

Water-Data Report 2010

03456100 WEST FORK PIGEON RIVER AT BETHEL, NC

French Broad-Holston Basin
Pigeon Subbasin

LOCATION.--Lat 35°27'50", long 82°54'00" referenced to North American Datum of 1983, Haywood County, NC, Hydrologic Unit 06010106, on left bank 20 ft downstream of bridge on Secondary Road 1112, 0.6 mi southwest of Bethel, 1.6 mi upstream from confluence with East Fork Pigeon River, and 5.6 mi downstream of Lake Logan.

DRAINAGE AREA.--58.4 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January 1981 to current year.

REVISED RECORDS.--WDR NC-04-1: 1983 (annual maximum discharge), 1994 (annual maximum discharge).

GAGE.--Water-stage recorder. Datum of gage is 2,667.78 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority).
Satellite and telephone telemetry at streamgage.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Considerable regulation, at times, caused by Lake Logan (station 03455773). Maximum discharge for period of record from rating curve extended above 7,000 ft³/s on basis of slope-area measurement of peak flow. Maximum gage height for period of record from high-water mark in gage. Minimum discharge for current water year also occurred September 3.

03456100 WEST FORK PIGEON RIVER AT BETHEL, NC—Continued

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	131	396	172	277	261	158	218	128	117	71	48	30
2	120	260	546	246	362	160	206	133	91	65	43	29
3	113	223	442	e214	318	153	194	265	93	63	41	29
4	103	199	310	e195	291	145	184	190	83	60	40	31
5	168	182	274	e183	731	141	176	163	86	56	45	33
6	127	167	245	e174	704	137	168	150	81	53	44	33
7	117	156	226	e166	479	136	159	142	75	51	39	32
8	103	145	223	e161	410	137	208	132	71	49	37	33
9	99	137	719	e157	378	142	225	125	70	50	36	33
10	102	264	393	e153	338	154	176	123	77	51	36	31
11	95	1,230	320	e150	303	197	166	124	65	48	36	39
12	105	616	286	e147	287	339	160	124	98	66	46	45
13	112	433	408	e145	268	340	153	117	73	79	50	35
14	106	350	324	143	250	242	147	113	69	64	62	32
15	132	297	283	140	245	211	142	123	69	53	45	32
16	134	266	258	138	223	196	138	112	93	57	41	31
17	117	242	240	530	212	190	133	124	117	119	40	31
18	114	672	263	322	201	181	129	109	76	69	47	30
19	105	415	240	251	194	176	125	100	69	62	47	32
20	108	321	213	245	188	174	126	97	65	57	40	34
21	105	283	199	341	185	275	133	97	61	52	101	33
22	100	265	192	331	220	780	122	99	58	49	115	33
23	107	257	188	270	210	312	117	92	67	61	55	33
24	380	230	190	803	198	271	129	88	80	50	44	33
25	163	215	1,500	1,040	183	254	301	89	116	50	41	32
26	138	200	653	518	172	242	166	88	110	59	39	40
27	212	187	464	415	170	222	163	84	114	49	37	46
28	381	176	387	361	164	295	149	81	149	47	36	41
29	215	169	333	335	---	326	139	78	91	47	34	45
30	188	179	301	327	---	256	133	76	78	45	33	75
31	239	---	297	280	---	234	---	122	---	45	32	---
Total	4,539	9,132	11,089	9,158	8,145	7,176	4,885	3,688	2,562	1,797	1,430	1,066
Mean	146	304	358	295	291	231	163	119	85.4	58.0	46.1	35.5
Max	381	1,230	1,500	1,040	731	780	301	265	149	119	115	75
Min	95	137	172	138	164	136	117	76	58	45	32	29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	95.0	134	175	201	233	247	207	163	117	89.7	86.5	109
Max	336	341	358	450	522	461	481	381	316	290	317	1,057
(WY)	(1996)	(1993)	(2010)	(1998)	(1998)	(1997)	(1983)	(2003)	(2005)	(2005)	(1994)	(2004)
Min	30.5	43.0	83.5	53.5	97.9	83.6	83.5	75.5	45.8	36.1	29.3	27.6
(WY)	(1999)	(1982)	(1989)	(1981)	(2007)	(1988)	(1986)	(2007)	(2008)	(2008)	(1993)	(1998)

03456100 WEST FORK PIGEON RIVER AT BETHEL, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1981 - 2010	
Annual total	65,696		64,667			
Annual mean	180		177		156	
Highest annual mean					224	2004
Lowest annual mean					87.5	1988
Highest daily mean	1,520	Sep 21	1,500	Dec 25	5,720	Sep 17, 2004
Lowest daily mean	32	Sep 15	29	Sep 2	9.2	Sep 2, 1986
Annual seven-day minimum	38	Sep 3	31	Aug 30	16	Sep 2, 1986
Maximum peak flow			3,120	Dec 25	^a 19,000	Sep 17, 2004
Maximum peak stage			5.91	Dec 25	^a 16.27	Sep 17, 2004
Instantaneous low flow			^a 28	Sep 2	4.2	Sep 5, 1986
10 percent exceeds	320		334		297	
50 percent exceeds	141		138		110	
90 percent exceeds	48		40		42	

^a See Remarks.

