

Water-Data Report 2010

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 streamgage.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. 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 period of record and current water year also occurred September 25, 26.

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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	29	22	47	178	101	80	130	24	22	27	12	12
2	25	24	51	149	133	89	107	23	22	19	14	11
3	22	23	196	119	274	252	90	22	26	17	12	11
4	21	22	159	100	250	252	76	24	23	16	12	13
5	20	21	209	88	219	184	66	25	22	13	21	11
6	21	22	223	79	631	143	58	23	20	14	23	12
7	21	21	142	72	553	123	52	21	19	12	18	11
8	20	21	112	69	344	107	47	21	18	11	26	9.5
9	18	19	281	65	281	89	60	19	18	11	19	10
10	17	21	419	61	270	81	55	19	17	11	17	8.5
11	19	110	257	59	230	82	48	19	16	14	14	8.1
12	19	315	172	58	194	146	44	19	16	12	14	10
13	19	211	133	55	178	165	42	19	16	13	12	8.7
14	19	139	118	55	156	155	39	19	16	14	12	7.8
15	22	101	104	52	150	125	38	17	13	14	13	7.7
16	24	79	92	50	147	104	35	18	18	12	11	7.9
17	22	66	81	80	133	90	35	26	31	12	10	8.0
18	21	59	76	131	122	82	32	36	21	15	11	7.9
19	20	165	121	109	113	75	e30	42	20	13	14	7.9
20	20	178	126	92	103	69	e30	41	19	12	22	7.9
21	19	120	105	83	92	65	33	33	17	13	23	8.2
22	18	92	90	191	91	69	39	28	18	12	20	7.8
23	18	91	81	170	97	72	35	26	24	12	21	7.6
24	18	85	74	130	91	65	33	65	26	12	18	6.3
25	18	77	76	265	95	61	34	40	16	11	20	5.6
26	18	69	180	302	97	58	32	33	14	9.5	18	6.7
27	20	63	141	183	91	56	30	29	13	9.7	18	29
28	21	57	115	134	86	54	28	26	11	9.6	16	117
29	20	53	96	111	---	161	26	27	13	9.7	15	96
30	21	50	83	111	---	280	24	25	53	12	13	488
31	20	---	139	110	---	174	---	23	---	9.7	14	---
Total	630	2,396	4,299	3,511	5,322	3,608	1,428	832	598	402.2	503	963.1
Mean	20.3	79.9	139	113	190	116	47.6	26.8	19.9	13.0	16.2	32.1
Max	29	315	419	302	631	280	130	65	53	27	26	488
Min	17	19	47	50	86	54	24	17	11	9.5	10	5.6
Cfsm	0.35	1.38	2.40	1.96	3.29	2.02	0.82	0.47	0.35	0.22	0.28	0.56
In.	0.41	1.54	2.77	2.26	3.43	2.33	0.92	0.54	0.39	0.26	0.32	0.62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	56.9	60.3	67.3	90.5	87.4	95.7	74.2	60.0	52.3	47.6	55.7	122
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 2009		Water Year 2010		Water Years 1988 - 2010	
Annual total	20,981		24,492.3			
Annual mean	57.5		67.1		72.3	
Highest annual mean					169	1999
Lowest annual mean					31.7	1988
Highest daily mean	496	Mar 2	631	Feb 6	8,000	Sep 16, 1999
Lowest daily mean	11	Sep 21	5.6	Sep 25	5.6	Sep 25, 2010
Annual seven-day minimum	13	Jul 25	7.2	Sep 20	7.2	Sep 20, 2010
Maximum peak flow			696	Feb 6	^a 11,000	Sep 16, 1999
Maximum peak stage			8.50	Feb 6	^a 16.04	Sep 16, 1999
Instantaneous low flow			^a 5.3	Sep 24	^a 5.3	Sep 24, 2010
Annual runoff (cfsm)	0.996		1.16		1.25	
Annual runoff (inches)	13.53		15.79		17.02	
10 percent exceeds	120		163		143	
50 percent exceeds	37		29		41	
90 percent exceeds	15		12		16	

^a See Remarks.

