

**08054500 Grapevine Lake near Grapevine, TX**

Upper Trinity Basin  
Denton Subbasin

LOCATION.--Lat 32°58'21", long 97°03'22" referenced to North American Datum of 1927, Tarrant County, TX, Hydrologic Unit 12030104, in intake structure of Grapevine Dam on Denton Creek, 2.7 mi northeast of Grapevine, 4.3 mi upstream from bridge on State Highway 121, and 11.7 mi upstream from mouth.

DRAINAGE AREA.--695 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--July 1952 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 "Grapevine Reservoir".

PERIOD OF RECORD, Water-Quality.--  
CHEMICAL DATA: Jan. 1964 to Jan. 1979.

PERIOD OF DAILY RECORD, Atmospheric.--  
PRECIPITATION DATA: Oct. 2001 to Sept. 2002.

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to May 16, 1953, nonrecording gage at site 1,000 ft upstream at present 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 12,850 ft long, including a 500-ft uncontrolled off-channel concrete-gravity spillway with an ogee weir section. The dam was completed in June 1952, and deliberate impoundment began July 3, 1952. The controlled outlet works consist of a 13.0 ft diameter concrete conduit that is controlled by two 6.5 by 13.0 ft broome-type gates and two 30 in steel pipes with service valves. The lake was built for flood control, navigation, and water conservation. The dam is owned by the U.S. Army Corps of Engineers. The City of Dallas uses water releases for their municipal supply. An unknown amount of water is diverted for other industrial and municipal uses. Inflow is affected at times by discharge from the flood-detention pools of 87 floodwater-retarding structures with a combined detention capacity of 57,850 acre-ft. These structures control runoff from 217 mi<sup>2</sup> in the Denton Creek watershed. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	588.0
Crest of spillway.....	560.0
Lowest intake to wet wells (invert).....	500.5
Invert of two broome-type gates.....	475.0

Water-quality records available from Jan. 1980 to Aug. 1986, Feb. 1998 to Aug. 2003 and Aug. 2006 were published separately as:

Site ID	Site name
325751097033001	Grapevine Lk Site AR nr Grapevine, TX
325822097030401	Grapevine Lk Site AC nr Grapevine, TX
325930097053801	Grapevine Lk Site BC nr Grapevine, TX
325933097081401	Grapevine Lk Site CC nr Grapevine, TX
330106097094601	Grapevine Lk Site DC nr Grapevine, TX
330207097103701	Grapevine Lk Site EC nr Grapevine, TX

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 471,200 acre-ft, Nov. 1, 1981, elevation, 563.29 ft; minimum since lake first filled in 1957, 94,480 acre-ft, Feb. 26, 1979, elevation, 520.67 ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 530.01 ft, Oct. 1; minimum elevation, 525.68 ft, Sept. 19.

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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	529.98	528.75	527.85	527.55	528.88	529.08	529.47	529.50	529.34	528.61	527.63	526.40
2	529.90	528.71	527.83	527.53	528.87	529.07	529.47	529.50	529.32	528.56	527.58	526.40
3	529.82	528.68	527.81	527.51	528.85	529.04	529.52	529.43	529.27	528.51	527.53	526.38
4	529.74	528.65	527.79	527.50	528.83	529.04	529.64	529.39	529.23	528.46	527.50	526.34
5	529.69	528.62	527.76	527.49	528.83	529.05	529.67	529.35	529.21	528.42	527.45	526.30
6	529.63	528.58	527.73	527.48	528.83	529.02	529.67	529.32	529.21	528.37	527.40	526.26
7	529.53	528.55	527.71	527.46	528.84	529.01	529.67	529.30	529.18	528.33	527.36	526.22
8	529.45	528.51	527.69	527.50	528.82	529.01	529.68	529.27	529.13	528.29	527.33	526.18
9	529.37	528.49	527.69	528.22	528.79	529.03	529.68	529.25	529.24	528.25	527.30	526.14
10	529.36	528.45	527.65	528.78	528.91	529.31	529.72	529.25	529.33	528.21	527.27	526.09
11	529.35	528.43	527.61	528.89	528.97	529.39	529.70	529.22	529.31	528.17	527.23	526.05
12	529.35	528.40	527.58	528.95	529.02	529.40	529.69	529.18	529.28	528.13	527.19	526.02
13	529.35	528.36	527.55	528.96	529.03	529.42	529.69	529.15	529.26	528.08	527.15	525.98
14	---	528.33	527.53	528.94	529.04	529.42	529.67	529.11	529.23	528.06	527.13	525.93
15	---	528.29	527.55	528.94	529.05	529.42	529.67	529.08	529.20	528.06	527.09	525.88
16	---	528.27	527.54	528.93	529.04	529.41	529.66	529.33	529.17	528.06	527.06	525.85
17	---	528.24	527.52	528.92	529.03	529.43	529.63	529.46	529.16	528.13	527.01	525.82
18	---	528.20	527.50	528.91	529.04	529.43	529.76	529.49	529.25	528.13	526.97	525.79
19	---	528.18	527.50	528.90	529.02	529.42	529.78	529.47	529.35	528.11	526.92	525.77
20	---	528.16	527.51	528.90	529.03	529.42	529.74	529.46	529.33	528.08	526.88	525.90
21	---	528.14	527.43	528.89	529.06	529.40	529.70	529.47	529.29	528.05	526.84	525.97
22	---	528.11	527.40	528.89	529.09	529.41	529.69	529.49	529.25	528.01	526.80	525.95
23	529.11	528.09	527.38	528.88	529.09	529.41	529.69	529.47	529.20	527.98	526.76	525.92
24	529.08	528.05	527.37	528.87	529.08	529.44	529.65	529.46	529.11	527.93	526.72	525.90
25	529.05	528.00	527.50	528.87	529.12	529.39	529.61	529.44	528.95	527.89	526.68	525.87
26	529.01	527.99	527.59	528.86	529.11	529.36	529.58	529.44	528.85	527.87	526.63	525.84
27	528.95	527.95	527.56	528.85	529.10	529.33	529.58	529.41	528.80	527.83	526.59	525.80
28	528.90	527.91	527.58	528.86	529.08	529.31	529.56	529.37	528.76	527.79	526.55	525.83
29	528.85	527.88	527.56	528.88	---	529.30	529.54	529.35	528.72	527.74	526.51	525.87
30	528.81	527.86	527.53	528.93	---	529.41	529.51	529.37	528.67	527.70	526.47	525.84
31	528.78	---	527.53	528.89	---	529.46	---	529.35	---	527.66	526.44	---
<b>Mean</b>	---	528.29	527.59	528.51	528.98	529.29	529.64	529.36	529.15	528.11	527.03	526.02
<b>Max</b>	---	528.75	527.85	528.96	529.12	529.46	529.78	529.50	529.35	528.61	527.63	526.40
<b>Min</b>	---	527.86	527.37	527.46	528.79	529.01	529.47	529.08	528.67	527.66	526.44	525.77

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