



Water-Data Report 2007

08025350 Toledo Bend Reservoir near Burkeville, TX

Sabine Basin
Toledo Bend Reservoir Subbasin

LOCATION.--Lat 31°11'46", long 93°34'19" referenced to North American Datum of 1927, Newton County, TX, Hydrologic Unit 12010004, prior to Sept. 20, 2007, in powerhouse at right end of Toledo Bend Dam on Sabine River, 15 mi northeast of Burkeville and at mile 156.5.

DRAINAGE AREA.--7,178 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct. 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by Sabine River Authority). Prior to July 20, 1967, nonrecording gage at powerhouse 1.6 mi south of present site and at same datum. July 20, 1967, to June 30, 1973, recording gage at same site and datum. July 1, 1973, to Sept. 20, 2007, recording gage at powerhouse 1.6 mi south of present site and at same datum. Satellite telemeter at station.

COOPERATION.--Capacity table furnished by the Sabine River Authority.

REMARKS.--Records good. The reservoir is formed by a rolled earthfill dam. Closure of embankment completed and deliberate impoundment began Oct. 3, 1966. The reservoir is operated for hydro-electric power generation and water conservation. Releases during high inflow periods are controlled by eleven 40 x 28-foot tainter gates. An 8.33 x 12-foot gated conduit through the dam is used for low-flow releases. Two additional 20-inch-diameter conduits, that bypass the larger conduit, may also be used for low-flow releases. Water for turbines is admitted through four 16.75 x 29-foot penstocks and controlled by vertically operated caterpillar-type gates. The dam is owned by the Sabine River Authority. The capacity table is based on U.S. Geological Survey topographic maps. There are many diversions above station for oil field operations and municipal supply. Conservation pool storage is 4,472,900 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	185.0
Design flood.....	175.3
Top of gates.....	173.0
Top of power drawdown storage (top of conservation pool).	172.0
Top of power head storage.....	162.2
Crest of spillway (controlled).....	145.0
Lowest gated outlet (invert).....	100.0

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 4,840,000 acre-ft, May 18, 1989, elevation, 173.95 ft; minimum since initial filling of reservoir in June 1968, 2,791,000 acre-ft, Oct. 10, 2006, elevation, 161.26 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 4,548,000 acre-ft, July 17, elevation, 172.39 ft; minimum contents, 2,791,000 acre-ft, Oct. 10, elevation, 161.26 ft.

08025350 Toledo Bend Reservoir near Burkeville, TX—Continued

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2,863,000	3,330,000	3,352,000	3,797,000	4,426,000	4,093,000	4,193,000	4,319,000	4,277,000	4,376,000	4,510,000	4,263,000
2	2,859,000	3,330,000	3,343,000	3,815,000	4,406,000	4,073,000	4,195,000	4,316,000	4,277,000	4,378,000	4,495,000	4,261,000
3	2,860,000	3,316,000	3,357,000	3,830,000	4,370,000	4,095,000	4,198,000	4,321,000	4,289,000	4,377,000	4,479,000	4,260,000
4	2,857,000	3,309,000	3,336,000	3,854,000	4,342,000	4,098,000	4,224,000	4,328,000	4,292,000	4,395,000	4,465,000	4,247,000
5	2,858,000	3,307,000	3,325,000	3,887,000	4,322,000	4,080,000	4,230,000	4,318,000	4,287,000	4,404,000	4,451,000	4,231,000
6	2,856,000	3,323,000	3,318,000	3,914,000	4,290,000	4,077,000	4,239,000	4,325,000	4,270,000	4,408,000	4,439,000	4,219,000
7	2,849,000	3,342,000	3,338,000	3,939,000	4,267,000	4,080,000	4,245,000	4,338,000	4,243,000	4,451,000	4,445,000	4,195,000
8	2,845,000	3,341,000	3,322,000	3,946,000	4,250,000	4,083,000	4,230,000	4,340,000	4,243,000	4,458,000	4,448,000	4,174,000
9	2,838,000	3,340,000	3,313,000	3,947,000	4,233,000	4,083,000	4,228,000	4,351,000	4,251,000	4,464,000	4,448,000	4,176,000
10	2,838,000	3,347,000	3,312,000	3,924,000	4,200,000	4,084,000	4,219,000	4,342,000	4,251,000	4,461,000	4,442,000	4,154,000
11	2,847,000	3,376,000	3,309,000	3,912,000	4,167,000	4,086,000	4,245,000	4,341,000	4,247,000	4,469,000	4,437,000	4,144,000
12	2,845,000	3,350,000	3,349,000	3,936,000	4,135,000	4,086,000	4,250,000	4,346,000	4,239,000	4,470,000	4,440,000	4,122,000
13	2,839,000	3,350,000	3,363,000	3,937,000	4,174,000	4,090,000	4,241,000	4,349,000	4,236,000	4,474,000	4,426,000	4,114,000
14	2,835,000	3,348,000	3,364,000	4,001,000	4,161,000	4,104,000	4,316,000	4,337,000	4,224,000	4,489,000	4,415,000	4,088,000
15	2,824,000	3,384,000	3,369,000	4,152,000	4,154,000	4,123,000	4,308,000	4,324,000	4,226,000	4,509,000	4,393,000	4,068,000
16	2,921,000	3,365,000	3,370,000	4,260,000	4,145,000	4,146,000	4,286,000	4,349,000	4,249,000	4,523,000	4,385,000	4,064,000
17	3,079,000	3,348,000	3,374,000	4,307,000	4,158,000	4,128,000	4,286,000	4,341,000	4,267,000	4,525,000	4,378,000	4,035,000
18	3,106,000	3,351,000	3,378,000	4,341,000	4,131,000	4,125,000	4,303,000	4,330,000	4,271,000	4,529,000	4,372,000	4,023,000
19	3,168,000	3,355,000	3,379,000	4,377,000	4,105,000	4,123,000	4,300,000	4,322,000	4,287,000	4,526,000	4,361,000	4,002,000
20	3,177,000	3,355,000	3,372,000	4,384,000	4,101,000	4,134,000	4,298,000	4,312,000	4,295,000	4,524,000	4,349,000	3,982,000
21	3,177,000	3,343,000	3,386,000	4,425,000	4,100,000	4,133,000	4,292,000	4,299,000	4,310,000	4,524,000	4,344,000	3,940,000
22	3,201,000	3,345,000	3,398,000	4,461,000	4,093,000	4,141,000	4,287,000	4,293,000	4,317,000	4,529,000	4,336,000	3,922,000
23	3,177,000	3,345,000	3,404,000	4,471,000	4,083,000	4,142,000	4,294,000	4,292,000	4,320,000	4,528,000	4,318,000	3,920,000
24	3,171,000	3,347,000	3,417,000	4,478,000	4,066,000	4,148,000	4,273,000	4,292,000	4,329,000	4,521,000	4,308,000	3,918,000
25	3,165,000	3,347,000	3,440,000	4,478,000	4,095,000	4,151,000	4,297,000	4,286,000	4,326,000	4,514,000	4,304,000	3,904,000
26	3,210,000	3,345,000	3,437,000	4,469,000	4,084,000	4,146,000	4,326,000	4,276,000	4,337,000	4,504,000	4,307,000	3,884,000
27	3,291,000	3,342,000	3,427,000	4,472,000	4,085,000	4,149,000	4,324,000	4,278,000	4,342,000	4,498,000	4,290,000	3,866,000
28	3,302,000	3,339,000	3,435,000	4,492,000	4,078,000	4,155,000	4,327,000	4,277,000	4,351,000	4,509,000	4,279,000	3,844,000
29	3,301,000	3,336,000	3,443,000	4,450,000		4,161,000	4,328,000	4,278,000	4,362,000	4,515,000	4,274,000	3,814,000
30	3,303,000	3,354,000	3,613,000	4,450,000		4,157,000	4,323,000	4,291,000	4,363,000	4,513,000	4,272,000	3,792,000
31	3,313,000		3,735,000	4,437,000		4,162,000		4,290,000		4,518,000	4,271,000	
Mean	3,025,000	3,344,000	3,390,000	4,179,000	4,186,000	4,117,000	4,270,000	4,316,000	4,286,000	4,480,000	4,383,000	4,054,000
Max	3,313,000	3,384,000	3,735,000	4,492,000	4,426,000	4,162,000	4,328,000	4,351,000	4,363,000	4,529,000	4,510,000	4,263,000
Min	2,824,000	3,307,000	3,309,000	3,797,000	4,066,000	4,073,000	4,193,000	4,276,000	4,224,000	4,376,000	4,271,000	3,792,000

	Calendar Year 2006	Water Year 2007
Mean	3,369,000	4,001,000
Max	3,926,000	4,529,000
Min	2,824,000	2,824,000

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