



Water-Data Report 2007

0208925200 BEAR CREEK AT MAYS STORE, NC

Neuse Basin
Middle Neuse Subbasin

LOCATION.--Lat 35°16'29", long 77°47'40" referenced to North American Datum of 1983, Lenoir County, NC, Hydrologic Unit 03020202, at downstream side of bridge on Secondary Road 1326, 0.7 mi west of Mays Store, and 1.0 mi downstream of Secondary Road 1002.

DRAINAGE AREA.--57.7 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 50 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Maximum discharge for period of record from rating extension above 3,000 ft³/s on basis of slope conveyance of peak flow. Maximum gage height for period of record from floodmark. Minimum discharge for current water year also occurred September 12.

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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	59	95	191	134	96	57	35	e32	17	43	17	12
2	53	90	200	118	223	67	36	e30	17	29	15	12
3	51	99	177	102	198	71	35	29	52	23	14	11
4	49	90	169	103	152	63	33	53	61	20	13	13
5	47	82	154	101	125	58	31	54	43	18	13	12
6	46	75	137	229	107	55	30	85	33	16	12	11
7	45	88	126	226	98	53	30	56	28	15	12	10
8	50	215	116	194	90	51	29	46	25	70	12	9.9
9	52	168	106	178	83	49	29	45	23	47	12	9.8
10	56	126	100	145	77	48	30	54	21	34	19	10
11	51	105	97	124	73	47	30	46	19	276	67	9.7
12	49	143	95	109	72	46	47	41	18	168	31	10
13	45	251	93	90	69	45	56	40	18	126	24	11
14	42	181	91	85	148	44	46	39	17	74	21	11
15	47	148	84	81	139	44	226	34	16	48	18	44
16	43	216	86	78	113	50	500	31	16	36	17	27
17	33	630	84	71	97	80	335	33	15	30	16	20
18	63	478	81	72	87	71	240	36	15	49	16	18
19	61	335	79	90	78	60	176	34	14	43	15	18
20	53	266	76	86	73	54	132	31	16	35	14	18
21	45	242	62	80	71	50	96	29	21	32	14	20
22	43	669	61	236	68	48	77	27	17	26	16	19
23	51	910	110	230	63	46	65	25	15	23	15	17
24	46	602	107	170	59	44	56	24	14	21	15	16
25	41	415	174	136	58	42	51	23	15	19	14	15
26	39	345	535	115	67	40	46	22	29	18	13	15
27	39	309	370	102	64	39	42	20	17	17	13	15
28	260	284	287	98	60	39	40	20	15	16	14	15
29	223	239	236	94	---	38	e38	19	16	16	13	14
30	144	205	180	85	---	37	e35	18	45	16	12	14
31	111	---	149	80	---	36	---	17	---	20	12	---
Total	2,037	8,101	4,613	3,842	2,708	1,572	2,652	1,093	688	1,424	529	457.4
Mean	65.7	270	149	124	96.7	50.7	88.4	35.3	22.9	45.9	17.1	15.2
Max	260	910	535	236	223	80	500	85	61	276	67	44
Min	33	75	61	71	58	36	29	17	14	15	12	9.7
Cfsm	1.14	4.68	2.58	2.15	1.68	0.88	1.53	0.61	0.40	0.80	0.30	0.26
In.	1.31	5.22	2.97	2.48	1.75	1.01	1.71	0.70	0.44	0.92	0.34	0.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	60.9	60.1	64.0	92.7	83.6	93.2	74.9	63.3	57.1	52.7	61.2	131
Max	316	270	149	266	306	230	204	216	201	156	231	1,401
(WY)	(2000)	(2007)	(2007)	(1993)	(1998)	(1998)	(1998)	(1989)	(1995)	(2003)	(1992)	(1999)
Min	17.2	15.8	21.5	29.0	40.1	35.3	26.5	19.8	13.2	12.5	12.8	15.2
(WY)	(1995)	(1995)	(1995)	(1995)	(2001)	(1988)	(1995)	(1994)	(1994)	(1993)	(1993)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1988 - 2007	
Annual total	40,494		29,716.4			
Annual mean	111		81.4		74.4	
Highest annual mean					169	1999
Lowest annual mean					31.7	1988
Highest daily mean	1,180	Sep 2	910	Nov 23	8,000	Sep 16, 1999
Lowest daily mean	19	Apr 21	9.7	Sep 11	8.4	Aug 18, 1997
Annual seven-day minimum	21	Apr 15	10	Sep 6	9.2	Aug 12, 1997
Maximum peak flow			950	Nov 23	^a 11,000	Sep 16, 1999
Maximum peak stage			9.10	Nov 23	^a 16.04	Sep 16, 1999
Instantaneous low flow			^a 9.1	Sep 11	7.7	Aug 18, 1997
Annual runoff (cfsm)	1.92		1.41		1.29	
Annual runoff (inches)	26.11		19.16		17.52	
10 percent exceeds	240		192		145	
50 percent exceeds	62		47		42	
90 percent exceeds	32		15		18	

^a See Remarks.

