

Lake Kemp Dam and Lake Kemp

OWNER

City of Wichita Falls and Wichita County Water Improvement District No. 2.

ENGINEER (Design)

U.S. Army Corps of Engineers, Tulsa District for rebuilt dam.

LOCATION

On the Wichita River in Baylor County, about 6 miles northeast of Mabelle.

DRAINAGE AREA

2,086 square miles.

DAM

Type	Earthfill
Length	8,890 ft
Maximum height	115 ft
Top width at outlet works	52 ft
Top width (typical embankment)	28 ft

SPILLWAY

Type	Cut channel on right side of dam
Control	None
Elevation	1,160.0 ft above msl
Crest length	3,000 ft

OUTLET WORKS

Type	Tower and 13-ft diameter conduit
Control	2 gates, 5.66 ft by 13 ft
Invert elevation	1,090.0 ft above msl
Low flow outlet	Valve controlled 6-inch diameter pipe

AUTHORIZATION

Federal: Flood Control Act October 26, 1962.
 State: Permit No. 504 (Application No. 516) March 22, 1921 for original dam.
 Permit No. 504A (Application No. 516A) for the enlarged dam by U.S. Army Corps of Engineers (1969).

RESERVOIR DATA (From 1971 data by U.S. Army Corps of Engineers)

FEATURE	ELEVATION (FEET ABOVE MSL)	CAPACITY (ACRE-FEET)	AREA (ACRES)
Top of dam	1,183.0	—	—
Spillway crest	1,160.0	672,100	27,440
Top of flood control pool	1,156.0	567,900	24,720
Top of conservation pool	1,144.0	319,600	16,540
Outlet works invert	1,090.0	1,580	380
Usable storage	—	318,020	—

GENERAL

Original dam completed	August 25, 1923
Impoundment of water began	October 1, 1922
New construction started	May 1969
Revision completed	Scheduled November 1973*
General contractor (new work)	Amis Construction Company
Estimated cost (new work)	\$8,000,000

Lake Diversion Dam, 55 ft high and 7,000 ft long, constructed in 1924, 20 miles downstream with a capacity of 40,000 acre-feet and a surface area of 3,419 acres is part of the original project and remains unchanged.

* Water supply features in operation before July 31, 1973. Final details scheduled for completion in November 1973.

