

07332500 BLUE RIVER NEAR BLUE, OK

Red-Little Basin
Blue Subbasin

LOCATION.--Lat 33°59'49", long 96°14'27" referenced to North American Datum of 1927, in NW ¼ NE ¼ sec.24, T.6 S., R.10 E., Bryan County, OK, Hydrologic Unit 11140102, on left bank on downstream side near end of bridge on U.S. Highway 70, 1.0 mi west of Blue, 7.0 mi east of Durant, 7.7 mi upstream from Caddo Creek, and at mile 38.8.

DRAINAGE AREA.--477 mi², from automated delineation using 10-meter National Elevation Dataset digital elevation model data dated 10/01/2006 and Watershed Boundary Dataset dated 10/01/2006, using Albers Equal-Area Projection, North American Datum 1983.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1936 to current year. Monthly discharge only for some periods, published in WSP 1311, 173.

REVISED RECORDS.--WDR 2012: Drainage area.

GAGE.--Water-stage recorder. datum of gage is 500.60 ft above NGVD of 1929. Prior to Oct. 1, 1998, at datum 3.00 ft higher. Prior to Mar. 13, 1945, nonrecording gage and Mar. 13, 1945, to Feb. 2, 1960, water-stage recorder at site 1.2 mi downstream at datum 5.00 ft lower.

REMARKS.--Records poor. Some regulation at low flow by a State fish hatchery, 16.0 mi upstream from station. Small diversion for municipal water supply for city of Durant upstream from station. U.S. Army Corps of Engineers' satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 22	0500	*3,870	*17.80

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	41	11	23	41	43	33	47	17	270	47	45	14
2	43	12	23	34	36	28	96	e15	943	41	37	14
3	27	13	23	30	30	27	136	14	e362	36	32	13
4	15	12	22	25	30	24	120	13	196	35	30	13
5	11	11	22	21	29	20	108	13	266	35	e28	14
6	9.1	12	21	22	30	19	e99	13	678	36	e26	12
7	8.5	13	21	23	28	19	72	14	1,330	36	26	12
8	9.1	17	19	24	24	18	53	13	421	35	23	11
9	9.5	17	e18	42	24	21	51	14	1,140	32	22	12
10	12	18	e17	100	46	68	53	17	329	31	21	12
11	12	21	18	69	70	68	90	16	e171	30	27	10
12	13	22	19	54	38	43	169	15	e135	28	e29	e9.9
13	13	22	19	44	110	33	95	15	115	27	22	e10
14	130	23	18	39	69	28	e64	13	102	25	19	e9.9
15	184	23	26	34	56	27	e53	e13	94	e26	21	e9.8
16	68	16	30	32	39	26	47	102	91	46	22	e9.2
17	38	15	28	31	e28	25	e42	199	100	54	20	e9.0
18	23	15	30	30	e26	e20	e43	120	167	47	21	e8.9
19	18	17	e27	29	23	24	64	62	173	41	21	e8.7
20	17	18	e53	27	22	22	56	e36	124	36	18	e12
21	18	16	41	26	42	22	e43	e708	105	33	17	e11
22	18	16	25	26	58	21	34	3,660	94	30	20	e10
23	20	16	21	22	77	23	30	1,970	84	e29	19	e10
24	21	18	20	14	63	31	29	429	77	32	20	e9.8
25	21	18	23	12	42	30	28	247	65	38	18	e9.6
26	17	19	54	13	e34	25	27	e183	63	45	16	e9.4
27	14	19	37	13	33	21	25	e144	60	e101	17	e9.5
28	14	19	29	13	38	21	26	e122	57	121	15	e11
29	14	20	23	e13	---	22	24	e104	53	142	15	e19
30	14	21	19	36	---	23	20	525	50	72	15	e22
31	11	---	21	45	---	28	---	1,010	---	52	15	---
Total	883.2	510	790	984	1,188	860	1,844	9,836	7,915	1,419	697	345.7
Mean	28.5	17.0	25.5	31.7	42.4	27.7	61.5	317	264	45.8	22.5	11.5
Max	184	23	54	100	110	68	169	3,660	1,330	142	45	22
Min	8.5	11	17	12	22	18	20	13	50	25	15	8.7
Ac-ft	1,750	1,010	1,570	1,950	2,360	1,710	3,660	19,510	15,700	2,810	1,380	686

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	240	257	253	242	362	448	541	604	417	157	77.1	148
Max	3,613	1,813	1,384	1,291	2,156	3,089	3,846	2,953	2,744	1,908	755	1,501
(WY)	(1982)	(1997)	(1972)	(1998)	(1938)	(1945)	(1990)	(1990)	(2007)	(2007)	(1950)	(1957)
Min	4.37	11.3	17.8	18.1	24.7	22.8	40.0	33.2	22.3	5.23	0.94	0.42
(WY)	(1940)	(1940)	(1940)	(1940)	(2009)	(1940)	(2011)	(1939)	(2011)	(1956)	(1956)	(1956)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1936 - 2013	
Annual total	65,008.04		27,271.9			
Annual mean	178		74.7		312	
Highest annual mean					972	1945
Lowest annual mean					30.8	1956
Highest daily mean	10,500	Jan 25	3,660	May 22	45,500	Oct 14, 1981
Lowest daily mean	0.19	Sep 25	8.5	Oct 7	0.00	At times
Annual seven-day minimum	0.32	Sep 7	9.4	Sep 13	0.00	Sep 19, 1956
Maximum peak flow			3,870	May 22	65,200	Oct 14, 1981
Maximum peak stage			17.80	May 22	^a 44.20	Oct 14, 1981
Annual runoff (ac-ft)	128,900		54,090		226,200	
10 percent exceeds	200		109		504	
50 percent exceeds	33		26		84	
90 percent exceeds	7.4		12		26	

^a From high-water mark.