Water-Data Report 2008

08017400 Lake Tawakoni near Wills Point, TX

Sabine Basin
Upper Sabine Subbasin

LOCATION.--Lat 32°48′31″, long 95°55′10″ referenced to North American Datum of 1927, Rains County, TX, Hydrologic Unit 12010001, in stairwell at left end of spillway of Iron Bridge Dam on Sabine River, 750 ft upstream from bridge on Farm Road 47, 3.8 mi upstream from McBee Creek, 9.0 mi northeast of Wills Point, and at mile 514.5.

DRAINAGE AREA.--756 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct. 1960 to current year. Water-quality records: Chemical data: Dec. 1961 to Apr. 1984. Radiochemical data: May 1981.

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

COOPERATION.--Capacity table No. 1, based on a 1984 survey was prepared by Forrest and Cotton, Inc., Consulting Engineers, for Sabine River Authority. Table No. 1 was replaced with Table No. 2, provided by the Texas Water Development Board from a survey conducted in Apr. 1997, and put into use Oct. 1, 2000.

REMARKS.--Records good except those for estimated daily mean contents, which are poor. The lake is formed by a rolled earthfill dam 29,500 ft long, including a 480-foot uncontrolled concrete ogee spillway. Outlet works consist of two 4- by 6-foot sluice gates and two 20-inch steel pipes controlled by service valves. Closure of earthen dam began July 1, 1960, and deliberate impoundment of water began Oct. 7, 1960. Diversions are made for municipal use by the city of Dallas and various other users in the Sabine River basin. The dam is owned by the Sabine River Authority. The lake was built for water conservation. Conservation pool storage is 888,130 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	454.0
Design flood	446.2
Crest of spillway	437.5
Lowest intake to wet well (invert)	416.5
Lowest gated outlet (invert)	378.0

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,130,400 acre-ft, May 1, 1966, elevation, 442.58 ft; minimum contents since lake first filled in May 1965, 489,500 acre-ft, Dec. 28,29, 2006, elevation, 424.88 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,020,000 acre-ft, Mar. 20, elevation, 440.78 ft; minimum contents, 792,500 acre-ft, Sept. 30, elevation, 434.91 ft.

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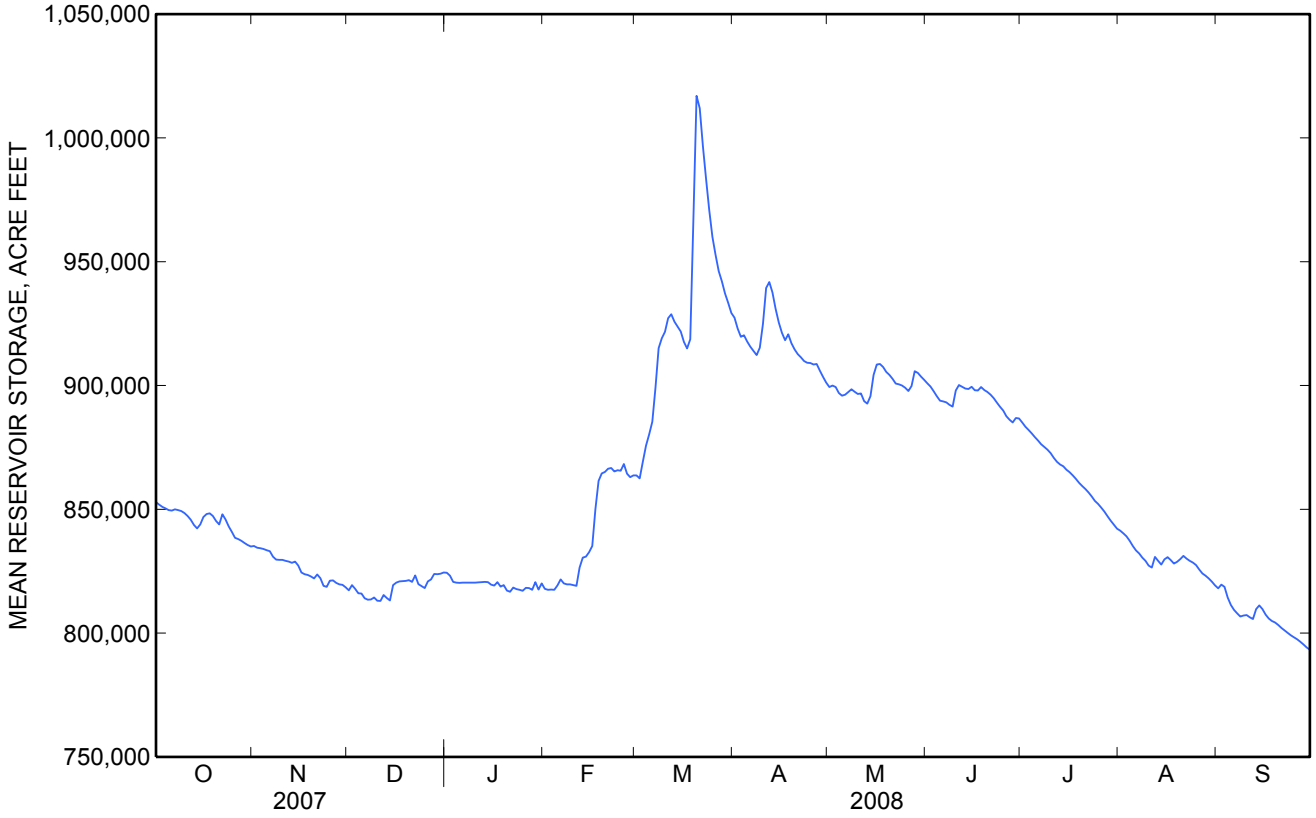
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	852,900	835,200	817,300	824,400	e817,900	863,700	927,400	899,400	900,900	885,100	841,400	818,100
2	851,900	834,500	819,400	823,200	817,500	862,500	923,000	900,000	899,600	883,400	840,300	819,600
3	851,000	834,300	817,900	e820,700	817,600	869,200	919,700	899,400	897,700	882,100	839,100	818,700
4	850,400	834,000	816,100	e820,400	817,500	875,700	920,300	897,000	895,700	880,700	837,300	814,400
5	849,700	833,500	816,000	e820,300	819,300	880,300	917,800	895,900	893,900	879,200	835,200	811,400
6	849,500	833,100	814,100	e820,400	821,700	885,400	915,700	896,300	893,600	877,800	833,400	809,400
7	850,000	830,900	813,500	e820,400	820,100	899,200	914,000	897,400	893,200	876,300	832,200	808,000
8	849,700	829,700	813,600	e820,400	819,700	915,100	912,300	898,500	892,200	875,200	830,500	806,700
9	849,300	829,600	814,400	e820,400	819,700	919,100	915,300	897,500	891,500	874,100	829,200	807,100
10	848,500	829,600	813,100	e820,400	819,400	921,700	924,900	896,600	898,000	872,700	827,300	807,300
11	847,300	829,200	813,000	e820,500	819,100	927,200	939,400	896,800	900,200	870,800	826,500	806,400
12	845,800	828,900	815,400	e820,600	826,500	928,800	941,800	893,700	899,500	869,200	830,800	805,700
13	843,700	828,400	814,200	e820,700	830,500	925,800	937,600	892,700	898,800	868,100	829,200	809,700
14	842,300	828,900	813,200	e820,600	830,900	923,800	931,000	895,700	898,600	867,400	827,700	811,200
15	843,900	827,300	819,400	819,600	832,700	921,800	925,500	904,300	899,500	866,000	829,800	809,700
16	846,900	824,500	820,400	819,200	835,200	917,600	921,300	908,500	898,100	865,000	830,700	807,500
17	848,100	823,800	820,900	820,600	850,100	915,000	918,300	908,700	898,000	863,700	829,500	805,900
18	848,400	823,500	821,000	818,800	861,500	918,700	920,700	907,500	899,400	862,300	828,100	804,900
19	847,300	822,900	821,100	819,400	864,500	967,400	917,100	905,500	898,200	860,700	828,800	804,300
20	845,300	822,100	821,400	817,200	865,100	1,017,000	914,600	904,300	897,400	859,400	829,900	803,300
21	843,900	823,700	820,700	816,700	866,400	1,012,000	912,700	902,700	896,300	858,200	831,200	802,100
22	848,000	822,200	823,300	818,400	866,700	996,700	911,400	900,800	894,900	856,800	830,100	801,100
23	845,900	819,100	e819,800	817,800	865,300	983,500	909,900	900,500	893,100	855,200	829,200	800,100
24	843,100	818,700	819,000	817,500	865,800	970,900	909,200	900,000	891,400	853,400	828,500	799,100
25	840,900	821,200	818,200	817,100	865,600	960,100	909,100	899,100	889,900	852,200	827,500	798,300
26	838,500	821,300	820,900	818,300	868,300	952,800	908,500	897,800	887,600	850,700	825,700	797,500
27	838,000	820,300	821,700	818,200	864,400	946,200	908,700	899,800	886,200	849,100	824,100	796,500
28	837,300	819,700	823,900	817,500	863,000	942,100	906,000	905,800	885,100	847,200	823,200	795,400
29	836,400	819,500	823,800	820,600	863,700	937,200	903,500	905,100	886,900	845,400	822,100	794,200
30	835,600	818,500	824,000	817,600	---	933,400	901,200	903,600	886,700	843,800	820,800	793,300
31	835,000	---	824,500	820,100	---	929,300	---	902,300	---	842,200	819,300	---
Mean	845,300	826,300	818,600	819,600	841,200	929,700	917,900	900,400	894,700	864,300	829,600	805,600
Max	852,900	835,200	824,500	824,400	868,300	1,017,000	941,800	908,700	900,900	885,100	841,400	819,600
Min	835,000	818,500	813,000	816,700	817,500	862,500	901,200	892,700	885,100	842,200	819,300	793,300

	Calendar Year 2007	Water Year 2008
Mean	761,100	857,800
Max	996,900	1,017,000
Min	521,000	793,300

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