

**08052800 Lewisville Lake near Lewisville, TX**

Upper Trinity Basin  
Elm Fork Trinity Subbasin

LOCATION.--Lat 33°04'09", long 96°57'51" referenced to North American Datum of 1927, Denton County, TX, Hydrologic Unit 12030103, in intake structure of Lewisville Dam on Elm Fork Trinity River, 2.0 mi upstream from bridge on State Highway Business 121, 2.4 mi northeast of Lewisville, 12.0 mi upstream from Denton Creek, and 30.0 mi upstream from mouth.

DRAINAGE AREA.--1,660 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Nov. 1954 to Sept. 2000 (U.S. Army Corps of Engineers furnished contents), Oct. 2000 to Sept. 2002 (contents), Oct. 2002 to current year. Prior to Oct. 1970, published as "Garza-Little Elm Reservoir near Lewisville".

PERIOD OF RECORD, Water-Quality.--  
CHEMICAL DATA: Jan. 1964 to Sept. 1977.

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to May 17, 1955, nonrecording gage at site 4,000 ft upstream at same datum. Satellite telemeter at station.

REMARKS.--Records good. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically. The lake is formed by a rolled earthfill dam 32,888 ft long, including a 560-ft uncontrolled off-channel concrete-gravity spillway with ogee weir section. Deliberate impoundment began Nov. 1, 1954, and the dam was completed in Aug. 1955. The controlled low-flow outlet works consist of a 16.0 ft diameter conduit that is controlled by three 6.5 by 13.0 ft broome-type gates and two 60 in steel pipes with service valves. The dam is owned by the U.S. Army Corps of Engineers. The lake was built for flood control and water conservation. The City of Dallas obtains most of its municipal water supply from this lake. Inflow is affected at times by discharge from the flood-detention pools of 118 floodwater-retarding structures with a combined detention capacity of 81,670 acre-ft. These structures control runoff from 298 mi<sup>2</sup> in the Elm Fork Trinity River, Clear, Little Elm, and Hickory Creek watersheds. An unknown amount of water was diverted for municipal and industrial uses. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	560.0
Crest of spillway.....	532.0
Lowest intakes to wet wells (invert).....	481.0
Invert of three broome-type gates.....	448.0

Water-quality records available from Sept. 1975 to July 1997, Jan. 1999 and Aug. 2006 were published separately as:

Site ID	Site name
330419096575401	Lewisville Lk Site AC nr Lewisville, TX
330410096584501	Lewisville Lk Site AL nr Lewisville, TX
330450096560501	Lewisville Lk Site BC nr Lewisville, TX
330606097025601	Lewisville Lk Site CC nr Lewisville, TX
330755096572001	Lewisville Lk Site DC nr Lewisville, TX
330959096565301	Lewisville Lk Site EC nr Lewisville, TX
330722096592201	Lewisville Lk Site FC nr Lewisville, TX
330944097003601	Lewisville Lk Site GC nr Lewisville, TX
330918096594601	Lewisville Lk Sec 1 nr Lewisville, TX
330930096571501	Lewisville Lk Sec 2 nr Lewisville, TX

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,181,000 acre-ft, May 4, 1990, elevation, 536.73 ft; minimum since initial filling in 1957, 184,700 acre-ft, Sept. 28, 1980, elevation, 498.65 ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 517.42 ft, Apr. 18, June 19; minimum elevation, 513.59 ft, Sept. 28.

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**ELEVATION OF RESERVOIR WATER SURFACE ABOVE DATUM, FEET**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	517.16	516.57	515.80	515.73	516.39	516.49	517.04	517.21	517.14	516.99	515.96	514.42
2	517.14	516.56	515.80	515.72	516.38	516.48	517.07	517.27	517.15	516.92	515.89	514.42
3	517.11	516.55	515.78	515.71	516.37	516.41	517.12	517.21	517.12	516.85	515.83	514.43
4	517.09	516.53	515.81	515.70	516.33	516.39	517.19	517.16	517.08	516.79	515.77	514.39
5	517.10	516.50	515.79	515.68	516.33	516.45	517.21	517.13	517.06	516.74	515.72	514.35
6	517.07	516.46	515.74	515.67	516.31	516.38	517.19	517.10	517.06	516.69	515.65	514.29
7	517.03	516.43	515.73	515.65	516.31	516.35	517.20	517.08	517.07	516.65	515.59	514.23
8	516.98	516.37	515.72	515.65	516.30	516.33	517.19	517.04	517.06	516.60	515.56	514.17
9	516.92	516.32	515.71	516.08	516.25	516.33	517.20	517.02	517.21	516.56	515.51	514.11
10	516.93	516.28	515.68	516.33	516.40	516.76	517.29	517.03	517.30	516.52	515.46	514.06
11	516.93	516.30	515.62	516.37	516.48	516.88	517.26	517.03	517.29	516.48	515.40	514.01
12	516.90	516.33	515.59	516.44	516.51	516.88	517.25	517.00	517.27	516.44	515.35	513.97
13	516.85	516.26	515.56	516.48	516.55	516.87	517.23	516.96	517.26	516.39	515.31	513.93
14	516.99	516.23	515.56	516.45	516.54	516.86	517.21	516.92	517.25	516.35	515.28	513.87
15	517.00	516.18	515.61	516.44	516.57	516.84	517.20	516.87	517.23	516.35	515.25	513.80
16	516.97	516.17	515.61	516.43	516.55	516.81	517.19	517.02	517.22	516.37	515.21	513.75
17	516.96	516.15	515.61	516.43	516.51	516.84	517.14	517.04	517.27	516.41	515.19	513.72
18	516.98	516.12	515.58	516.41	516.51	516.86	517.33	517.02	517.38	516.41	515.15	513.67
19	516.96	516.11	515.55	516.40	516.53	516.84	517.38	516.97	517.41	516.39	515.10	513.62
20	516.90	516.11	515.61	516.40	516.52	516.83	517.33	516.95	517.39	516.37	515.05	513.77
21	516.85	516.09	515.54	516.41	516.54	516.77	517.33	517.00	517.36	516.34	515.00	513.85
22	516.84	516.03	515.51	516.38	516.56	516.80	517.31	517.06	517.32	516.30	514.95	513.82
23	516.83	516.05	515.51	516.37	516.54	516.80	517.34	517.05	517.27	516.27	514.90	513.77
24	516.83	515.98	515.50	516.36	516.52	516.88	517.34	517.05	517.24	516.24	514.85	513.74
25	516.83	515.93	515.65	516.37	516.53	516.83	517.30	517.09	517.21	516.21	514.79	513.71
26	516.81	515.94	515.75	516.35	516.55	516.80	517.27	517.14	517.18	516.18	514.73	513.67
27	516.72	515.92	515.72	516.32	516.53	516.76	517.28	517.15	517.16	516.16	514.68	513.63
28	516.67	515.87	515.74	516.32	516.51	516.76	517.26	517.12	517.15	516.12	514.63	513.62
29	516.62	515.84	515.71	516.34	---	516.76	517.25	517.10	517.11	516.07	514.59	513.67
30	516.59	515.82	515.69	516.44	---	516.91	517.23	517.12	517.06	516.02	514.54	513.64
31	516.58	---	515.69	516.40	---	516.99	---	517.13	---	516.00	514.48	---
<b>Mean</b>	516.91	516.20	515.66	516.20	516.46	516.71	517.24	517.07	517.21	516.43	515.21	513.94
<b>Max</b>	517.16	516.57	515.81	516.48	516.57	516.99	517.38	517.27	517.41	516.99	515.96	514.43
<b>Min</b>	516.58	515.82	515.50	515.65	516.25	516.33	517.04	516.87	517.06	516.00	514.48	513.62

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