

Water-Data Report 2010

03459500 PIGEON RIVER NEAR HEPCO, 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 and maximum discharges; 1932, maximum discharge; 1933-36, daily discharge; 1935-39, maximum discharge.

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 telemetry at streamgage.

REMARKS.--No estimated daily discharges. Records fair. 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 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 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	653	1,760	778	1,190	1,240	789	826	601	585	315	232	137
2	595	1,220	1,450	1,090	1,520	789	789	594	497	285	206	129
3	559	1,050	1,970	981	1,560	771	757	1,280	467	273	190	130
4	514	943	1,300	939	1,420	739	723	986	402	260	214	124
5	802	860	1,170	906	2,820	714	698	796	397	247	242	122
6	648	790	1,040	864	3,240	679	673	730	386	232	265	123
7	564	741	963	834	2,230	673	647	681	378	221	234	121
8	517	700	958	812	1,880	674	831	637	347	212	188	128
9	483	662	4,540	754	1,740	690	936	596	340	214	174	141
10	525	1,090	2,230	747	1,650	721	731	577	366	241	171	129
11	481	5,240	1,650	711	1,500	797	691	578	379	215	177	229
12	479	2,850	1,400	720	1,410	1,060	668	569	383	296	196	380
13	532	1,980	1,570	685	1,350	1,510	665	546	353	345	191	203
14	572	1,550	1,470	674	1,260	1,180	659	520	321	273	280	157
15	634	1,320	1,270	662	1,250	1,040	641	558	339	237	273	141
16	609	1,160	1,150	648	1,160	943	613	565	433	272	223	134
17	561	1,050	1,080	1,790	1,100	906	604	631	433	503	207	132
18	565	1,880	1,110	1,420	1,030	876	586	538	341	331	223	126
19	523	1,780	1,130	1,110	984	874	568	497	312	314	294	125
20	508	1,360	998	1,040	941	890	575	472	298	271	226	125
21	498	1,200	940	1,170	921	882	602	467	281	259	292	122
22	482	1,110	916	1,340	992	2,330	558	473	269	274	512	125
23	473	1,070	908	1,180	1,000	1,370	537	446	280	260	296	140
24	1,150	976	930	1,720	960	1,170	565	420	311	230	224	126
25	761	911	4,960	5,010	918	1,070	1,200	427	495	218	198	130
26	664	861	3,080	2,530	868	1,050	793	424	484	251	182	261
27	1,020	810	2,050	1,950	861	950	754	403	410	271	176	382
28	1,790	772	1,650	1,650	821	1,020	731	412	517	254	177	355
29	1,090	743	1,400	1,510	---	1,320	665	419	439	270	162	241
30	927	786	1,270	1,520	---	996	628	388	375	225	153	381
31	959	---	1,240	1,350	---	890	---	492	---	209	146	---
Total	21,138	39,225	48,571	39,507	38,626	30,363	20,914	17,723	11,618	8,278	6,924	5,299
Mean	682	1,308	1,567	1,274	1,380	979	697	572	387	267	223	177
Max	1,790	5,240	4,960	5,010	3,240	2,330	1,200	1,280	585	503	512	382
Min	473	662	778	648	821	673	537	388	269	209	146	121

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	414	512	679	871	1,002	1,115	960	721	535	422	416	417
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 2009		Water Year 2010		Water Years 1927 - 2010	
Annual total	263,300		288,186			
Annual mean	721		790		670	
Highest annual mean					943	1949
Lowest annual mean					341	1988
Highest daily mean	5,240	Nov 11	5,240	Nov 11	23,900	Sep 8, 2004
Lowest daily mean	142	Sep 6	121	Sep 7	64	Aug 23, 2008
Annual seven-day minimum	153	Sep 3	125	Sep 2	75	Aug 19, 2008
Maximum peak flow			8,570	Jan 25	^a 36,500	Sep 17, 2004
Maximum peak stage			8.33	Jan 25	17.31	Sep 17, 2004
Instantaneous low flow			114	Sep 18	^a 61	Aug 23, 2008
10 percent exceeds	1,310		1,480		1,230	
50 percent exceeds	559		653		504	
90 percent exceeds	198		201		203	

^a See Remarks.

