Great Salt Plains

NTU = *nephelometric turbidity units*

E. coli = Escherichia coli

 μ S/cm = microsiemens per centimeter

| | Sample Period | t | Times Visited | Sampling Sites | | | | | |
|---|---------------------|-----------------------------|------------------|----------------|--|--|--|--|--|
| | October 2018 – July | 2019 | 4 | 5 | | | | | |
| 5 | Location | Alfalfa County | | | | | | | |
| | Impoundment | 1941 | | | | | | | |
| | Area | 8,690 acres | | | | | | | |
| | Capacity | 31,240 acre-feet | | | | | | | |
| | Purposes | Flood Control, Conservation | | | | | | | |

Times



ppt = parts per thousand En = Enterococci

| | | Danamatan (Danamin (iama) | Daniel | | | | | N-11 | ^ | | | | |
|-----------------|-----------|---|---|------------------------|---------------------|---------------------------------------|--------------------------------------|------------------------------|----------|-----------|------------------------------|-----------------------|---------|
| | | Parameter (<u>Descriptions</u>) | | Result | | | | | Commen | | | | |
| | | Average Turbidity | 105 NTU | | | 100% of values > OWQS of 25 NTU (n=7) | | | | | | | |
| | | Average Secchi Disk Depth | 15 cm | | | | | | | | | | |
| | itu | Water Clarity Rating | Poor | | | | | | | | | | |
| | In Situ | Chlorophyll-a | 84.87 mg/m3 | | | | | | | | | | |
| | | Trophic State Index | 74 | 74 | | | | Previous value = 76 | | | | | |
| SIS | | Trophic Class | Hypere | Hypereutrophic | | | | | | | | | |
| Parameters | | Salinity | 1.66-3 | 1.66– 3.04 ppt | | | | | | | | | |
| arai | Φ | Specific Conductivity | 3204.8 | - 5611.1 | 0 μS/cm | 1 | | | | | | | |
| <u>a</u> | Profile | pH | 8.09 – | 8.09 – 8.56 pH units | | | | Neutral to slightly alkaline | | | | | |
| | | Oxidation-Reduction Potential | 114.9 – 446.1 mV | | | | | | | | | | |
| | | Dissolved Oxygen | | | | | Not stratified at any sampling event | | | | | | |
| | ts | Surface Total Nitrogen | 1.23 m | 1.23 mg/L to 2.54 mg/L | | | | | | | | | |
| | Nutrients | Surface Total Phosphorus | 0.200 mg/L to 1.89 mg/L | | | | | | | | | | |
| | Ž | Nitrogen to Phosphorus Ratio | 4:1 | | | | possibly co-limited | | | | | | |
| | | Click to learn more about Beneficial Uses□ | Turbidity | Hd | Dissolved Oxygen | Metals | TSI | True | Sulfates | Chlorides | Total Dissolved Solids | Enterro. & E. coli | Chlor-a |
| ses | Fisł | h & Wildlife Propagation | NS | S | S | S | | | | | | | |
| <u></u> | Aes | sthetics | | | | | NEI | * | N/A | N/A | | | |
| ficia | Agr | riculture | | | | | | | | | | | |
| Beneficial Uses | Prin | mary Body Contact Recreation | | | | | | | | | | NS | |
| m | Pub | olic & Private Water Supply | | | | | | | | | | | |
| | Ν | S = Fully Supporting IS = Not Supporting IEI = Not Enough Information | *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. *Standards revision, true color is for permitting purposes only. | | | | | | | | | | |

mg/L = milligrams per liter

 μ S/cm = microsiemens/cm

OWQS = Oklahoma Water Quality Standards

mV = millivolts

Chlor-a = Chlorophyll-a