LAKE MAUMELLE HISTORY

Central Arkansas Water (CAW) has ten 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 systemwide demand.

The former Little Rock Municipal Water Works originally developed Lake Maumelle as a second raw water supply. Studies that began in 1947 preceded the water utility's development of a second source to meet the area's growing demand for water service. Construction of the first source, Lake Winona, located approximately 10 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 Lake Maumelle 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 and project site work followed in March 1955. The studies proved favorable and the engineers proceeded with project design. In July 1959, water officials awarded the final major contract for construction of the dam on the Big Maumelle River. In June 1959, 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 $914,944. The last pump addition increased the station's firm capacity to approximately 113 MGD.

In 1998, 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. The first phase of this installation included two 15-MGD pumps and the design for one additional 30-MGD pump. In addition to increasing the increased treated 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. (Little Rock Municipal Water Works and its largest wholesale customer, the North Little Rock Water Department, merged July 1, 2001, into Central Arkansas Water. CAW is a metropolitan water system serving a population of almost 398,000.)

LAKE MAUMELLE PHYSICAL STATISTICS

WATERSHED

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

LAKE

Area ............................................................ 8,900 acres
Volume .................................................. 72 billion gal
Shoreline .................................................. 73 mi.
Average Depth ...................................... 24.7 ft.
Maximum Depth .................................. 60 ft.
Storage Capacity ...........................................

TOTAL

Total ........................................................ 219,440 acre-ft.

DAM

Length (including Spillway) ............ 3.5 ft.
Height .................................................. 280 ft.
Width of Top ........................................ 210 ft.
Volumes ..................................................
Spillway: total length .......................... 250 ft.
Spillway: discharge capacity .................. 342.5 ft. MIS.
Eff. of outlet works at Full Lake level ... 546 ft. MIS.

PIPES

Diameter – Internal
Length .................................................. 48 in.
48 in. ...................................... 463 ft.
24 in. .................................. 276 ft.
36 in. .................................. 168 ft.
21 in. .................................. 108 ft.
10.5 ft. .................................. 54 ft.
Capacities ...........................................
500 MIS ........................................ 110 MIS
250 MIS ........................................ 50 MIS

EMERGENCY TELEPHONE NUMBERS

Pulaski County Sheriff’s Office .................. 911 or 501.340.6963
Arkansas Game & Fish Commission Enforcement .... 501.223.6381 or 1.800.482.9262
Pulaski County Sheriff’s Office .......... 911 or 501.340.6963
Loon Park .................................. 501.377.1239
Lake Maumelle Pumping Station ........ 501.885.4390

LAKE HOURS

April 1 through October 31: 24 hours a day
November 1 through March 31: 4 a.m. to 8 p.m.

EMERGENCY TELEPHONE NUMBERS

AREA MAP
9.1 No person shall perform an act in the Lake Maumelle Area that will pollute the water of the Lake other than acts that are specifically permitted by the Regulations.

9.2 No person, except CWA or AGFC personnel, or Law Enforcement Officers in the performance of their official duties, or others specifically authorized by CWA, shall (i) operate an Off-Road Recreational Vehicle within the Lake Maumelle Area.

9.3 No person shall perform an act in the Lake Maumelle Area or supply reservoirs, boating, hunting, fishing, or recreational activities within the Lake Maumelle Area, except for Operation of Prohibited Watercraft.

11.6 Hunting is permitted in compliance with the Regulations, the AGFC Code of Regulations, and the Arkansas Game & Fish Commission’s (AGFC) regulations.

17.3 An Agent, or other person authorized by CWA, may enter and search any Watercraft or area connected to or such release is into a non-discharging drain or into public property, vegetation, rocks, or minerals in the Lake Maumelle Area. Such inspections shall be conducted in accordance with applicable laws.

11.7 The Lake is not open to Prohibited Watercraft less than fourteen feet (14’) in length except as provided in Section 11.6 and 11.16. An Authorized Representative may grant Official Written Permission for persons to be on permitted Prohibited Watercraft in the Lake Maumelle Area east of the Arkansas Highway 10 bridge.

11.8 Motorized Prohibited Watercraft with a primary motor of nine (9) horsepower or less are prohibited except as provided in Regulation 11.16.

11.9 Limitation of Prohibited Watercraft.

13.1 Dock Operators shall store and handle gasoline, oil, and other flammable liquids in a manner satisfactory to CWA and in compliance with all State and federal regulatory requirements.

13.2 Dock Operators shall not permit any person to engage in work on the leased area without Official Written Permission.

13.3 Dock Operators shall provide necessary boat haul-out mechanisms.

13.4 Dock Operators shall be responsible for requiring that Operators thoroughly clean the interior and exterior of all rented boats and boats prior to Launching or prior to leaving the dock area.

13.5 Dock Operators shall not permit the Launching of a Prohibited Watercraft.

13.6 Dock Operators shall not permit the Launching of a Prohibited Watercraft, with any motor greater than nine (9) horsepower. Such launchings will be subject to the prevailing circumstances and conditions.