Water-Data Report 2011

03182500 GREENBRIER RIVER AT BUCKEYE, WV

Kanawha Basin
Greenbrier Subbasin

LOCATION.--Lat 38°11′09″, long 80°07′51″ referenced to North American Datum of 1927, Pocahontas County, WV, Hydrologic Unit 05050003, on right bank at upstream side of highway bridge at Buckeye, 1,000 ft upstream from Swago Creek, 3.5 mi downstream from Knapp Creek, and at mile 105.1.

DRAINAGE AREA.--540 mi^2, includes that of Swago Creek.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1929 to current year (daily discharge and peaks).

REVISED RECORDS.--WSP 758: 1933. WSP 953: 1930-32, 1934-35(M), 1936, 1937(M), 1938-39, 1940(M). WSP 1275: 1936.

GAGE.--Water-stage recorder with satellite telemeter. Datum of gage is 2,085.69 ft above NAVD 88 (2,085.95 ft above NGVD 29, corrected). Prior to Feb. 27, 1939, nonrecording gage at same site and datum.

REMARKS.--Records good except for periods of estimated daily discharges (ice effect), which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 11,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 1	1330	11,300	10.00
Mar 6	2030	14,800	11.24
Mar 11	0230	13,900	10.91
Apr 13	0230	*22,700	*13.67
Apr 28	1100	21,300	13.26

Minimum discharge, 19 ft^3/s, Aug. 5, 6, gage height, 1.81 ft.

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 03182500, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/03182500.2011.pdf

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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	1,800	125	6,480	353	300	5,620	865	1,930	536	88	26	24
2	534	117	3,920	1,200	1,490	3,120	869	1,400	424	70	23	28
3	294	113	1,810	2,160	3,040	1,920	910	1,080	342	60	23	33
4	213	146	1,140	1,510	1,750	1,320	1,070	998	285	58	22	32
5	218	462	834	1,160	1,270	1,030	2,930	942	250	71	20	66
6	189	502	630	877	1,050	7,040	3,980	857	226	253	20	674
7	174	391	e490	745	850	7,070	2,580	799	195	149	23	1,730
8	234	318	e390	588	756	3,310	1,790	724	171	104	28	804
9	191	280	e280	409	580	2,410	1,710	624	157	98	51	421
10	152	246	e300	e320	467	8,420	1,940	524	146	122	53	268
11	126	209	e330	e270	424	9,870	1,810	524	139	107	40	188
12	108	179	e340	e230	377	4,120	3,490	604	155	82	33	145
13	96	157	e260	e200	465	2,550	13,500	678	184	69	28	125
14	95	141	e220	e240	468	1,840	4,660	734	141	60	39	107
15	106	135	e200	e255	488	1,470	2,580	834	111	56	102	91
16	144	140	e180	e260	453	1,310	3,010	778	95	51	74	83
17	164	188	e200	e255	492	1,150	6,470	898	89	48	53	76
18	162	328	e280	e250	1,190	1,030	3,500	4,140	90	45	41	70
19	138	308	e330	e260	2,710	1,220	2,220	4,360	120	43	38	66
20	125	284	e310	e270	1,760	1,380	1,590	2,780	227	42	35	66
21	114	259	e280	e230	1,290	1,280	1,170	1,890	326	40	37	67
22	103	232	e250	e170	2,000	2,650	947	1,350	205	37	41	70
23	94	208	e230	206	1,800	3,210	2,950	1,350	164	36	36	86
24	88	191	e220	249	1,310	4,770	3,310	1,190	144	34	36	80
25	84	177	e200	217	2,110	4,200	2,370	1,110	118	34	31	77
26	81	167	e185	262	3,380	2,530	1,890	908	100	32	30	88
27	116	165	e170	259	2,260	1,770	2,150	2,730	96	48	29	85
28	202	173	e160	251	2,100	1,300	12,600	1,890	101	39	28	75
29	206	149	e180	239	---	1,020	6,290	1,320	99	36	27	68
30	155	204	e190	243	---	864	3,090	966	118	33	26	63
31	135	---	e200	269	---	851	---	708	---	29	24	---
Total	6,641	6,694	21,189	14,407	36,630	91,645	98,241	41,620	5,554	2,074	1,117	5,856
Mean	214	223	684	465	1,308	2,956	3,275	1,343	185	66.9	36.0	195
Max	1,800	502	6,480	2,160	3,380	9,870	13,500	4,360	536	253	102	1,730
Min	81	113	160	170	300	851	865	524	89	29	20	24
Cfsm	0.40	0.41	1.27	0.86	2.42	5.47	6.06	2.49	0.34	0.12	0.07	0.36
In.	0.46	0.46	1.46	0.99	2.52	6.31	6.77	2.87	0.38	0.14	0.08	0.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	342	661	1,085	1,294	1,462	1,969	1,420	1,135	528	330	298	218
Max	2,626	3,602	2,811	3,542	3,431	4,672	3,275	3,219	2,313	1,333	2,000	1,380
(WY)	(1977)	(1986)	(1973)	(1996)	(1994)	(1963)	(2011)	(1996)	(2003)	(1972)	(1942)	(2003)
Min	11.8	20.7	115	101	273	536	493	224	67.9	27.8	21.5	13.5
(WY)	(1931)	(1931)	(1931)	(1981)	(1934)	(2006)	(2010)	(1930)	(1991)	(1930)	(1930)	(1930)

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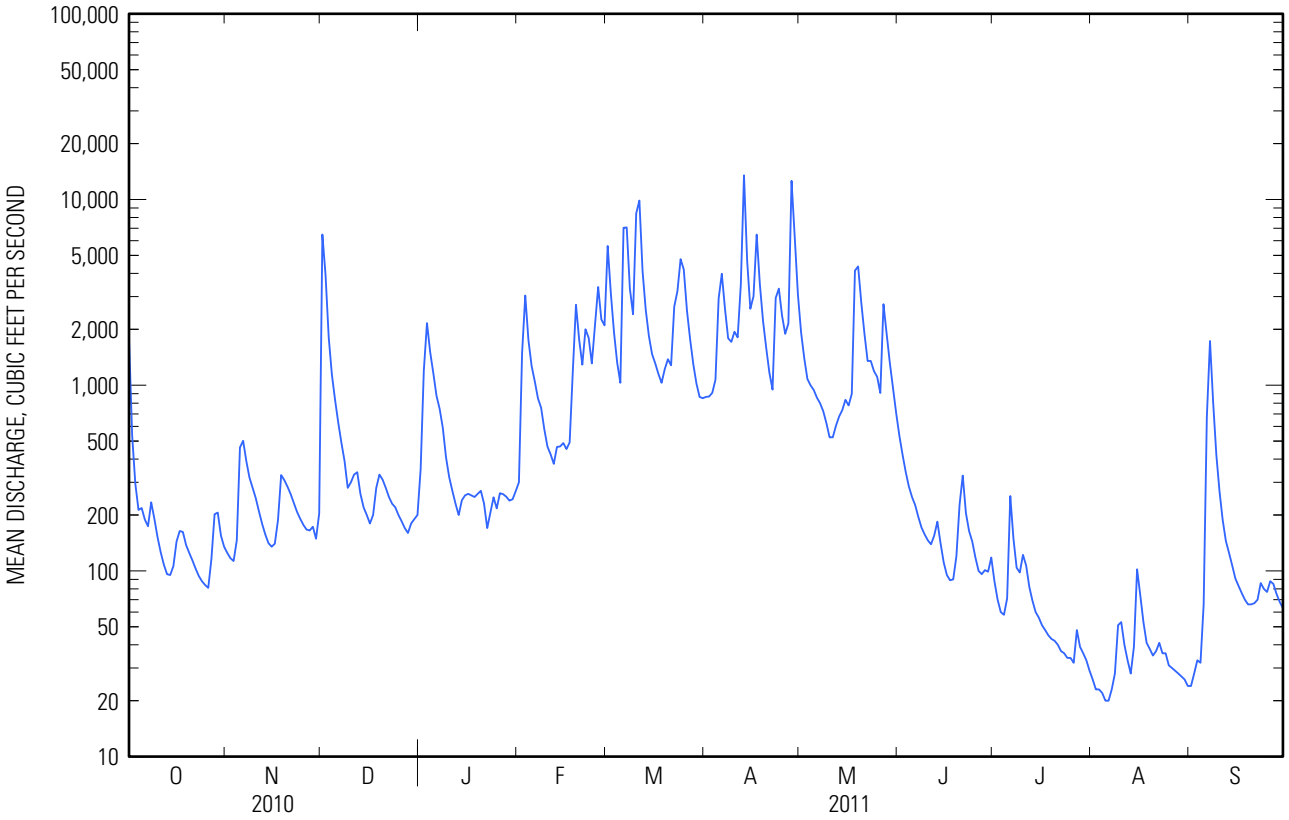
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1930 - 2011	
Annual total	286,125		331,668			
Annual mean	784		909		893	
Highest annual mean					1,573	2003
Lowest annual mean					492	1941
Highest daily mean	26,100	Jan 25	13,500	Apr 13	44,400	Nov 5, 1985
Lowest daily mean	26	Sep 25	20	Aug 5 [a]	5.2	Aug 13, 1930
Annual seven-day minimum	28	Sep 9	22	Aug 1	7.3	Sep 28, 1930
Maximum peak flow			22,700	Apr 13	[b]82,000	Nov 5, 1985
Maximum peak stage			13.67	Apr 13	[c]23.20	Nov 5, 1985
Instantaneous low flow			19	Aug 5 [a]	3.8	Aug 13, 1930
Annual runoff (cfsm)	1.45		1.68		1.65	
Annual runoff (inches)	19.71		22.85		22.47	
10 percent exceeds	1,800		2,560		2,100	
50 percent exceeds	254		250		420	
90 percent exceeds	50		40		55	

[a] Also Aug. 6.
[b] From rating curve extended above 33,000 ft³/s on basis of slope-area measurement of peak flow, highest since 1896.
[c] From floodmarks.