Water-Data Report 2012

08072000 Lake Houston near Sheldon, TX

San Jacinto Basin
West Fork San Jacinto Subbasin

LOCATION.--Lat 29°54′58″, long 95°08′28″ referenced to North American Datum of 1927, Harris County, TX, Hydrologic Unit 12040101, at intake structure on San Jacinto River near right bank 100 ft upstream from Lake Houston Dam, 4.0 mi north of Sheldon, 4.6 mi upstream from bridge on U.S. Highway 90, and 18 mi northeast of Houston.

DRAINAGE AREA.--2,828 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Apr. 1954 to current year.

PERIOD OF RECORD, Water-Quality.--
CHEMICAL DATA: July 1961 to Apr. 1964, Dec. 1969 to Sept. 2004.
BIOCHEMICAL DATA: Aug. 1983 to Sept. 2004.
PESTICIDE DATA: May 1968 to Aug. 1972, Aug. 1983 to Sept. 2004.
SEDIMENT DATA: Feb. 2000 to Sept. 2004.

REVISED RECORDS.--WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage at dam is NAVD 1988, 2001 adjustment. Prior to Oct. 1, 2009, datum of gage at dam was 0.70 ft below NGVD of 1929; unadjusted for land-surface subsidence (2.77 ft above current datum). Satellite telemeter at station.

COOPERATION.--The capacity table is based on a bathymetric survey made in 1994 by Texas Water Development Board. Records of diversions may be obtained from the San Jacinto River Authority and the city of Houston.

REMARKS.--Records good. The lake is formed by two earthfill embankment sections and a 3,160-foot long concrete spillway midway between the embankment sections. The dam was completed and storage began Apr. 9, 1954. The spillway includes two tainter gates, 18.0 x 20.5 ft, that can be used for control of releases below gage heights of 41.7 ft and above 25.2 ft. In addition, there is a 36-inch-diameter sluice gate that is used for low-flow releases. The dam is owned by the city of Houston. Water is used for irrigation, municipal, and industrial supply in the Houston metropolitan area. Data regarding the dam are given in the following table:

	Gage height (feet)
Top of dam	60.2
Design flood	54.2
Crest of spillway	41.7
Crest of tainter gates (sill)	25.2
Lowest gated outlet (invert)	19.2

Some records listed in the "Period of Record" for surface water and water quality may not be available electronically. Water-quality data for this site published as:

Site ID	Site name
295516095080801	Lk Houston Site AC nr Sheldon, TX
295702095091401	Lk Houston Site BC nr Sheldon, TX
295902095074201	Lk Houston Site CC nr Sheldon, TX
300016095073401	Lk Houston Site DC nr Sheldon, TX
300158095074601	Lk Houston Site EC nr Sheldon, TX
300209095091201	Lk Houston Site FC nr Sheldon, TX

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 249,900 acre-ft, Oct. 19, 1994, gage height, 52.79 ft (datum then in use); minimum since first filling of lake in Aug. 1954, 53,380 acre-ft, Dec. 1, 1971, gage height, 34.08 ft. (datum then in use)

EXTREMES FOR CURRENT YEAR.--Maximum contents, 161,300 acre-ft, July 15, gage height, 43.93 ft; minimum contents, 86,100 acre-ft, Oct. 8, gage height, 36.67 ft.

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 08072000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/08072000.2012.pdf

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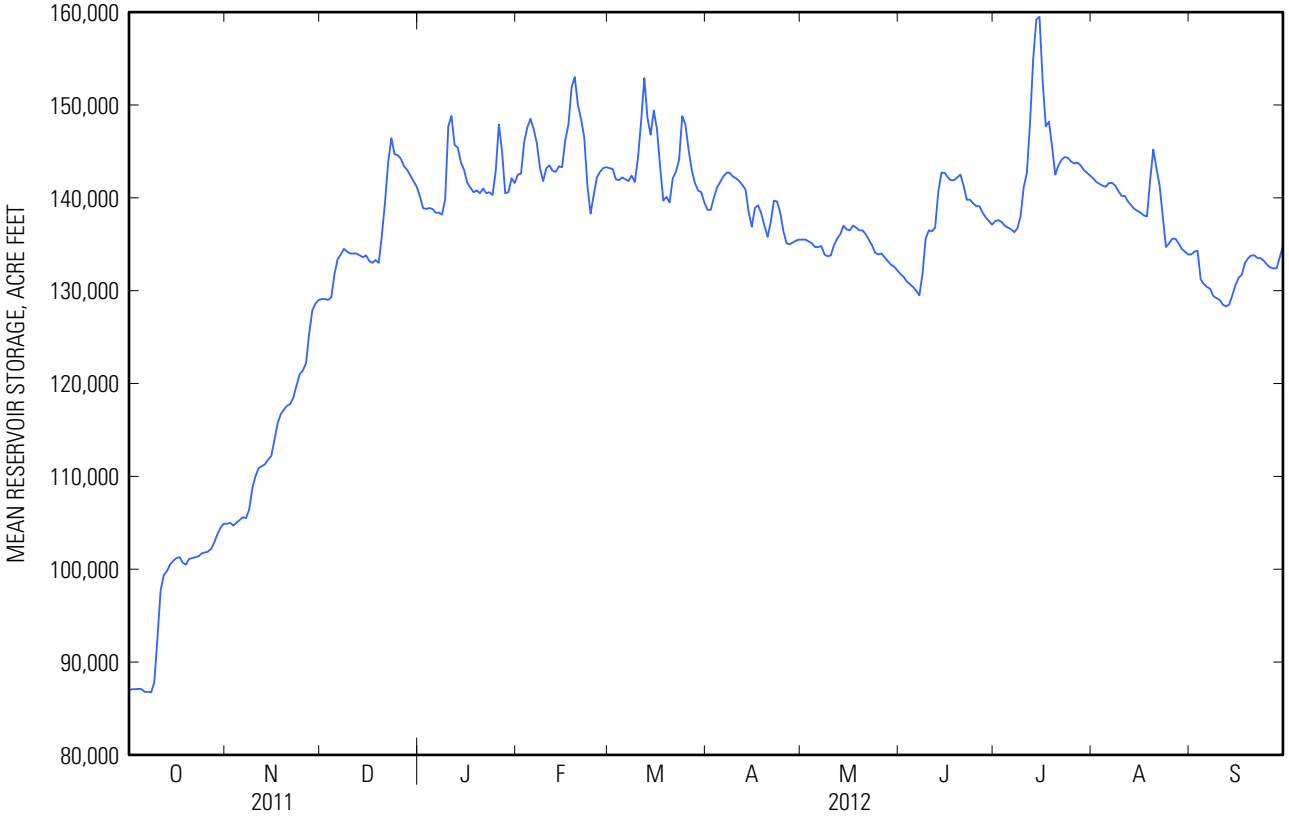
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	86,970	104,900	129,100	140,200	142,500	143,200	138,700	135,500	131,800	137,500	142,100	133,900
2	87,080	105,000	129,100	138,900	142,600	143,100	138,700	135,500	131,500	137,600	141,700	134,200
3	87,080	104,700	129,000	138,800	146,000	142,000	140,000	135,300	131,000	137,400	141,500	134,300
4	87,120	105,000	129,300	138,900	147,600	141,900	141,100	135,100	130,700	137,000	141,300	131,200
5	87,080	105,300	131,800	138,800	148,500	142,200	141,700	134,700	130,400	136,800	141,200	130,700
6	86,780	105,600	133,400	138,400	147,400	142,000	142,300	134,700	130,000	136,600	141,600	130,400
7	86,800	105,500	133,900	138,400	145,900	141,800	142,700	134,800	129,500	136,300	141,600	130,200
8	86,740	106,400	134,500	138,200	143,200	142,400	142,700	133,900	131,800	136,700	141,300	129,400
9	87,810	108,700	134,200	139,800	141,800	141,700	142,300	133,700	135,600	138,000	140,700	129,200
10	92,590	110,000	134,000	147,700	143,200	144,300	142,100	133,800	136,500	141,100	140,200	129,000
11	97,700	110,900	134,000	148,800	143,500	148,300	141,800	134,900	136,400	142,700	140,200	128,500
12	99,370	111,100	134,000	145,700	142,900	152,900	141,400	135,600	136,800	148,000	139,600	128,300
13	99,800	111,300	133,800	145,400	142,800	148,600	140,900	136,100	140,700	154,900	139,200	128,500
14	100,500	111,800	133,600	143,800	143,400	146,800	138,500	137,000	142,700	159,200	138,800	129,500
15	100,900	112,200	133,800	143,000	143,300	149,400	136,900	136,600	142,700	159,500	138,600	130,600
16	101,200	113,900	133,200	141,600	146,200	147,400	138,900	136,500	142,200	152,600	138,400	131,400
17	101,300	115,700	133,000	141,100	147,900	143,400	139,200	137,000	141,900	147,700	138,100	131,700
18	100,700	116,700	133,300	140,600	151,900	139,700	138,300	136,800	141,900	148,200	138,000	133,000
19	100,500	117,200	133,000	140,800	153,000	140,100	137,000	136,500	142,200	145,500	141,900	133,500
20	101,100	117,600	136,000	140,500	150,000	139,500	135,800	136,500	142,500	142,500	145,200	133,800
21	101,200	117,800	139,600	141,000	148,500	142,100	137,400	136,100	141,300	143,500	143,200	133,800
22	101,300	118,500	143,900	140,500	146,500	142,800	139,700	135,500	139,800	144,100	141,300	133,500
23	101,400	119,800	146,400	140,600	141,300	144,100	139,600	134,900	139,800	144,400	138,000	133,500
24	101,700	121,000	144,700	140,300	138,300	148,800	138,400	134,100	139,400	144,300	134,700	133,200
25	101,800	121,400	144,600	142,900	140,300	147,900	136,400	133,900	139,100	143,900	135,100	132,800
26	101,900	122,200	144,200	147,900	142,200	145,200	135,100	134,000	139,100	143,700	135,600	132,500
27	102,200	125,400	143,400	145,000	142,800	143,000	135,000	133,600	138,400	143,800	135,600	132,400
28	102,900	127,900	143,000	140,500	143,200	141,600	135,200	133,200	137,900	143,500	135,100	132,400
29	103,800	128,600	142,400	140,600	143,300	140,800	135,400	132,800	137,500	143,000	134,500	133,600
30	104,500	129,000	141,800	142,100	---	140,600	135,500	132,600	137,100	142,700	134,200	134,800
31	104,900	---	141,200	141,600	---	139,500	---	132,200	---	142,400	133,900	---
Mean	96,990	114,400	136,500	141,700	144,800	143,800	139,000	134,900	137,300	143,700	139,100	131,800
Max	104,900	129,000	146,400	148,800	153,000	152,900	142,700	137,000	142,700	159,500	145,200	134,800
Min	86,740	104,700	129,000	138,200	138,300	139,500	135,000	132,200	129,500	136,300	133,900	128,300

	Calendar Year 2011	Water Year 2012
Mean	115,900	133,600
Max	146,400	159,500
Min	83,360	86,740

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