Water-Data Report 2013

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.

PERIOD OF RECORD, Water-Quality.--
CHEMICAL DATA: Dec. 1961 to Apr. 1984.
BIOCHEMICAL DATA: Dec. 1961 to June 1973.
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. 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 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, 770,600 acre-ft, Oct. 1, elevation, 434.28 ft; minimum contents, 595,300 acre-ft, Sept. 19, elevation, 428.75 ft.

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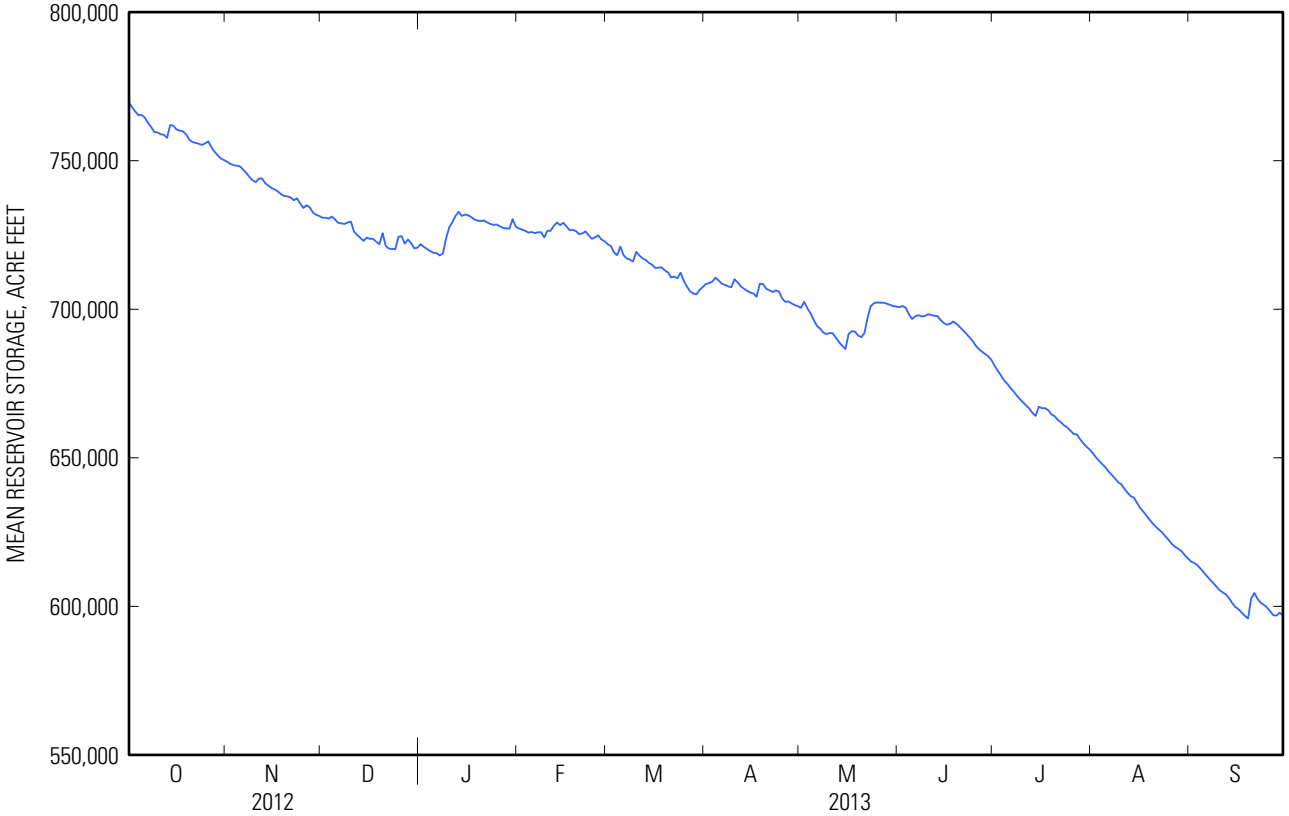
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	769,500	749,600	730,800	721,900	727,200	721,900	708,500	700,500	700,700	681,100	651,600	615,100
2	768,000	748,900	730,800	721,000	726,800	721,300	708,800	702,500	701,100	679,400	650,200	614,600
3	766,500	748,500	730,500	720,300	726,400	719,100	709,300	700,300	700,500	677,800	649,000	613,900
4	765,300	748,300	731,200	719,600	725,800	718,200	710,600	698,600	698,400	676,100	647,900	612,700
5	765,400	748,100	730,200	719,000	726,000	721,100	709,700	696,400	696,700	675,000	646,800	611,500
6	764,500	747,000	729,100	718,900	725,600	718,200	708,600	694,400	697,600	673,600	645,400	610,200
7	762,700	745,900	728,900	718,100	725,900	717,100	708,200	693,500	698,000	672,400	644,300	609,000
8	761,300	744,500	728,700	718,700	725,900	716,700	707,700	692,200	697,600	671,000	643,100	607,900
9	759,600	743,400	729,200	723,700	724,200	716,100	707,400	691,600	697,700	669,800	641,800	606,700
10	759,500	742,800	729,500	727,500	726,400	719,300	710,100	692,000	698,300	668,700	641,100	605,500
11	758,900	744,000	726,100	729,300	726,400	718,100	709,000	691,900	698,100	667,600	639,600	604,700
12	758,700	744,000	725,000	731,400	728,100	717,100	707,700	690,400	697,800	666,600	638,200	604,000
13	757,700	742,400	724,000	732,800	729,200	716,600	706,900	688,900	697,700	665,100	637,100	602,800
14	762,000	741,600	723,000	731,400	728,300	715,600	706,200	687,700	696,400	664,100	636,600	601,100
15	761,800	740,800	724,100	731,900	729,100	715,000	705,600	686,600	695,400	667,200	634,800	599,800
16	760,500	740,300	723,700	731,600	727,900	713,900	705,300	691,700	694,800	666,700	633,100	599,000
17	760,100	739,600	723,700	731,000	726,600	714,000	704,200	692,600	695,100	666,700	631,800	597,900
18	759,900	738,700	722,700	730,200	726,700	714,100	708,600	692,500	695,900	666,000	630,500	596,800
19	758,900	738,100	721,900	729,800	726,300	713,100	708,500	691,200	695,100	664,600	629,100	595,900
20	757,100	738,000	725,600	729,700	725,300	712,400	706,900	690,600	694,100	664,000	627,800	602,700
21	756,300	737,600	721,300	729,900	725,500	710,700	706,400	692,000	693,000	662,800	626,700	604,500
22	756,000	736,700	720,400	729,200	726,200	711,000	705,800	697,200	691,900	661,900	625,700	602,500
23	755,700	737,300	720,300	728,700	724,900	710,400	706,300	701,100	690,700	660,900	624,800	601,200
24	755,300	735,600	720,200	728,400	723,700	712,300	706,000	702,000	689,500	660,200	623,500	600,500
25	755,800	734,100	724,400	728,500	724,200	709,600	703,700	702,300	687,900	659,100	622,300	599,600
26	756,500	735,000	724,600	727,900	724,900	707,600	702,500	702,200	686,700	658,000	621,000	598,300
27	754,500	734,300	722,100	727,400	723,500	706,000	702,600	702,200	685,800	657,900	620,000	597,000
28	753,000	732,600	723,500	727,200	722,900	705,300	702,000	701,900	685,000	656,300	619,400	596,900
29	751,800	731,800	722,200	727,100	---	705,000	701,400	701,500	684,200	654,900	618,600	597,900
30	750,700	731,400	720,500	730,300	---	706,500	701,000	701,100	683,000	653,800	617,300	596,900
31	750,200	---	720,700	727,800	---	707,500	---	700,900	---	652,800	616,200	---
Mean	759,200	740,700	725,100	726,800	726,100	713,900	706,500	695,800	694,200	665,900	633,400	603,600
Max	769,500	749,600	731,200	732,800	729,200	721,900	710,600	702,500	701,100	681,100	651,600	615,100
Min	750,200	731,400	720,200	718,100	722,900	705,000	701,000	686,600	683,000	652,800	616,200	595,900

	Calendar Year 2012	Water Year 2013
Mean	789,100	699,200
Max	878,300	769,500
Min	652,700	595,900

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