

Water-Data Report 2010

02088000 MIDDLE CREEK NEAR CLAYTON, NC

Neuse Basin
Upper Neuse Subbasin

LOCATION.--Lat 35°34'15", long 78°35'26" referenced to North American Datum of 1983, Johnston County, NC, Hydrologic Unit 03020201, on left bank 800 ft downstream of bridge on North Carolina Highway 50, 0.5 mi upstream from Buffalo Branch, 3.7 mi downstream of Wake-Johnston County line, and 9.5 mi southwest of Clayton.

DRAINAGE AREA.--83.5 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for October 1939, published in WSP 1303.

REVISED RECORDS.--WSP 952: 1940(M), 1941. WSP 1233: 1943(M), 1945, 1949. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 183.56 ft above North American Vertical Datum of 1988. November 1-20, 1939, nonrecording gage at same site. Satellite telemetry at streamgage.

REMARKS.--No estimated daily discharges. Records fair. Maximum discharge for period of record from rating curve extended above 10,000 ft³/s, by logarithmic plotting; maximum gage height for period of record, 14.88 ft, from high-water mark in gage well. Minimum discharge for period of record, no flow, also occurred October 12-13, 1954, and July 13-28, 1986. Minimum discharge for current water year also occurred October 5, 10.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	14	19	41	138	108	73	103	26	157	19	41	33
2	13	32	59	109	130	72	85	26	357	17	69	29
3	13	30	310	87	243	112	74	25	364	15	40	26
4	12	22	620	76	311	159	69	27	436	14	28	24
5	12	18	308	71	300	112	65	29	118	12	175	22
6	13	17	172	68	1,250	90	60	27	82	12	248	19
7	16	16	108	65	1,180	80	54	23	92	12	101	18
8	17	15	83	65	372	75	49	23	92	12	48	19
9	13	15	406	64	188	71	191	20	60	12	33	20
10	11	15	729	59	257	69	156	17	48	12	27	18
11	12	166	368	56	200	78	84	17	42	13	22	17
12	13	427	124	56	137	157	65	17	37	12	20	18
13	14	621	104	56	129	251	55	19	39	12	19	18
14	16	213	128	54	142	311	50	18	58	13	17	17
15	17	85	109	53	127	147	46	17	42	12	16	16
16	20	61	92	53	116	109	46	16	34	12	15	15
17	19	50	78	166	103	92	43	30	42	25	14	15
18	16	44	72	482	96	84	39	168	32	96	15	14
19	14	50	166	358	91	79	36	153	26	48	16	14
20	14	48	284	132	85	73	36	135	24	29	52	14
21	13	42	132	112	82	68	37	62	22	23	147	14
22	13	38	97	406	87	69	46	41	20	18	70	13
23	13	45	84	509	123	69	43	92	19	15	200	13
24	12	81	76	178	108	63	37	475	19	13	587	13
25	14	66	86	360	100	59	41	373	18	12	758	12
26	15	53	277	653	94	61	58	130	17	12	686	13
27	16	45	187	303	83	60	45	79	16	12	185	96
28	18	41	111	135	77	56	37	57	16	113	80	179
29	20	38	90	113	---	290	31	800	15	83	59	108
30	19	38	77	115	---	468	28	254	15	112	46	730
31	18	---	102	122	---	173	---	90	---	79	39	---
Total	460	2,451	5,680	5,274	6,319	3,730	1,809	3,286	2,359	901	3,873	1,577
Mean	14.8	81.7	183	170	226	120	60.3	106	78.6	29.1	125	52.6
Max	20	621	729	653	1,250	468	191	800	436	113	758	730
Min	11	15	41	53	77	56	28	16	15	12	14	12
Cfsm	0.18	0.98	2.19	2.04	2.70	1.44	0.72	1.27	0.94	0.35	1.50	0.63
In.	0.20	1.09	2.53	2.35	2.82	1.66	0.81	1.46	1.05	0.40	1.73	0.70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	51.7	67.3	89.0	136	160	168	115	70.0	58.3	58.1	61.9	63.0
Max	275	280	254	378	450	439	319	330	435	472	340	601
(WY)	(1960)	(2007)	(1973)	(1998)	(1973)	(1998)	(1959)	(1958)	(2006)	(1965)	(1949)	(1999)
Min	0.77	4.67	19.7	31.6	46.2	45.1	16.1	11.4	2.15	0.23	1.75	0.50
(WY)	(1987)	(1974)	(1952)	(1942)	(1941)	(1981)	(1986)	(1981)	(1986)	(1986)	(1983)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1940 - 2010	
Annual total	26,747.4		37,719			
Annual mean	73.3		103		91.2	
Highest annual mean					193	2003
Lowest annual mean					30.0	1981
Highest daily mean	752	Mar 30	1,250	Feb 6	6,660	Jun 15, 2006
Lowest daily mean	8.5	Jul 5	11	Oct 10	0.00	Oct 11, 1954
Annual seven-day minimum	9.8	Jul 1	12	Jul 5	0.00	Jul 13, 1986
Maximum peak flow			1,700	Feb 6	^a 11,900	Sep 6, 1996
Maximum peak stage			9.83	Feb 6	^a 14.88	Sep 6, 1996
Instantaneous low flow			^a 9.2	Oct 4	^a 0.00	Oct 11, 1954
Annual runoff (cfsm)	0.878		1.24		1.09	
Annual runoff (inches)	11.92		16.80		14.84	
10 percent exceeds	133		255		197	
50 percent exceeds	44		54		47	
90 percent exceeds	12		14		8.4	

^a See Remarks.

