

Water-Data Report 2008

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. Datum of gage is 45.8 ft above North American Vertical Datum of 1988. 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.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	14	25	16	95	32	75	40	79	20	10	12	42
2	14	23	16	73	49	66	38	64	19	9.9	11	30
3	14	22	16	59	44	58	34	53	18	9.5	13	24
4	16	20	16	51	40	54	35	46	17	9.3	11	21
5	15	19	16	47	37	192	130	41	16	9.2	10	20
6	16	18	16	44	35	151	481	37	15	9.7	9.7	145
7	20	17	16	41	33	139	335	35	15	11	9.3	150
8	18	17	16	38	31	279	246	32	14	11	9.2	91
9	16	17	16	37	29	215	173	33	13	11	8.8	82
10	16	17	16	35	27	148	136	33	12	13	8.8	391
11	15	16	16	34	25	118	115	32	12	14	9.7	331
12	15	16	16	32	25	96	96	34	28	13	9.0	168
13	14	16	16	31	49	80	82	31	21	12	13	113
14	14	16	16	31	85	69	69	28	18	11	17	87
15	14	16	16	28	69	62	61	27	18	11	14	69
16	15	17	76	26	57	179	55	28	19	10	13	67
17	14	17	62	28	49	135	50	27	17	9.1	12	105
18	e13	17	47	32	279	98	46	24	15	8.6	12	100
19	e13	17	38	34	405	82	44	26	14	8.9	11	77
20	e13	17	33	59	239	76	45	25	14	9.0	11	64
21	e12	17	31	51	171	63	46	44	15	8.5	9.9	56
22	e12	17	29	46	213	55	44	32	17	11	9.3	51
23	e11	17	28	44	247	49	42	27	15	25	8.9	46
24	e11	16	29	41	168	45	39	25	14	39	8.7	43
25	38	17	28	37	134	42	36	24	12	30	8.6	44
26	41	17	174	35	120	39	34	22	12	22	8.8	286
27	70	17	283	33	128	37	38	21	12	19	73	394
28	57	16	142	31	107	35	149	21	11	16	37	280
29	43	17	96	30	87	33	134	26	10	14	52	176
30	33	16	95	31	---	33	100	23	11	13	57	131
31	28	---	131	30	---	37	---	22	---	12	96	---
Total	655	527	1,562	1,264	3,014	2,840	2,973	1,022	464	419.7	593.7	3,684
Mean	21.1	17.6	50.4	40.8	104	91.6	99.1	33.0	15.5	13.5	19.2	123
Max	70	25	283	95	405	279	481	79	28	39	96	394
Min	11	16	16	26	25	33	34	21	10	8.5	8.6	20
Cfsm	0.37	0.30	0.87	0.71	1.80	1.59	1.72	0.57	0.27	0.23	0.33	2.13
In.	0.42	0.34	1.01	0.81	1.94	1.83	1.92	0.66	0.30	0.27	0.38	2.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	59.0	58.1	63.4	90.2	84.6	93.2	76.1	61.9	55.1	50.8	59.2	130
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 2007		Water Year 2008		Water Years 1988 - 2008	
Annual total	17,709.4		19,018.4			
Annual mean	48.5		52.0		73.3	
Highest annual mean					169	1999
Lowest annual mean					31.7	1988
Highest daily mean	500	Apr 16	481	Apr 6	8,000	Sep 16, 1999
Lowest daily mean	9.7	Sep 11	8.5	Jul 21	8.4	Aug 18, 1997
Annual seven-day minimum	10	Sep 6	9.2	Aug 6	9.2	Aug 12, 1997
Maximum peak flow			536	Apr 6	^a 11,000	Sep 16, 1999
Maximum peak stage			8.06	Apr 6	^a 16.04	Sep 16, 1999
Instantaneous low flow			7.5	Jul 22	7.5	Jul 22, 2008
Annual runoff (cfs)	0.841		0.901		1.27	
Annual runoff (inches)	11.42		12.26		17.27	
10 percent exceeds	102		131		144	
50 percent exceeds	29		29		41	
90 percent exceeds	14		11		17	

^aSee Remarks.