

Water-Data Report 2008

02085070 ENO RIVER NEAR DURHAM, NC

Neuse Basin
Upper Neuse Subbasin

LOCATION.--Lat 36°04'20", long 78°54'28" referenced to North American Datum of 1983, Durham County, NC, Hydrologic Unit 03020201, on right bank 275 ft downstream of bridge on U.S. Highway 501, 0.2 mi downstream of Crooked Creek, and 5 mi north of Durham.

DRAINAGE AREA.--141 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1963 to current year. Occasional low-flow measurements, water year 1955.

REVISED RECORDS.--WDR NC-72-1: 1968-71 (maximum water year discharges).

GAGE.--Water-stage recorder. Datum of gage is 269.92 ft above North American Vertical Datum of 1988. Prior to November 19, 1966, at site 275 ft upstream, at datum 272.35 ft. Water-stage recorder at present site, at datum 270.94 ft. November 20, 1966, to September 30, 1967. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Some regulation during periods of low flow caused by mill 600 ft upstream. Maximum gage height for period of record, 23.58 ft, from floodmark. Minimum discharge for period of record also occurred on August 15, 1977.

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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	2.4	3.5	e1.4	79	46	24	353	122	31	73	4.7	28
2	2.4	2.7	e1.4	43	70	19	188	79	38	30	4.8	30
3	2.6	e2.7	e1.7	24	58	16	111	59	29	13	4.0	20
4	2.6	e4.7	e2.0	16	40	53	204	49	18	7.1	3.7	13
5	2.9	e4.0	e1.4	14	30	1,160	735	41	12	16	4.0	9.2
6	3.3	e3.5	e1.4	11	23	245	476	36	8.2	162	3.7	4,930
7	2.9	e5.1	e1.5	7.2	18	528	297	33	6.1	110	3.4	1,060
8	2.8	e5.2	e1.7	7.8	15	753	170	29	4.4	60	2.6	303
9	2.8	e5.6	e2.2	5.8	13	227	121	30	3.9	49	2.4	109
10	4.8	e4.9	e2.2	5.1	10	118	96	30	3.3	36	12	69
11	4.4	e4.7	e2.1	5.0	7.7	86	80	45	2.8	40	6.3	59
12	3.5	e4.8	e2.0	5.5	7.4	70	73	74	2.3	28	5.2	55
13	3.4	e4.9	e2.0	6.6	153	60	70	57	2.1	20	6.3	46
14	3.5	e4.9	e2.8	5.3	111	50	63	38	2.5	17	5.5	38
15	3.5	e5.2	e4.7	4.3	69	73	55	30	3.1	15	11	30
16	3.4	e6.0	21	3.4	51	134	50	63	3.8	14	6.5	64
17	4.4	e4.7	15	14	41	103	46	75	6.6	9.9	4.1	103
18	6.3	e3.9	11	18	39	72	42	52	5.5	6.9	4.5	68
19	7.2	e2.7	7.4	31	31	61	39	51	3.8	10	3.6	46
20	7.9	e2.7	5.7	28	23	69	92	54	2.2	11	2.9	34
21	7.5	e2.3	4.6	21	18	66	187	69	1.6	7.8	3.7	26
22	6.9	e2.4	3.4	16	21	56	110	58	11	8.2	19	20
23	6.3	e2.2	3.1	13	20	50	81	39	153	7.0	9.7	16
24	11	e2.1	3.2	11	20	44	66	29	46	6.7	6.0	13
25	48	e2.0	3.4	9.3	18	39	56	22	20	6.7	4.0	10
26	56	e1.6	46	8.0	28	36	49	17	8.2	7.2	3.6	632
27	171	e1.3	29	7.2	37	34	55	13	4.4	5.9	837	326
28	38	e1.8	18	6.7	36	31	341	28	3.5	6.6	974	139
29	17	e1.7	e11	6.1	30	30	851	32	17	6.8	126	81
30	9.4	e1.4	e61	5.8	---	34	276	29	262	5.6	60	58
31	4.8	---	e198	5.2	---	121	---	27	---	4.7	50	---
Total	452.9	105.2	471.3	443.3	1,084.1	4,462	5,433	1,410	715.3	801.1	2,194.2	8,435.2
Mean	14.6	3.51	15.2	14.3	37.4	144	181	45.5	23.8	25.8	70.8	281
Max	171	6.0	198	79	153	1,160	851	122	262	162	974	4,930
Min	2.4	1.3	1.4	3.4	7.4	16	39	13	1.6	4.7	2.4	9.2
Cfs/m	0.10	0.02	0.11	0.10	0.27	1.02	1.28	0.32	0.17	0.18	0.50	1.99
In.	0.12	0.03	0.12	0.12	0.29	1.18	1.43	0.37	0.19	0.21	0.58	2.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	57.3	78.1	111	189	230	270	186	115	86.0	69.9	52.9	74.1
Max	456	462	406	517	638	767	603	429	411	452	282	606
(WY)	(1972)	(1986)	(1973)	(1998)	(1998)	(1998)	(2003)	(1978)	(1982)	(1975)	(1985)	(1999)
Min	4.77	3.51	11.3	14.3	37.4	32.4	34.9	10.2	5.28	6.01	3.12	0.84
(WY)	(1964)	(2008)	(2002)	(2008)	(2008)	(2006)	(1995)	(2002)	(2002)	(2002)	(2007)	(1968)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1963 - 2008	
Annual total	24,786.2		26,007.6			
Annual mean	67.9		71.1		126	
Highest annual mean					293	
Lowest annual mean					26.7	
Highest daily mean	1,670	Apr 15	4,930	Sep 6	9,900	Sep 6, 1996
Lowest daily mean	1.2	Sep 13	1.3	Nov 27	0.08	Aug 14, 1977
Annual seven-day minimum	1.5	Sep 7	1.5	Nov 26	0.20	Aug 8, 1977
Maximum peak flow			8,850	Sep 6	14,700	Sep 6, 1996
Maximum peak stage			18.82	Sep 6	^a 23.58	Sep 6, 1996
Instantaneous low flow			0.82	Jun 21	^a 0.06	Aug 14, 1977
Annual runoff (cfs)	0.482		0.504		0.895	
Annual runoff (inches)	6.54		6.86		12.16	
10 percent exceeds	124		113		257	
50 percent exceeds	12		16		51	
90 percent exceeds	2.1		2.7		6.3	

^aSee Remarks.