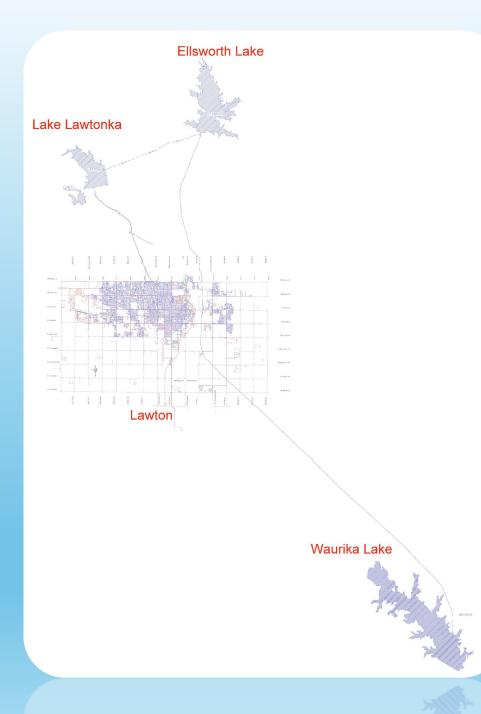


# City of Lawton Public Utilities

Update on Lake Levels & Water Resources





The City of Lawton draws its water supply from three surface water sources:

- Ellsworth Lake
- Lake Lawtonka
- Waurika Lake

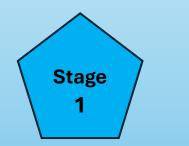
The lake levels are monitored closely by staff at the Medicine Park Water Treatment Plant.

Restrictions on water usage are determined based on the combined percentage of lake levels.

Medicine Park WTP - Total Water Treated				
Date	TWT		Sent to Distribution	Remarks
10/29/24	13.700	MGD	12.321 MG	
Lake Elevations				
Lawtonka	1339.87	Feet	SSE Wind @ 19 mph Water Temp. @ 67 degrees	
Ellsworth	1229.29	Feet		
Waurika	947.83	Feet		
City of Lawton - Water Resources				
LAKE	Conservation ACRE/	FT.	Current ACRE/FT.	% Full
Lawtonka	55,171.00		47,080.00	85.33%
Ellsworth	60,000.00		43,510.00	72.52%
Waurika	188,760.00		154,237.00	81.71%
10/30/24	TOTAL GALLONS STORED	)	79,813,602,000	79.85%

# **Restrictions on Water Usage**

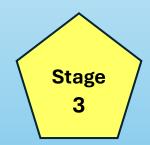
There are 5 stages of restrictions that may be established during times of drought beginning when the combined level of the lakes drop below 70%.



- Lake Levels at 70% or less
- Voluntary Conservation
- Limits on outside watering to every other day



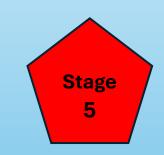
- Lake Levels at 60% or less
- Mandatory Restrictions
- Limits on outside water usage to every other day



- Lake Levels at 50% or less
- Mandatory
  Restrictions
  - Limits on outside water usage to Wednesdays & Saturdays only



- Lake Levels at 40%
  or less
- Mandatory
  Restrictions
- Limits on outside water usage to one day per week



- Lake Levels at 30% or less
- Mandatory Restrictions
- Restriction on all outside water usage.

## Lake Levels information is always available to the public on

### Can't find the information you're looking for? Email: PublicUtilities@LawtonOK.Gov

From the www.LawtonOK.Gov Homepage

our website:

**Hover over** "Departments"

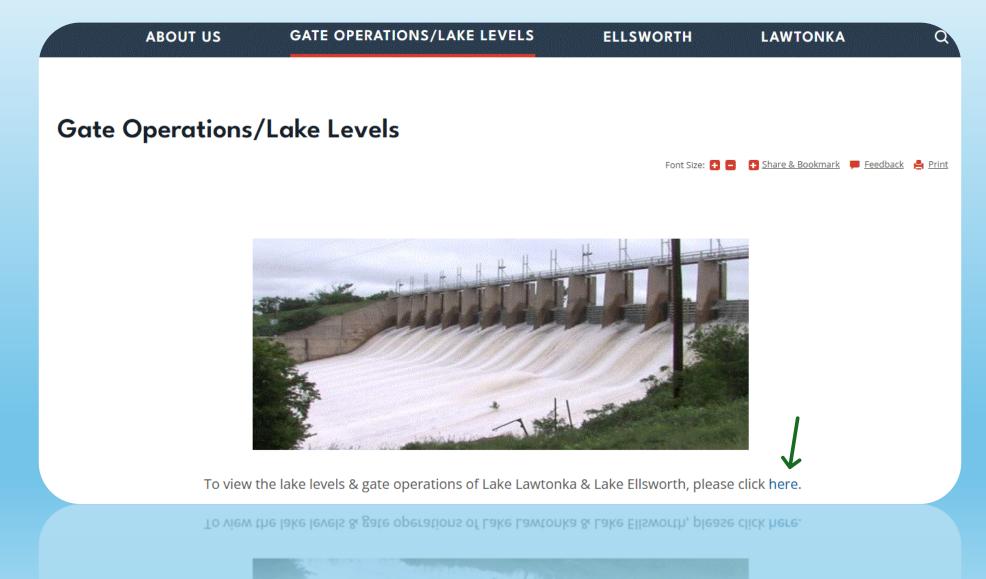
Then, navigate to "Gate Operations/ Lake Levels" under the "Lakes" header



City of Lawton Home lobs Contact Us SERVICE FINDER RESIDENTS BUSINESS DEPARTMENTS GOVERNMENT **Animal Welfare** Fire McMahon Auditorium Police Divisions Seating Chart Services Arts and Humanities Visitor Info Programs Resources Film and Music Production Support About Us About Us **Municipal Court** City Clerk Awards and Commendations Human Resources Resources Accessibility Information Officer Complaints Benefits Services View City Alerts Public Utilities Human Resources Staff FAOs **Community Services** Divisions Employee Training About Us Neighborhood Services Careers About Us Parks and Recreation Housing Contact Us Information Technology AmeriCorp Seniors Lawton RSVP **Building Division** Publications **Recreational/Assembly Permits** Lakes Sewer Line Construction Activities **Emergency Communications** Aquatics About Us Report Contact Us Facility Rental Gate Operations/Lake Levels Form Directory Public Works Find a Park Ellsworth Divisions Find a Campground Engineering Lawtonka Adopt-A-Stream and Stream Clean-up Our Team Planning Lawton Public Library Residential Refuse and Bulky Waste Latest News Boards and Committees Pick-Up About Us Zoning Map Mosquito Control Map Finance Newsletters **Rezoning and Plan Requests** Flood Plain Management **Budgets & Financials** E-Resources Urban Renewal Plans Lawton Drainage Issue Input Stale Dated Checks Services Utility Services Legal Services

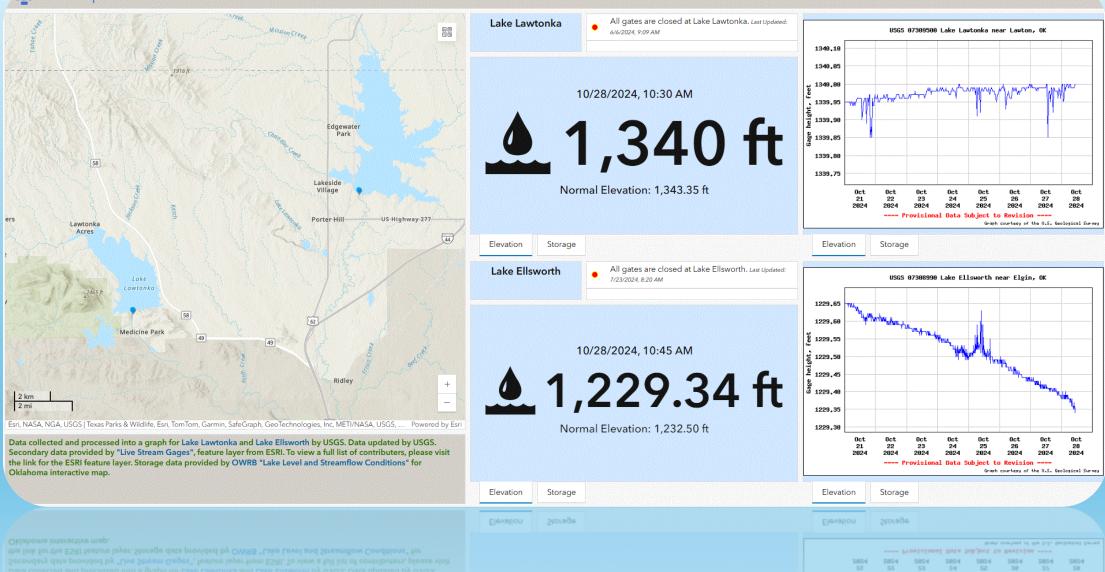
Tort Claim

## Click the hyperlink to navigate to the Gate Operations GIS Site.



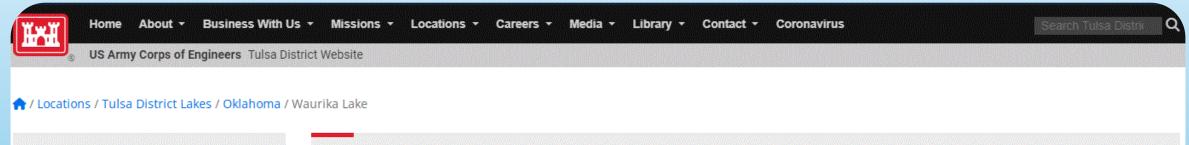
### View real-time data for Lake Lawtonka and Lake Ellsworth on this page.

💪 Gate Operations - Lake Levels



## Data for Waurika Lake is available from the US Army Corps of Engineers at: <a href="http://www.swt.usace.army.mil/Locations/Tulsa-District-Lakes/Oklahoma/Waurika-Lake/">www.swt.usace.army.mil/Locations/Tulsa-District-Lakes/Oklahoma/Waurika-Lake/</a>

Click on "Lake Level" to view the data page.



#### Waurika Lake Links

Project News and Notices Waurika Lake Recreation Lake Level Other Recreation Links History Pertinent Data Water Safety Volunteer Opportunities Shoreline Management Plans Survey Boundary Plats

#### Welcome to Waurika Lake



The U.S. Army Corps of Engineers wishes you an enjoyable stay at the project. The lake offers the visitor extensive opportunities for a memorable outdoor recreation experience. Overnight accommodations, services and supplies are available at nearby communities.

Inquiries regarding the lake and its uses are welcomed by the Project Manager at the Project Office located at the east end of the dam. Copies of regulations governing public use of the lake may be obtained at the Waurika Lake Project Office.

water barety Volunteer Opportunities Shoreline Management Plans Survey Boundary Plats

### **Current Readings**

- 3.58 ft BELOW normal
- Pool elevation is 947.82 feet on 30OCT2024 07:00 hours.
- At this elevation the total amount of water stored in Waurika Lake is 154149 acre-feet.
- Reservoir release is 0 cubic feet per second on Wednesday 30Oct2024 08:00.
- · Conservation pool is 80.84% full.
- · Conservation pool storage filled is 151473 acre-feet which is equivalent to 5.05 inches of runoff over the entire drainage basin.
- · Conservation pool storage empty is 34611 acre-feet which is equivalent to 1.15 inches of runoff over the entire drainage basin.

### **Gate Change**

Conditions at the time of Gate Change

#### • Tuesday, 10 Oct 2023 1110

- Pool Elevation = 947.31 feet.
- Total Release = 0 (cfs)
  - Gate Release = 0 (cfs)
  - Unregulated Release = 0 (cfs)
- Gate Settings:

All CLOSED

Scroll the page to view information such as current readings, the most recent gate change, current reservoir data, and more.

View 24H and 7Day Graphs (Enlarged) 947.95 Elev(ft) 947.90 947.85-947.80-947.75 0.8 Precip(in) 0.6-0.4 0.2-0.0 1,000-Flaw(cfs) 800-600-400-200-0 -----154,800-Stor(ac-ft) ~~~ 154,200-153,600 24 25 26 27 28 29 Oct2024 Elevation - Tailwater Precipitation Out Flow Storage In Flow

Graphs are also available to show recent and current elevation, precipitation, flow, and storage for Waurika Lake. Graphs

of Measured and Calculated Lake Parameters

## Alternate Water Supply Projects

In order to sustain Lawton's water supply for the future, the alternate water supply projects are working to expand and diversify our water supply options by incorporating additional sources.

### These projects aim to:

- Increase drought resiliency
- Augment the drinking water supply
- Decrease reliance on surface water
- Reduce the impact of emergency drought responses.

# Alternate Water Supply Projects



### **PU2301 Groundwater Wells Project**

- The well pictured here is the first production well in this project that has been successfully drilled to produce groundwater from the Arbuckle-Timbered Hills Aquifer.
- 4 more production wells with available water are currently contracted to be drilled for production.
- A reverse osmosis treatment system is being designed at the Southeast Water Treatment Plant to treat this water to potable standards.
- Additional pilots testing different treatment methods are underway to find the most economical and efficient form of water treatment.