



Water-Data Report 2011

08045000 Eagle Mountain Reservoir above Fort Worth, TX

Upper Trinity Basin
Upper West Fork Trinity Subbasin

LOCATION.--Lat 32°52'39", long 97°28'29" referenced to North American Datum of 1927, Tarrant County, TX, Hydrologic Unit 12030101, in valve house at left end of main section of Eagle Mountain Dam on West Fork Trinity River, 11.8 mi northwest of Fort Worth and at mile 583.3.

DRAINAGE AREA.--1,970 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Feb. 1934 to current year. Prior to Oct. 1943 end of month values only.

PERIOD OF RECORD, Water-Quality.--
CHEMICAL DATA: Jan. to July 1964, Aug. 2006.
BIOCHEMICAL DATA: Jan. to July 1964.

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to Oct. 16, 1988, nonrecording gages at several sites within 1.0 mi of present site at present datum. Satellite telemeter at station.

COOPERATION.--Capacity Table No. 5, furnished by the Tarrant Regional Water District, was put into use beginning Oct. 1, 2003. A new capacity table, Table No. 6, was furnished by the Texas Water Development Board and was put into use beginning Oct. 1, 2009.

REMARKS.--Records good except those for estimated daily mean contents, which are fair. Some records listed in the Period of Record for surface water and water quality may not be available electronically. The reservoir is formed by two sections of rolled earthfill and a concrete spillway separated by high natural ground. Total length of the dam including spillway is 4,800 ft. The dam was completed Oct. 24, 1932, and storage began Feb. 24, 1934. The spillway is a 1,300-ft-wide cut through natural ground located between the two sections of earthfill that make up the dam. The original service spillway, located in the section to the right of the main dam, contains a concrete spillway with four 25-ft bays, three are equipped with vertical lift gates and the fourth is left open. In 1971, a side-channel spillway was constructed. The newest spillway is located 300 ft to the left of the original service spillway and has six 11.25 x 22-ft-wide roller lift gates. The main section of the dam contains the outlet works that consist of two concrete conduits with two 48-in diameter valves in each conduit. The dam is owned by the Tarrant Regional Water District. The reservoir is used for flood control and for part of the municipal water supply for the City of Fort Worth. Conservation pool storage is 179,880 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	682.0
Crest of spillway.....	676.0
Top of gates (new side-channel spillway).....	659.0
Crest of (old service) spillway.....	649.1
Crest of spillway (new side-channel spillway).....	637.0
Lowest gated outlet (invert).....	599.9

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 333,500 acre-ft, Apr. 26, 1942, elevation, 659.9 ft; minimum contents observed since first appreciable storage in 1935, 57,690 acre-ft, Nov. 19, 20, 1956, elevation, 629.3 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 178,900 acre-ft, Oct. 1, elevation, 648.95 ft; minimum contents, 130,700 acre-ft, Sept. 30, elevation, 642.91 ft.

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RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	178,700	170,500	163,700	163,800	165,600	164,300	157,500	156,500	157,400	144,900	140,300	140,000
2	178,500	170,500	163,600	163,800	165,100	164,200	157,300	158,700	156,700	144,600	140,400	139,800
3	178,100	170,700	163,600	163,900	164,700	163,900	156,800	159,700	156,000	144,400	e140,300	139,700
4	177,700	170,300	163,700	164,100	164,700	163,900	157,400	160,000	155,300	144,100	e140,200	139,700
5	177,300	169,700	163,500	164,200	164,600	164,100	156,500	160,200	154,600	143,800	140,200	139,200
6	176,900	169,200	163,200	164,200	164,700	163,500	156,100	160,200	154,000	143,500	140,200	138,800
7	176,300	168,900	163,100	164,200	164,800	163,200	156,100	160,000	153,200	143,200	140,300	138,600
8	175,800	168,500	163,000	164,200	164,600	163,400	155,900	159,800	152,300	142,800	140,300	138,200
9	175,300	168,100	162,800	164,900	165,400	163,400	155,600	159,400	151,400	142,400	140,200	137,800
10	174,800	167,900	162,900	165,700	165,000	163,000	155,600	159,100	150,600	142,100	e140,300	137,400
11	174,300	167,600	163,100	165,800	165,000	162,600	157,400	159,300	150,100	141,700	e140,200	136,900
12	173,900	167,600	162,900	165,700	165,200	162,500	157,300	159,700	149,600	141,400	140,200	136,400
13	173,600	167,400	162,600	165,600	165,200	162,500	157,200	160,000	149,100	141,100	141,100	135,800
14	173,200	166,900	162,500	165,600	165,400	162,600	157,000	159,900	148,600	140,800	141,500	135,300
15	172,800	166,600	162,500	165,700	165,400	162,200	157,300	159,900	148,300	140,600	141,700	134,700
16	172,600	166,400	162,700	165,800	165,400	161,900	156,400	159,900	147,700	140,400	141,800	134,300
17	172,400	166,100	162,500	165,700	165,400	161,600	156,000	159,700	147,000	140,200	141,900	134,900
18	172,200	165,700	162,300	165,800	165,500	161,600	155,800	159,100	146,400	140,000	141,900	134,900
19	172,000	165,300	162,100	165,500	165,400	161,300	155,800	158,800	145,800	139,800	141,900	134,700
20	171,800	165,100	162,100	165,800	165,300	161,000	155,800	158,900	145,200	139,700	141,800	134,200
21	171,600	165,000	162,200	165,300	165,500	160,700	155,400	159,000	146,800	139,600	141,800	133,800
22	171,300	165,100	162,200	165,200	165,200	160,300	155,200	158,900	147,600	139,500	141,800	133,600
23	171,700	165,000	162,000	165,200	165,000	160,400	155,200	159,100	147,800	139,500	e141,700	133,200
24	172,400	164,800	162,400	165,100	165,100	160,000	155,300	159,200	147,600	139,700	141,600	132,900
25	172,100	165,000	162,900	165,100	164,900	159,500	155,900	159,700	147,100	139,800	141,500	132,600
26	172,000	164,600	162,800	164,900	164,700	159,400	156,400	159,500	146,700	139,900	141,400	132,300
27	171,800	164,400	162,600	164,800	164,600	158,900	156,500	159,000	146,300	140,000	141,300	132,000
28	171,500	164,000	162,800	164,800	164,700	158,400	156,200	158,700	146,000	140,000	141,200	131,700
29	171,100	164,200	163,100	164,600	---	158,200	155,800	158,300	145,600	140,000	140,900	131,400
30	170,800	164,100	163,400	164,700	---	157,900	155,800	158,000	145,200	140,100	140,500	131,000
31	170,600	---	163,700	164,700	---	157,700	---	158,000	---	140,200	140,200	---
Mean	173,700	166,800	162,900	165,000	165,100	161,600	156,300	159,200	149,500	141,300	141,000	135,500
Max	178,700	170,700	163,700	165,800	165,600	164,300	157,500	160,200	157,400	144,900	141,900	140,000
Min	170,600	164,000	162,000	163,800	164,600	157,700	155,200	156,500	145,200	139,500	140,200	131,000

	Calendar Year 2010	Water Year 2011
Mean	175,500	156,500
Max	186,500	178,700
Min	162,000	131,000

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