07289730 BIG BLACK RIVER NEAR BENTONIA, MS

Big Black-Homochitto Basin
Lower Big Black Subbasin

LOCATION.--Lat 32°36′11″, long 90°21′50″ referenced to North American Datum of 1983, in NW ¼ NW ¼ NW ¼ sec.25, T.9 N., R.2 W., Madison County, MS, Hydrologic Unit 08060202, Choctaw Meridian, on downstream side of U.S. Highway 49 bridge, 2.5 mi south of Bentonia, and at mile 106.

DRAINAGE AREA.--2,340 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1995 to current year. Stage, 1947 to date in reports of U.S. Army Corps of Engineers. Measured discharge, June 1946 to date.

GAGE.--Water-stage recorder. Datum of gage is 130.18 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records good. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1983 reached a stage of 32.48 ft, discharge 86,000 ft^3/s. Peak stage of 34.70 ft on May 23, 1930, 3.1 mi upstream at Ragan Station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 13,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 25	1800	*16,500	*25.82

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 07289730, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/07289730.2011.pdf

07289730 BIG BLACK RIVER NEAR BENTONIA, MS—Continued

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	114	173	2,520	950	3,570	951	1,570	9,470	480	261	1,890	193
2	114	173	2,570	2,090	3,020	896	1,320	9,050	435	234	1,370	184
3	111	223	1,790	3,480	2,330	833	1,200	6,460	393	217	1,090	175
4	109	355	1,170	3,390	1,700	751	1,560	4,080	361	318	862	179
5	107	415	928	3,310	1,340	721	3,990	3,470	336	422	653	3,430
6	105	379	824	3,220	1,310	931	6,020	2,820	314	491	529	4,930
7	104	340	691	3,160	1,380	1,790	6,120	2,280	296	437	449	5,460
8	102	295	566	3,030	1,270	2,330	4,240	2,060	282	330	391	3,930
9	102	266	472	2,400	1,200	8,340	2,500	2,150	273	257	348	1,960
10	105	246	407	1,360	1,280	9,690	2,350	2,180	270	239	319	1,110
11	110	224	372	1,090	1,230	9,600	2,380	1,820	262	207	329	1,000
12	112	203	381	896	1,160	9,590	2,030	1,360	257	195	333	961
13	113	187	402	798	1,110	10,600	1,560	1,060	244	282	319	788
14	110	174	475	720	1,050	11,600	1,250	887	235	337	316	601
15	103	172	466	659	981	11,800	1,080	771	234	383	383	463
16	94	175	404	619	904	11,200	1,010	684	223	426	425	381
17	90	181	366	587	835	10,400	3,020	650	215	326	424	326
18	90	221	344	557	769	9,630	4,950	756	206	314	379	286
19	91	240	327	534	711	8,170	5,400	1,030	197	312	504	261
20	93	243	308	520	673	4,380	5,740	1,130	197	296	482	260
21	91	231	292	512	645	2,800	6,390	991	214	277	407	270
22	90	223	280	504	610	2,230	8,040	806	219	452	309	286
23	89	224	267	488	574	1,780	9,120	668	236	611	287	327
24	90	227	258	475	544	1,500	11,700	578	250	425	313	368
25	92	226	250	1,180	569	1,310	15,700	520	253	1,120	334	291
26	101	248	243	3,110	629	1,180	14,500	481	249	2,150	312	251
27	115	254	238	4,770	902	1,090	12,200	459	256	2,850	280	496
28	121	232	233	4,550	1,020	1,020	10,700	438	309	3,020	252	670
29	136	228	233	2,930	---	981	9,910	425	319	3,220	231	603
30	144	1,180	233	2,500	---	1,240	9,560	464	292	3,120	217	433
31	162	---	239	3,410	---	1,510	---	484	---	2,480	204	---
Total	3,310	8,158	18,549	57,799	33,316	140,844	167,110	60,482	8,307	26,009	14,941	30,873
Mean	107	272	598	1,864	1,190	4,543	5,570	1,951	277	839	482	1,029
Max	162	1,180	2,570	4,770	3,570	11,800	15,700	9,470	480	3,220	1,890	5,460
Min	89	172	233	475	544	721	1,010	425	197	195	204	175
Med	105	227	372	1,180	1,030	1,790	4,600	991	257	337	348	407
Cfsm	0.05	0.12	0.26	0.80	0.51	1.94	2.38	0.83	0.12	0.36	0.21	0.44
In.	0.05	0.13	0.29	0.92	0.53	2.24	2.66	0.96	0.13	0.41	0.24	0.49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2011, BY WATER YEAR (WY)

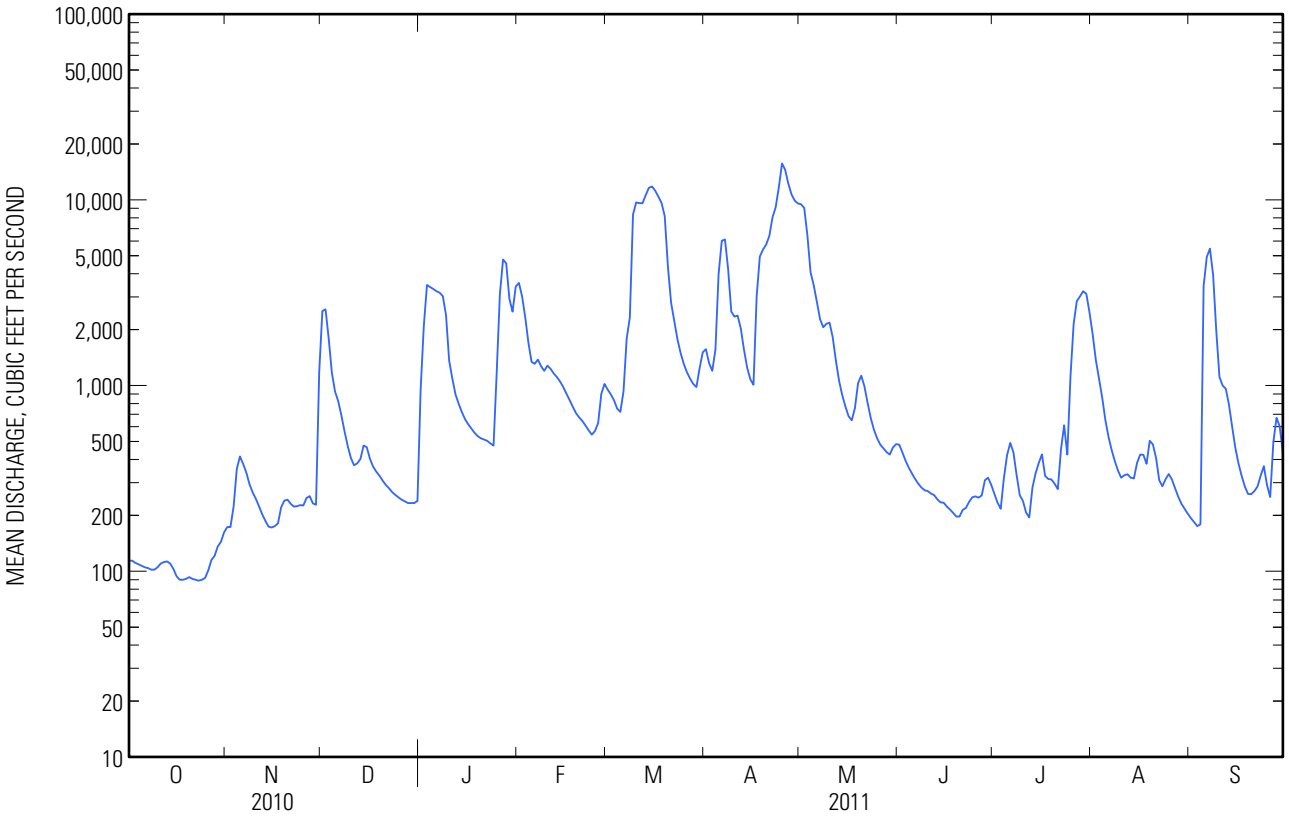
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,734	1,245	4,012	5,283	6,148	6,017	4,442	2,577	1,670	1,198	746	1,051
Max	13,750	5,142	12,530	10,560	11,940	11,520	13,970	8,072	8,282	6,156	2,565	3,911
(WY)	(2010)	(2003)	(2002)	(1999)	(2006)	(2001)	(2000)	(2009)	(1997)	(2004)	(2008)	(2005)
Min	107	196	346	596	595	1,423	644	340	236	166	121	113
(WY)	(2011)	(2008)	(2008)	(2008)	(2000)	(2007)	(2007)	(2007)	(2007)	(2000)	(2000)	(2000)

07289730 BIG BLACK RIVER NEAR BENTONIA, MS—Continued

SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1996 - 2011	
Annual total	732,345		569,698			
Annual mean	2,006		1,561		2,997	
Highest annual mean					4,263	2003
Lowest annual mean					1,561	2011
Highest daily mean	12,400	Feb 9	15,700	Apr 25	47,700	Apr 7, 2000
Lowest daily mean	89	Oct 23	89	Oct 23	80	Sep 6, 2000
Annual seven-day minimum	91	Oct 17	91	Oct 17	83	Sep 3, 2000
Maximum peak flow			16,500	Apr 25	86,000	May 23, 1983
Maximum peak stage			25.82	Apr 25	34.70	May 23, 1930
Instantaneous low flow			88	Oct 17[a]	79	Sep 6, 2000
Annual runoff (cfsm)	0.857		0.667		1.28	
Annual runoff (inches)	11.64		9.06		17.40	
10 percent exceeds	6,870		4,030		9,420	
50 percent exceeds	513		484		938	
90 percent exceeds	133		175		216	

[a] Also Oct. 22,23,25,26.

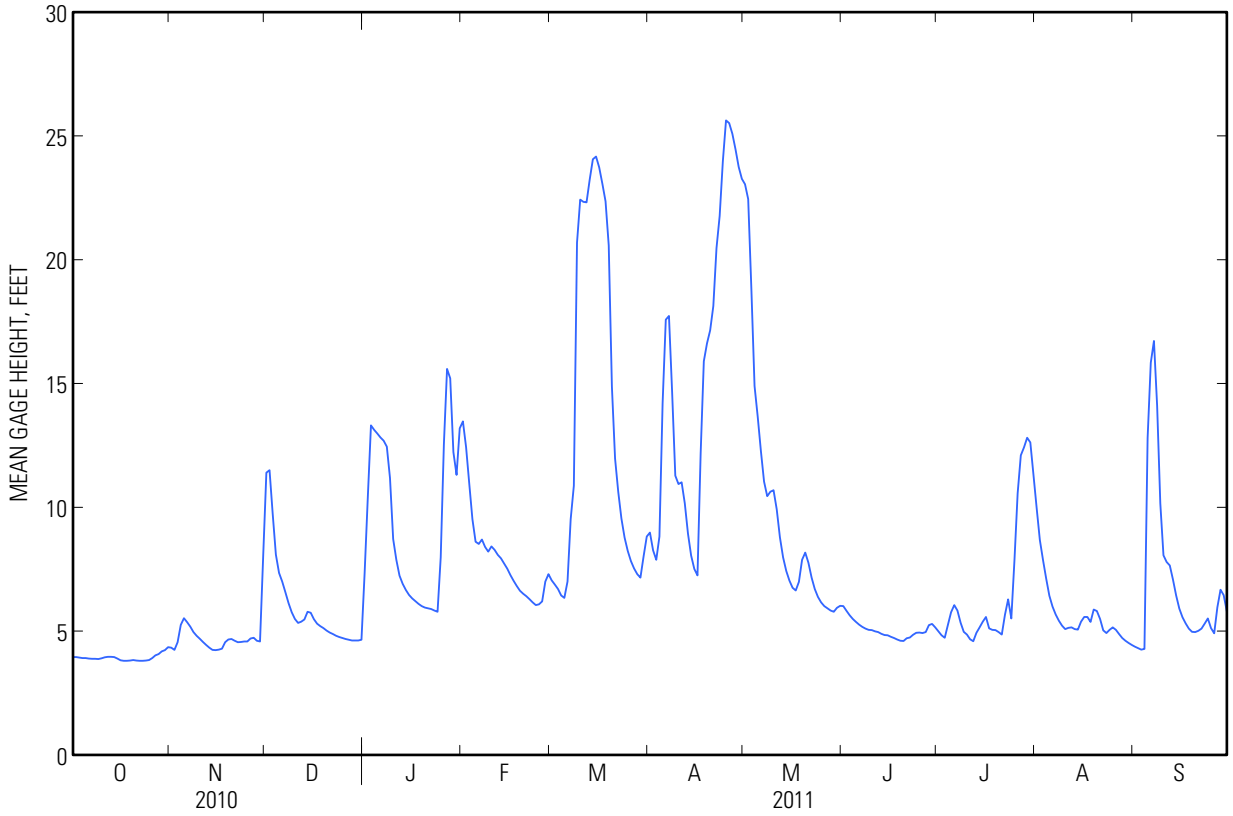


07289730 BIG BLACK RIVER NEAR BENTONIA, MS—Continued

GAGE HEIGHT, 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	3.95	4.33	11.40	7.35	13.47	7.05	8.98	23.05	6.01	4.99	9.97	4.37
2	3.95	4.24	11.50	10.40	12.43	6.88	8.26	22.45	5.82	4.83	8.68	4.31
3	3.93	4.55	9.73	13.31	10.96	6.70	7.88	18.81	5.64	4.73	7.87	4.25
4	3.91	5.25	8.09	13.13	9.52	6.44	8.82	14.90	5.49	5.25	7.12	4.28
5	3.91	5.52	7.35	12.98	8.61	6.34	14.20	13.66	5.37	5.76	6.43	12.80
6	3.89	5.36	7.00	12.82	8.52	7.00	17.58	12.28	5.26	6.05	5.99	15.84
7	3.88	5.18	6.57	12.69	8.70	9.52	17.73	11.04	5.17	5.83	5.67	16.72
8	3.88	4.96	6.13	12.45	8.40	10.87	14.65	10.45	5.10	5.34	5.42	14.10
9	3.87	4.81	5.76	11.18	8.21	20.69	11.28	10.63	5.05	4.97	5.22	10.16
10	3.90	4.69	5.49	8.72	8.42	22.43	10.94	10.69	5.04	4.86	5.08	8.06
11	3.94	4.56	5.33	7.88	8.28	22.34	11.01	9.92	4.99	4.67	5.13	7.79
12	3.96	4.44	5.38	7.24	8.08	22.32	10.16	8.79	4.96	4.59	5.15	7.65
13	3.96	4.33	5.47	6.91	7.94	23.24	8.94	7.98	4.89	4.93	5.08	7.08
14	3.95	4.24	5.78	6.66	7.73	24.06	8.05	7.43	4.84	5.15	5.06	6.44
15	3.89	4.23	5.74	6.46	7.52	24.17	7.51	7.04	4.83	5.38	5.38	5.91
16	3.82	4.25	5.48	6.32	7.26	23.73	7.25	6.75	4.77	5.57	5.57	5.56
17	3.80	4.29	5.30	6.21	7.03	23.07	12.18	6.64	4.72	5.11	5.57	5.31
18	3.80	4.55	5.20	6.10	6.82	22.36	15.90	6.99	4.66	5.05	5.37	5.10
19	3.81	4.66	5.12	6.01	6.63	20.58	16.62	7.88	4.61	5.04	5.87	4.97
20	3.83	4.68	5.02	5.95	6.51	14.88	17.15	8.17	4.60	4.96	5.81	4.96
21	3.81	4.61	4.94	5.92	6.41	11.97	18.13	7.76	4.71	4.86	5.49	5.01
22	3.80	4.55	4.88	5.89	6.29	10.63	20.47	7.16	4.74	5.66	5.03	5.10
23	3.80	4.56	4.81	5.83	6.16	9.55	21.77	6.70	4.85	6.28	4.92	5.30
24	3.81	4.58	4.76	5.78	6.05	8.78	23.98	6.38	4.93	5.51	5.05	5.51
25	3.83	4.58	4.72	7.98	6.08	8.24	25.63	6.16	4.94	7.88	5.15	5.12
26	3.91	4.70	4.68	12.55	6.20	7.83	25.52	6.01	4.92	10.57	5.05	4.91
27	4.02	4.73	4.65	15.59	7.00	7.53	25.09	5.92	4.96	12.10	4.88	5.96
28	4.07	4.61	4.62	15.21	7.30	7.30	24.46	5.83	5.24	12.42	4.72	6.67
29	4.18	4.58	4.62	12.23	---	7.16	23.75	5.78	5.29	12.81	4.61	6.45
30	4.23	8.05	4.62	11.31	---	8.02	23.27	5.94	5.15	12.62	4.52	5.79
31	4.35	---	4.65	13.19	---	8.82	---	6.02	---	11.30	4.44	---
Mean	3.92	4.76	5.96	9.43	7.95	13.56	15.57	9.52	5.05	6.62	5.65	7.05
Max	4.35	8.05	11.50	15.59	13.47	24.17	25.63	23.05	6.01	12.81	9.97	16.72
Min	3.80	4.23	4.62	5.78	6.05	6.34	7.25	5.78	4.60	4.59	4.44	4.25

07289730 BIG BLACK RIVER NEAR BENTONIA, MS—Continued



07289730 BIG BLACK RIVER NEAR BENTONIA, MS—Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

[NTRU, nephelometric turbidity ratio unit; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter]

Date	Sample start time	Discharge, instantaneous, ft³/s (00061)	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)	Temperature, water, °C (00010)	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Gage height, ft (00065)	Stream width, ft (00004)	Suspended sediment concentration, mg/L (80154)
01-24-2011	**1405**	460	101	8.7	31	5.77	169	39
04-28-2011	**1640**	10,500	51	21.7	150	24.38	503	290
06-06-2011	**1400**	316	33	32.6	25	5.27	166	50
07-13-2011	**1020**	293	132	32.2	56	4.96	170	439
08-31-2011	**1445**	214	134	30.2	52	4.44	162	88