



Water-Data Report 2010

03176500 NEW RIVER AT GLEN LYN, VA

Kanawha Basin
Middle New Subbasin

LOCATION.--Lat 37°22'22", long 80°51'39" referenced to North American Datum of 1927, Giles County, VA, 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.--3,783 mi².

SURFACE-WATER RECORDS

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

REVISED RECORDS.--WSP 1305: 1928(M), 1930(M). OFR 2006-1308: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,490.11 ft NGVD of 1929. Aug. 11, 1927, to Oct. 16, 1934, on left bank opposite current site, at present datum. Oct. 17, 1934, to June 16, 1939, on left bank at site 200 ft upstream, at present datum.

REMARKS.--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 Water withdrawn by American Electric Power at gage.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. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	3,790	4,300	4,030	7,590	8,790	8,080	10,100	5,310	3,860	2,220	1,580	1,580
2	2,120	4,820	5,050	8,240	8,790	6,510	8,590	5,210	3,830	2,150	2,250	1,870
3	2,220	6,310	9,550	7,070	8,770	6,820	8,050	5,710	3,740	2,160	3,260	1,760
4	2,620	5,830	12,800	5,000	9,190	6,460	7,260	5,790	3,770	1,920	2,020	1,590
5	2,240	4,980	11,200	6,210	9,070	6,140	7,870	5,010	3,930	1,750	1,860	1,430
6	2,160	4,130	9,720	4,770	9,460	6,190	7,790	4,370	3,770	1,720	1,800	1,300
7	2,070	2,910	6,990	4,910	9,270	5,930	6,590	4,280	3,630	1,590	1,720	1,270
8	2,020	1,880	5,930	4,250	8,690	6,110	6,140	4,510	3,530	1,440	2,180	1,220
9	2,030	1,550	19,400	6,200	8,150	7,780	7,800	4,150	3,080	1,460	2,330	1,190
10	1,970	3,750	33,900	4,540	7,580	10,600	10,100	4,250	3,090	1,480	1,570	1,450
11	1,910	4,790	19,900	4,190	7,590	14,500	7,250	4,120	2,970	1,450	2,260	1,350
12	1,900	23,500	14,000	3,710	7,120	16,600	6,670	3,790	3,070	1,670	1,980	1,270
13	1,850	28,900	13,100	4,510	6,480	47,300	6,610	3,530	3,510	2,080	2,070	1,840
14	1,860	13,900	19,000	4,170	6,290	46,800	6,090	3,580	3,750	2,420	1,840	1,590
15	2,010	11,200	17,400	5,480	6,140	25,900	5,860	4,320	5,240	3,380	1,660	1,380
16	2,620	7,350	13,000	6,100	6,160	17,700	5,580	4,150	4,370	2,850	1,980	1,400
17	3,270	6,360	9,880	7,400	6,140	14,200	5,410	7,840	4,350	1,940	1,940	1,340
18	3,150	6,160	9,940	21,200	6,060	12,500	5,460	11,500	3,630	1,660	3,720	1,500
19	2,310	6,540	9,650	22,300	5,130	10,600	5,420	9,690	3,300	1,790	5,830	1,330
20	2,590	6,670	7,730	19,100	5,960	9,820	5,350	6,590	2,900	2,590	6,230	1,250
21	2,510	6,200	7,360	16,400	5,570	9,030	5,420	6,060	3,110	2,610	7,910	1,240
22	2,120	4,920	6,740	13,500	7,500	10,800	5,420	5,650	2,850	2,440	4,510	2,060
23	2,010	5,030	6,010	15,900	10,500	20,100	5,660	5,220	2,470	1,970	2,430	1,480
24	2,260	5,330	5,720	15,800	13,400	16,700	5,580	4,980	2,740	1,970	2,410	1,740
25	2,070	4,870	7,070	35,200	12,800	13,100	5,600	4,910	2,600	1,630	3,450	1,210
26	4,180	4,670	18,700	42,800	11,500	11,900	5,240	4,540	2,270	1,470	3,330	1,220
27	5,040	3,550	21,200	24,400	9,820	11,200	5,420	4,390	2,020	1,510	3,180	1,460
28	3,390	4,680	16,800	16,500	8,220	11,400	5,330	4,210	2,200	1,540	2,870	2,040
29	5,870	4,090	12,300	13,700	---	12,600	5,250	4,990	2,320	1,710	2,450	5,600
30	5,810	3,500	10,700	13,400	---	12,600	5,340	4,780	2,270	3,050	1,630	3,850
31	4,740	---	9,150	11,900	---	11,100	---	3,850	---	1,980	1,560	---
Total	86,710	202,670	373,920	376,440	230,140	427,070	194,250	161,280	98,170	61,600	85,810	50,810
Mean	2,797	6,756	12,060	12,140	8,219	13,780	6,475	5,203	3,272	1,987	2,768	1,694
Max	5,870	28,900	33,900	42,800	13,400	47,300	10,100	11,500	5,240	3,380	7,910	5,600
Min	1,850	1,550	4,030	3,710	5,130	5,930	5,240	3,530	2,020	1,440	1,560	1,190
Cfsm	0.74	1.79	3.19	3.21	2.17	3.64	1.71	1.38	0.87	0.53	0.73	0.45
In.	0.85	1.99	3.68	3.70	2.26	4.20	1.91	1.59	0.97	0.61	0.84	0.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3,109	3,807	4,715	5,878	7,189	8,178	7,297	5,861	4,483	3,261	3,100	2,883
Max	9,882	12,450	12,060	13,290	15,810	18,650	20,890	11,270	12,860	9,784	16,410	11,650
(WY)	(1990)	(1978)	(2010)	(1996)	(1957)	(1993)	(1987)	(1984)	(1992)	(1949)	(1940)	(2004)
Min	1,204	1,258	1,305	1,489	2,285	2,407	2,673	2,397	1,373	1,390	1,040	1,127
(WY)	(1989)	(1982)	(1998)	(1966)	(2002)	(1988)	(1986)	(1941)	(1999)	(1988)	(2002)	(1998)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1939 - 2010	
Annual total	2,000,310		2,348,870			
Annual mean	5,480		6,435		4,967	
Highest annual mean					7,492	2003
Lowest annual mean					2,511	2002
Highest daily mean	33,900	Dec 10	47,300	Mar 13	126,000	Aug 15, 1940
Lowest daily mean	1,550	Nov 9	1,190	Sep 9	^a 538	Aug 25, 2008
Annual seven-day minimum	1,670	Sep 2	1,290	Sep 6	616	Aug 20, 2008
Maximum peak flow			69,700	Mar 13	^b 226,000	Aug 14, 1940
Maximum peak stage			14.48	Mar 13	^b 27.50	Aug 14, 1940
Instantaneous low flow			1,070	Sep 8 ^c	^{a,d} 449	Aug 13, 1999 ^e
Annual runoff (cfsm)	1.45		1.70		1.31	
Annual runoff (inches)	19.67		23.10		17.84	
10 percent exceeds	10,600		13,100		9,540	
50 percent exceeds	4,180		4,870		3,640	
90 percent exceeds	2,010		1,650		1,500	

^a Affected by withdrawals.

^b Prior to regulation, 1928-38, maximum peak flow, 99,000 ft³/s, Oct. 3, 1929, gage height, 16.75 ft.

^c Also Sept. 9, 2010.

^d Prior to regulation, 1928-38, instantaneous low flow, 770 ft³/s, Sept. 8, 1930.

^e Also Aug. 19, 1999.

