

KANAWHA RIVER BASIN

03165500 NEW RIVER AT IVANHOE, VA

LOCATION.--Lat 36°50'05", long 80°57'10", Wythe County, Hydrologic Unit 05050001, on left bank at Ivanhoe, 2.1 mi downstream from Big Branch, and 2.3 mi upstream from Cripple Creek.

DRAINAGE AREA.--1,340 mi².

PERIOD OF RECORD.--August to December 1927, October 1929 to September 1978, October 1978 to September 1982 (annual maximum only), February 1996 to present. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected in vicinity, October 1916 to July 1943, are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 783: Drainage area, 1933(M).

GAGE.--Water-stage recorder. Datum of gage is 1,943.09 ft above sea level.

REMARKS.--Records good except for period of no gage-height record Nov. 13-14, which is fair. Large diurnal fluctuation and some regulation caused by powerplants at Buck 2.8 mi upstream and at Byllesby 5.5 mi upstream. Maximum discharge, 155,000 ft³/s, from rating curve extended above 32,000 ft³/s on basis of flood records for other stations on New River. Minimum gage height, 0.59 ft, Oct. 11, 1965. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1916 reached a stage of 34.8 ft, from floodmark, discharge, 132,000 ft³/s, from rating curve extended as explained above. Flood in September 1878 was about 5 ft lower than flood in July 1916 and was the highest known from 1840 to 1916.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 13,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 24	2245	*7,870	*6.20	No peak greater than base discharge.			

Minimum discharge, 245 ft³/s, Sep 2, gage height, 1.36 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	777	702	673	814	1640	2290	1610	3690	991	1250	990	489
2	784	695	681	611	2290	2570	1950	3120	984	1080	932	442
3	661	713	658	1500	2610	2390	1860	2490	935	1000	913	429
4	682	717	639	1830	2320	2760	1660	2140	986	1120	751	392
5	685	763	663	1420	2000	2650	1500	1910	1040	1130	753	864
6	748	956	688	1230	1830	2490	1400	1770	898	873	622	1480
7	764	707	747	1150	1730	2640	1390	1660	813	831	576	1480
8	2340	663	730	1210	1640	2680	1360	2100	815	916	756	924
9	2040	706	1060	1590	1830	2400	1350	2530	837	1320	550	814
10	1660	705	1040	2390	1580	2240	1330	2130	724	1020	450	751
11	1120	836	937	2560	1240	2120	1430	1850	752	940	355	573
12	865	979	789	1880	1430	1940	1470	1720	854	1430	464	515
13	864	e900	1940	1880	1460	1820	1460	1600	903	2160	475	482
14	794	e770	3780	1700	1330	1890	1340	3170	896	2390	591	451
15	766	808	2330	2300	1280	2340	1360	2810	704	1760	269	499
16	733	746	1490	4040	1270	2580	1740	2240	752	1370	508	436
17	765	711	1150	2830	1290	2560	1750	1840	841	1260	500	406
18	837	718	1080	2190	2070	2490	1560	1690	1080	1260	438	410
19	893	709	916	2120	2440	2490	1440	2660	1080	1490	371	408
20	582	709	967	1960	2260	2500	1420	2360	834	1020	562	403
21	518	712	942	1770	2040	2430	1340	1930	800	1030	1280	405
22	679	674	938	1640	1890	2440	1290	1650	777	959	966	431
23	678	685	957	2130	1760	2210	1230	1530	791	969	611	450
24	669	680	1090	6020	1650	1990	1230	1480	738	828	562	456
25	691	714	1370	6210	1640	1920	1160	1280	734	1030	783	415
26	688	663	1620	3860	1590	1830	1200	1330	986	1170	1450	355
27	693	690	1350	2810	1580	1770	1260	1250	1210	1020	1700	464
28	685	711	1150	2350	1630	1630	1700	1220	1270	851	1060	795
29	711	711	1110	2050	---	1600	2720	1090	1330	849	722	1300
30	739	683	997	1870	---	1510	3370	1070	1050	826	615	2390
31	725	---	963	1710	---	1480	---	1030	---	863	552	---
TOTAL	26836	22136	35445	69625	49320	68650	46880	60340	27405	36015	22127	20109
MEAN	866	738	1143	2246	1761	2215	1563	1946	914	1162	714	670
MAX	2340	979	3780	6210	2610	2760	3370	3690	1330	2390	1700	2390
MIN	518	663	639	611	1240	1480	1160	1030	704	826	269	355
CFSM	.65	.55	.85	1.68	1.31	1.65	1.17	1.45	.68	.87	.53	.50
IN.	.74	.61	.98	1.93	1.37	1.91	1.30	1.68	.76	1.00	.61	.56

03165500 NEW RIVER AT IVANHOE, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1978, 1996**, 1997 - 1999 BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1629	1797	2035	2498	2939	3212	2910	2391	1893	1546	1596	1356
MAX	4200	7149	4248	5052	6106	6266	5993	5000	4511	4440	8953	4499
(WY)	1930	1978	1962	1937	1998	1975	1960	1998	1976	1949	1940	1945
MIN	491	578	703	678	693	1450	1289	991	817	485	606	433
(WY)	1931	1932	1940	1940	1934	1931	1942	1941	1930	1930	1956	1954

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1930 - 1978 1996** 1997 - 1999
ANNUAL TOTAL	998030	484888	
ANNUAL MEAN	2734	1328	2140
HIGHEST ANNUAL MEAN			3188
LOWEST ANNUAL MEAN			1285
HIGHEST DAILY MEAN	20800	Apr 20	87600
LOWEST DAILY MEAN	518	Oct 21	184
ANNUAL SEVEN-DAY MINIMUM	644	Oct 20	343
INSTANTANEOUS PEAK FLOW			155000
INSTANTANEOUS PEAK STAGE		6.20	a38.1
INSTANTANEOUS LOW FLOW		245	44
ANNUAL RUNOFF (CFSM)	2.04	.99	1.60
ANNUAL RUNOFF (INCHES)	27.71	13.46	21.70
10 PERCENT EXCEEDS	5370	2390	3810
50 PERCENT EXCEEDS	1900	1110	1700
90 PERCENT EXCEEDS	706	580	742

** Partial water year.
a From floodmark.
e Estimated.

