Water-Data Report 2013

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 below 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

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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, 149,000 acre-ft, Jan. 10, gage height, 42.97 ft; minimum contents, 125,600 acre-ft, Sept. 19, gage height, 40.93 ft.

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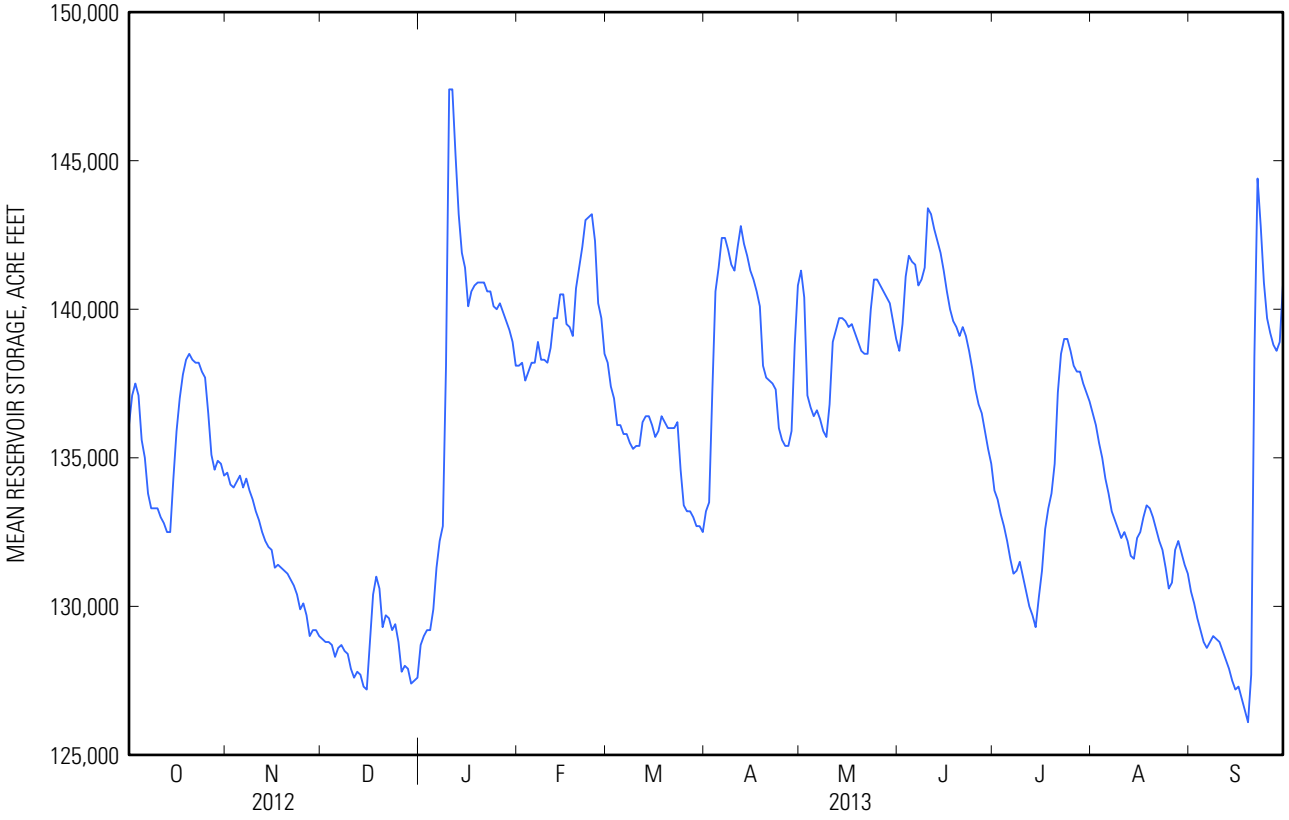
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	136,100	134,500	128,900	128,700	138,100	138,200	133,200	141,300	138,600	133,900	136,500	130,500
2	137,100	134,100	128,800	129,000	138,200	137,400	133,500	140,400	139,500	133,600	136,100	130,100
3	137,500	134,000	128,800	129,200	137,600	137,000	137,200	137,100	141,100	133,100	135,500	129,600
4	137,100	134,200	128,700	129,200	137,900	136,100	140,600	136,700	141,800	132,700	135,000	129,200
5	135,600	134,400	128,300	129,900	138,200	136,100	141,400	136,400	141,600	132,200	134,300	128,800
6	135,000	134,000	128,600	131,300	138,200	135,800	142,400	136,600	141,500	131,600	133,800	128,600
7	133,800	134,300	128,700	132,200	138,900	135,800	142,400	136,300	140,800	131,100	133,200	128,800
8	133,300	133,900	128,500	132,700	138,300	135,500	142,000	135,900	141,000	131,200	132,900	129,000
9	133,300	133,600	128,400	138,100	138,300	135,300	141,500	135,700	141,400	131,500	132,600	128,900
10	133,300	133,200	127,900	147,400	138,200	135,400	141,300	136,800	143,400	131,000	132,300	128,800
11	133,000	132,900	127,600	147,400	138,700	135,400	142,100	138,900	143,200	130,500	132,500	128,500
12	132,800	132,500	127,800	145,200	139,700	136,200	142,800	139,300	142,700	130,000	132,200	128,200
13	132,500	132,200	127,700	143,200	139,700	136,400	142,200	139,700	142,300	129,700	131,700	127,900
14	132,500	132,000	127,300	141,900	140,500	136,400	141,800	139,700	141,900	129,300	131,600	127,500
15	134,300	131,900	127,200	141,400	140,500	136,100	141,300	139,600	141,300	130,300	132,300	127,200
16	135,900	131,300	128,800	140,100	139,500	135,700	141,000	139,400	140,600	131,200	132,500	127,300
17	137,000	131,400	130,400	140,600	139,400	135,900	140,600	139,500	140,000	132,600	133,000	126,900
18	137,800	131,300	131,000	140,800	139,100	136,400	140,100	139,200	139,600	133,300	133,400	126,500
19	138,300	131,200	130,600	140,900	140,700	136,200	138,100	138,900	139,400	133,800	133,300	126,100
20	138,500	131,100	129,300	140,900	141,400	136,000	137,700	138,600	139,100	134,800	133,000	127,700
21	138,300	130,900	129,700	140,900	142,100	136,000	137,600	138,500	139,400	137,200	132,600	138,400
22	138,200	130,700	129,600	140,600	143,000	136,000	137,500	138,500	139,100	138,500	132,200	144,400
23	138,200	130,400	129,200	140,600	143,100	136,200	137,300	140,000	138,600	139,000	131,900	142,800
24	137,900	129,900	129,400	140,100	143,200	134,600	136,000	141,000	138,000	139,000	131,300	140,900
25	137,700	130,100	128,800	140,000	142,300	133,400	135,600	141,000	137,300	138,600	130,600	139,700
26	136,500	129,700	127,800	140,200	140,200	133,200	135,400	140,800	136,800	138,100	130,800	139,200
27	135,100	129,000	128,000	139,900	139,700	133,200	135,400	140,600	136,500	137,900	131,900	138,800
28	134,600	129,200	127,900	139,600	138,500	133,000	135,900	140,400	135,900	137,900	132,200	138,600
29	134,900	129,200	127,400	139,300	---	132,700	138,800	140,200	135,300	137,500	131,800	138,900
30	134,800	129,000	127,500	138,900	---	132,700	140,800	139,600	134,800	137,200	131,400	140,800
31	134,400	---	127,600	138,100	---	132,500	---	139,000	---	136,900	131,100	---
Mean	135,700	131,900	128,600	138,300	139,800	135,400	139,100	138,900	139,800	134,000	132,800	132,300
Max	138,500	134,500	131,000	147,400	143,200	138,200	142,800	141,300	143,400	139,000	136,500	144,400
Min	132,500	129,000	127,200	128,700	137,600	132,500	133,200	135,700	134,800	129,300	130,600	126,100

	Calendar Year 2012	Water Year 2013
Mean	137,700	135,500
Max	159,500	147,400
Min	127,200	126,100

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