

Water-Data Report 2007

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

REVISED RECORDS.--WDR NC-72-1: 1968-71(M), 1971(P).

GAGE.--Water-stage recorder. Elevation of gage is 270 ft above NGVD of 1929, from topographic map. Prior to November 19, 1966, at site 275 ft upstream, at datum 272.35 ft. November 20, 1966, to September 30, 1967, water-stage recorder at present site, at datum 270.94 ft. 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. Minimum discharge for current water year also occurred September 14.

02085070 ENO RIVER NEAR DURHAM, NC—Continued

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	e6.0	29	68	100	65	88	70	42	8.7	9.1	4.4	1.7
2	e3.8	22	77	227	93	1,200	71	40	7.7	7.8	4.3	1.6
3	3.0	15	72	136	122	545	69	39	45	6.0	3.9	1.5
4	2.9	14	61	100	91	236	63	38	58	6.6	3.7	1.7
5	3.7	17	54	86	75	151	57	40	35	4.0	3.1	1.8
6	20	16	48	746	66	120	52	41	42	4.0	2.5	1.8
7	15	122	47	395	63	105	52	39	39	5.6	2.1	1.7
8	22	392	44	1,030	61	96	52	35	29	5.7	1.7	1.7
9	25	155	41	557	57	87	49	48	22	4.9	1.5	1.7
10	19	95	38	247	54	81	47	46	20	12	1.7	1.5
11	16	72	39	149	53	79	51	41	14	16	2.2	1.4
12	13	375	37	116	51	77	241	137	12	12	2.3	1.3
13	5.9	229	35	102	56	70	199	281	11	11	2.4	1.2
14	5.0	117	36	92	666	70	108	74	32	8.3	2.4	2.3
15	5.0	88	36	85	416	69	1,670	49	25	6.6	2.3	6.6
16	7.2	406	35	80	182	367	1,430	39	20	6.1	2.2	16
17	29	477	34	73	122	886	474	36	15	6.1	7.0	6.4
18	74	179	33	68	100	302	228	34	12	8.3	3.3	3.7
19	51	124	32	75	86	166	150	33	9.4	6.9	2.3	2.7
20	31	100	31	76	76	125	120	30	9.5	7.5	1.9	2.4
21	19	137	30	77	75	107	102	27	9.3	6.0	5.0	2.3
22	14	2,850	48	444	71	94	89	25	7.9	4.3	4.5	2.1
23	10	1,220	136	331	66	89	79	21	7.8	3.7	11	2.1
24	6.9	494	107	175	60	84	70	20	7.8	3.6	3.3	2.2
25	5.9	210	677	123	78	80	65	17	20	3.5	2.9	2.4
26	5.3	130	884	100	266	74	60	16	42	3.9	2.7	3.3
27	14	100	297	86	162	73	59	15	23	17	2.4	3.0
28	126	83	145	81	109	91	55	14	16	11	2.4	2.5
29	100	73	105	73	---	79	51	12	11	5.1	2.0	2.5
30	60	66	85	66	---	83	47	11	10	5.4	1.7	2.4
31	41	---	74	63	---	76	---	9.2	---	5.3	1.6	---
Total	759.6	8,407	3,486	6,159	3,442	5,850	5,930	1,349.2	621.1	223.3	96.7	85.5
Mean	24.5	280	112	199	123	189	198	43.5	20.7	7.20	3.12	2.85
Max	126	2,850	884	1,030	666	1,200	1,670	281	58	17	11	16
Min	2.9	14	30	63	51	69	47	9.2	7.7	3.5	1.5	1.2
Cfsm	0.17	1.99	0.80	1.41	0.87	1.34	1.40	0.31	0.15	0.05	0.02	0.02
In.	0.20	2.22	0.92	1.62	0.91	1.54	1.56	0.36	0.16	0.06	0.03	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	58.3	79.8	113	193	235	273	186	117	87.4	70.9	52.5	69.5
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	7.27	11.3	21.4	47.1	32.4	34.9	10.2	5.28	6.01	3.12	0.84
(WY)	(1964)	(2002)	(2002)	(1981)	(2002)	(2006)	(1995)	(2002)	(2002)	(2002)	(2007)	(1968)

02085070 ENO RIVER NEAR DURHAM, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1963 - 2007	
Annual total	31,597.1		36,409.4			
Annual mean	86.6		99.8		127	
Highest annual mean					293	2003
Lowest annual mean					26.7	2002
Highest daily mean	2,850	Nov 22	2,850	Nov 22	9,900	Sep 6, 1996
Lowest daily mean	2.9	Oct 4	1.2	Sep 13	0.08	Aug 14, 1977
Annual seven-day minimum	5.0	Sep 29	1.5	Sep 7	0.20	Aug 8, 1977
Maximum peak flow			4,140	Nov 22	14,700	Sep 6, 1996
Maximum peak stage			11.63	Nov 22	^a 23.58	Sep 6, 1996
Instantaneous low flow			^a 1.1	Sep 13	^a 0.06	Aug 14, 1977
Annual runoff (cfsm)	0.614		0.707		0.904	
Annual runoff (inches)	8.34		9.61		12.28	
10 percent exceeds	149		189		259	
50 percent exceeds	37		40		52	
90 percent exceeds	7.2		2.4		6.6	

^a See Remarks.

