

KANAWHA RIVER BASIN

03176500 NEW RIVER AT GLEN LYN, VA

LOCATION.--Lat 37°22'22", long 80°51'39", Giles County, Hydrologic Unit 05050002, on right bank 90 ft upstream from bridge on U.S. Highway 460 at Glen Lyn, 0.3 mi upstream from East River, and 6.3 mi downstream from Wolf Creek.

DRAINAGE AREA.--3,768 mi².

PERIOD OF RECORD.--August 1927 to current year.

REVISED RECORDS.--WSP 758: Drainage area. WSP 1305: 1928(M), 1930(M).

GAGE.--Water-stage recorder. Datum of gage is 1,490.11 ft above sea level. Aug. 11, 1927, to Oct. 16, 1934, on left bank opposite present site at same datum, and Oct. 17, 1934, to Jun. 16, 1939, on left bank at site 200 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since 1939 by Claytor Reservoir (station 03169000) 55 mi upstream from station. Statistics of monthly mean data and summary statistics for water years 1928-1938 (unregulated flow) are available in previous data books, water years 1991-1998. Water withdrawn by American Electric Power at gage. U.S. Army Corps of Engineers satellite gage-height telemeter at station. Maximum discharge, 226,000 ft³/s, from rating curve extended above 89,000 ft³/s on basis of slope-area measurement of peak flow. Minimum gage height, 2.10 ft, Sep. 8, 1930. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,300 ft³/s, May 15, gage height, 6.88 ft; minimum discharge, 449 ft³/s, Aug 13, 19, gage height, 2.49 ft; minimum daily, 557 ft³/s, Aug 19, minimums affected by withdrawals.

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	1180	1060	1080	1720	1810	2090	3880	9140	2010	1880	955	771
2	1210	1080	1070	1290	4020	6130	3670	5700	1730	1920	1110	779
3	1140	1540	1050	1190	6010	3900	3720	5610	1550	2020	1210	760
4	1170	1550	1060	2620	6940	4890	3360	4520	1980	1420	1170	749
5	1060	1260	1040	3820	5770	9060	2170	4190	1870	1360	1080	1060
6	1010	1080	1070	2880	3630	6810	3180	4750	1750	1620	793	5770
7	916	1810	1050	3040	3100	5040	3240	3320	1570	1620	786	4680
8	1860	1080	1120	2210	1960	5520	3250	3500	1450	1000	738	2390
9	6640	1080	1210	2000	3630	6990	3230	5620	1340	1020	753	1650
10	4240	3290	1310	1670	5060	7180	3980	5630	1080	1210	726	1880
11	1690	3510	1330	3710	2980	5800	1880	4410	1100	1540	782	1620
12	1280	3440	1160	4940	2840	4040	6360	3910	1050	1550	719	1320
13	1250	3580	1230	3360	3110	4120	7520	3410	999	4690	568	1130
14	1780	4290	1400	3480	1540	4900	4770	4200	1040	4290	673	897
15	1630	1400	2220	5540	1470	3230	4140	14600	1100	2930	784	2830
16	1320	1290	6120	7090	2980	7780	4130	8780	1090	1780	644	1350
17	2310	1350	2940	7700	2830	7410	3870	6240	1290	2210	641	994
18	1110	1300	2140	4160	2980	10500	4390	5400	1390	1940	656	1050
19	1060	1240	1800	4760	6740	10000	4010	8280	1460	1750	557	971
20	1140	1230	1100	4480	6580	9200	3690	9400	1350	2210	745	963
21	1390	1290	1070	3600	3740	7400	3380	6310	1390	1580	755	1060
22	1490	1140	1880	3530	2210	4560	3580	4980	1220	1250	721	1070
23	1390	1300	1960	5770	4560	6690	3450	4520	1020	1610	744	953
24	1250	1210	1920	12100	3320	6680	4380	4110	1000	1340	1020	947
25	1210	1280	1110	10100	3180	4800	4580	3870	965	1540	1020	903
26	1050	1220	1100	11700	4620	5380	3190	3410	1010	1650	2830	890
27	1020	1310	1090	8110	3120	5240	1900	2560	940	1520	3990	927
28	1290	1170	1590	6660	2580	2190	2290	2810	1670	1780	3180	1010
29	1270	1220	3060	4510	---	2220	3920	2640	1780	2730	1640	1200
30	1450	1210	2490	3910	---	3900	5530	2420	2000	2880	1140	2020
31	1370	---	1630	3980	---	3680	---	2160	---	1670	752	---
TOTAL	49176	49810	51400	145630	103310	177330	114640	160400	41194	59510	33882	44594
MEAN	1586	1660	1658	4698	3690	5720	3821	5174	1373	1920	1093	1486
MAX	6640	4290	6120	12100	6940	10500	7520	14600	2010	4690	3990	5770
MIN	916	1060	1040	1190	1470	2090	1880	2160	940	1000	557	749
()	+302	-9932	+8924	+807	-252	-1210	+706	+1160	+202	0	-1916	+1613
()	13710	13725	13406	12546	10478	12071	12999	11616	14539	17121	16794	11163
mean	2038	1787	2378	5128	4055	6071	4278	5586	1864	2472	1573	1912
CFSM	.54	.47	.63	1.36	1.08	1.61	1.14	1.48	.49	.66	.42	.51
IN	.62	.53	.73	1.57	1.12	1.86	1.27	1.71	.55	.76	.48	.57

CAL YR 1998 TOTAL 2265536 MEAN 6207 MAX 48700 MIN 868 MEAN 6658 CFSM 1.77 IN 23.99
WTR YR 1999 TOTAL 1030876 MEAN 2824 MAX 14600 MIN 557 MEAN 3264 CFSM .87 IN 11.76

Total change in contents, equivalent in cubic feet per second, per month, in Claytor Reservoir; provided by American Electric Power.
Total water withdrawal, equivalent in cubic feet per second, per month by power plant; provided by American Electric Power.
Adjusted for monthly change in contents and water withdrawal.

03176500 NEW RIVER AT GLEN LYN, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3201	3727	4674	5995	7502	8440	7426	6007	4465	3262	3165	2839
MAX	9882	12450	10910	13290	15810	18650	20890	11270	12860	9784	16410	11500
(WY)	1990	1978	1949	1996	1957	1993	1987	1984	1992	1949	1940	1989
MIN	1204	1258	1305	1489	3304	2407	2673	2397	1373	1390	1093	1127
(WY)	1989	1982	1998	1966	1941	1988	1986	1941	1999	1988	1999	1998

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1939 - 1999

ANNUAL TOTAL	2265536	1030876	
ANNUAL MEAN	6207	2824	5045
HIGHEST ANNUAL MEAN			7424
LOWEST ANNUAL MEAN			2626
HIGHEST DAILY MEAN	48700	Apr 20	14600
LOWEST DAILY MEAN	868	Sep 16	a557
ANNUAL SEVEN-DAY MINIMUM	991	Sep 12	a646
INSTANTANEOUS PEAK FLOW			16300
INSTANTANEOUS PEAK STAGE			6.88
INSTANTANEOUS LOW FLOW			449
ANNUAL RUNOFF (CFSM)	1.65		.75
ANNUAL RUNOFF (INCHES)	22.37		10.18
10 PERCENT EXCEEDS	14500		5780
50 PERCENT EXCEEDS	3550		1880
90 PERCENT EXCEEDS	1080		997

a Affected by withdrawals.
 b Also Aug 19, 1999.

