

03061500 BUFFALO CREEK AT BARRACKVILLE, WV

Monongahela Basin
Upper Monongahela Subbasin

LOCATION.--Lat 39°30'14", long 80°10'20" referenced to North American Datum of 1927, Marion County, WV, Hydrologic Unit 05020003, on right downstream concrete and steel beam retaining wall 50 ft above highway bridge at Barrackville, 300 ft upstream from Finchs Run, and at mile 4.4.

DRAINAGE AREA.--116 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1907 to December 1908, May 1915 to May 1924, and August 1932 to current year (daily discharge and peaks).

REVISED RECORDS.--WSP 783: 1917(M). WSP 1335: 1916(M), 1918-20(M), 1921, 1922(M), 1924(M), 1933(M), 1940. WDR WV-97-1: Drainage area. WDR WV-04-1: 2001(M), 2002(M), 2003(M). WDR-US-2009: 1950(M).

GAGE.--Water-stage recorder with satellite telemeter. Datum of gage is 883.63 ft above NAVD88. Prior to Oct. 1, 2000, water-stage recorder at site 0.2 mi upstream at same datum. Prior to Dec. 6, 1940, nonrecording gage 0.2 mi upstream. Prior to June 4, 1943, at datum 1.98 ft higher.

REMARKS.--Records good except for period of estimated daily discharges, which are poor. Flow from 5.2 mi² is partially controlled, but not diverted, by three floodwater-detention reservoirs. Some additional regulation at low flow from mine pumpage above station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1912 reached a stage of about 18 ft, at site 0.2 mi upstream at present datum, discharge, 11,600 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 23	0330	*6,350	*11.78
Feb 29	2100	4,090	9.79

Minimum discharge, 3.3 ft³/s, Sept. 1, gage height, 1.59 ft.

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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	122	248	347	266	186	1,560	370	66	29	7.8	13	3.5
2	273	185	250	230	158	538	272	967	56	7.4	11	27
3	513	149	191	193	133	552	212	537	38	6.9	9.2	48
4	366	126	158	158	121	395	187	225	28	6.3	8.3	18
5	240	105	136	145	120	296	e141	433	24	5.9	8.0	11
6	170	90	194	132	106	232	e132	501	21	7.4	16	9.4
7	129	81	1,150	122	98	199	e124	264	19	6.6	26	7.7
8	104	74	1,080	109	93	188	e112	560	18	5.9	14	8.3
9	87	69	487	98	93	467	e106	680	16	5.7	125	30
10	77	73	319	93	85	341	e94	375	15	5.1	103	21
11	71	67	232	104	90	265	e86	230	13	4.6	57	12
12	177	59	184	388	84	241	e80	158	17	4.2	29	9.2
13	766	53	153	612	84	308	e73	123	25	4.3	18	7.7
14	1,370	49	143	365	84	267	e66	152	18	4.9	13	6.5
15	503	145	150	244	98	233	e61	133	13	7.5	11	5.8
16	274	905	175	190	114	210	e56	107	12	14	9.1	5.2
17	245	886	160	1,110	147	187	e54	87	10	11	7.7	4.9
18	216	379	144	957	142	167	e52	73	14	9.3	7.5	45
19	174	241	129	435	127	860	e51	64	17	80	7.0	96
20	323	185	129	297	113	640	e65	54	14	95	6.2	40
21	422	262	137	309	101	380	65	48	12	44	5.7	22
22	288	709	165	270	100	281	69	52	11	27	5.2	14
23	195	3,460	242	369	100	229	85	113	9.3	18	4.9	11
24	150	801	254	426	97	211	101	63	7.7	14	4.8	9.3
25	139	438	210	297	85	186	81	47	7.8	14	4.7	8.1
26	156	305	175	380	74	162	78	39	7.2	31	4.3	7.5
27	1,600	239	787	1,270	69	140	80	34	6.5	217	4.1	11
28	931	211	1,090	653	65	138	70	30	6.1	78	4.2	28
29	578	548	500	389	1,220	141	68	33	5.9	39	4.2	24
30	553	615	332	284	---	125	65	33	6.7	25	3.9	15
31	357	---	298	222	---	473	---	28	---	17	3.6	---
Total	11,569	11,757	10,101	11,117	4,187	10,612	3,156	6,309	497.2	823.8	548.6	566.1
Mean	373	392	326	359	144	342	105	204	16.6	26.6	17.7	18.9
Max	1,600	3,460	1,150	1,270	1,220	1,560	370	967	56	217	125	96
Min	71	49	129	93	65	125	51	28	5.9	4.2	3.6	3.5
Cfsm	3.22	3.38	2.81	3.09	1.24	2.95	0.91	1.75	0.14	0.23	0.15	0.16
In.	3.71	3.77	3.24	3.57	1.34	3.40	1.01	2.02	0.16	0.26	0.18	0.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1907 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	50.6	115	217	283	300	352	252	199	108	65.3	54.5	47.1
Max	373	530	696	944	690	795	664	543	476	381	357	285
(WY)	(2012)	(1986)	(1991)	(1937)	(1994)	(1963)	(2011)	(1968)	(1981)	(1978)	(1980)	(1990)
Min	0.00	0.00	9.53	25.2	32.8	71.9	53.3	17.8	6.69	2.44	2.24	0.01
(WY)	(1909)	(1909)	(1999)	(1967)	(1934)	(1969)	(1971)	(1934)	(1936)	(1966)	(1938)	(1908)

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SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1907 - 2012	
Annual total	100,052.2		71,243.7			
Annual mean	274		195		169	
Highest annual mean					280	1994
Lowest annual mean					80.3	1969
Highest daily mean	3,460	Nov 23	3,460	Nov 23	5,710	Apr 12, 1948
Lowest daily mean	9.2	Jul 18	3.5	Sep 1	0.00	Aug 13, 1908 ^a
Annual seven-day minimum	15	Jul 13	4.0	Aug 26	0.00	Sep 4, 1908
Maximum peak flow			6,350	Nov 23	10,400	Feb 19, 2000
Maximum peak stage			11.78	Nov 23	^b 16.76	Feb 19, 2000
Instantaneous low flow			3.3	Sep 1	0.00	Aug 1, 1908 ^c
Annual runoff (cfsm)	2.36		1.68		1.46	
Annual runoff (inches)	32.09		22.85		19.82	
10 percent exceeds	717		491		403	
50 percent exceeds	150		100		60	
90 percent exceeds	25		7.5		5.8	

^a Also Aug. 14-17, Sept. 4-28, Sept. 30 to Dec. 6, 1908.

^b From floodmarks.

^c Greater part of period August to December 1908.

