

Water-Data Report 2007

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(M), 1994(M).

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

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 August 18, 22, September 7.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	69	91	406	651	108	210	115	79	50	45	48	61
2	66	100	201	250	113	587	126	76	61	42	43	40
3	64	88	161	204	101	238	106	76	53	42	46	33
4	62	84	145	182	94	190	128	129	53	38	38	30
5	60	81	134	210	90	167	108	103	49	36	36	29
6	62	80	128	248	92	154	100	119	46	35	68	28
7	59	94	120	228	95	144	97	92	44	70	50	28
8	58	197	107	539	91	135	94	85	43	64	40	30
9	60	115	108	309	88	128	94	83	43	46	35	30
10	57	102	107	254	85	122	92	80	41	76	33	30
11	56	100	103	225	82	118	92	79	40	66	32	30
12	68	108	100	207	84	114	111	86	40	83	30	30
13	56	96	102	194	91	110	93	105	40	51	30	33
14	52	91	97	179	126	108	93	82	40	46	28	164
15	51	248	91	167	87	106	190	78	57	43	30	152
16	52	653	89	162	79	409	136	75	50	41	30	58
17	392	252	86	147	79	215	120	74	42	48	29	44
18	224	197	83	144	79	172	114	70	61	46	29	39
19	123	170	82	142	76	160	110	68	114	42	29	36
20	170	153	80	131	79	149	105	66	61	38	29	34
21	121	139	80	143	151	144	101	64	48	36	29	34
22	107	133	305	210	113	136	98	63	41	34	30	35
23	98	126	174	152	93	147	93	61	38	36	29	34
24	92	118	121	141	89	109	92	64	60	35	e29	33
25	88	112	156	134	137	120	91	60	50	39	e29	32
26	85	106	162	124	128	116	90	59	55	e42	e29	33
27	98	102	127	125	108	112	100	56	58	e45	e29	32
28	181	98	117	120	102	109	87	55	52	46	29	33
29	111	96	111	105	---	108	84	53	54	46	35	37
30	99	216	106	112	---	108	80	52	56	56	36	37
31	94	---	298	102	---	105	---	49	---	78	79	---
Total	3,035	4,346	4,287	6,241	2,740	5,050	3,140	2,341	1,540	1,491	1,116	1,299
Mean	97.9	145	138	201	97.9	163	105	75.5	51.3	48.1	36.0	43.3
Max	392	653	406	651	151	587	190	129	114	83	79	164
Min	51	80	80	102	76	105	80	49	38	34	28	28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	96.9	134	170	201	238	250	213	165	120	93.8	89.4	111
Max	336	341	334	450	522	461	481	381	316	290	317	1,057
(WY)	(1996)	(1993)	(1984)	(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	51.3	42.0	29.3	27.6
(WY)	(1999)	(1982)	(1989)	(1981)	(2007)	(1988)	(1986)	(2007)	(2007)	(2002)	(1993)	(1998)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1981 - 2007	
Annual total	42,830		36,626			
Annual mean	117		100		158	
Highest annual mean					224	2004
Lowest annual mean					87.5	1988
Highest daily mean	653	Nov 16	653	Nov 16	5,720	Sep 17, 2004
Lowest daily mean	37	Aug 2	28	Aug 14	9.2	Sep 2, 1986
Annual seven-day minimum	43	Jul 29	29	Aug 14	16	Sep 2, 1986
Maximum peak flow			2,100	Nov 15	^a 19,000	Sep 17, 2004
Maximum peak stage			4.71	Nov 15	^a 16.27	Sep 17, 2004
Instantaneous low flow			^a 27	Aug 14	4.2	Sep 5, 1986
10 percent exceeds	197		173		300	
50 percent exceeds	96		88		110	
90 percent exceeds	54		34		44	

^a See Remarks.

