Water-Data Report 2011

03053500 BUCKHANNON RIVER AT HALL, WV

Monongahela Basin
Tygart Valley Subbasin

LOCATION.--Lat 39°03′04″, long 80°06′53″ referenced to North American Datum of 1927, Barbour County, WV, Hydrologic Unit 05020001, on right bank 0.2 mi upstream from highway bridge at Hall, 1.0 mi upstream from Pecks Run, and at mile 7.9.

DRAINAGE AREA.--277 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1915 to current year (daily discharge and peaks). Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 783: 1918(M). WDR-US-2006: 2002-05 (P).

GAGE.--Water-stage recorder with satellite telemeter. Datum of gage is 1,368.55 ft above NAVD 88 (VERTCON conversion of 1,369.15 ft above NGVD 29). Prior to June 9, 1939, nonrecording gage at site 500 ft downstream at present datum.

REMARKS.--Records good except those for periods of estimated daily discharges (ice effect, no gage-height record), which are poor. Some regulation at low flow from mine pumpage above station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 6, 1908, reached a stage of 13.8 ft (at site 0.2 mi downstream at datum 4.12 ft lower), discharge, 9,800 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 2	2100	4,750	9.27
Mar 1	1030	6,210	10.35
Mar 11	0930	5,120	9.55
Mar 24	2300	4,540	9.11
Apr 13	1230	*7,200	*11.08

Minimum discharge, 20 ft^3/s, Sept. 4, gage height, 3.99 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 03053500, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/03053500.2011.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	234	160	2,780	1,050	882	5,700	516	988	289	89	79	27
2	216	136	3,120	2,160	3,510	3,070	660	746	229	69	56	23
3	111	115	1,470	1,730	3,410	1,490	849	583	182	57	44	21
4	167	136	896	1,060	1,590	993	861	596	144	62	35	23
5	226	456	659	745	1,070	746	2,110	577	126	285	29	595
6	292	557	528	559	1,140	1,460	3,520	480	142	357	34	1,290
7	666	454	443	456	976	2,430	1,910	432	128	218	51	1,870
8	524	362	380	386	843	1,790	1,260	387	101	206	153	860
9	329	307	e360	310	693	2,100	1,070	340	87	598	287	451
10	228	260	e330	e290	584	3,740	908	288	203	386	266	293
11	169	217	323	e270	549	4,790	800	356	160	243	183	217
12	132	186	462	e260	517	2,890	1,370	669	153	185	117	164
13	106	160	1,520	e245	482	1,690	6,690	641	224	164	85	131
14	93	144	1,120	e235	421	1,210	4,100	551	148	250	67	107
15	109	140	707	e225	412	920	1,810	441	104	313	125	118
16	148	179	549	217	388	782	1,340	391	83	195	133	195
17	145	578	e480	e210	393	663	1,720	691	76	138	117	179
18	126	636	443	211	523	548	1,330	2,200	112	107	79	122
19	115	483	385	573	931	620	1,380	2,210	112	97	54	95
20	111	384	331	1,100	778	919	1,600	1,570	244	120	40	94
21	98	314	318	864	626	924	999	1,280	373	116	38	132
22	86	265	268	630	1,560	1,350	744	920	312	78	170	164
23	77	233	262	531	1,480	2,600	986	671	257	56	153	134
24	68	221	256	504	1,080	3,110	2,300	569	190	56	81	e150
25	62	212	236	392	2,250	3,620	2,090	778	147	94	63	e140
26	64	301	e225	479	2,490	1,850	1,540	565	121	468	111	e130
27	134	716	e220	1,030	1,520	1,210	1,180	580	105	267	74	e400
28	425	612	e220	934	2,240	865	1,780	821	156	141	61	e570
29	302	463	e215	705	---	663	2,210	929	155	94	45	e340
30	229	426	e220	682	---	541	1,440	579	121	67	36	e270
31	189	---	390	739	---	502	---	394	---	64	30	---
Total	5,981	9,813	20,116	19,782	33,338	55,786	51,073	23,223	4,984	5,640	2,896	9,305
Mean	193	327	649	638	1,191	1,800	1,702	749	166	182	93.4	310
Max	666	716	3,120	2,160	3,510	5,700	6,690	2,210	373	598	287	1,870
Min	62	115	215	210	388	502	516	288	76	56	29	21
Cfsm	0.70	1.18	2.34	2.30	4.30	6.50	6.15	2.70	0.60	0.66	0.34	1.12
In.	0.80	1.32	2.70	2.66	4.48	7.49	6.86	3.12	0.67	0.76	0.39	1.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	258	506	822	927	1,001	1,114	845	674	391	291	254	171
Max	1,272	2,399	1,942	1,862	1,993	2,474	1,736	2,357	1,435	1,302	976	914
(WY)	(1938)	(1986)	(1973)	(1937)	(1994)	(1917)	(1973)	(1996)	(1950)	(1958)	(1956)	(2003)
Min	0.29	1.03	67.1	169	217	413	299	117	30.6	15.9	3.56	0.55
(WY)	(1931)	(1931)	(1931)	(1977)	(1978)	(2006)	(1971)	(1964)	(1965)	(1966)	(1930)	(1930)

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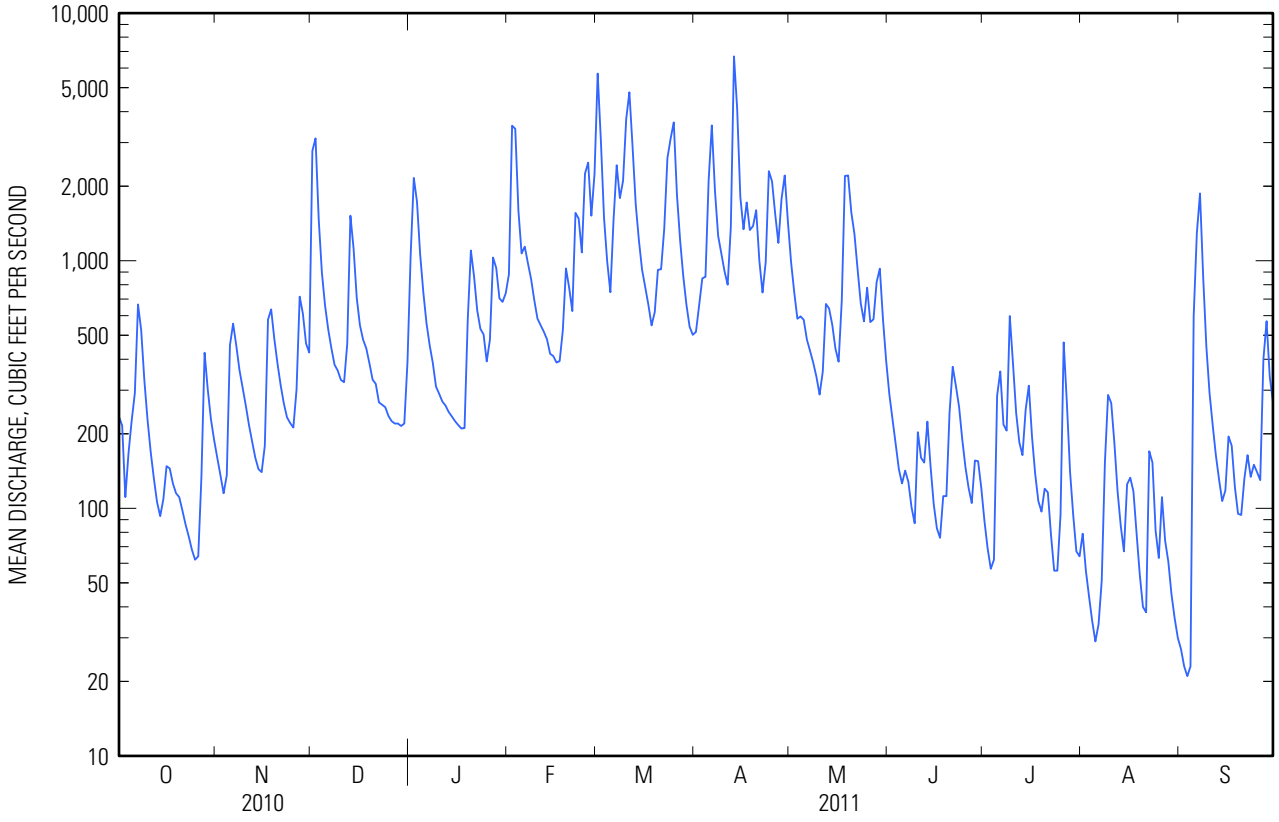
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1915 - 2011	
Annual total	179,307.1		241,937			
Annual mean	491		663		603	
Highest annual mean					915	1927
Lowest annual mean					354	1966
Highest daily mean	4,140	Mar 13	6,690	Apr 13	14,500	Nov 5, 1985
Lowest daily mean	5.4	Sep 26	21	Sep 3	0.20	Oct 21, 1930 [a]
Annual seven-day minimum	10	Sep 21	29	Aug 29	0.21	Oct 21, 1930
Maximum peak flow			7,200	Apr 13	[b] 15,000	Nov 5, 1985
Maximum peak stage			11.08	Apr 13	[c] 16.88	Nov 5, 1985
Instantaneous low flow			20	Sep 4	0.20	Oct 23, 1930 [d]
Annual runoff (cfsm)	1.77		2.39		2.18	
Annual runoff (inches)	24.08		32.49		29.60	
10 percent exceeds	1,130		1,640		1,420	
50 percent exceeds	311		357		320	
90 percent exceeds	36		82		36	

[a] Also Oct. 22, 23, 25-27, 29, 1930.
[b] From rating curve extended above 13,000 ft³/s on basis of slope-area measurement.
[c] From floodmarks.
[d] Also Oct. 27, 1930.