Water-Data Report 2010

08049800 Joe Pool Lake near Duncanville, TX

Upper Trinity Basin
Lower West Fork Trinity Subbasin

LOCATION.--Lat 32°38′36″, long 97°00′03″ referenced to North American Datum of 1927, Dallas County, TX, Hydrologic Unit 12030102, in control room of outlet works tower located 285 ft upstream from centerline of Joe Pool Dam on Mountain Creek, 0.7 mi downstream from Walnut Creek, 0.7 mi upstream from bridge over Mountain Creek on Camp Wisdom Road, 1.0 mi downstream from John Penn Branch, 5.5 mi west of water towers in downtown Duncanville, 7.1 mi upstream from Mountain Creek Dam on Mountain Creek, and 11.2 mi upstream from mouth.

DRAINAGE AREA.--232 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Jan. 1986 to Sept. 2000 (U.S. Army Corps of Engineers furnished contents), Oct. 2000 to Sept. 2002 (contents), Oct. 2002 to current year.

PERIOD OF RECORD, Water-Quality.--

BIOLOGICAL DATA: Jan. to Aug. 1986.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (U.S. Army Corps of Engineers benchmark). Satellite telemeter at station.

REMARKS.--Records good. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically. The lake is formed by a rolled earthfill dam 24,200 ft long, including a 50 ft uncontrolled broad-crested concrete spillway. Impoundment of water began Jan. 7, 1986, after closure of the dam was completed in Dec. 1985. The flood-control outlet works consist of a 10.5 ft diameter conduit that is controlled by two 4.75 by 10.5 ft slide gates. Above an elevation of 541.0 ft, water will flow over a 50-ft-long uncontrolled broad-crested concrete spillway located 0.5 mi to left of the outlet works tower. The low-flow outlet works consist of four 3- by 5-ft slide gates having invert elevations at 486.0, 495.0, 504.0, and 513.0 ft that open to a wet-well. Discharge from the wet-well to the 10.5 ft diameter conduit is controlled by a 2- by 4-ft gate with invert at elevation 483.0 ft. A low flow bypass system consisting of a turbine pump and 10-in-diameter piping is also available for use if needed. The lake was built for water supply, conservation, and flood control. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	564.5
Crest of spillway.....	541.0
Top of conservation pool.....	522.0
Lowest gated outlet.....	466.0

Water-quality records available from Jan. 1986 to July 2007 were published separately as:

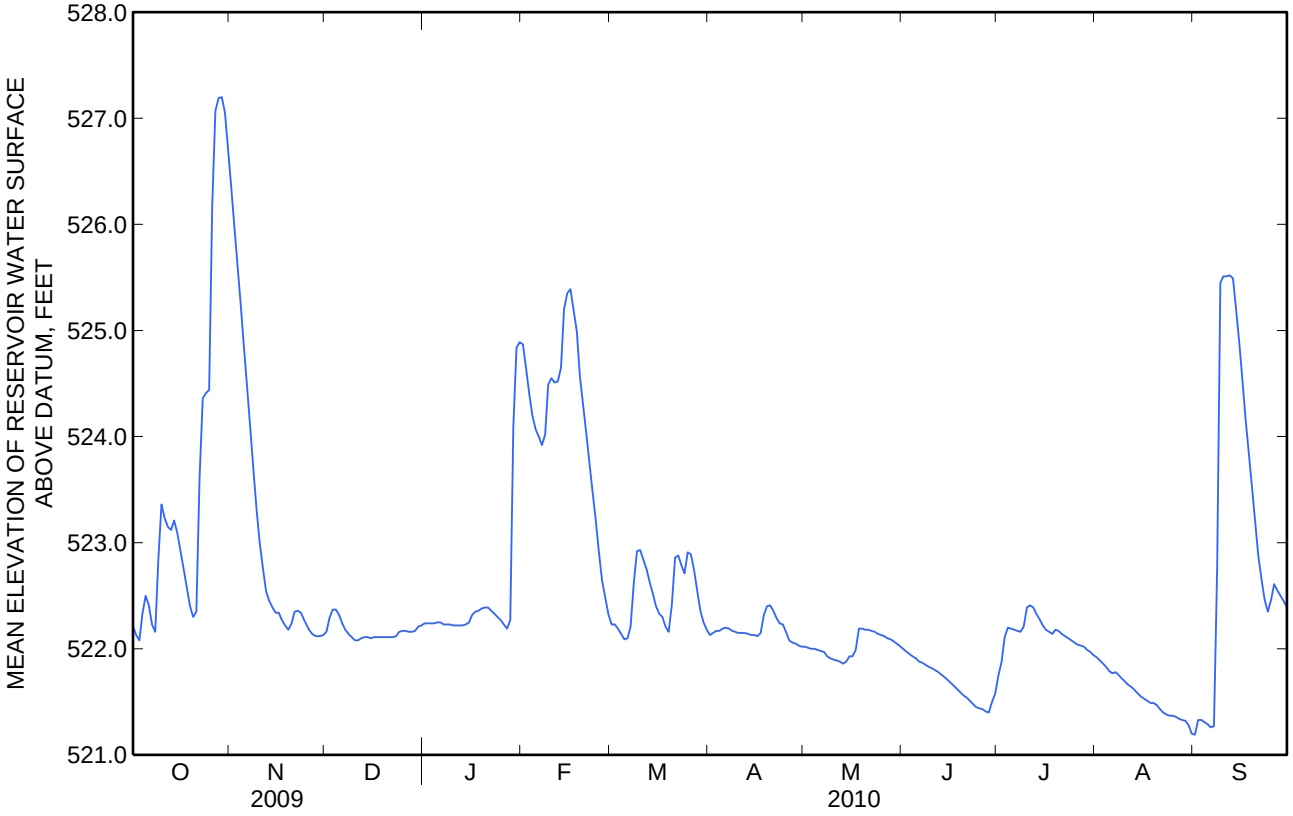
Site ID	Site name
323329097024101	Joe Pool Lk Site EC nr Duncanville, TX
323503097012201	Joe Pool Lk Site DC nr Duncanville, TX
323645097002001	Joe Pool Lk Site CR nr Duncanville, TX
323646097005101	Joe Pool Lk Site CC nr Duncanville, TX
323731097013901	Joe Pool Lk Site BC nr Duncanville, TX
323812096591701	Joe Pool Lk Site AR nr Duncanville, TX
323819096584801	Joe Pool Lk Site AC nr Duncanville, TX

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 274,600 acre-ft, May 20, 1990, elevation 533.21 ft; minimum contents after initial filling, 75,910 acre-ft, Jan. 24, 1989, elevation, 507.84 ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 527.27 ft, Oct. 29; minimum elevation, 521.15 ft, Sept. 1.

08049800 Joe Pool Lake near Duncanville, TX—Continued

ELEVATION OF RESERVOIR WATER SURFACE ABOVE DATUM, FEET
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	522.21	526.35	522.16	522.24	524.87	522.23	522.13	522.02	522.00	521.75	521.92	521.19
2	522.13	525.97	522.29	522.24	524.64	522.23	522.15	522.01	521.97	521.88	521.89	521.33
3	522.08	525.60	522.37	522.24	524.40	522.19	522.17	522.00	521.95	522.11	521.86	521.33
4	522.33	525.23	522.37	522.24	524.20	522.14	522.17	522.00	521.93	522.20	521.83	521.31
5	522.50	524.85	522.32	522.25	524.07	522.09	522.19	521.99	521.91	522.19	521.79	521.29
6	522.41	524.47	522.24	522.25	524.00	522.10	522.20	521.98	521.88	522.18	521.77	521.26
7	522.23	524.08	522.18	522.23	523.92	522.21	522.19	521.97	521.87	522.17	521.78	521.27
8	522.16	523.68	522.14	522.23	524.02	522.62	522.17	521.93	521.85	522.16	521.75	522.76
9	522.83	523.30	522.11	522.23	524.49	522.92	522.16	521.91	521.83	522.21	521.72	525.45
10	523.36	523.00	522.08	522.22	524.55	522.93	522.15	521.90	521.82	522.39	521.69	525.51
11	523.23	522.76	522.08	522.22	524.51	522.84	522.15	521.89	521.80	522.41	521.66	525.51
12	523.15	522.54	522.10	522.22	524.52	522.75	522.15	521.88	521.78	522.39	521.64	525.52
13	523.12	522.45	522.11	522.22	524.65	522.63	522.14	521.86	521.76	522.33	521.61	525.49
14	523.21	522.39	522.11	522.23	525.20	522.52	522.13	521.88	521.73	522.28	521.58	525.19
15	523.09	522.34	522.10	522.25	525.35	522.40	522.13	521.93	521.71	522.22	521.55	524.89
16	522.92	522.34	522.11	522.32	525.39	522.33	522.12	521.93	521.68	522.18	521.53	524.53
17	522.75	522.27	522.11	522.35	525.19	522.30	522.15	521.99	521.65	522.16	521.51	524.16
18	522.57	522.22	522.11	522.36	524.99	522.21	522.32	522.19	521.62	522.14	521.49	523.84
19	522.40	522.18	522.11	522.38	524.57	522.16	522.40	522.19	521.59	522.18	521.49	523.52
20	522.30	522.24	522.11	522.39	524.30	522.42	522.41	522.18	521.56	522.17	521.47	523.19
21	522.35	522.35	522.11	522.39	524.03	522.86	522.36	522.18	521.54	522.14	521.43	522.88
22	523.61	522.36	522.11	522.36	523.75	522.88	522.29	522.17	521.51	522.12	521.40	522.66
23	524.36	522.34	522.12	522.33	523.47	522.79	522.24	522.16	521.48	522.10	521.38	522.46
24	524.41	522.27	522.16	522.30	523.20	522.71	522.23	522.14	521.45	522.08	521.37	522.35
25	524.44	522.21	522.17	522.27	522.91	522.91	522.16	522.13	521.44	522.06	521.37	522.46
26	526.17	522.16	522.17	522.23	522.64	522.89	522.08	522.12	521.43	522.04	521.36	522.61
27	527.07	522.13	522.16	522.19	522.48	522.74	522.06	522.10	521.41	522.03	521.34	522.55
28	527.19	522.12	522.16	522.27	522.32	522.54	522.05	522.09	521.40	522.02	521.33	522.50
29	527.20	522.12	522.17	524.09	---	522.36	522.03	522.07	521.50	521.99	521.32	522.45
30	527.05	522.13	522.21	524.84	---	522.25	522.02	522.05	521.58	521.97	521.28	522.39
31	526.71	---	522.22	524.89	---	522.18	---	522.02	---	521.94	521.20	---
Mean	523.66	523.08	522.16	522.50	524.17	522.49	522.18	522.03	521.69	522.14	521.56	523.13
Max	527.20	526.35	522.37	524.89	525.39	522.93	522.41	522.19	522.00	522.41	521.92	525.52
Min	522.08	522.12	522.08	522.19	522.32	522.09	522.02	521.86	521.40	521.75	521.20	521.19

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