

Fairfield Dam and Fairfield Lake

OWNER

Texas Power & Light Company.
 Texas Electric Service Company.
 Dallas Power & Light Company.
 Industrial Generating Co. is the operating agent.

ENGINEER (Design)

Forrest and Cotton, Inc.

LOCATION

On Big Brown Creek in Freestone County, 11 miles northeast of Fairfield.

DRAINAGE AREA

34 square miles.

DAM

Type Earthfill
 Length (including spillway) 4,350 ft
 Height (above streambed) 77 ft
 Top width 25 ft

SPILLWAY (emergency)

Location Right end of dam
 Crest length 500 ft
 Crest elevation 314.0 ft above msl

SPILLWAY (service)

Location Near left end of dam
 Crest length (net) 60 ft
 Crest elevation 299.0 ft above msl
 Control 2 tainter gates, each 30 by 14 ft

OUTLET WORKS

None. Water is circulated from reservoir to power plant and back to reservoir.

POWER GENERATION FEATURES

Present construction—2 units with total capacity of 1,150,000 kw. Ultimate—3 units with total capacity of 1,900,000 kw.

STATE AUTHORIZATION

Permit No. 2351A (Application No. 2561A) May 9, 1968, authorizes a dam to impound 50,600 acre-feet of water with 19,700 acre-feet of this diverted annually by pumping from the Trinity River. Annual use not to exceed 14,150 acre-feet for cooling in a steam-electric generating plant.

RESERVOIR DATA

FEATURE	ELEVATION (FEET ABOVE MSL)	CAPACITY (ACRE-FEET)	AREA (ACRES)
Top of dam	322.0	—	—
Emergency spillway crest	314.0	60,540	2,620
Normal pool	310.0	50,600	2,350
Service spillway crest	299.0	28,640	1,640
Streambed	245.0	—	—
Sediment storage	—	850	—
Usable conservation storage space	—	49,750	—

GENERAL

Construction started August 19, 1968
 Dam completed December 1969
 Impoundment of water began December 1969
 General contractor Spencer Construction Company
 Cost of the dam \$2,600,000

