



Water-Data Report 2011

08155200 Barton Creek at State Highway 71 near Oak Hill, TX

Middle Colorado-Llano Basin
Austin-Travis Lakes Subbasin

LOCATION.--Lat 30°17'46", long 97°55'31" referenced to North American Datum of 1927, Travis County, TX, Hydrologic Unit 12090205, on right bank under downstream side of bridge on State Highway 71, 0.1 mi downstream from Little Barton Creek, and 5.8 mi northwest of Oak Hill.

DRAINAGE AREA.--89.7 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Aug. 1975 to Feb. 1978 (peak discharge greater than base discharge), Feb. 1978 to Sept. 1982, Jan. 1989 to current year.

GAGE.--Water-stage recorder. Datum of gage is 737.04 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records poor except those for daily discharges above 5 ft³/s, which are fair. No known regulation or diversions. No flow at times. Annual peak adjusted for draw down. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 32 ft³/s, Oct. 1, stage falling, peak occurred Sept. 8, 2010; peak discharges greater than base discharge of 550 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 9	1005	*28	*3.12

08155200 Barton Creek at State Highway 71 near Oak Hill, TX—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

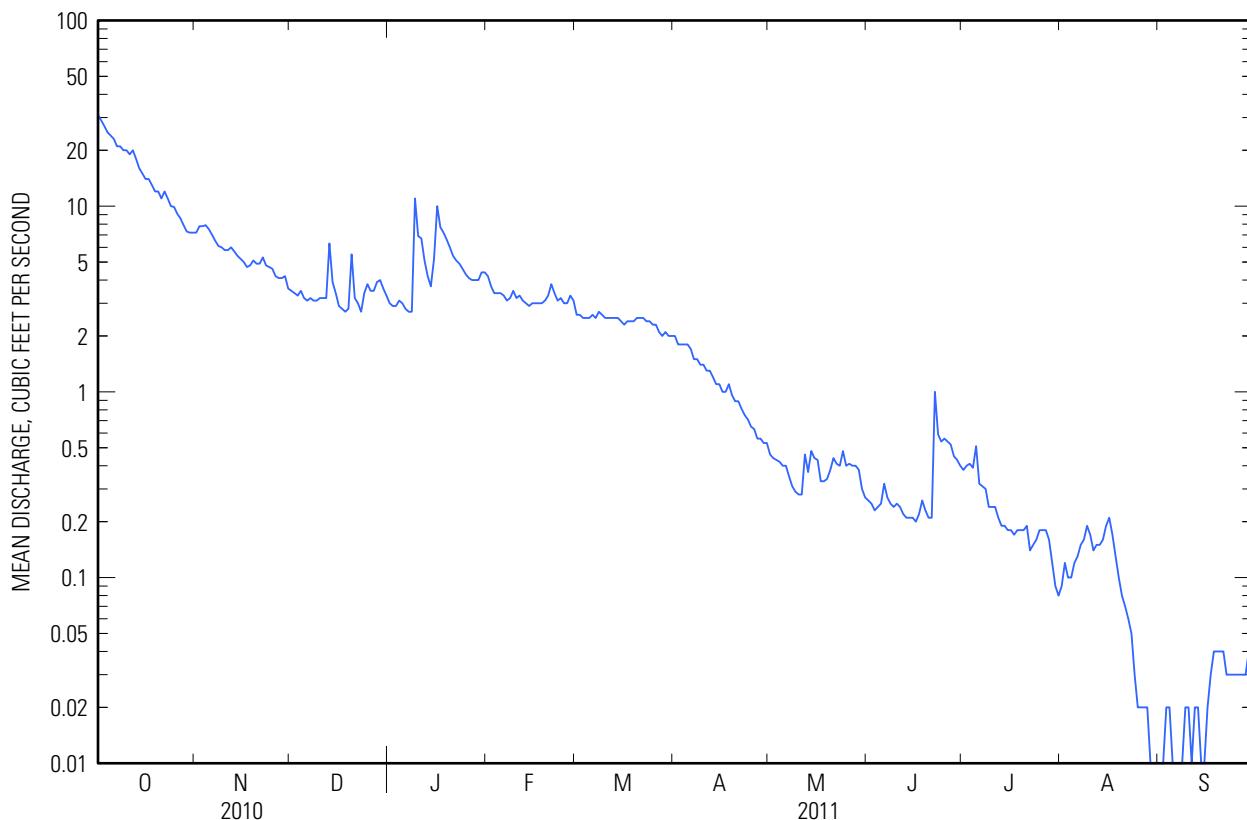
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	31	7.2	3.5	3.0	4.2	2.6	2.0	0.46	0.26	0.38	0.09	0.01
2	29	7.8	3.4	2.9	3.7	2.6	1.8	0.44	0.25	0.40	0.12	0.01
3	27	7.8	3.3	2.9	3.4	2.5	1.8	0.43	0.23	0.41	0.10	0.02
4	25	7.9	3.5	3.1	3.4	2.5	1.8	0.42	0.24	0.39	0.10	0.02
5	24	7.5	3.2	3.0	3.4	2.5	1.8	0.40	0.25	0.51	0.12	0.01
6	23	7.0	3.1	2.8	3.3	2.6	1.7	0.40	0.32	0.32	0.13	0.01
7	21	6.5	3.2	2.7	3.1	2.5	1.5	0.35	0.27	0.31	0.15	0.01
8	21	6.1	3.1	2.7	3.2	2.7	1.5	0.31	0.25	0.30	0.16	0.01
9	20	6.0	3.1	11	3.5	2.6	1.4	0.29	0.24	0.24	0.19	0.02
10	20	5.8	3.2	6.9	3.2	2.5	1.4	0.28	0.25	0.24	0.17	0.02
11	19	5.8	3.2	6.7	3.3	2.5	1.3	0.28	0.24	0.24	0.14	0.01
12	20	6.0	3.2	5.1	3.1	2.5	1.3	0.46	0.22	0.21	0.15	0.02
13	18	5.7	6.3	4.2	3.0	2.5	1.2	0.37	0.21	0.19	0.15	0.02
14	16	5.4	3.9	3.7	2.9	2.5	1.1	0.48	0.21	0.19	0.16	0.01
15	15	5.2	3.4	5.2	3.0	2.4	1.1	0.44	0.21	0.18	0.19	0.01
16	14	5.0	2.9	10	3.0	2.3	1.0	0.43	0.20	0.18	0.21	0.02
17	14	4.7	2.8	7.7	3.0	2.4	1.0	0.33	0.22	0.17	0.17	0.03
18	13	4.8	2.7	7.2	3.0	2.4	1.1	0.33	0.26	0.18	0.13	0.04
19	12	5.1	2.8	6.6	3.1	2.4	0.96	0.34	0.23	0.18	0.10	0.04
20	12	4.9	5.5	6.0	3.3	2.5	0.89	0.38	0.21	0.18	0.08	0.04
21	11	4.9	3.2	5.4	3.8	2.5	0.89	0.44	0.21	0.19	0.07	0.04
22	12	5.3	e3.0	5.1	3.4	2.5	0.81	0.41	1.0	0.14	0.06	0.03
23	11	4.8	2.7	4.9	3.1	2.4	0.75	0.40	0.59	0.15	0.05	0.03
24	10	4.7	3.4	4.6	3.2	2.4	0.71	0.48	0.54	0.16	0.03	0.03
25	9.9	4.6	3.8	4.3	3.0	2.3	0.65	0.40	0.56	0.18	0.02	0.03
26	9.1	4.2	3.5	4.1	3.0	2.3	0.63	0.41	0.54	0.18	0.02	0.03
27	8.6	4.1	3.5	4.0	3.3	2.1	0.56	0.40	0.52	0.18	0.02	0.03
28	7.9	4.1	3.9	4.0	3.1	2.0	0.56	0.40	0.45	0.16	0.02	0.03
29	7.3	4.2	4.0	4.0	---	2.1	0.53	0.38	0.43	0.12	0.01	0.04
30	7.2	3.6	3.6	4.4	---	2.0	0.53	0.30	0.40	0.09	0.01	0.05
31	7.2	---	3.3	4.4	---	2.0	---	0.27	---	0.08	0.01	---
Total	495.2	166.7	107.2	152.6	91.0	74.6	34.27	11.91	10.01	7.03	3.13	0.72
Mean	16.0	5.56	3.46	4.92	3.25	2.41	1.14	0.38	0.33	0.23	0.10	0.02
Max	31	7.9	6.3	11	4.2	2.7	2.0	0.48	1.0	0.51	0.21	0.05
Min	7.2	3.6	2.7	2.7	2.9	2.0	0.53	0.27	0.20	0.08	0.01	0.01
Ac-ft	982	331	213	303	180	148	68	24	20	14	6.2	1.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2011^b, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	21.3	48.9	49.5	44.4	57.1	59.9	41.1	51.9	74.1	39.4	5.94	10.8
Max	192	514	520	293	465	338	196	226	613	529	89.0	166
(WY)	(1999)	(2005)	(1992)	(1992)	(1992)	(1992)	(1979)	(1992)	(1981)	(2002)	(2007)	(2010)
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
(WY)	(1991)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(1996)	(1996)	(1978)	(1996)	(1999)

08155200 Barton Creek at State Highway 71 near Oak Hill, TX—Continued**SUMMARY STATISTICS**

	Calendar Year 2010	Water Year 2011	Water Years 1978 - 2011^h	
Annual total	24,551.53	1,154.37		
Annual mean	67.3	3.16	43.4	
Highest annual mean			182	1992
Lowest annual mean			0.17	1996
Highest daily mean	2,880	Sep 8	b31	Oct 1
Lowest daily mean	0.24	Sep 1	0.01	Aug 29
Annual seven-day minimum	0.28	Aug 26	0.01	Aug 27
Maximum peak flow			28	Jan 9
Maximum peak stage			3.12	Jan 9
Annual runoff (ac-ft)	48,700		2,290	25,300
10 percent exceeds	159		7.2	a22.82
50 percent exceeds	19		2.0	4.3
90 percent exceeds	3.1		0.04	0.05

^a From floodmark.^h See Period of Record paragraph.^b Occurred from recession of Sept. 8, 2010 peak.

08155200 Barton Creek at State Highway 71 near Oak Hill, TX—Continued**WATER-QUALITY RECORDS****PERIOD OF RECORD.--**

CHEMICAL DATA: Apr. 1978 to July 1982, Feb. 1989 to Oct. 2004, Mar. 2006 to current year.

BIOCHEMICAL DATA: Apr. 1978 to July 1982, Feb. 1989 to Oct. 2004, Mar. 2006 to current year.

RADIOCHEMICAL DATA: Jan. 1980 to June 1981.

PESTICIDE DATA: June 1978 to July 1982, Jan. 1993 to June 1995, June 2002 to Oct. 2004.

SEDIMENT CHEMISTRY DATA: May 2000 to Feb. 2004.

SEDIMENT DATA: Nov. 1998 to Oct. 2004, Mar. 2006 to Oct. 2009.

INSTRUMENTATION.--Stage-activated automatic sampler.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 1 of 4

[CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; mg/L, milligrams per liter; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	End date	End time	Medium name	Sample type	Color, water, filtered, platinum cobalt units (00080)	Discharge, mean for storm event, cubic feet per second (72123)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, laboratory, µS/cm at 25 °C (90095)
01-09-2011	0750	01-09-2011	2050	Surface water	Composite (time)	10	13	8.0	565

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 2 of 4

[CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; mg/L, milligrams per liter; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Turbidity, water, unfiltered, broad band light source (400-680 nm), Specific conductance, water, unfiltered, multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Suspended solids, water, unfiltered, mg/L	Alkalinity, water, filtered, inflection-point, incremental titration method, mg/L as CaCO ₃ (00530)	Bicarbonate, water, filtered, inflection-point, incremental titration method, mg/L as CaCO ₃ (39086)	Carbon dioxide, water, unfiltered, mg/L (00453)	Carbonate, water, filtered, inflection-point, incremental titration method, mg/L (00405)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)
01-09-2011	0750	569	34	40	177	214	3.2	< 1.0 .27

08155200 Barton Creek at State Highway 71 near Oak Hill, TX—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 3 of 4

[CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; mg/L, milligrams per liter; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Ammonia, water, unfiltered, milligrams per liter as NH ₄ (71845)	Ammonia, water, unfiltered, mg/L as N (00610)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Nitrate, water, filtered, mg/L (71851)	Nitrate, water, filtered, mg/L as N (00618)	Nitrite, water, filtered, mg/L (71856)	Nitrite, water, filtered, mg/L as N (00613)	Organic nitrogen, water, unfiltered, mg/L (00605)	Orthophosphate, water, filtered, mg/L (00660)
01-09-2011	0750	<.026	<.02	.22	.951	.215	.007	.002	<.27	.017

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 4 of 4

[CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; mg/L, milligrams per liter; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Orthophosphate, water, filtered, mg/L as P (00671)	Phosphorus, water, filtered, mg/L as P (00666)	Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, unfiltered, mg/L (00600)	Copper, water, unfiltered, recoverable, µg/L (01042)	Lead, water, unfiltered, recoverable, µg/L (01051)	Zinc, water, unfiltered, recoverable, µg/L (01092)	Organic carbon, water, unfiltered, mg/L (00680)
01-09-2011	0750	.006	<.02	.03	.49	.95	.77	2.8	4.0