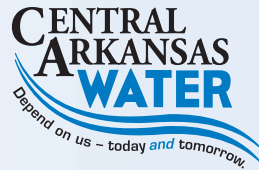


LAKE MAUMELLE



221 East Capitol Avenue • P.O. Box 1789 • Little Rock, AR 72203 • www.carkw.com

LAKE MAUMELLE HISTORY

Central Arkansas Water (CAW or Water Utility) has two high-quality and well-protected raw water supplies, Lake Maumelle and Lake Winona. Lake Maumelle, located in West Pulaski County, is a scenic 13.9-square-mile reservoir that provides approximately 65 percent of daily system-wide demand.

Little Rock Municipal Water Works originally developed Lake Maumelle, as a second raw water supply. The Little Rock water utility and its largest "wholesale" customer, the North Little Rock Water Department, merged July 1, 2001, into Central Arkansas Water, a metropolitan water system serving a population of 398,000 in Greater Little Rock-North Little Rock.

Studies that began in 1947 preceded the Water Utility's development of a second source lake to meet the area's growing demand for water service. Construction of the first source, Lake Winona, located approximately 18 miles west of Lake Maumelle in the foothills of the Ouachita Mountains, spanned 1936-1938. The Lake Winona project got under way in 1936, immediately after the City of Little Rock purchased the local water system south of the Arkansas River from private owners.

With the assistance of consulting engineers, the Water Utility thoroughly investigated several prospective sources prior to selecting a site for the second reservoir. Along with the decision to build the lake was a public vote on a new water rate schedule to finance the project.

The Water Utility initiated preliminary surveys and mapping of the Lake Maumelle site in February 1954 and completed the work in December 1954. Sub-surface investigations at the project site followed in March 1956. The studies proved favorable and the engineers proceeded with project design. Water officials awarded the first major contract for construction of the dam and spillway in July 1956. In June 1958, water from the new Lake Maumelle source flowed into the system for the first time. The overall project

included two, 30-million-gallon-per-day (MGD) constant-speed pumps and cost approximately \$9 million.

In 1975, a third pump increased the firm capacity of the Lake Maumelle Pumping Station to 90 MGD. The pump, driven by a 2,250-horsepower (hp) motor, also added variable speed drive capabilities to the facility. In 1984, the Water Utility replaced the 2,250-hp motor and variable speed drive with a constant speed, 2,500-hp motor. The third pump, motor, associated piping, and electrical equipment cost about \$1 million.

In 1983, the Water Utility added a fourth, 30-MGD pump at a cost of \$974,944. The last pump addition increased the station's firm capacity to approximately 113 MGD.

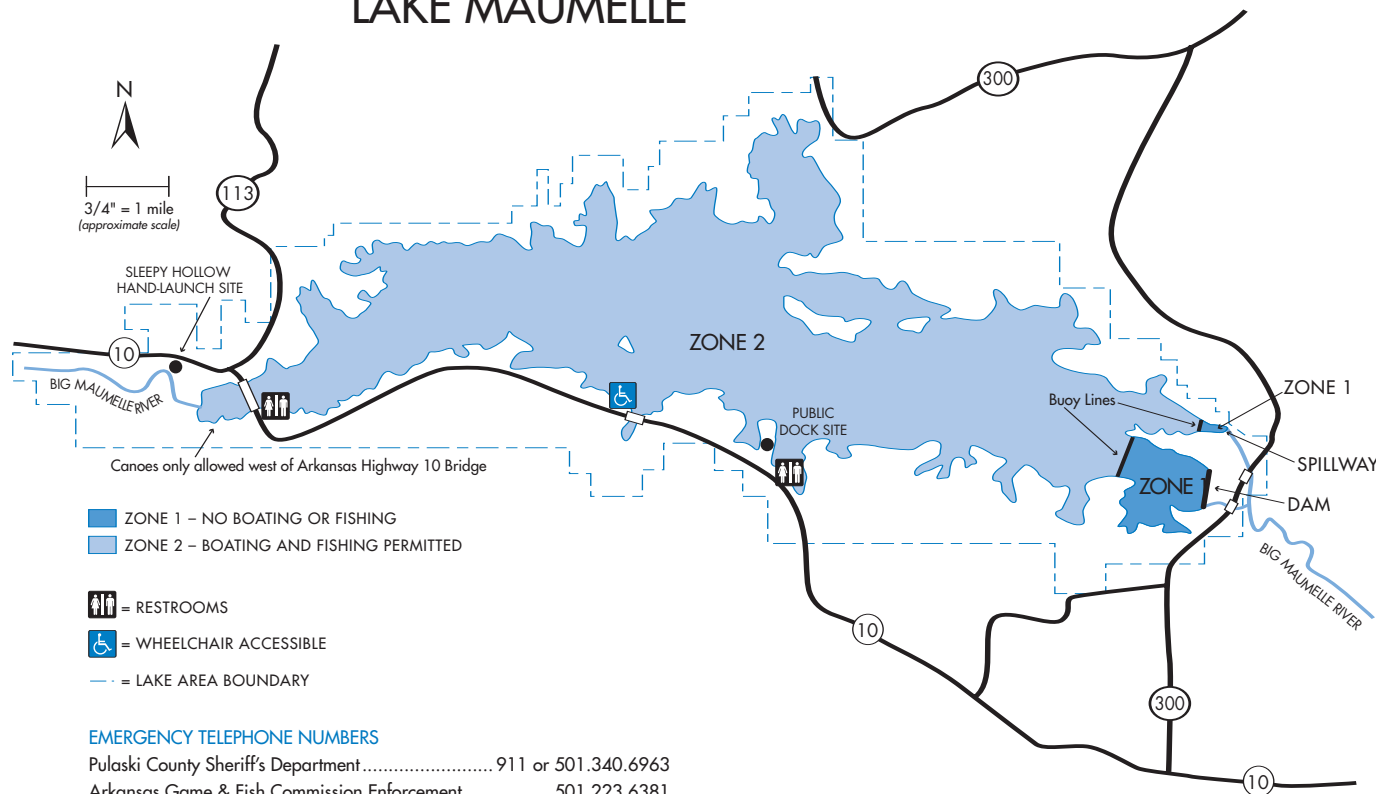
In 1988, the installation of an emergency stand-by power generating station equipped the Water Utility with backup power in the event of a failure on the commercial electric system. The project included two 3,000-hp diesel engines; two 2,000-kilowatt generators; and variable frequency drive equipment. The generators have the capacity to power two of the 30-MGD pumps. This capability, coupled with the gravity supply from Lake Winona, can provide customers with up to 84 MGD (more than current average-day demand) during a complete electrical power outage at the Lake Maumelle Pumping Station.

With the stand-by generating facility, the Water Utility also is able to control additional electric power costs incurred during peak demand periods.

In 2004, CAW completed construction of a second intake structure at the Lake Maumelle Pumping Station. Phase I installation included two 15-MGD pumps and the design for one additional 30-MGD pump. In addition to supporting the increased treatment capacity of the Jack H. Wilson Water Treatment Plant, the new \$7.7-million intake enhanced the overall reliability and integrity of the raw-water delivery system.

Water flows from the Lake Maumelle Pumping Station by way of 48-inch-and 72-inch-diameter pipelines.

LAKE MAUMELLE



LAKE HOURS:

April 1 through October 31 – 24 hours a day
November 1 through March 31 – 6 a.m. to 8 p.m.

LAKE MAUMELLE PHYSICAL STATISTICS

WATERSHED

Area	137 sq. mi.
Rainfall – Annually (Normal)	49.1 in.
Run-off – Annually (Normal)	.44 billion gal.
	134,000 acre ft.

LAKE

Area	8,900 acres
	13.9 sq. mi.
Maximum Length	12 mi.
Shore Line	70 mi.
Average Depth	24.7 ft.
Maximum Depth	60 ft.
Storage Capacity	
Total	72 billion gal.
Usable	61 billion gal.
Total	219,440 acre ft.
Usable	187,340 acre ft.
Safe Yield	93 MGD

DAM

Length (including Spillway)	2,550 ft.
Height	67 ft.
Width of Base	460 ft.
Width of Top	20 ft.
Volume	708,000 cubic yd.
Spillway Weir Length	250 ft.
Spillway Elevation	290 ft. MSL
Spillway Elevation of Auxiliary Reservoir	542.5 ft. MSL
Elevation of Settling Basins at Filtration Plants	510 ft. MSL

PIPELINES

Diameter – Internal	48 in.	72 in.
Length	9.3 mi.	7.8 mi.
Length of Sections	16 ft.	24 ft.
Weight of Sections	5.5 tons	21 tons
Type of Joints	Rubber Gaskets	Rubber Gaskets
Capacity of Line	50 MGD	110 MGD
Maximum Pressure on Line	195 psi	195 psi

ABBREVIATIONS

cubic yd. = cubic yards	MSL = mean sea level
gal. = gallons	psi = pounds per square inch
MGD = million gallons per day	sq. mi. = square miles

PREFACE

Lake Maumelle is a public water supply reservoir that serves the Little Rock-North Little Rock metropolitan area. The sole purpose for the construction of the lake was to provide a high-quality water supply for customers. CAV owns the lake and its Board of Commissioners (Board) has the responsibility of ensuring the water quality and protection of the lake. The reservoir is a vital component of the public drinking water system and is a raw water supply for a population of 398,000.

The lake is available for limited recreational use. This brochure outlines the Rules and Regulations that the Board has adopted to govern authorized recreational uses in the Lake Area. All persons using the Lake Area for recreational purposes must abide by the Rules and Regulations and all referenced rules, laws, etc., of the State of Arkansas and the federal government. The Board may curtail or entirely prohibit all authorized uses if it believes such action is necessary to protect the water supply. The Board urges all persons using the Lake Area to cooperate with and abide by the Rules and Regulations so that the Water Utility may continue the authorized recreational uses of this beautiful area.

Under State of Arkansas law, conviction for a violation of the Rules and Regulations carries a minimum fine of \$50 and a maximum fine of \$200, plus court costs.

GENERAL

The Board has adopted and established the following Rules and Regulations for the Lake Maumelle area. The Lake Area encompasses all property of Central Arkansas Water in Pulaski County, Arkansas, lying west of Pinnacle Mountain, and includes property that the Water Utility leases to other individuals and/or marina operators.

The Board extends the privileges of boating, fishing, and other permitted recreational uses on Lake Maumelle to all persons who comply with the Rules and Regulations. The Board may, without prosecution, suspend or revoke the privileges of a person whom it believes to be in violation of the rules. The Board may revoke or suspend the privileges of a person convicted of violating the Rules and Regulations or convicted of violating in the Lake Area applicable State of Arkansas or federal rules or laws regarding public water supply reservoirs, boating, hunting, or fishing.

The Board, in accordance with State law, has designated certain Water Utility personnel as Lake Wardens. The Lake Wardens have authority to enforce the Rules and Regulations. The Lake Wardens and other law enforce-

ment officers have authority to issue tickets and make arrests for violations of the rules, in accordance with Ark. Code Ann. 14-251-108; State boating laws; and the Arkansas Department of Health's Rules and Regulations pertaining to Public Water Systems.

To protect water quality, Lake Maumelle consists of two zones, as shown in the accompanying map in this brochure. The establishment of the zones and the map are parts of the official Rules and Regulations. Special and clearly visible markers and buoys distinguish the area of the restricted zone from the remainder of the lake (unrestricted area). The unrestricted Lake Area is open to boating and fishing only during the hours of 6 a.m. to 8 p.m. November 1 through March 31 and 24 hours a day from April 1 through October 31.

No persons other than Water Utility personnel or law enforcement officers engaged in the performance of their duties may enter or exit the Lake Area other than at points of entry/exit that the private dock operators have leased for this purpose or at areas that the Water Utility has marked clearly as picnic facilities.

WATERSHED PROTECTION

In February 2007, the Board of Commissioners, CAV, adopted the Lake Maumelle Watershed Management Plan. The comprehensive plan specifically directs that the water utility undertake strategies and standards related to lake management, private land development, forestry activities, other land disturbances, property owner practices, and land acquisition to ensure the long-term viability of the lake, as a drinking water supply. The management plan will help to ensure a high quality of drinking water for generations to come. To view the watershed management plan, visit <http://www.carkw.com/watershed/future.asp>.

PROHIBITED ACTIVITIES

1. No person shall perform an act in the Lake Area that tends to pollute the waters of Lake Maumelle other than acts that are permitted by the Rules and Regulations.
2. The Water Utility has provided appropriate receptacles for waste and prohibits lake patrons from depositing refuse, cans, trash, garbage, or human waste on lands or waters in the Lake Area, except in the receptacles that the Water Utility has provided for said purposes.
3. The emptying of a toilet into the lake is prohibited.
4. Camping, hunting, and trapping are prohibited in the Lake Area.



5. Picnicking, except in picnic areas that the Water Utility has established and marked for such, is prohibited in the Lake Area.
6. Cooking and the building or setting of fires in the Lake Area are prohibited, except in fireplaces that the Water Utility has established in picnic areas. Lake patrons may not smoke or build fires in the facilities during burn bans in effect by order of the Arkansas Forestry Commission or Pulaski County Judge.
7. The introduction of materials for fish habitat enhancement in the lake and the presence of brush-cutting devices in a boat in the Lake Area or on the lake are prohibited.
8. Swimming, bathing, wading, and the use of aquaplanes, surfboards, motorized surfboards, wind-powered surfboards, personal water craft, water skis, rafts, kayaks, or other similar devices or vehicles that the Rules and Regulations do not expressly permit are prohibited.
9. Skin diving and aqua-lung sports are prohibited. A Lake Warden, upon request, may grant a special permit for the recovery of lost personal property.
10. The destruction, injury, defacement, or removal of signs, public property, vegetation, rocks, or minerals is prohibited.
11. The distribution, posting, or displaying of advertisements and private notices in the Lake Area without authorization from the Water Utility is prohibited.
12. The placement of buildings or structures in the Lake Area without Water Utility approval is prohibited.
13. A meeting of a political nature, as defined by the Board or Water Utility, is prohibited in the Lake Area and on the leased areas.
14. The landing of aircraft in the Lake Area is prohibited.
15. All pets in the Lake Area shall be on leash and shall not be allowed in the water.
16. No person willfully shall permit livestock in the Lake Area.
17. The possession of firearms and ammunition in the Lake Area by individuals other than law enforcement officers and Lake Wardens who have said authority is prohibited.
18. The use of fireworks in the Lake Area is prohibited.

FISHING

19. Fishing is prohibited in the restricted zone (Zone 1). Zone 2 is open to fishing activities.
20. Commercial fishing and fishing by trotline, seine, net, trap, gig, jug lines, yo-yo, or setline are prohibited in the lake.
21. Fishing from roads, bridges, or docks is prohibited. The Rules and Regulations permit fishing only from boats and designated bank fishing areas.
22. An activity that violates a law, rule, or regulation of the Arkansas Game & Fish Commission is prohibited in the Lake Area.

BOATING

23. In Zone 1 (restricted area), the Water Utility prohibits all boating activities, with the exception of boating activities by Lake Wardens; Water Utility, Arkansas Game & Fish Commission, and U.S. Geological Survey personnel; and law enforcement officers engaged in the performance of their duties. Zone 2 is open to boating activities.

24. Owners/operators must equip and operate boats in accordance with State boating laws. The Lake Warden shall require the prompt removal of a boat that the Lake Warden deems unsafe for lake conditions or that is being operated in an unsafe manner.
25. No person shall operate a boat on the lake while intoxicated or under the influence of alcohol, as described in Ark. Code Ann. 5-76-102(a)(2); under the influence of a narcotic drug, barbiturate, or marijuana; or under a physical or mental disability that renders the person incapable of operating the boat safely under the prevailing circumstances and conditions.
26. The lake and Lake Area are not open to boats with an unblocked through-the-hull toilet.
27. Cooking on boats is prohibited.
28. A boat operator shall not launch or operate a boat on the lake without a prior thorough cleaning of the boat's interior and exterior. All boats are subject to inspection at all times. The Water Utility shall require the removal or prohibit the launching of a boat that fails to pass inspection.
29. No person under 16 years of age may operate a boat on the lake without the accompaniment of an adult. The Lake Warden may grant special permits for training on smaller boats.
30. The lake is not open to boats less than 14 feet in length. The Lake Warden may grant special permits for training on smaller boats.
31. Lake patrons may place boats upon the Lake Area only at points of entry that the private dock operators have leased for said purpose or at the designated hand-launch area at Sleepy Hollow. Launching at Sleepy Hollow requires a valid launch permit. The Water Utility may confiscate a boat or boat and motor; upon the determination that the operator has not entered the lake at a prescribed entry point. The owner may recover the boat only upon the payment of the Water Utility's applicable charge for taking, towing, and/or storing said boat.
32. Boat owners/operators shall restrict their operation of boats with a primary motor of less than nine (9) horsepower to the Lake Area west of the Arkansas Highway 10 Bridge. Sail boats are not subject to this rule.
33. Lake patrons shall restrict canoeing to the Lake Area west of the Arkansas Highway 10 Bridge. Canoe launching is permissible at Sleepy Hollow and at the access west of the Arkansas Highway 10 Bridge; however, actual canoeing activity must remain west of the bridge.
34. When operating a boat on the lake during hours of darkness, the owner/operator must conform to the boat's lighting to the specifications contained in the Arkansas Boating Laws, Title 27, as amended, and the regulations promulgated by the Arkansas Game & Fish Commission.

DOCK OPERATORS

35. Dock operators shall store and handle gasoline, oil, and other inflammable liquids in a manner satisfactory to the Water Utility and in compliance with all state and federal regulatory requirements.
36. Dock operators shall not permit a person, business, corporation, or a representative of such to engage in or solicit business on the leased area without prior authorization by the Water Utility.
37. All docks shall have the necessary boat haul-out mechanism.
38. Dock operators shall be responsible for requiring that boat operators thoroughly clean the interior and exterior of all rented boats and private boats prior to launching or prior to leaving the dock area.
39. Dock operators shall not permit the launching of a boat, private or rented, in an unsafe condition from their leased areas.
40. Dock operators shall not permit the launching of a boat, private or rented, from their leased areas by a person under the influence of alcohol, narcotic drug, barbiturate, or marijuana, or under a physical or mental disability that renders the person incapable of operating the boat safely under the prevailing circumstances and conditions.

The Board of Commissioners, Central Arkansas Water, adopted the revised Rules and Regulations herein for Lake Maumelle on October 10, 2002.



GENERAL LOCATION MAP

