Water-Data Report 2007

08018800 Lake Fork Reservoir near Quitman, TX

Sabine Basin
Lake Fork Subbasin

LOCATION.--Lat 32°48′48″, long 95°31′40″ referenced to North American Datum of 1927, Wood County, TX, Hydrologic Unit 12010003, in room at left-end of gated concrete spillway structure of Lake Fork Dam on Lake Fork Creek, 2,000 ft upstream from bridge on State Highway 182, 2.3 mi upstream from Alum Branch, and 4.4 mi west-northwest of the county courthouse in Quitman.

DRAINAGE AREA.--490 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct. 1979 to current year. Water-quality records: Chemical data: May 1981 to July 2006. Radiochemical data: May 1981.

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

COOPERATION.--Capacity table 1-A was provided by URS/Forest and Cotton, Inc., Consulting Engineers for the Sabine River Authority. Observed elevations for the period Oct. 31, 1979, to Jan. 31, 1980, were provided by the Sabine River Authority. Capacity table, Table 2-C, provided by the Sabine River Authority was put into effect Oct. 1, 1996.

REMARKS.--Records good except for estimated daily mean contents, which are poor. The lake is formed by a rolled earthfill dam 12,660 ft long, including a 260-foot gated concrete spillway. The outlet works consist of two 5- by 8-foot low-flow sluice gates, five 40- by 20-foot tainter gates, and two 5- by 6-foot sluice gates that open into a wet well where there are two 36-inch and one 10-inch valve-controlled and metered-outlet pipes. Deliberate impoundment began June 29, 1979, and closure of the dam was completed in Jan. 1980. The lake was built for water conservation and is owned by the Sabine River Authority. No known diversions were made from the lake this year. Flow is affected at times by discharge from the flood-detention pools of 21 floodwater- retarding structures with a combined detention capacity of 20,270 acre-ft. These structures control runoff from 60 mi^2 above the lake. Conservation pool storage is 675,820 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	419.5
Top of tainter gates	405.0
Crest of gated spillway	385.0
Invert of upper sluice gate	383.0
Invert of lower sluice gate	360.5
Invert of sluice gate in two center pieces	360.0

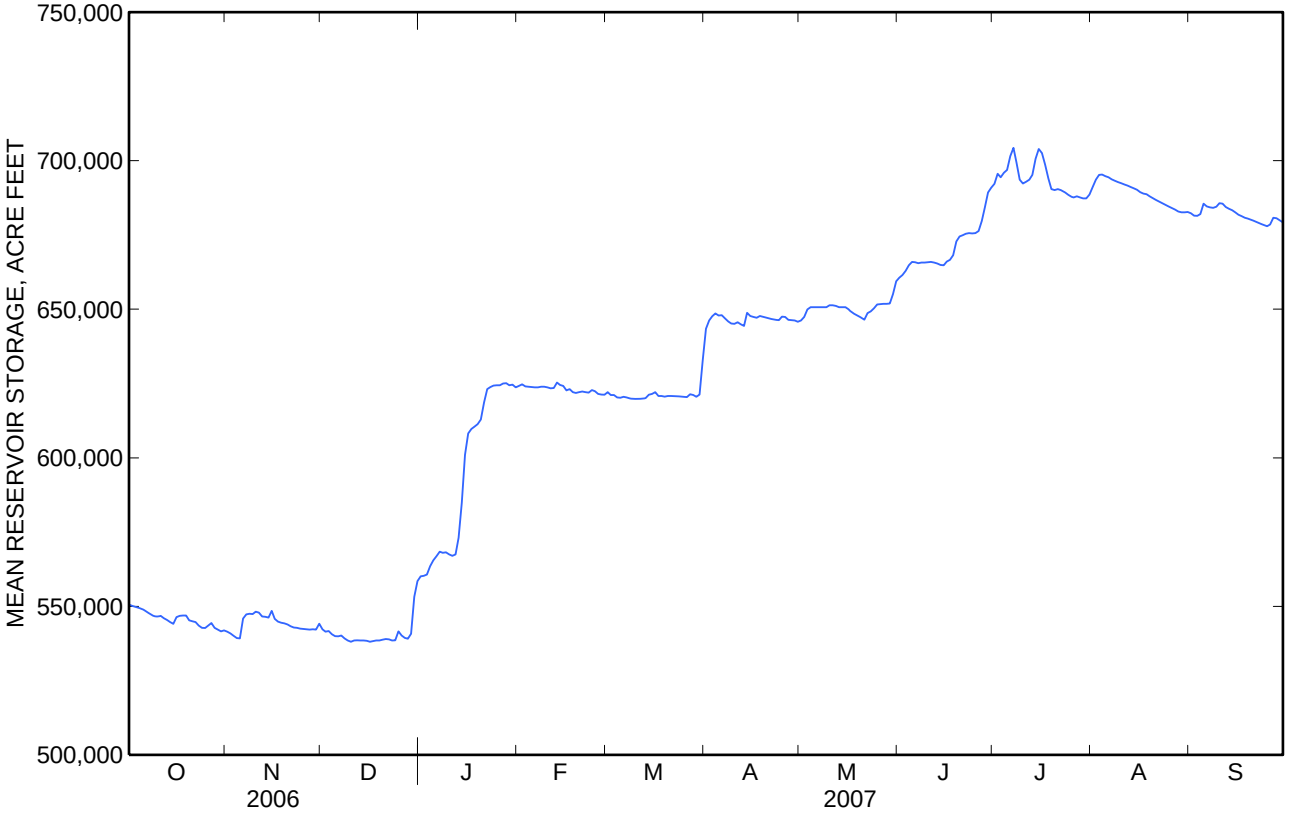
EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 737,400 acre-ft, Feb. 16, 2001, elevation, 405.15 ft; minimum contents after initial filling, 81,550 acre-ft, Sept. 27, 1980, elevation, 366.86 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 705,100 acre-ft, July 7, elevation, 404.04 ft; minimum contents, 537,800 acre-ft, Dec. 16, elevation, 397.61 ft.

08018800 Lake Fork Reservoir near Quitman, TX—Continued

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	550,600	541,500	542,300	560,100	624,200	622,100	643,400	646,200	660,600	692,200	691,100	682,300
2	550,200	540,900	541,500	560,300	624,700	621,100	646,200	647,400	661,500	695,600	693,600	681,500
3	549,800	540,100	541,700	560,700	624,000	621,100	647,600	649,900	662,900	694,400	695,200	681,400
4	549,500	539,300	540,600	563,500	623,900	620,300	648,600	650,700	664,800	695,900	695,300	682,000
5	549,200	539,200	540,000	565,500	623,800	620,200	647,900	650,700	665,900	696,900	694,800	685,500
6	548,600	545,900	539,900	566,900	623,700	620,500	648,000	650,700	665,800	701,500	694,400	684,600
7	547,900	547,300	540,200	568,400	623,700	620,300	646,900	650,700	665,500	704,300	693,700	684,300
8	547,200	547,500	539,200	568,000	623,900	620,000	645,900	650,700	665,700	699,300	693,200	684,100
9	546,700	547,400	538,500	568,200	623,900	e619,800	645,200	650,700	665,700	693,600	692,800	684,500
10	546,600	548,200	538,100	567,500	623,700	e619,800	645,100	651,300	665,800	692,300	692,400	685,700
11	546,800	547,900	538,500	567,000	623,400	e619,900	645,600	651,300	665,900	692,900	692,000	685,500
12	546,000	546,600	538,600	567,500	623,500	e619,900	644,900	651,100	665,700	693,600	691,600	684,400
13	545,400	546,500	538,500	573,100	625,300	620,100	644,400	650,700	665,400	695,200	691,100	683,800
14	544,700	546,200	538,500	584,900	624,500	621,200	648,800	650,700	664,900	700,600	690,700	683,300
15	544,100	548,500	538,400	601,000	624,200	621,500	647,700	650,700	664,800	703,900	690,200	682,600
16	546,400	545,800	538,100	608,200	622,700	622,100	647,400	650,000	666,000	702,500	689,400	681,800
17	546,800	544,900	538,300	609,700	623,100	620,800	647,100	649,000	666,600	698,600	688,900	681,300
18	546,900	544,500	538,500	610,500	622,100	620,800	647,700	648,300	668,200	694,000	688,700	680,800
19	546,900	544,300	538,500	611,300	621,800	620,600	647,500	647,700	672,800	690,400	688,000	680,500
20	545,300	543,900	538,800	612,900	622,100	620,800	647,100	647,100	674,500	690,100	687,300	680,000
21	545,000	543,300	539,000	618,600	622,300	620,800	646,900	646,500	674,900	690,400	686,800	679,700
22	544,700	542,900	538,900	623,100	622,100	620,800	646,600	648,700	675,400	690,000	686,200	679,200
23	543,500	542,800	538,500	623,800	621,900	620,700	646,500	649,300	675,600	689,500	685,600	678,800
24	542,800	542,500	538,600	624,300	622,800	620,600	646,300	650,300	675,500	688,800	685,100	678,300
25	542,700	542,400	541,600	624,400	622,400	620,500	647,500	651,600	675,600	688,000	684,500	677,900
26	543,500	542,300	540,200	624,400	621,500	620,400	647,400	651,700	676,300	687,600	684,100	678,500
27	544,400	542,200	539,400	625,000	621,300	621,400	646,400	651,800	679,700	688,000	683,500	680,800
28	542,800	542,300	539,100	625,100	621,200	621,100	646,300	651,800	684,200	687,600	682,900	680,600
29	542,200	542,200	540,800	624,400	---	620,500	646,200	651,900	689,300	687,300	682,600	679,900
30	541,600	544,200	553,200	624,600	---	621,300	645,800	655,100	690,900	687,300	682,600	679,200
31	541,900	---	558,500	623,700	---	632,900	---	659,400	---	688,600	682,700	---
Mean	545,800	544,100	540,500	595,400	623,100	621,100	646,600	650,400	670,500	693,600	689,100	681,800
Max	550,600	548,500	558,500	625,100	625,300	632,900	648,800	659,400	690,900	704,300	695,300	685,700
Min	541,600	539,200	538,100	560,100	621,200	619,800	643,400	646,200	660,600	687,300	682,600	677,900

	Calendar Year 2006	Water Year 2007
Mean	574,800	625,100
Max	616,700	704,300
Min	538,100	538,100

08018800 Lake Fork Reservoir near Quitman, TX—Continued