

Water-Data Report 2010

03456500 EAST FORK PIGEON RIVER NEAR CANTON, NC

French Broad-Holston Basin
Pigeon Subbasin

LOCATION.--Lat 35°27'42", long 82°52'11" referenced to North American Datum of 1983, Haywood County, NC, Hydrologic Unit 06010106, on right bank 800 ft upstream from bridge on U.S. Highway 276, 0.3 mi downstream of Dix Creek, 1.6 mi upstream from confluence with West Fork Pigeon River, and 5.2 mi southwest of Canton.

DRAINAGE AREA.--51.5 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--March 1954 to current year.

REVISED RECORDS.--WDR NC-73-1: 1966 (annual maximum discharge), 1972 (annual maximum discharge).

GAGE.--Water-stage recorder. Datum of gage is 2,674.34 ft above National Geodetic Vertical Datum of 1929 (Tennessee Valley Authority bench mark).
Satellite and telephone telemetry at streamgage.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Maximum discharge for period of record from rating curve extended above 6,000 ft³/s, on basis of slope-area measurement of peak flow. Minimum discharge for period of record also occurred August 9, 11-13, 2008.

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

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	156	369	165	251	266	148	240	105	109	56	38	21
2	141	283	509	226	334	150	222	107	90	52	33	19
3	130	244	469	e206	306	142	207	181	94	51	30	19
4	119	214	344	e190	283	136	195	140	85	48	28	18
5	162	192	298	e178	517	131	183	126	83	45	29	17
6	126	173	259	e167	589	128	173	119	77	43	38	16
7	116	159	234	e158	424	125	163	113	73	40	33	16
8	106	146	227	e150	363	126	193	108	68	39	28	17
9	101	136	720	e144	342	132	195	103	67	39	26	19
10	100	278	437	e138	314	148	165	101	69	43	28	17
11	94	1,310	355	e134	279	204	156	101	65	38	33	30
12	105	707	311	129	261	361	149	100	65	48	47	57
13	102	492	369	123	240	408	143	95	61	49	36	27
14	112	380	310	119	222	314	138	92	59	44	32	20
15	116	318	277	116	215	267	133	107	82	38	35	18
16	108	275	249	116	197	239	129	100	97	40	34	18
17	106	246	229	519	186	223	125	101	73	58	32	18
18	105	896	241	320	177	207	119	90	63	41	42	17
19	100	637	219	263	169	196	117	86	59	40	38	17
20	99	478	196	245	163	188	116	83	56	37	30	16
21	95	391	184	328	161	285	117	83	53	36	64	15
22	90	344	176	332	200	877	110	83	51	35	80	16
23	105	322	172	290	199	429	106	77	53	34	41	19
24	402	279	173	805	193	349	110	75	69	36	34	16
25	186	251	1,180	1,250	180	313	210	86	79	34	31	15
26	157	228	658	655	168	287	133	77	78	40	29	29
27	229	209	451	487	162	254	124	73	73	35	27	73
28	400	193	362	404	155	318	117	71	87	40	27	62
29	263	179	314	362	---	338	112	69	67	41	26	38
30	222	178	281	341	---	288	108	69	62	32	25	83
31	255	---	267	294	---	261	---	107	---	34	23	---
Total	4,708	10,507	10,636	9,440	7,265	7,972	4,508	3,028	2,167	1,286	1,077	783
Mean	152	350	343	305	259	257	150	97.7	72.2	41.5	34.7	26.1
Max	402	1,310	1,180	1,250	589	877	240	181	109	58	80	83
Min	90	136	165	116	155	125	106	69	51	32	23	15
Cfsm	2.95	6.80	6.66	5.91	5.04	4.99	2.92	1.90	1.40	0.81	0.67	0.51
In.	3.40	7.59	7.68	6.82	5.25	5.76	3.26	2.19	1.57	0.93	0.78	0.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2010, BY WATER YEAR (WY)

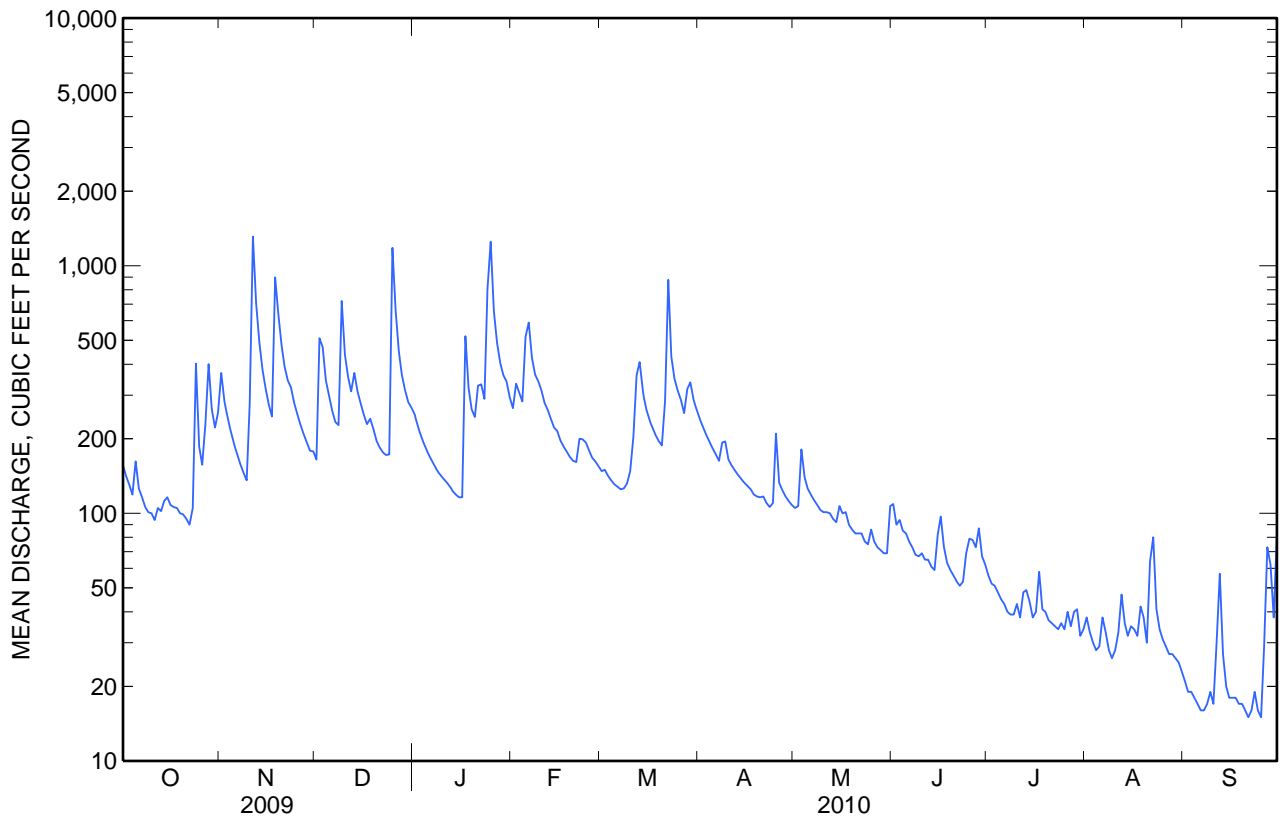
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	106	134	151	168	196	226	199	150	113	74.9	75.4	99.3
Max	363	484	343	444	517	541	480	453	339	277	263	1,057
(WY)	(1965)	(1980)	(2010)	(1998)	(1998)	(1979)	(1957)	(1976)	(1967)	(2005)	(1994)	(2004)
Min	17.1	27.9	42.4	33.8	65.2	60.9	63.2	59.8	32.6	20.7	25.1	16.0
(WY)	(1955)	(1955)	(1956)	(1956)	(2009)	(1988)	(1986)	(1986)	(2008)	(2008)	(2002)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1954 - 2010	
Annual total	60,550		63,377			
Annual mean	166		174		141	
Highest annual mean					207	2004
Lowest annual mean					71.9	1988
Highest daily mean	2,270	Sep 21	1,310	Nov 11	6,200	Sep 8, 2004
Lowest daily mean	25	Sep 14	15	Sep 21	11	Aug 12, 2008
Annual seven-day minimum	27	Sep 9	16	Sep 19	12	Aug 6, 2008
Maximum peak flow			2,740	Jan 24	^a 12,900	Sep 17, 2004
Maximum peak stage			5.14	Jan 24	13.05	Sep 17, 2004
Instantaneous low flow			13	Sep 25	^a 11	Aug 8, 2008
Annual runoff (cfsm)	3.22		3.37		2.74	
Annual runoff (inches)	43.74		45.78		37.27	
10 percent exceeds	317		351		264	
50 percent exceeds	109		124		99	
90 percent exceeds	34		30		35	

^a See Remarks.



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CLIMATOLOGICAL RECORDS

PERIOD OF RECORD.--October 1999 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Satellite and telephone telemetry at station.

REMARKS.--Gage is operated in cooperation with Evergreen Packaging Group. Precipitation data collected during freezing periods may not be accurately reflected in daily record.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	0.13	0.00	0.00	---	0.00	0.00	0.00	0.01	0.00	0.01	0.00
2	0.00	0.00	1.45	0.00	---	0.00	0.00	0.00	0.09	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	---	0.00	0.00	0.92	0.01	0.00	0.00	0.00
4	0.18	0.00	0.00	0.00	---	0.00	0.00	0.00	0.06	0.00	0.00	0.00
5	0.74	0.00	0.07	0.00	---	0.00	0.00	0.00	0.00	0.00	0.18	0.00
6	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.09	0.00	0.41	0.00
7	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.78	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.00	0.09
9	0.22	0.00	0.86	0.00	0.07	0.00	0.00	0.00	0.02	0.04	0.00	0.00
10	0.05	2.36	0.00	0.00	0.00	0.00	0.00	0.04	0.11	0.00	0.00	0.00
11	0.00	1.28	0.00	0.00	0.00	0.10	0.00	0.01	0.00	0.00	0.19	1.65
12	0.60	0.00	0.00	0.00	0.00	0.58	0.00	0.02	0.00	0.64	0.01	0.01
13	0.00	0.00	0.20	0.00	0.01	0.03	0.00	0.00	0.00	0.09	0.77	0.00
14	0.13	0.00	0.00	0.00	0.00	0.01	0.00	0.08	0.14	0.00	0.00	0.00
15	0.08	0.00	0.00	0.00	0.31	0.00	0.00	0.33	0.03	0.00	0.01	0.00
16	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.19	0.01	0.42	0.00	0.00
17	0.26	0.38	0.00	1.05	0.00	0.00	0.00	0.21	0.00	0.03	0.62	0.05
18	0.11	0.77	---	0.01	0.04	0.00	0.00	0.00	0.00	0.03	0.13	0.00
19	0.00	0.01	---	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.07	0.00
20	0.00	0.00	---	0.03	0.00	0.00	0.12	0.00	0.00	0.08	0.00	0.00
21	0.00	0.00	---	0.18	0.00	1.30	0.02	0.12	0.00	0.31	0.97	0.00
22	0.00	0.19	---	0.04	0.32	0.00	0.00	0.00	0.13	0.00	0.00	0.09
23	0.06	0.00	---	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.00
24	0.11	0.00	---	1.79	0.00	0.00	0.56	0.12	2.39	0.00	0.00	0.00
25	0.00	0.00	---	0.09	0.00	0.03	0.31	0.08	0.07	0.46	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.00	0.03	0.01	0.00	0.98
27	1.24	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.32	0.00	0.00	0.81
28	0.01	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.33	0.43	0.00	0.00
29	0.00	0.00	0.00	---	---	0.01	0.00	0.00	0.12	0.01	0.00	0.62
30	0.00	0.19	0.01	---	---	0.00	0.00	0.10	0.00	0.00	0.00	0.07
31	0.83	---	0.01	---	---	0.00	---	0.72	---	0.26	0.00	---
Total	4.77	5.31	---	---	---	2.57	1.84	2.94	4.34	2.90	3.37	4.37

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