

Water-Data Report 2008

03459500 PIGEON RIVER NEAR HEPKO, NC

French Broad-Holston Basin
Pigeon Subbasin

LOCATION.--Lat 35°38'06", long 82°59'24" referenced to North American Datum of 1983, Haywood County, NC, Hydrologic Unit 06010106, on left bank 95 ft east of Interstate Highway 40, 0.8 mi downstream of Jonathan Creek, 2.0 mi south of Hepco, 2.4 mi upstream from Fines Creek, and at river mile 45.1.

DRAINAGE AREA.--350 mi².

SURFACE-WATER RECORDS

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

REVISED RECORDS.--WSP 823: Drainage area. WSP 893: 1928-31(daily discharge), 1932(M), 1933-36(daily discharge), 1937-39(M).

GAGE.--Water-stage recorder. Datum of gage is 2,335.95 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority).
Satellite and telephone telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Regulation by Lake Junaluska on Richland Creek and Lake Logan (station 03455773) on West Fork Pigeon River for periods at low flow, combined capacity of reservoirs, about 2,000 ft³/s-day. Maximum discharge for period of record, from rating curve extended above 12,000 ft³/s on basis of slope-conveyance measurement of peak flow. Minimum discharge for period of record and current water year also occurred August 24, 2008.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of June 1876 and February 1902 reached a stage of about 18 ft, from flood profiles by Tennessee Valley Authority; discharge, about 42,000 ft³/s.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	106	166	219	560	1,550	562	508	385	255	177	134	242
2	105	163	207	481	1,090	523	488	371	265	155	116	221
3	107	157	264	e445	799	502	489	357	249	141	107	197
4	120	150	244	e414	811	2,430	529	356	235	129	100	175
5	175	146	215	382	798	3,200	694	344	e220	135	98	159
6	160	163	203	362	821	1,460	1,000	331	e210	167	98	151
7	131	155	195	342	931	1,320	721	320	221	158	95	146
8	118	148	190	323	743	1,770	630	315	245	170	93	140
9	118	144	212	314	669	1,240	584	356	210	218	88	163
10	118	141	221	351	606	1,040	548	407	223	273	87	233
11	106	137	203	1,530	559	919	522	425	247	211	86	187
12	103	137	193	780	531	827	615	412	201	165	80	221
13	106	139	193	601	551	750	528	365	182	144	81	212
14	106	141	202	523	520	702	489	341	175	170	90	178
15	104	371	212	463	478	884	478	339	198	144	96	161
16	102	296	447	421	462	1,100	453	386	191	e130	91	154
17	104	199	355	455	566	830	435	366	178	e120	152	158
18	108	175	269	465	1,300	755	418	337	160	e110	105	157
19	144	170	247	425	786	974	427	367	153	113	89	151
20	140	163	236	385	677	1,350	419	338	152	113	80	137
21	117	160	290	e370	623	961	391	332	154	109	73	131
22	110	242	305	386	602	849	378	313	167	150	69	126
23	209	293	601	426	587	772	368	297	173	171	64	120
24	807	216	653	388	538	712	356	293	159	127	65	116
25	510	194	436	e369	522	662	346	290	147	110	84	112
26	311	273	394	e348	743	625	352	276	142	133	1,510	114
27	245	418	369	329	717	593	377	273	172	146	3,690	134
28	215	306	500	313	583	564	539	322	162	122	743	143
29	197	257	726	310	551	605	496	306	191	131	483	130
30	183	235	606	547	---	557	406	277	184	126	350	121
31	171	---	772	441	---	518	---	264	---	125	281	---
Total	5,456	6,055	10,379	14,249	20,714	30,556	14,984	10,461	5,821	4,593	9,378	4,790
Mean	176	202	335	460	714	986	499	337	194	148	303	160
Max	807	418	772	1,530	1,550	3,200	1,000	425	265	273	3,690	242
Min	102	137	190	310	462	502	346	264	142	109	64	112

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	414	506	669	868	1,005	1,123	967	721	537	426	421	415
Max	1,353	1,627	2,125	2,275	2,227	2,455	2,010	1,798	1,502	1,159	2,246	3,636
(WY)	(1965)	(1980)	(1933)	(1937)	(1990)	(1929)	(1936)	(2003)	(1967)	(2005)	(1940)	(2004)
Min	122	133	193	194	319	346	359	283	194	148	163	123
(WY)	(1955)	(1954)	(1940)	(1940)	(1941)	(1988)	(1986)	(1941)	(2008)	(2008)	(1953)	(1999)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1927 - 2008	
Annual total	141,386		137,436			
Annual mean	387		376		671	
Highest annual mean					943	
Lowest annual mean					341	
Highest daily mean	3,820	Jan 1	3,690	Aug 27	23,900	Sep 8, 2004
Lowest daily mean	101	Sep 13	64	Aug 23	64	Aug 23, 2008
Annual seven-day minimum	104	Oct 11	75	Aug 19	75	Aug 19, 2008
Maximum peak flow			11,200	Aug 27	^a 36,500	Sep 17, 2004
Maximum peak stage			9.45	Aug 27	17.31	Sep 17, 2004
Instantaneous low flow			^a 61	Aug 23	^a 61	Aug 23, 2008
10 percent exceeds	699		743		1,230	
50 percent exceeds	283		264		504	
90 percent exceeds	119		110		205	

^aSee Remarks.