Water-Data Report 2011

03051000 TYGART VALLEY RIVER AT BELINGTON, WV

Monongahela Basin
Tygart Valley Subbasin

LOCATION.--Lat 39°01′45″, long 79°56′10″ referenced to North American Datum of 1927, Barbour County, WV, Hydrologic Unit 05020001, on left bank opposite mouth of Mill Creek, 0.2 mi downstream from highway bridge at Belington, and at mile 62.4.

DRAINAGE AREA.--406 mi^2, excluding that of Mill Creek.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1907 to current year (daily discharge and peaks). Prior to October 1960, published as Tygart River at Belington.

REVISED RECORDS.--WSP 953: 1933(M), 1941(M). WSP 1335: 1912, 1914-15, 1916(M), 1921-22(M), 1925(M), 1928, 1933. WSP 1385: 1909(M), 1913-15(M), 1917-18, 1924(M), 1928(M), 1932, 1934, 1936, 1938-39, 1948-49. WDR WV-97-1: Drainage area. WDR-US-2009: 1926(M).

GAGE.--Water-stage recorder with satellite telemeter. Datum of gage is 1,679.62 ft above NAVD 88 (1,680.35 ft above NGVD 29, 1,679.49 ft above COE 12). Prior to Apr. 25, 1939, nonrecording gage at site 0.2 mi upstream at same datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1888, reached a stage of 21.7 ft, from floodmarks at former site, discharge, 21,200 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,200 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 2	1700	6,990	11.50
Mar 1	1100	7,290	11.74
Mar 11	1300	7,000	11.51
Mar 25	0000	6,920	11.44
Apr 13	1230	*9,850	*13.69
Apr 29	1030	6,850	11.38
May 18	0600	6,920	11.44

Minimum discharge, 26 ft^3/s, Aug. 7, gage height, 2.30 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 03051000, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/03051000.2011.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	1,290	149	3,430	1,480	891	7,080	649	1,390	269	102	62	50
2	523	126	4,970	3,910	5,290	4,130	830	979	225	82	49	54
3	282	117	1,810	2,680	5,350	1,870	1,310	757	181	74	42	57
4	354	155	1,060	1,480	2,220	1,200	1,510	743	150	162	37	57
5	464	1,060	749	998	1,500	904	3,180	853	134	681	31	206
6	500	989	584	695	2,120	1,240	4,200	801	122	547	28	1,360
7	887	659	483	572	1,650	2,850	2,290	723	118	274	99	3,430
8	606	474	420	477	1,260	2,280	1,510	624	109	635	191	1,260
9	378	381	e396	317	917	2,950	1,630	538	97	1,140	131	538
10	264	314	e372	e286	773	6,080	1,630	466	165	492	169	329
11	197	263	e360	e268	601	6,690	1,420	502	159	285	138	235
12	156	225	519	e255	582	3,790	2,120	661	146	225	96	175
13	126	197	1,340	e242	562	2,170	9,470	758	138	187	77	139
14	120	181	1,000	e231	579	1,610	6,370	738	127	183	63	117
15	146	174	623	e222	656	1,210	2,270	630	99	194	58	117
16	187	203	535	e212	639	1,050	1,720	614	85	159	65	148
17	237	367	466	e206	788	934	4,110	1,920	98	116	56	149
18	208	452	e436	e207	1,570	822	2,850	6,310	249	93	52	117
19	187	406	e391	540	2,190	1,330	1,990	4,020	215	98	48	93
20	167	340	e344	1,150	1,380	1,870	2,200	2,320	192	133	42	92
21	142	293	e314	876	1,080	1,650	1,300	1,720	371	94	37	103
22	119	257	e276	572	2,860	3,360	932	1,240	303	95	63	118
23	105	235	e255	518	2,600	4,040	1,930	869	236	199	63	122
24	96	223	e248	428	1,670	4,990	4,110	694	173	379	60	138
25	89	220	e231	420	2,980	5,720	3,050	770	137	1,330	70	161
26	88	364	e218	421	3,530	2,450	2,180	609	116	464	140	143
27	140	711	e214	378	2,170	1,520	2,150	589	103	282	110	137
28	271	514	e215	470	2,920	1,080	3,990	1,520	176	173	66	182
29	261	386	e208	451	---	813	5,980	1,040	227	126	52	170
30	212	359	e213	477	---	676	2,400	512	147	100	40	150
31	176	---	403	549	---	621	---	349	---	79	37	---
Total	8,978	10,794	23,083	21,988	51,328	78,980	81,281	36,259	5,067	9,183	2,272	10,147
Mean	290	360	745	709	1,833	2,548	2,709	1,170	169	296	73.3	338
Max	1,290	1,060	4,970	3,910	5,350	7,080	9,470	6,310	371	1,330	191	3,430
Min	88	117	208	206	562	621	649	349	85	74	28	50
Cfsm	0.71	0.89	1.83	1.75	4.52	6.28	6.67	2.88	0.42	0.73	0.18	0.83
In.	0.82	0.99	2.11	2.01	4.70	7.24	7.45	3.32	0.46	0.84	0.21	0.93

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1907 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	323	630	1,024	1,270	1,351	1,564	1,219	1,025	556	418	335	214
Max	1,765	3,431	2,837	2,731	2,905	3,765	2,709	3,847	2,449	1,997	1,981	1,202
(WY)	(1912)	(1986)	(1973)	(1911)	(1994)	(1963)	(2011)	(1996)	(1910)	(1912)	(1942)	(1971)
Min	1.26	5.74	84.2	245	255	437	383	203	51.5	18.5	2.50	0.65
(WY)	(1931)	(1954)	(1909)	(1977)	(1978)	(1910)	(1921)	(1991)	(1965)	(1999)	(1930)	(1930)

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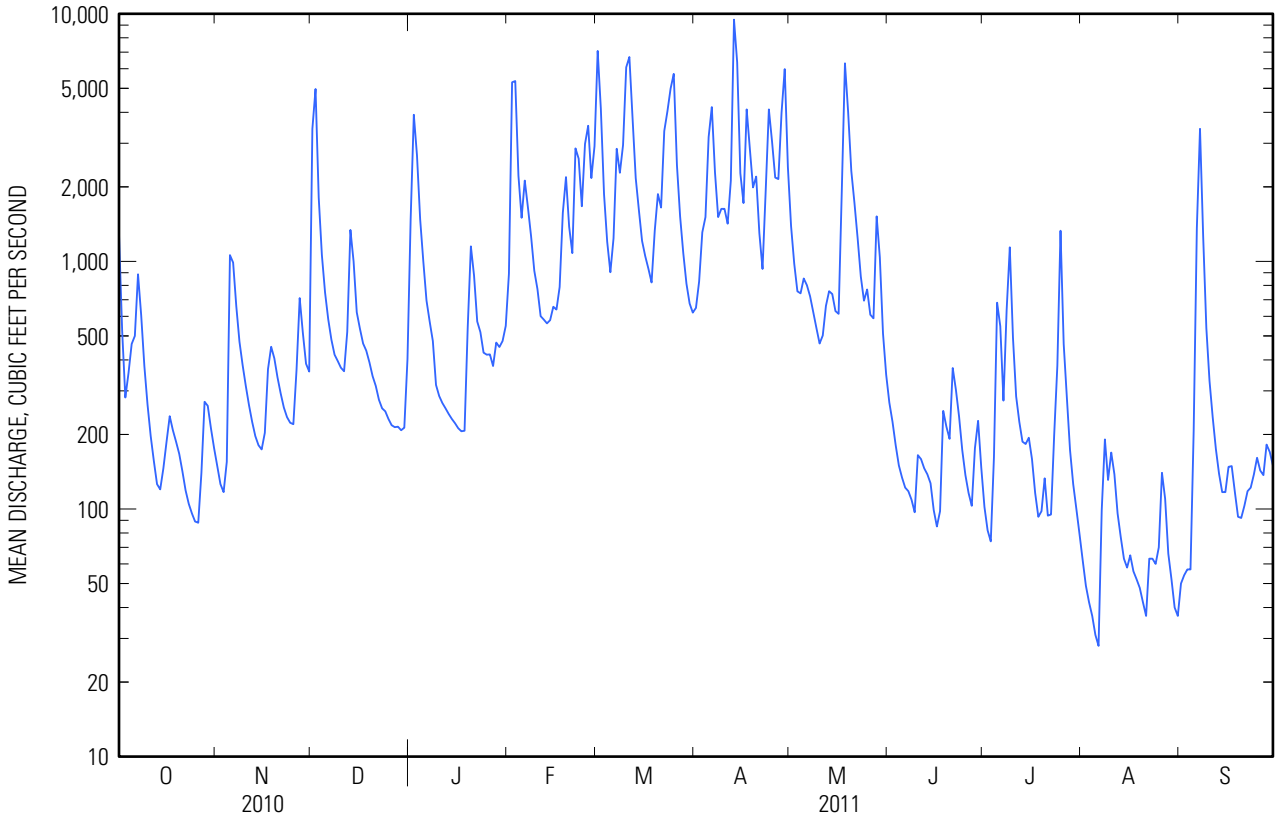
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1907 - 2011	
Annual total	233,855.1		339,360			
Annual mean	641		930		824	
Highest annual mean					1,375	1996
Lowest annual mean					506	1966
Highest daily mean	8,710	Mar 12	9,470	Apr 13	27,400	Nov 5, 1985
Lowest daily mean	8.7	Sep 27	28	Aug 6	0.10	Sep 13, 1930 [a]
Annual seven-day minimum	17	Sep 22	47	Jul 31	0.17	Sep 13, 1930
Maximum peak flow			9,850	Apr 13	[b] 29,500	Nov 5, 1985
Maximum peak stage			13.69	Apr 13	[c] 23.65	Nov 5, 1985
Instantaneous low flow			26	Aug 7	0.10	Sep 13, 1930
Annual runoff (cfsm)	1.58		2.29		2.03	
Annual runoff (inches)	21.43		31.09		27.57	
10 percent exceeds	1,430		2,420		2,000	
50 percent exceeds	359		386		406	
90 percent exceeds	56		94		46	

[a] Also Sept. 14-16, 1930.
[b] From rating curve extended above 18,700 ft³/s, highest since 1888.
[c] From floodmarks.