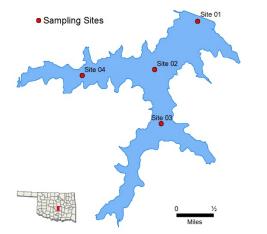
## **Shawnee Twin No. 1**

	Sample Perio	d	Visited	Sampling Sites					
Nov	vember 2018 – Septe	ember 2019	4	4					
General	Location	Pottawatomi	e County						
	Impoundment	1935							
	Area	1,336 acres							
ည်	Capacity	22 600 acre-feet							



	Pur	poses	Water Supply,	Recreation								Miles				
		Parameter (Des	scriptions)	Result					Notes/0	Commer	nts					
		Average Turbidit	ty	12 NTU	12 NTU					100% of values < OWQS of 25 NTU						
		Average Secchi	Disk Depth	74.2 cm												
	itu	Water Clarity Ra	Good													
	In-Situ	Chlorophyll-a		8.93 m	g/m3											
		Trophic State Index		52	52					s Value	= 47					
S		Trophic Class		Eutroph	Eutrophic											
Parameters		Salinity	0.09 -	0.13 ppt												
ıram	a	Specific Conduc	195.2 -	- 277.1 µ	S/cm											
Pa	Profile	рН	7.10 – 8.27 pH units					Neutral to slightly alkaline								
	_₽	Oxidation-Reduc	ction Potential	45.1 to 468.0 mV												
		Dissolved Oxyge	en	Up to 3 Septem		iter colum	nn < 2 m	g/L in								
	ts	Surface Total Ni	trogen	0.375 n	0.375 mg/L to 0.765 mg/L											
	Nutrients	Surface Total Ph	nosphorus	0.012 n	0.012 mg/L to 0.026 mg/L											
	N	Nitrogen to Phos	sphorus Ratio	31:1 Phosphorus limited												
		Click to learn m		Turbidity	Hd	Dissolved Oxygen	Metals	TSI	True Color	Sulfates	Chlorides	Total Dissolved Solids	Enterro. & E. coli	Chlor-a		
Beneficial Uses	Fisl	h & Wildlife Propa	gation	NS	S	NEI	S									
<u> </u>	Aes	sthetics						S	*							
ficia	Agr	riculture								S	S	S				
ene	Prir	Primary Body Contact Recreation											S			
Ď	Pub	olic & Private Wate	er Supply													
	٨	S = Fully Supporting  IS = Not Supporting  IEI = Not Enough Intel	formation &	*Standa	ards revisi	on, true co	lor is for p	ermitting	purposes c	only						

NTU = nephelometric turbidity units  $\mu$ S/cm = microsiemens per centimeter E. coli = Escherichia coli

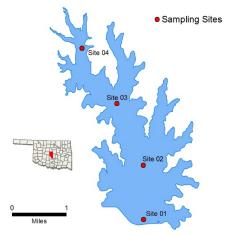
OWQS = Oklahoma Water Quality Standards mV = millivolts Chlor-a = Chlorophyll-a mg/L = milligrams per liter μS/cm = microsiemens/cm ppt = parts per thousand En = Enterococci

## **Stanley Draper**

Capacity

	Sample Period	t	Times Visited	Sampling Sites
C	October 2015 – Augu	st 2016	4	5
al	Location	Cleveland (	County	
	Impoundment	1962		
neral	Area	2,900 acres	3	

100,000 acre-feet



	Pur	poses	Water Supply,	Recreation		Miles			Site 01						
		Parameter (Des	scriptions)	Result					Notes/0	ommer	nts				
		Average Turbidit	ty	8 NTU					100% of values < OWQS of 25 NTU						
		Average Secchi	Disk Depth	104 cm											
	Situ	Water Clarity Ra	ating	Excellent											
	밀	Chlorophyll-a		2.7 mg/m3											
		Trophic State Index		40					Previou	s value =	= 36				
S.		Trophic Class	Oligotro	phic											
Parameters		Salinity		0.05 – 0	0.06 ppt										
ıran	a)	Specific Conduc	tivity	108.7 –	132.7 µ	S/cm									
g	Profile	рН		6.81 – 8	3.34 pH u	ınits									
	4	Oxidation-Reduc	ction Potential	176.1 – 463.7 mV											
		Dissolved Oxyge	en	Up to 62 August	n < 2 m	g/L in									
	Si	Surface Total Ni	trogen	0.26 mg	g/L to 0.5	5 mg/L									
	Nutrients	Surface Total Pr	nosphorus	0.010 m	ng/L to 0.	015 mg/L	-								
	Ž	Nitrogen to Phos	sphorus Ratio	31:1	31:1					Phosphorus limited					
		Click to learn m	nore about	Turbidity	Hd	Dissolved Oxygen	Metals	TSI	True Color	Sulfates	Chlorides	Total Dissolved Solids	Enterro. & E. coli	Chlor-a	
ses	Fish	n & Wildlife Propa	gation	NS	S	S	S								
<u> </u>	Aes	sthetics						S	*						
Beneficial Uses	Agr	iculture								S	S	S			
ene	Prir	mary Body Contac	t Recreation										S		
Ш	Pub	olic & Private Wate	er Supply												
	٨	S = Fully Supporting IS = Not Supporting IEI = Not Enough Int	formation septon	*Standa	*Standards revision, true color is for permitting purposes only										

NTU = nephelometric turbidity units  $\mu S/cm = microsiemens per centimeter$ E. coli = Escherichia coli

OWQS = Oklahoma Water Quality Standards mV = millivolts Chlor-a = Chlorophyll-a mg/L = milligrams per liter $\mu S/cm = microsiemens/cm$  ppt = parts per thousand En = Enterococci

## **Tecumseh Times** Sampling Sites **Sample Period Visited** October 2007 - July 2008 4 5 Location Pottawatomie County Impoundment 1934 General Area 127 acres Capacity 1,118 acre feet

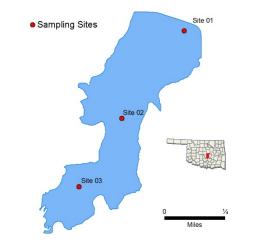
Waters Supply, and Recreation

Purposes

*NTU* = *nephelometric turbidity units* 

E. coli = Escherichia coli

 $\mu$ S/cm = microsiemens per centimeter



			- · <b>,</b>	ana rec													
		Parameter (Des	scriptions)		Result					Notes/0	Commen	ıts					
		Average Turbidi	ty		132 NT	U				All values > 25 NTU							
		Average Secchi	Disk Depth		11 cm					All values > OWQS of 70							
	itu	Water Clarity Ra	ating		poor												
	In Situ	Chlorophyll-a			6.52 mg/m3												
		Trophic State In	dex		49					Previous value = 57							
S		Trophic Class			mesotrophic												
Parameters		Salinity		0.00 - 0	).10 ppt												
arar	a	Specific Conduc	ctivity		105.6 –	141 µS/	cm										
ق	Profile	рН			7.08 – 7	7.60 pH	units			Neutral							
	<u> </u>	Oxidation-Redu	ction Potential		337 to 5	537 mV											
		Dissolved Oxyge	en							D.O. always > 5.0 mg/L							
	ts	Surface Total N	itrogen		1.01 mg	g/L to 1.5	5 mg/L										
	Nutrients	Surface Total Pl	hosphorus		0.066 m	ng/L to 0.	.131 mg/L	-									
	Z	Nitrogen to Phos	sphorus Ratio		12:1					Phosphorus limited							
		Click to learn m Beneficial Uses			Turbidity	Hd	Dissolved Oxygen	Metals	TSI	True Color	Sulfates	Chlorides	Total Dissolved Solids	Enterro. & E. coli	Chlor-a		
ses	Fish	n & Wildlife Propa	gation		NS	S	S	S									
<u>≅</u>	Aes	sthetics							S	*							
fici	Agr	iculture									S	S	S				
Beneficial Uses	Prin	mary Body Contac	ct Recreation											S			
æ	Pub	olic & Private Wate	er Supply														
	Ν	S = Fully Supporting IS = Not Supporting IEI = Not Enough In	formation	Notes	*Standards revision, true color is for permitting purposes only												

Sampling and Assessment by the Oklahoma Water Resources Board – 3800 Classen Blvd, Oklahoma City, OK, 73118 – 405.530.8800 – http://www.owrb.ok.gov

OWQS = Oklahoma Water Quality Standards

mV = millivolts

Chlor-a = Chlorophyll-a

mg/L = milligrams per liter

 $\mu$ S/cm = microsiemens/cm

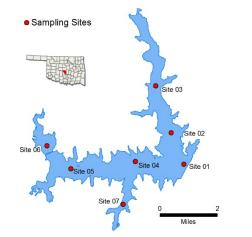
ppt = parts per thousand

En = Enterococci

## **Thunderbird**

Sample Period	d	Times Visited	Sampling Sites
October 2014 – July	2015	4	7
Location	Cleveland (	County	

	Location	Cleveland County
<u></u>	Impoundment	1965
	Area	6,070 acres
	Capacity	119,600 acre-feet
	Purposes	Flood Control, Water Supply, Recreation, Fish & Wildlife



		Wildlife													
		Parameter ( <u>Descriptions</u> )	Result					Notes/0	Commen	nts					
		Average Turbidity	14 NTU	J				4% of values > OWQS of 25 NTU							
		Average Secchi Disk Depth	59 cm												
	itu	Water Clarity Rating	Average												
	In Situ	Chlorophyll-a	21 mg/m3												
		Trophic State Index	61					Previous value = 56							
ទ		Trophic Class	Hypere	utrophic											
Parameters		Salinity	0.13 – 0	0.26 ppt											
aran	a	Specific Conductivity	281.5 –	- 530 μS/	cm										
ď	Profile	рН	7.14 – 8	8.68 pH	units			Neutral to slightly alkaline							
	Ē	Oxidation-Reduction Potential		454 mV											
		Dissolved Oxygen	Up to 67% of water column < 2 mg/L in July					Occurred at sites 1, the dam							
	ts	Surface Total Nitrogen	0.80 mg	g/L to 1.2	.7 mg/L										
	Nutrients	Surface Total Phosphorus	0.018 m	ng/L to 0.	.064 mg/l	_									
	Ž	Nitrogen to Phosphorus Ratio	23:1					Phosphorus limited							
		Click to learn more about Beneficial Uses□	Turbidity	Hd.	Dissolved Oxygen	Metals	TSI	True Color	Sulfates	Chlorides	Total Dissolved Solids	Enterro. & E. coli	Chlor-a		
ses	Fish	h & Wildlife Propagation	NS	S	NS	S									
<u> </u>	Aes	sthetics					NEI*	S							
ficia	Agr	iculture							S	S	S				
Beneficial Uses	Prin	mary Body Contact Recreation										S			
m	Pub	olic & Private Water Supply											NS		
	Λ	S = Fully Supporting  IS = Not Supporting  IEI = Not Enough Information	(NLW).	This listing	means th	at the lake	is consid		tened fror		rient Limite ts until a mo				

*NTU* = *nephelometric turbidity units*  $\mu$ S/cm = microsiemens per centimeter E. coli = Escherichia coli

OWQS = Oklahoma Water Quality Standards mV = millivoltsChlor-a = Chlorophyll-a

mg/L = milligrams per liter  $\mu$ S/cm = microsiemens/cm ppt = parts per thousand En = Enterococci