

### Bridgeport Dam and Bridgeport Reservoir

**OWNER**

Tarrant County Water Control and Improvement District Number One.

**ENGINEER (Design)**

Hawley, Freese and Nichols (original).  
Freese, Nichols and Endress (1971 enlargement).

**LOCATION**

On the West Fork Trinity River in Wise County, 4 miles west of Bridgeport.

**DRAINAGE AREA**

1,111 square miles.

**DAM**

Type Earthfill  
Length 2,040 ft  
Maximum height 130 ft  
Top width 16 ft  
Top elevation 874.0 ft above msl

**SPILLWAY (emergency)**

Type Natural ground  
Location Left of the dam  
Length 700 ft  
Elevation 866.0 ft above msl

**SPILLWAY (new service)**

Location 3,000 ft ± to left of dam  
Type Excavated channel from lake to concrete ogee section  
Crest length 90 ft  
Control 8 vertical gates  
Crest elevation 820.0 ft above msl  
Top of gate elevation 842.0 ft above msl  
Discharge To excavated channel

**MODIFIED ORIGINAL OUTLET WORKS**

Type Pipes installed in conduits used to pass water during original construction  
Size 18- and 48-inch steel cylinder concrete pipes  
Control Valves operated from top of tower  
Invert of pipe 752.0 ft above msl

**OUTLET WORKS (New)**

Location Part of service spillway wall  
Type 60-inch steel pipe with entrance elbow  
Invert of elbow 810.0 ft above msl  
Control Slide gate at discharge  
Discharge To spillway discharge basin at elevation 810.0 ft above msl

**STATE AUTHORIZATION**

Permit No. 1073 (Application No. 1144) May 1, 1928, with a priority date July 6, 1926, authorized a dam to impound 290,000 acre-feet of water with annual diversion of 52,000 acre-feet for irrigation and 93,000 acre-feet to be transported to Eagle Mountain Reservoir for municipal use.  
Permit No. 1073B (Application No. 1144B) February 19, 1969, authorizes increased impoundment to 438,510 acre-feet at elevation 840.0 feet above mean sea level. Increased diversion for municipal use to 5,000 acre-feet and 2,000 acre-feet for mining. Releases to Eagle Mountain Reservoir reduced to 86,000 acre-feet.  
Permit No. 1073C (Application No. 1144C) February 22, 1971, reduces impoundment from 438,510 at elevation 840.0 feet above mean sea level to 386,000 acre-feet at elevation 836.0 feet above mean sea level.

**RESERVOIR DATA (Based on data from Freese and Nichols, February 23, 1959)**

FEATURE	ELEVATION (FEET ABOVE MSL)	CAPACITY (ACRE-FEET)	AREA (ACRES)
Top of dam	874.0	-	-
Crest of service spillway	836.0	386,420	13,000
Invert of 48-inch valves	751.4	0	0
Usable conservation storage space	-	386,420	-

**GENERAL (original dam)**

Construction started January 23, 1930  
Dam completed December 15, 1931  
Impoundment of water began April 1, 1932  
General contractor McKenzie and Uvalde Construction Companies  
Estimated cost \$2,316,000

**1971 ENLARGEMENT**

Work completed October 1972  
Contractor H. B. Zachry Company  
Estimated cost \$3,000,000

