Period	Times Visited	Sampling Sites
October 2016 – July 2017	4	17

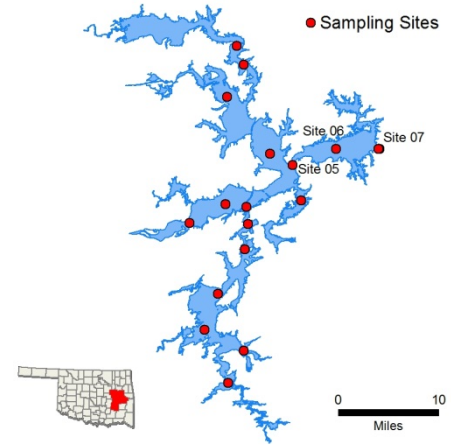
General	Location	Haskell County
	Impoundment	1964
	Area	105,000 acres
	Capacity	2,314,600 acre-feet
	Purposes	Water Supply, Flood Control, Hydropower, Sediment Control

Parameters	In Situ	Parameter ( <i>Descriptions</i> )	Result	Notes/Comments
		Average Turbidity	26 NTU	38% of values > OWQS of 25 NTU
		Average Secchi Disk Depth	57 cm	
		Water Clarity Rating	Average	
		Chlorophyll-a	14.85 mg/m <sup>3</sup>	
		Trophic State Index	57	Previous value = 53
	Trophic Class	Eutrophic		
	Profile	Salinity	0.17 – 0.28 ppt	
		Specific Conductivity	358.3 – 577.2 μS/cm	
		pH	7.87 – 8.36 pH units	Neutral to slightly alkaline
		Oxidation-Reduction Potential	336.4 – 494.4 mV	
		Dissolved Oxygen	Up to 44% of water column < 2.0 mg/L in August	
	Nutrients	Surface Total Nitrogen	0.58 mg/L to 1.31 mg/L	
		Surface Total Phosphorus	0.055 mg/L to 0.133 mg/L	
		Nitrogen to Phosphorus Ratio	9:1	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	NEI	NEI							
	Aesthetics					S	N/A					
	Agriculture							N/A	N/A	S		
	Primary Body Contact Recreation										NEI	
	Public & Private Water Supply											
<i>S = Fully Supporting</i> <i>NS = Not Supporting</i> <i>NEI = Not Enough Information</i>		<b>Notes</b> *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

# Eufaula (5-7)



Sample Period	Times Visited	Sampling Sites
October 2016 – July 2017	4	17

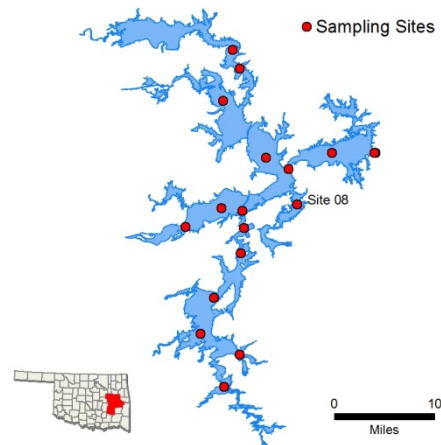
General	Location	Haskell County
	Impoundment	1964
	Area	105,000 acres
	Capacity	2,314,600 acre-feet
	Purposes	Water Supply, Flood Control, Hydropower, Sediment Control

Parameters	Parameter ( <i>Descriptions</i> )	Result	Notes/Comments	
	Average Turbidity	6 NTU	0% of values > OWQS of 25 NTU	
	Average Secchi Disk Depth	114 cm		
	Water Clarity Rating	Excellent		
	Chlorophyll-a	6.26 mg/m <sup>3</sup>		
	Trophic State Index	49	Previous value = 48	
	Trophic Class	Mesotrophic		
	Profile	Salinity	0.18 – 0.25 ppt	
		Specific Conductivity	371.3 – 515 µS/cm	
		pH	6.91 – 8.61 pH units	Neutral to slightly alkaline
		Oxidation-Reduction Potential	158.9 – 513.3 mV	
		Dissolved Oxygen	Up to 46% of water column < 2.0 mg/L in August	
	Nutrients	Surface Total Nitrogen	0.48 mg/L to 0.67 mg/L	
		Surface Total Phosphorus	0.027 mg/L to 0.052 mg/L	
Nitrogen to Phosphorus Ratio		13:1	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	S	S	NEI	NEI							
	Aesthetics					S	*					
	Agriculture							N/A	N/A	S		
	Primary Body Contact Recreation										NEI	
	Public & Private Water Supply											
<i>S = Fully Supporting</i> <i>NS = Not Supporting</i> <i>NEI = Not Enough Information</i>		<b>Notes</b> *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

# Eufaula, Longtown Creek Arm (8)



Sample Period	Times Visited	Sampling Sites
October 2016 – July 2017	4	17

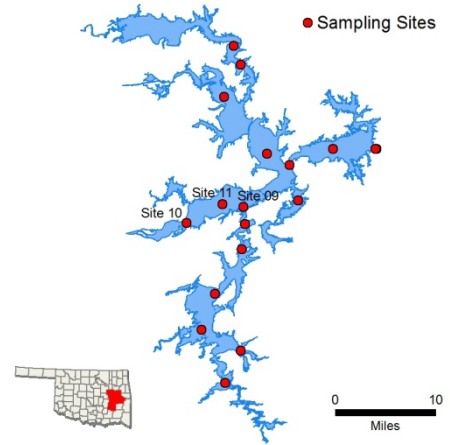
General	Location	Haskell County
	Impoundment	1964
	Area	105,000 acres
	Capacity	2,314,600 acre-feet
	Purposes	Water Supply, Flood Control, Hydropower, Sediment Control

Parameters	In Situ	Parameter ( <i>Descriptions</i> )	Result	Notes/Comments
		Average Turbidity	8 NTU	0% of values > OWQS of 25 NTU
		Average Secchi Disk Depth	87 cm	
		Water Clarity Rating	Good	
		Chlorophyll-a	16.76 mg/m <sup>3</sup>	
		Trophic State Index	58	Previous value = 52
	Trophic Class	Eutrophic		
	Profile	Salinity	0.16 – 0.25 ppt	
		Specific Conductivity	336.1 – 512 µS/cm	
		pH	6.99 – 8.44 pH units	Neutral to slightly alkaline
		Oxidation-Reduction Potential	207.1 – 427.1 mV	
		Dissolved Oxygen	Up to 50% water column <2 mg/L in August	
	Nutrients	Surface Total Nitrogen	0.43 mg/L to 0.64 mg/L	
		Surface Total Phosphorus	0.026 mg/L to 0.048 mg/L	
		Nitrogen to Phosphorus Ratio	15:1	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	NEI	NEI							
	Aesthetics					S	*					
	Agriculture							N/A	N/A	S		
	Primary Body Contact Recreation										NEI	
	Public & Private Water Supply											
<i>S = Fully Supporting</i> <i>NS = Not Supporting</i> <i>NEI = Not Enough Information</i>		<b>Notes</b> *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

# Eufaula, Canadian River Arm (9-11)



Sample Period	Times Visited	Sampling Sites
October 2016 – July 2017	4	17

General	Location	Haskell County
	Impoundment	1964
	Area	105,000 acres
	Capacity	2,314,600 acre-feet
	Purposes	Water Supply, Flood Control, Hydropower, Sediment Control

Parameters		Parameter ( <i>Descriptions</i> )	Result	Notes/Comments
		In Situ	Average Turbidity	24 NTU
Average Secchi Disk Depth	52 cm			
Water Clarity Rating	Fair			
Chlorophyll-a	5.87 mg/m <sup>3</sup>			
Trophic State Index	48		Previous value = 53	
Trophic Class	Mesotrophic			
Profile	Salinity	0.17 – 0.45 ppt		
	Specific Conductivity	349.5 – 908.2 μS/cm		
	pH	7.19 – 8.39 pH units	Neutral to slightly alkaline	
	Oxidation-Reduction Potential	193.4 – 416.9 mV		
	Dissolved Oxygen	Up to 42% of water column < 2.0 mg/L in the August		
Nutrients	Surface Total Nitrogen	0.44 mg/L to 1.08 mg/L		
	Surface Total Phosphorus	0.031 mg/L to 0.097 mg/L		
	Nitrogen to Phosphorus Ratio	12:1	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	NEI	NEI							
	Aesthetics					S	*					
	Agriculture							N/A	N/A	S		
	Primary Body Contact Recreation										NEI	
	Public & Private Water Supply											

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*NS = Not Supporting*  
*NEI = Not Enough Information*

Notes

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

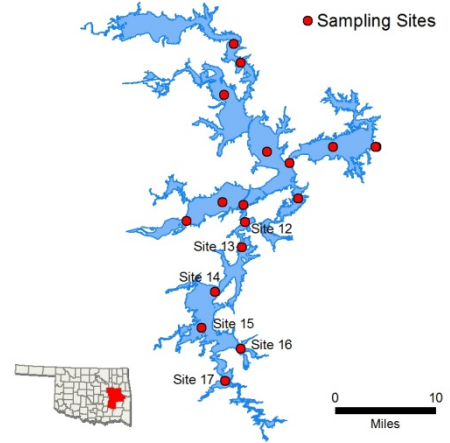
*NTU = nephelometric turbidity units*  
*μS/cm = microsiemens per centimeter*  
*E. coli = Escherichia coli*

*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*

# Eufaula, Gaines Creek Arm (12-17)



Sample Period	Times Visited	Sampling Sites
October 2016 – July 2017	4	17

General	Location	Haskell County
	Impoundment	1964
	Area	105,000 acres
	Capacity	2,314,600 acre-feet
	Purposes	Water Supply, Flood Control, Hydropower, Sediment Control

Parameters		Parameter ( <i>Descriptions</i> )	Result	Notes/Comments
		In Situ	Average Turbidity	31 NTU
Average Secchi Disk Depth	48 cm			
Water Clarity Rating	Fair			
Chlorophyll-a	13.75 mg/m <sup>3</sup>			
Trophic State Index	56		Previous value = 49	
Trophic Class	Eutrophic			
Profile	Salinity	0.04 – 0.34 ppt		
	Specific Conductivity	87.6 – 692.1 μS/cm		
	pH	6.5 – 8.21 pH units		
	Oxidation-Reduction Potential	192 – 447.1 mV		
	Dissolved Oxygen	Up to 50% of water column < 2.0 mg/L in August		
Nutrients	Surface Total Nitrogen	0.37 mg/L to 0.77 mg/L		
	Surface Total Phosphorus	0.029 mg/L to 0.107 mg/L		
	Nitrogen to Phosphorus Ratio	9:1	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	NEI							
	Aesthetics					S	N/A					
	Agriculture							N/A	N/A	S		
	Primary Body Contact Recreation										NEI	
	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  
 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