



Water-Data Report TX-2005

**08090900 Lake Granbury near Granbury, TX**

Brazos River Basin

LOCATION.--Lat 32°22'27", long 97°41'20" referenced to North American Datum of 1927, Hood County, Hydrologic Unit 12060201, at right end of spillway of DeCordova Bend Dam on the Brazos River, 2.6 mi upstream from Fall Creek, 7.5 mi southeast of Granbury, and at mile 542.5.

DRAINAGE AREA.--25,679 mi<sup>2</sup> of which 9,566 mi<sup>2</sup> probably is noncontributing.

WATER-STAGE RECORDS

PERIOD OF RECORD.--Oct. 1968 to current year. Water-quality records: Chemical data: Sept. 1970 to Sept. 1997. Biochemical data: Sept. 1970 to Sept. 1997.

REVISED RECORDS.--WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1.11 ft below NGVD of 1929. Satellite telemeter at station.

REMARKS.--No estimated contents. Records good. The lake is formed by an Ambursen-type concrete and earthfill dam 2,256 ft long, including a 932-ft concrete spillway. The dam was completed on Aug. 30, 1969, and deliberate impoundment began Sept. 15, 1969. The spillway consists of sixteen 36-by 35-ft tainter gates and two 7- by 8-ft sluice gates. Outflow through the sluice gates discharges into a bay where the outflow is then controlled by two 4- by 4.5-ft sluice gates with inverts at 625.8 ft. Flow is affected at times by discharge from the flood-detention pools of twelve floodwater-retarding structures with a combined detention capacity of 13,940 acre-ft. These structures control runoff from 53.9 mi<sup>2</sup> in the East Keechi, Kickapoo, and Ruckers Creeks drainage basins. The lake was built by the Brazos River Authority for the conservation of water for irrigation, municipal, and industrial uses. Water is also diverted into Squaw Creek Reservoir (station 08091730, conservation pool storage 151,030 acre-ft). The city of Granbury returns wastewater effluent into Lake Granbury. Conservation pool storage is 136,823 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	706.5
Top of tainter gates (design flood).....	693.0
Crest of spillway.....	658.0
Lowest gated outlet (invert).....	640.0

COOPERATION.--The capacity table, Table No. 2-C, was provided by the Texas Water Development Board and put into use Oct. 1, 1995.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 158,800 acre-ft, Mar. 27, 1977, elevation, 693.60 ft; minimum contents since normal operating level was reached in Oct. 1969, 97,600 acre-ft, Aug. 9, 1978, elevation, 685.28 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 136,300 acre-ft, June 1, elevation, 692.92 ft; minimum contents, 123,400 acre-ft, Aug. 4, elevation, 691.29 ft.

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**RESERVOIR STORAGE, ACRE FEET**  
**WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	132,500	133,700	132,100	132,200	133,500	132,800	133,600	132,600	134,200	132,000	125,200	133,000
2	132,900	132,600	133,000	132,900	133,500	131,900	132,800	133,200	133,600	131,300	124,900	133,000
3	133,000	132,400	133,200	133,700	132,700	133,000	132,100	133,200	133,600	130,300	124,500	133,200
4	133,300	133,100	133,100	131,600	132,300	133,400	131,700	133,600	134,000	129,600	124,400	133,200
5	133,000	133,900	132,500	132,800	131,900	133,500	133,100	133,600	134,100	129,800	124,700	133,200
6	133,600	133,800	131,800	132,600	132,100	133,700	133,800	132,900	134,300	129,900	125,000	132,600
7	133,800	134,000	132,600	132,600	132,600	133,800	133,200	132,300	133,700	130,000	125,100	132,700
8	133,200	133,700	132,500	133,700	132,200	133,200	133,100	132,400	133,400	130,000	125,100	132,800
9	133,400	133,200	132,900	133,300	132,200	133,200	132,900	132,900	133,500	129,900	125,100	132,800
10	133,400	133,800	132,700	132,300	132,200	133,100	132,700	132,900	133,700	129,800	125,000	132,300
11	133,200	134,400	131,900	132,100	132,600	133,000	133,100	133,000	133,600	129,600	124,800	132,000
12	132,900	133,500	132,500	132,000	132,600	132,700	132,800	133,200	133,500	129,300	124,500	132,300
13	132,900	133,200	133,200	132,300	132,600	132,700	133,200	133,200	133,700	129,000	124,300	132,700
14	133,000	133,300	133,500	131,600	133,200	132,300	133,400	133,300	134,400	128,800	124,400	132,300
15	132,500	133,200	133,400	131,600	133,700	132,200	133,100	132,100	134,700	128,600	124,700	131,700
16	132,400	132,200	133,100	131,400	133,400	132,600	132,600	132,000	134,700	128,400	125,300	131,900
17	132,200	132,400	133,000	131,200	132,300	132,500	132,400	132,100	134,600	128,100	125,300	132,900
18	132,100	133,300	132,700	132,000	131,600	133,000	132,200	132,100	134,700	127,900	125,200	133,500
19	132,100	132,900	132,200	133,400	131,100	133,200	132,000	132,100	134,900	127,600	126,700	133,500
20	132,100	132,900	132,000	134,400	131,500	133,200	132,300	132,200	135,200	127,300	131,000	132,700
21	132,500	133,300	132,600	134,300	132,600	133,800	133,100	132,600	135,200	127,000	131,900	132,000
22	133,000	133,500	133,600	133,800	133,000	133,800	133,800	133,100	135,000	126,900	132,400	131,900
23	132,800	133,000	131,800	132,900	133,900	132,700	133,500	133,900	134,700	126,900	134,000	131,700
24	132,500	131,300	131,400	132,900	133,500	132,100	133,200	134,700	134,500	126,800	134,200	133,000
25	132,900	131,000	131,500	132,900	132,300	132,700	133,800	135,200	134,100	126,700	134,100	134,100
26	133,000	132,000	131,600	132,700	133,000	133,200	133,200	135,500	133,700	126,500	132,000	134,000
27	133,000	132,600	132,100	132,500	134,500	134,000	131,900	135,500	133,400	126,700	129,200	133,200
28	132,900	132,600	132,700	132,700	134,200	133,100	131,900	135,300	133,100	126,500	131,500	133,100
29	132,900	132,800	133,600	132,500	---	133,000	132,400	135,200	132,800	126,100	133,000	133,500
30	133,100	132,000	134,600	132,400	---	133,400	132,500	134,600	132,300	125,800	133,400	133,600
31	133,200	---	133,500	133,000	---	133,400	---	134,100	---	125,500	133,600	---
<b>Mean</b>	132,900	133,000	132,700	132,700	132,700	133,000	132,800	133,400	134,000	128,300	127,900	132,800
<b>Max</b>	133,800	134,400	134,600	134,400	134,500	134,000	133,800	135,500	135,200	132,000	134,200	134,100
<b>Min</b>	132,100	131,000	131,400	131,200	131,100	131,900	131,700	132,000	132,300	125,500	124,300	131,700

	Calendar Year 2004	Water Year 2005
<b>Mean</b>	133,200	132,200
<b>Max</b>	135,400	135,500
<b>Min</b>	130,700	124,300

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