08039300 Sam Rayburn Reservoir near Jasper, TX

Neches Basin
Lower Angelina Subbasin

LOCATION.--Lat 31°03′38″, long 94°06′21″ referenced to North American Datum of 1927, Jasper County, TX, Hydrologic Unit 12020005, in the powerhouse-intake structure of Sam Rayburn Dam on the Angelina River, 10 mi northwest of Jasper and 25.2 mi upstream from mouth.

DRAINAGE AREA.--3,449 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Jan. 1965 to Sept. 2000 (U.S. Army Corps of Engineers furnished contents), Oct. 2000 to Sept. 2002 (daily mean contents). Oct. 2002 to current year (daily mean elevation).

PERIOD OF RECORD, Water-Quality.--
CHEMICAL DATA: Oct. 1964 to Sept. 1984, Sept. 1993 to Sept. 1999.
BIOCHEMICAL DATA: Nov. 1967 to Sept. 1984, Sept. 1993 to Sept. 1999.
PESTICIDE DATA: Nov. 1965 to Mar. 1968.
RADIOCHEMICAL DATA: May 1981.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Apr. 20, 1965, nonrecording gage at same site and datum. Satellite telemeter at station.

REMARKS.--Records good. The reservoir is formed by a rolled earthfill dam 19,430 ft long, including spillway and dikes. The dam was completed and deliberate impoundment began Mar. 29, 1965. The spillway is an uncontrolled broad-crested weir 2,200 ft wide, on right bank 7,000 ft to right of outlet works and is designed to discharge 125,300 ft^3/s at maximum flood design. The flood-control outlet works consists of two 10.0 x 20.0-foot rectangular concrete-lined conduits controlled by two 10.0 x 20.0-foot tractor-type service gates and one 10.0 x 20.0-foot tractor-type emergency gate. Water for turbines is admitted through four 18.0 x 26.0-foot penstocks and controlled by two wheeled-leaf-type headgates. The dam is owned by the U.S. Army Corps of Engineers. The reservoir is operated for flood control and power generation. The area-capacity tables are based on topographic maps prepared by the U.S. Army Corps of Engineers and detailed sedimentation ranges established in 1961 and dated Feb. 1965. For statement regarding regulation by Natural Resource Conservation Service flood-water-retarding structures, see station 08038000. Conservation pool storage is 2,898,500 acre-ft. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	190.0
Design flood	183.0
Crest of spillway	176.0
Top of flood-control pool	173.0
Top of conservation pool (power pool)	I64.4
Top of power head and sediment pool	149.0
Lowest gated outlet (invert)	105.0

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 4,283,000 acre-ft, Mar. 9, 1992, elevation, 174.95 ft; minimum since conservation storage was reached in 1968, 1,585,000 acre-ft, Aug. 10, 1996, elevation, 150.74 ft.

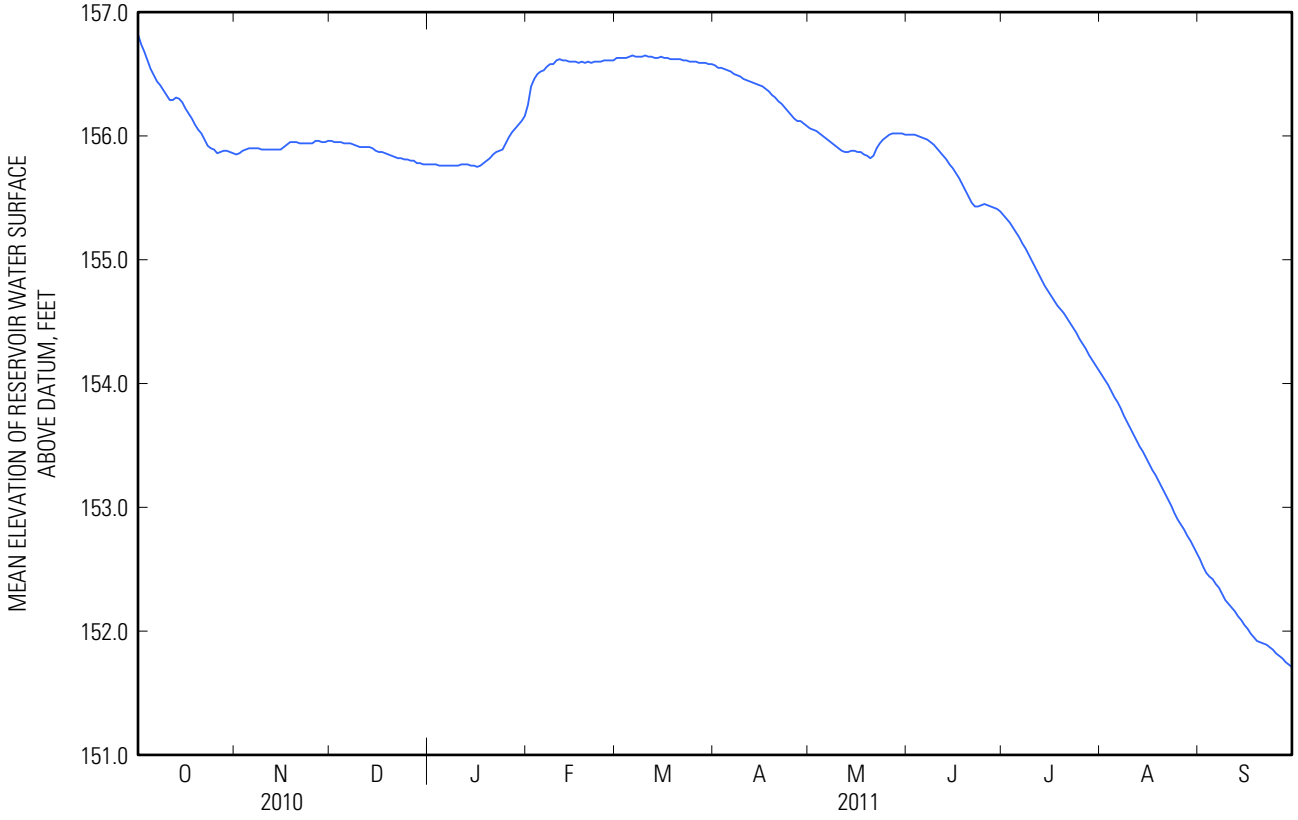
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 156.86 ft, Oct. 1; minimum elevation, 151.68 ft, Sept. 29.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 08039300, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/08039300.2011.pdf

08039300 Sam Rayburn Reservoir near Jasper, TX—Continued

ELEVATION OF RESERVOIR WATER SURFACE ABOVE DATUM, FEET
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	156.82	155.85	155.96	155.77	156.25	156.63	156.57	156.06	156.01	155.36	154.07	152.58
2	156.74	155.86	155.95	155.77	156.40	156.63	156.55	156.05	156.01	155.33	154.03	152.52
3	156.68	155.88	155.95	155.77	156.46	156.63	156.55	156.04	156.01	155.30	153.99	152.47
4	156.61	155.89	155.95	155.76	156.50	156.63	156.54	156.02	156.00	155.26	153.94	152.44
5	156.54	155.90	155.94	155.76	156.52	156.64	156.53	156.00	155.99	155.22	153.89	152.42
6	156.49	155.90	155.94	155.76	156.53	156.65	156.52	155.98	155.98	155.18	153.85	152.38
7	156.44	155.90	155.94	155.76	156.56	156.64	156.50	155.96	155.97	155.13	153.80	152.35
8	156.41	155.90	155.93	155.76	156.58	156.64	156.49	155.94	155.95	155.09	153.74	152.30
9	156.37	155.89	155.92	155.76	156.58	156.64	156.48	155.92	155.93	155.04	153.69	152.25
10	156.33	155.89	155.91	155.76	156.61	156.65	156.46	155.90	155.90	154.99	153.64	152.22
11	156.29	155.89	155.91	155.77	156.62	156.64	156.45	155.88	155.87	154.94	153.59	152.19
12	156.29	155.89	155.91	155.77	156.61	156.64	156.44	155.87	155.84	154.89	153.54	152.16
13	156.31	155.89	155.91	155.77	156.61	156.63	156.43	155.87	155.81	154.84	153.49	152.12
14	156.30	155.89	155.90	155.76	156.60	156.63	156.42	155.88	155.77	154.79	153.45	152.09
15	156.27	155.89	155.88	155.76	156.60	156.64	156.41	155.88	155.74	154.75	153.40	152.05
16	156.22	155.91	155.87	155.75	156.60	156.63	156.40	155.87	155.70	154.71	153.35	152.02
17	156.18	155.93	155.87	155.76	156.59	156.63	156.38	155.87	155.66	154.67	153.30	151.98
18	156.14	155.95	155.86	155.78	156.60	156.62	156.36	155.85	155.61	154.63	153.26	151.95
19	156.09	155.95	155.85	155.80	156.59	156.62	156.33	155.84	155.56	154.60	153.21	151.92
20	156.05	155.95	155.84	155.82	156.60	156.62	156.31	155.82	155.51	154.57	153.16	151.91
21	156.02	155.94	155.83	155.85	156.59	156.62	156.28	155.84	155.46	154.53	153.11	151.90
22	155.97	155.94	155.82	155.87	156.60	156.61	156.26	155.90	155.43	154.49	153.06	151.89
23	155.92	155.94	155.82	155.88	156.60	156.61	156.23	155.94	155.43	154.45	153.01	151.87
24	155.90	155.94	155.81	155.89	156.60	156.60	156.20	155.97	155.44	154.41	152.95	151.85
25	155.89	155.94	155.81	155.94	156.61	156.60	156.17	155.99	155.45	154.36	152.90	151.82
26	155.86	155.96	155.80	155.99	156.61	156.60	156.14	156.01	155.44	154.32	152.86	151.80
27	155.87	155.96	155.80	156.03	156.61	156.59	156.12	156.02	155.43	154.28	152.82	151.78
28	155.88	155.95	155.78	156.06	156.61	156.59	156.12	156.02	155.42	154.23	152.77	151.75
29	155.88	155.95	155.78	156.09	---	156.59	156.10	156.02	155.41	154.19	152.73	151.73
30	155.87	155.96	155.77	156.12	---	156.58	156.08	156.02	155.39	154.15	152.68	151.71
31	155.86	---	155.77	156.16	---	156.58	---	156.01	---	154.11	152.63	---
Mean	156.21	155.92	155.87	155.85	156.57	156.62	156.36	155.94	155.70	154.74	153.35	152.08
Max	156.82	155.96	155.96	156.16	156.62	156.65	156.57	156.06	156.01	155.36	154.07	152.58
Min	155.86	155.85	155.77	155.75	156.25	156.58	156.08	155.82	155.39	154.11	152.63	151.71

	Calendar Year 2010	Water Year 2011
Mean	160.69	155.43
Max	165.10	156.82
Min	155.77	151.71

08039300 Sam Rayburn Reservoir near Jasper, TX—Continued