

Water-Data Report 2011

08095550 Waco Lake near Waco, TX

 Middle Brazos-Bosque Basin
 Bosque Subbasin

LOCATION.--Lat 31°34'46", long 97°11'51" referenced to North American Datum of 1927, McLennan County, TX, Hydrologic Unit 12060203, in intake structure at Waco Dam on Bosque River, at northwest edge of city limits of Waco, and 4.6 mi upstream from mouth.

DRAINAGE AREA.--1,652 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Aug. 1964 to Sept. 2000 (Reservoir Contents furnished by U.S. Army Corps of Engineers), Oct. 2000 to Jan. 2004 (Daily Mean Reservoir Contents), Oct. 2002 to current year. Prior to Oct. 1970, published as "Waco Reservoir".

PERIOD OF RECORD, Water-Quality.--

CHEMICAL DATA: May 1971 to Aug. 1980.

BIOCHEMICAL DATA: May 1971 to Jan. 1973.

GAGE.--Water-stage recorder. Datum of gage is NAVD of 1988. Satellite telemeter at station.

COOPERATION.--Prior to Oct. 1, 2000, record of contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey. A new capacity table, provided by the Texas Water Development Board, was put into use beginning Oct. 1, 1995.

REMARKS.--Records fair. The lake is formed by a rolled earthfill dam 24,618 ft long, including spillway. The lake was built for flood control and water conservation. From Oct. 1, 1964, to Feb. 26, 1965, the lake was operated as a detention basin only. On Feb. 26, 1965, old Lake Waco was breached and deliberate impoundment began. The spillway is controlled by fourteen 40.0-by 35.0-foot tainter gates. The outlet works consists of three gate-controlled outlets, 6.7 by 20.0 ft, opening into a 20.0-foot-diameter concrete conduit and two 54-inch concrete pipes. Low-flow releases are made through two 54-inch butterfly valves. Flow into two wet wells is controlled by four 5.0- by 6.0-foot slide gates that are used to release water downstream for the city of Waco municipal water supply. An unknown amount of water was diverted for municipal and industrial uses. The dam is the property of the U.S. Army Corps of Engineers. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	510.0
Design flood.....	505.0
Top of gates.....	500.0
Crest of spillway	465.0
Top of conservation pool	462.0
Lowest controlled outlet (invert).....	400.0

Some records listed in the "Period of Record" for surface water and water quality may not be available electronically.

EXTREMES FOR PERIOD OF RECORD.--Feb. 1965 to Sept. 2002: Maximum contents, 521,100 acre-ft, Dec. 24, 1991; minimum since normal operating level was reached, 86,300 acre-ft, Oct. 8, 1984; Feb. 1965 to current year: Maximum elevation, 488.48 ft, Dec. 24, 1991, minimum elevation, 445.10 ft, Oct. 8, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 462.16 ft, Feb. 28; minimum elevation, 455.10 ft, Sept. 30.

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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	462.02	461.55	461.20	460.96	461.80	462.12	461.67	460.92	460.31	459.17	457.76	456.25
2	462.01	461.55	461.18	460.95	461.78	462.06	461.65	460.87	460.28	459.13	457.72	456.21
3	461.99	461.57	461.18	460.94	461.78	461.99	461.63	460.85	460.24	459.09	457.67	456.15
4	461.98	461.56	461.16	460.94	461.82	461.93	461.61	460.83	460.20	459.05	457.62	456.09
5	461.95	461.54	461.12	460.94	461.82	461.93	461.56	460.80	460.17	459.01	457.57	456.01
6	461.94	461.52	461.11	460.93	461.84	461.93	461.52	460.77	460.13	458.96	457.51	455.95
7	461.93	461.51	461.10	460.92	461.86	461.92	461.49	460.74	460.10	458.92	457.46	455.90
8	461.92	461.50	461.08	460.90	461.86	461.94	461.47	460.72	460.05	458.87	457.41	455.85
9	461.90	461.48	461.06	461.08	461.89	461.94	461.44	460.70	460.00	458.82	457.35	455.79
10	461.89	461.46	461.05	461.19	461.88	461.93	461.42	460.68	459.96	458.77	457.30	455.75
11	461.88	461.45	461.05	461.22	461.89	461.92	461.43	460.68	459.92	458.72	457.26	455.70
12	461.86	461.47	461.03	461.22	461.88	461.91	461.40	460.79	459.87	458.68	457.21	455.66
13	461.85	461.46	461.00	461.23	461.89	461.90	461.38	460.78	459.83	458.63	457.16	455.62
14	461.81	461.45	460.98	461.23	461.90	461.91	461.35	460.76	459.78	458.58	457.13	455.58
15	461.79	461.44	460.98	461.25	461.92	461.90	461.33	460.73	459.73	458.54	457.10	455.53
16	461.77	461.43	460.97	461.39	461.94	461.90	461.26	460.69	459.68	458.49	457.04	455.48
17	461.76	461.40	460.95	461.51	461.96	461.90	461.22	460.67	459.63	458.44	456.99	455.44
18	461.75	461.37	460.93	461.55	461.98	461.90	461.19	460.64	459.57	458.41	456.94	455.43
19	461.73	461.35	460.93	461.58	461.99	461.89	461.16	460.62	459.52	458.38	456.89	455.53
20	461.72	461.34	460.92	461.61	462.00	461.88	461.13	460.61	459.46	458.34	456.84	455.50
21	461.72	461.33	460.92	461.61	462.02	461.87	461.12	460.62	459.42	458.29	456.79	455.47
22	461.69	461.33	460.91	461.63	462.02	461.87	461.10	460.61	459.52	458.24	456.74	455.43
23	461.69	461.32	460.89	461.64	462.02	461.87	461.07	460.59	459.49	458.18	456.69	455.39
24	461.73	461.32	460.91	461.64	462.05	461.85	461.04	460.56	459.46	458.14	456.64	455.35
25	461.71	461.32	460.93	461.66	462.05	461.84	461.02	460.56	459.42	458.09	456.60	455.30
26	461.70	461.29	460.93	461.65	462.06	461.83	461.02	460.53	459.38	458.04	456.54	455.26
27	461.68	461.27	460.92	461.66	462.08	461.80	461.05	460.49	459.34	457.99	456.50	455.22
28	461.65	461.25	460.92	461.67	462.14	461.79	461.00	460.45	459.29	457.94	456.46	455.19
29	461.62	461.25	460.95	461.68	---	461.76	460.97	460.41	459.26	457.89	456.41	455.16
30	461.60	461.23	460.97	461.70	---	461.72	460.93	460.37	459.22	457.85	456.36	455.14
31	461.57	---	460.96	461.71	---	461.70	---	460.34	---	457.80	456.30	---
Mean	461.80	461.41	461.01	461.35	461.93	461.89	461.29	460.66	459.74	458.50	457.03	455.61
Max	462.02	461.57	461.20	461.71	462.14	462.12	461.67	460.92	460.31	459.17	457.76	456.25
Min	461.57	461.23	460.89	460.90	461.78	461.70	460.93	460.34	459.22	457.80	456.30	455.14

Water Year 2011	
Mean	460.18
Max	462.14
Min	455.14

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