08083500 Fort Phantom Hill Reservoir near Nugent, TX

Middle Brazos-Clear Fork Basin
Upper Clear Fork Brazos Subbasin

LOCATION.--Lat 32°35′46″, long 99°40′49″ referenced to North American Datum of 1927, Jones County, TX, Hydrologic Unit 12060102, at city of Abilene primary pump station on right bank, 1.4 mi upstream from Fort Phantom Hill Dam on Elm Creek, 5.8 mi upstream from mouth, and 6.9 mi south of Nugent.

DRAINAGE AREA.--470 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1940 to Sept. 1965 (end of month contents only), Oct. 1965 to Sept. 1986, Mar. 1999 to Sept. 2002 (contents), Oct. 2002 to current year.

PERIOD OF RECORD, Water-Quality.--
CHEMICAL DATA: Apr. 1964 to Jan. 1965, Sept. 1970 to Apr. 1984.

REVISED RECORDS.--WSP 1562: 1953-57 (figures of end of month contents). WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to October 1986, nonrecording gage at same site at datum 0.78 ft lower. Satellite telemeter at station.

COOPERATION.--Records of diversions may be obtained from the city of Abilene.

REMARKS.--Records good. The reservoir is formed by a rock-faced earthfill dam about 3,740 ft long. The dam was completed, and storage began in October 1938. The uncontrolled service spillway is a cut channel through natural ground with a concrete ogee weir located 0.7 mi from right end of dam. The service outlet works consists of a concrete tower with a 4.0 by 7.0 ft conduit. The service tower contains five gated openings at various elevations. The dam and reservoir are owned by the city of Abilene and were built to impound water for municipal use. Since July 1974, West Texas Utility Company has operated a steam generating powerplant on the reservoir. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	1,650.0
Crest of spillway.....	1,635.9
Highest gated outlet (invert).....	1,608.8
Lowest gated outlet (invert).....	1,582.4

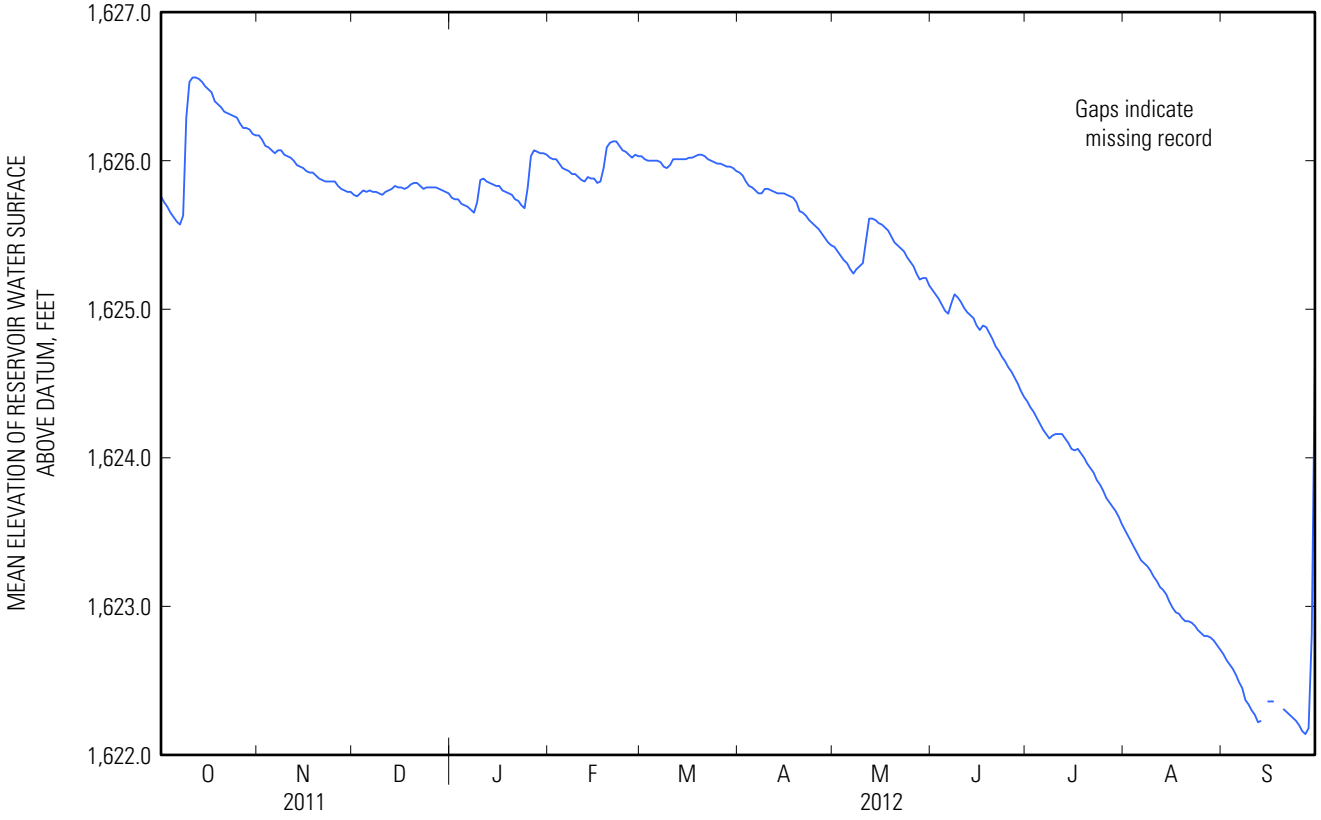
EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 89,910 acre-ft, May 25, 1957, elevation, 1,639.50 ft; minimum observed, 19,040 acre-ft, Apr. 23, 24, 25, 1953, elevation, 1,615.30 ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,626.58 ft, Oct. 11, 12; minimum elevation, 1,622.11 ft, Sept. 27.

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 08083500, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/08083500.2012.pdf

08083500 Fort Phantom Hill Reservoir near Nugent, TX—Continued

ELEVATION OF RESERVOIR WATER SURFACE ABOVE DATUM, 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	1,625.76	1,626.17	1,625.77	1,625.75	1,626.02	1,626.03	1,625.92	1,625.42	1,625.13	1,624.38	1,623.51	1,622.68
2	1,625.72	1,626.14	1,625.76	1,625.74	1,626.01	1,626.01	1,625.90	1,625.39	1,625.10	1,624.34	1,623.47	1,622.64
3	1,625.69	1,626.10	1,625.78	1,625.74	1,626.01	1,626.00	1,625.86	1,625.36	1,625.07	1,624.31	1,623.43	1,622.61
4	1,625.65	1,626.09	1,625.80	1,625.71	1,625.98	1,626.00	1,625.83	1,625.33	1,625.03	1,624.27	1,623.39	1,622.58
5	1,625.62	1,626.07	1,625.79	1,625.70	1,625.95	1,626.00	1,625.82	1,625.31	1,624.99	1,624.23	1,623.35	1,622.54
6	1,625.59	1,626.05	1,625.80	1,625.69	1,625.94	1,626.00	1,625.80	1,625.27	1,624.97	1,624.19	1,623.31	1,622.49
7	1,625.57	1,626.07	1,625.79	1,625.67	1,625.93	1,625.99	1,625.78	1,625.24	1,625.04	1,624.16	1,623.29	1,622.45
8	1,625.63	1,626.07	1,625.79	1,625.65	1,625.91	1,625.96	1,625.78	1,625.27	1,625.10	1,624.13	1,623.27	1,622.37
9	1,626.29	1,626.04	1,625.78	1,625.72	1,625.91	1,625.95	1,625.81	1,625.29	1,625.08	1,624.15	1,623.24	1,622.34
10	1,626.53	1,626.03	1,625.77	1,625.87	1,625.89	1,625.97	1,625.81	1,625.31	1,625.05	1,624.16	1,623.20	1,622.30
11	1,626.56	1,626.02	1,625.79	1,625.88	1,625.87	1,626.01	1,625.80	1,625.46	1,625.01	1,624.16	1,623.17	1,622.27
12	1,626.56	1,626.00	1,625.80	1,625.86	1,625.86	1,626.01	1,625.79	1,625.61	1,624.98	1,624.16	1,623.13	1,622.22
13	1,626.55	1,625.97	1,625.81	1,625.85	1,625.89	1,626.01	1,625.78	1,625.61	1,624.96	1,624.13	1,623.11	1,622.23
14	1,626.53	1,625.96	1,625.83	1,625.84	1,625.88	1,626.01	1,625.78	1,625.60	1,624.94	1,624.10	1,623.08	---
15	1,626.50	1,625.95	1,625.82	1,625.83	1,625.88	1,626.01	1,625.78	1,625.58	1,624.89	1,624.06	1,623.03	1,622.36
16	1,626.48	1,625.93	1,625.82	1,625.83	1,625.85	1,626.02	1,625.77	1,625.57	1,624.86	1,624.05	1,622.99	1,622.36
17	1,626.46	1,625.92	1,625.81	1,625.80	1,625.86	1,626.02	1,625.76	1,625.55	1,624.89	1,624.06	1,622.96	1,622.36
18	1,626.40	1,625.92	1,625.82	1,625.79	1,625.95	1,626.03	1,625.75	1,625.53	1,624.88	1,624.03	1,622.95	---
19	1,626.38	1,625.90	1,625.84	1,625.78	1,626.09	1,626.04	1,625.72	1,625.49	1,624.84	1,624.00	1,622.92	---
20	1,626.36	1,625.88	1,625.85	1,625.77	1,626.12	1,626.04	1,625.66	1,625.45	1,624.80	1,623.96	1,622.90	1,622.31
21	1,626.33	1,625.87	1,625.85	1,625.74	1,626.13	1,626.03	1,625.65	1,625.43	1,624.75	1,623.93	1,622.90	1,622.29
22	1,626.32	1,625.86	1,625.83	1,625.73	1,626.13	1,626.01	1,625.63	1,625.41	1,624.72	1,623.90	1,622.89	1,622.27
23	1,626.31	1,625.86	1,625.81	1,625.70	1,626.10	1,626.00	1,625.60	1,625.39	1,624.68	1,623.85	1,622.87	1,622.25
24	1,626.30	1,625.86	1,625.82	1,625.68	1,626.07	1,625.99	1,625.58	1,625.35	1,624.65	1,623.82	1,622.84	1,622.23
25	1,626.29	1,625.86	1,625.82	1,625.82	1,626.06	1,625.98	1,625.56	1,625.32	1,624.61	1,623.78	1,622.82	1,622.20
26	1,626.25	1,625.83	1,625.82	1,626.03	1,626.04	1,625.98	1,625.54	1,625.29	1,624.58	1,623.73	1,622.80	1,622.16
27	1,626.22	1,625.81	1,625.82	1,626.07	1,626.02	1,625.97	1,625.51	1,625.24	1,624.54	1,623.70	1,622.80	1,622.14
28	1,626.22	1,625.80	1,625.81	1,626.06	1,626.04	1,625.96	1,625.48	1,625.20	1,624.50	1,623.67	1,622.79	1,622.18
29	1,626.21	1,625.79	1,625.80	1,626.05	1,626.03	1,625.96	1,625.45	1,625.21	1,624.45	1,623.64	1,622.77	1,622.81
30	1,626.18	1,625.79	1,625.79	1,626.05	---	1,625.95	1,625.43	1,625.21	1,624.41	1,623.60	1,622.74	1,624.67
31	1,626.17	---	1,625.78	1,626.04	---	1,625.93	---	1,625.16	---	1,623.55	1,622.71	---
Mean	1,626.18	1,625.95	1,625.81	1,625.82	1,625.98	1,626.00	1,625.71	1,625.38	1,624.85	1,624.01	1,623.05	---
Max	1,626.56	1,626.17	1,625.85	1,626.07	1,626.13	1,626.04	1,625.92	1,625.61	1,625.13	1,624.38	1,623.51	---
Min	1,625.57	1,625.79	1,625.76	1,625.65	1,625.85	1,625.93	1,625.43	1,625.16	1,624.41	1,623.55	1,622.71	---

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