Water-Data Report 2012

07063000 BLACK RIVER AT POPLAR BLUFF, MO

Upper White Basin
Upper Black Subbasin

LOCATION.--Lat 36°45'34.5", long 90°23'17.2" referenced to North American Datum of 1983, in SW ¼ NW ¼ sec.2, T.24 N., R.6 E., Butler County, MO, Hydrologic Unit 11010007, on right bank at City Light and Water Plant in Poplar Bluff, 1,500 ft upstream from bridge on Business Route 60, 4.8 mi downstream from Indian Creek, and at mile 211.2.

DRAINAGE AREA.--1,245 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1936 to September 1937, October 1939 to current year. Gage-height records collected at site 1,800 ft downstream September 1923 to July 1935 and since July 1935 at site 1,500 ft downstream, in reports of the National Weather Service.

REVISED RECORDS.--WSP 927: Drainage area. WDR US-2008: 1983(P).

GAGE.--Water-stage recorder. Datum of gage is 317.48 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1940, nonrecording gage at site 1,500 ft downstream at datum 2.00 ft higher; Oct. 1, 1940, to June 7, 1955, at site 1,500 ft downstream at present datum. Prior to July 12, 1985, at datum 0.10 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Clearwater Lake (station 07062000), 47 mi upstream, since June 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1904 reached a maximum discharge of 100,000 ft^3/s, and flood of Mar. 12, 1935, reached a stage of 21.1 ft, present datum (affected by levees constructed since 1904).

EXTREMES FOR PERIOD PRIOR TO REGULATION.--Maximum discharge 52,600 ft^3/s, May 12, 1943, from rating curve extended above 44,000 ft^3/s; maximum gage height, 20.80 ft, June 10, 1945; minimum discharge observed 236 ft^3/s, Aug. 12, 1944.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,440 ft^3/s, Dec. 6, gage height, 12.97 ft; minimum discharge, 286 ft^3/s, Aug. 11, 14, gage height, -0.12 ft.

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 07063000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/07063000.2012.pdf

07063000 BLACK RIVER AT POPLAR BLUFF, MO—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	827	459	1,960	1,900	1,790	960	1,360	451	441	e357	320	558
2	734	479	1,660	1,810	1,820	945	1,320	417	427	e358	318	596
3	704	553	1,540	1,600	1,690	980	1,230	390	426	e356	319	432
4	692	564	1,700	1,350	1,800	965	1,120	500	430	354	317	405
5	651	564	4,270	1,210	1,770	955	1,090	631	422	335	328	428
6	549	564	4,990	1,170	1,550	943	1,040	597	421	328	314	534
7	520	566	3,000	1,130	1,510	942	1,020	602	447	325	315	571
8	509	598	2,100	1,090	1,670	1,010	1,100	615	448	323	312	596
9	502	1,200	2,080	1,060	1,710	1,270	1,090	666	445	320	300	583
10	496	938	2,000	1,030	1,740	1,230	1,120	824	435	319	295	587
11	496	774	1,910	1,090	1,630	1,180	1,170	911	446	317	290	680
12	495	768	1,840	1,090	1,490	1,300	1,160	871	468	313	290	953
13	505	755	1,730	1,030	1,410	1,290	1,050	756	447	310	296	1,080
14	496	748	1,670	1,020	1,240	1,220	866	730	437	315	294	1,110
15	483	1,480	2,770	1,030	1,180	1,200	774	696	436	417	294	1,130
16	479	1,950	2,990	1,020	1,340	2,650	816	623	433	326	295	1,160
17	474	1,400	2,350	1,040	1,310	2,540	784	600	443	317	321	1,160
18	492	990	2,220	1,010	1,440	2,660	743	587	448	313	303	1,140
19	503	806	2,170	949	1,600	3,310	827	584	431	324	297	1,130
20	518	738	2,370	915	1,600	3,560	1,000	582	425	333	297	1,030
21	520	787	2,590	864	1,600	3,740	1,060	581	425	326	312	815
22	529	2,360	2,250	844	1,710	3,730	1,100	578	424	320	384	655
23	552	2,810	1,770	1,730	1,830	3,680	1,100	570	419	317	385	593
24	558	1,790	1,500	1,220	1,710	3,220	966	563	415	314	326	570
25	559	1,510	1,450	1,200	1,450	2,630	656	551	415	312	322	563
26	558	1,450	1,420	1,430	1,290	2,350	571	515	410	315	336	561
27	558	2,080	2,100	1,510	1,260	2,250	504	503	409	372	335	643
28	491	1,950	2,260	1,560	1,140	2,190	473	499	405	349	335	640
29	468	2,100	2,330	1,620	1,010	1,900	459	493	e369	325	354	677
30	461	2,350	2,280	1,590	---	1,550	446	481	e361	331	360	676
31	460	---	2,150	1,660	---	1,410	---	452	---	325	390	---
Mean	543	1,203	2,239	1,251	1,527	1,928	934	594	427	331	321	742
Max	827	2,810	4,990	1,900	1,830	3,740	1,360	911	468	417	390	1,160
Min	460	459	1,420	844	1,010	942	446	390	361	310	290	405
In.	0.50	1.08	2.07	1.16	1.32	1.79	0.84	0.55	0.38	0.31	0.30	0.66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2012[a], BY WATER YEAR (WY)

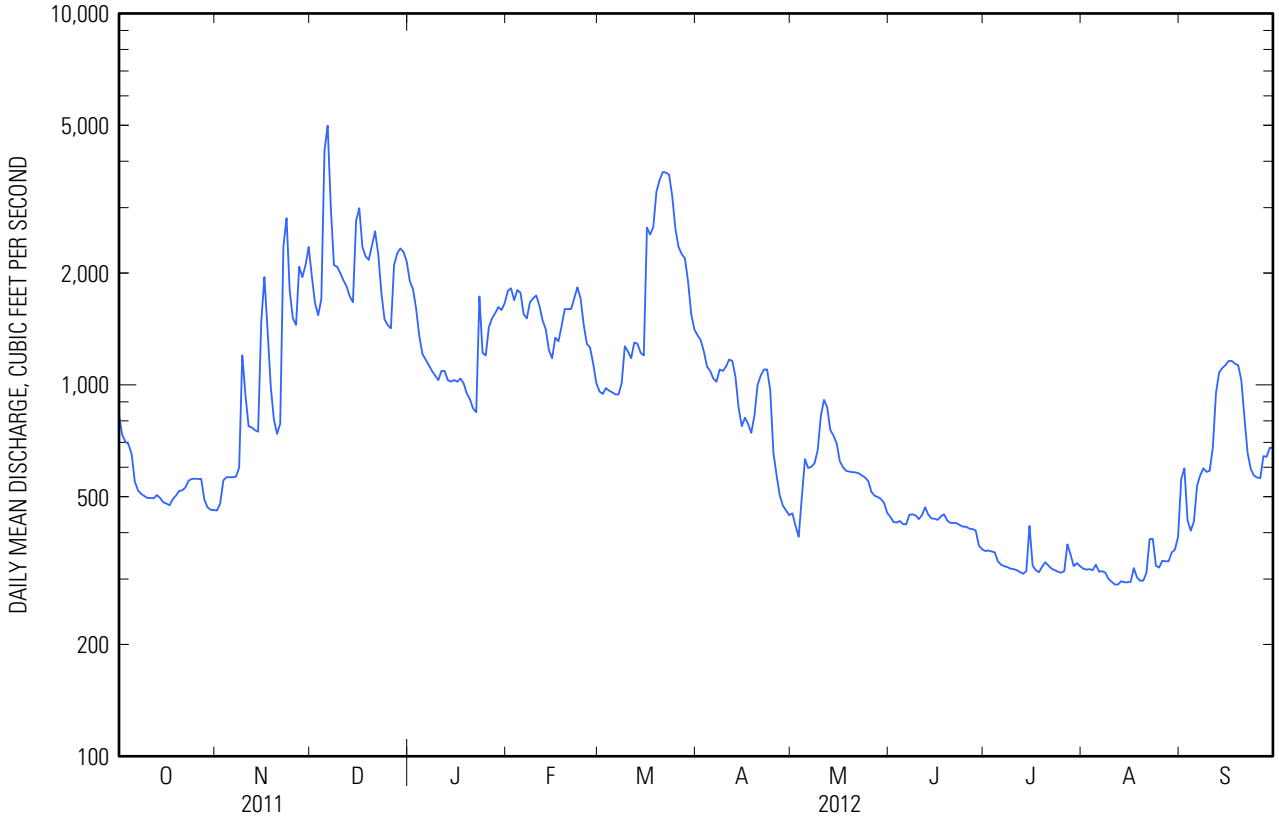
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	677	1,050	1,568	1,635	1,751	2,149	2,226	2,049	1,364	892	656	657
Max	2,474	4,153	5,065	3,890	4,938	5,494	5,142	5,816	4,063	3,673	3,232	2,071
(WY)	(2010)	(2010)	(1983)	(1950)	(1949)	(2008)	(2011)	(2011)	(2011)	(2002)	(1957)	(1985)
Min	259	315	335	309	376	564	676	375	427	321	288	268
(WY)	(1957)	(1954)	(1954)	(1956)	(1963)	(1981)	(2000)	(2001)	(2012)	(1954)	(1954)	(1954)

07063000 BLACK RIVER AT POPLAR BLUFF, MO—Continued

SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1949 - 2012[a]	
Annual mean	2,239		1,002		1,388	
Highest annual mean					2,858	1985
Lowest annual mean					564	1954
Highest daily mean	22,900	Apr 26	4,990	Dec 6	26,700	Dec 4, 1982[b]
Lowest daily mean	296	Sep 6	290	Aug 11[c]	186	Sep 25, 1966
Annual seven-day minimum	341	Sep 2	293	Aug 10	245	Sep 21, 1966
Maximum peak flow			5,440	Dec 6	37,200	Mar 19, 2008
Maximum peak stage			12.97	Dec 6	22.15	Mar 19, 2008
Instantaneous low flow			286	Aug 11[d]	180	Sep 25, 1966
Annual runoff (inches)	24.42		10.96		15.14	
10 percent exceeds	4,310		2,020		3,390	
50 percent exceeds	1,340		736		844	
90 percent exceeds	504		325		392	

[a] Period of Regulated Streamflow
[b] Also Mar 19, 2008
[c] Also Aug 12
[d] Also Aug 14



07063000 BLACK RIVER AT POPLAR BLUFF, MO—Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
OBSERVATION AT 0800
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1.60	0.44	4.79	4.49	4.13	1.99	3.05	0.53	0.36	---	-0.01	0.45
2	1.27	0.45	3.88	4.25	4.24	1.84	2.96	0.45	0.31	---	-0.02	1.01
3	1.16	0.71	3.52	3.85	3.94	2.02	2.78	0.35	0.31	---	-0.02	0.34
4	1.12	0.76	3.41	3.12	4.06	1.97	2.42	0.65	0.32	0.11	-0.03	0.25
5	1.08	0.76	9.40	2.67	4.25	1.95	2.32	1.07	0.30	0.04	0.03	0.22
6	0.73	0.76	12.80	2.53	3.61	1.91	2.24	0.90	0.27	0.01	-0.03	0.61
7	0.64	0.76	7.80	2.44	3.28	1.90	2.00	0.88	0.37	0.00	-0.06	0.72
8	0.61	0.77	4.87	2.32	3.85	1.95	2.32	0.93	0.38	-0.02	-0.03	0.80
9	0.58	2.95	4.92	2.26	3.91	2.83	2.31	0.91	0.38	-0.01	-0.07	0.77
10	0.56	1.95	4.76	2.17	4.04	2.73	2.35	1.42	0.34	-0.03	-0.09	0.78
11	0.55	1.35	4.51	2.29	3.87	2.55	2.52	1.71	0.33	-0.03	-0.11	0.83
12	0.55	1.33	4.32	2.35	3.39	2.86	2.51	1.73	0.44	-0.03	-0.11	1.73
13	0.57	1.30	4.05	2.16	3.28	2.89	2.37	1.28	0.37	-0.04	-0.09	2.17
14	0.56	1.26	3.89	2.10	2.80	2.67	1.76	1.20	0.34	-0.04	-0.09	2.28
15	0.52	2.23	5.96	2.16	2.48	2.56	1.46	1.15	0.34	0.58	-0.09	2.31
16	0.51	4.51	7.65	2.13	3.01	5.81	1.51	0.90	0.33	0.01	-0.09	2.41
17	0.49	3.36	5.61	2.14	2.88	6.11	1.49	0.83	0.35	-0.02	0.02	2.42
18	0.53	2.10	5.26	2.16	3.07	5.84	1.35	0.78	0.39	-0.04	-0.06	2.37
19	0.57	1.49	5.14	1.93	3.68	7.88	1.39	0.78	0.33	-0.01	-0.08	2.32
20	0.62	1.27	5.34	1.86	3.69	8.39	2.04	0.77	0.31	0.03	-0.09	2.23
21	0.62	1.28	6.27	1.72	3.68	8.99	2.18	0.75	0.30	0.01	-0.09	1.57
22	0.63	3.62	5.57	1.59	3.83	8.97	2.33	0.76	0.30	-0.01	0.17	1.01
23	0.72	7.40	4.34	4.73	4.27	8.85	2.34	0.73	0.29	-0.02	0.23	0.81
24	0.74	4.30	3.42	2.77	4.07	8.05	2.24	0.72	0.24	-0.03	0.01	0.74
25	0.75	3.45	3.30	2.38	3.41	6.47	1.14	0.70	0.28	-0.04	-0.01	0.71
26	0.73	3.18	3.19	3.16	2.86	5.64	0.90	0.58	0.26	-0.05	0.03	0.70
27	0.79	4.79	4.83	3.48	2.74	5.37	0.67	0.54	0.26	0.14	0.04	0.96
28	0.55	4.71	5.22	3.43	2.58	5.22	0.57	0.53	0.26	0.10	0.03	0.87
29	0.48	4.64	5.56	3.75	2.08	4.71	0.54	0.51	e0.18	0.00	0.09	1.04
30	0.46	5.80	5.43	3.66	---	3.65	0.50	0.49	---	0.02	0.11	1.04
31	0.45	---	5.25	3.72	---	3.21	---	0.39	---	0.00	0.13	---
Mean	0.70	2.46	5.30	2.77	3.48	4.44	1.89	0.84	---	---	-0.01	1.22
Max	1.60	7.40	12.80	4.73	4.27	8.99	3.05	1.73	---	---	0.23	2.42
Min	0.45	0.44	3.19	1.59	2.08	1.84	0.50	0.35	---	---	-0.11	0.22