

NEUSE RIVER BASIN

02087500 NEUSE RIVER NEAR CLAYTON, NC

LOCATION.--Lat 35°38'50", long 78°24'22", Johnston County, Hydrologic Unit 03020201, on left bank at downstream side of bridge on State Highway 42, 2.3 mi upstream from Mill Creek, and 3 mi east of Clayton.

DRAINAGE AREA.--1,150 mi².

PERIOD OF RECORD.--July 1927 to current year.

REVISED RECORDS.--WSP 1032: 1930, 1935(M). WSP 1333: 1935. WSP 1503: 1949. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 128.41 ft above NGVD of 1929. Prior to Mar. 18, 1942, at site 1,100 ft upstream at same datum. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges which are fair. Flow regulated by Falls Lake (station 02087182), since Dec. 7, 1983. The City of Raleigh diverted an average of 80.8 ft³/s upstream from station, most of which was returned upstream from station as treated effluent. Prior to regulation, maximum discharge: 22,900 ft³/s, Sept. 19, 1945; gage height: 22.12 ft; minimum discharge: 44 ft³/s, Sept. 15, 1932; gage height: 0.28 ft, at site then in use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 23, 1919, reached a stage of 21.15 ft, from floodmark at former site; discharge 21,200 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	402	371	213	196	415	331	4290	322	252	275	261	2640
2	306	373	188	e204	387	344	2150	322	332	248	257	1300
3	273	369	215	228	352	784	1020	326	279	247	252	665
4	275	363	197	286	341	545	640	337	242	231	243	474
5	271	360	195	302	325	405	541	490	232	223	235	e385
6	297	350	196	510	312	375	505	387	e238	281	230	326
7	507	313	195	1550	1030	e325	465	350	291	232	223	292
8	337	277	191	821	1370	344	438	e328	248	217	219	272
9	295	261	196	544	826	325	422	326	218	210	215	262
10	319	228	187	452	616	330	546	317	256	210	210	262
11	324	238	1100	439	552	303	600	271	270	699	215	274
12	317	238	784	413	465	294	470	243	248	742	214	253
13	313	224	363	478	428	e284	435	241	243	367	213	239
14	311	228	302	454	397	e331	423	306	247	313	209	240
15	1180	235	269	374	364	336	412	272	251	339	207	365
16	593	225	e242	335	355	317	405	241	241	301	513	798
17	407	227	230	303	353	320	389	249	242	259	330	1230
18	342	244	301	292	329	510	368	232	241	236	362	575
19	312	225	319	350	321	419	406	284	247	325	601	427
20	289	230	e254	3570	346	380	465	e264	243	285	382	398
21	317	229	229	1710	379	e417	425	e231	242	408	296	335
22	338	223	217	1150	380	534	390	223	240	290	e254	306
23	336	219	206	1710	338	406	367	219	243	259	260	286
24	310	319	219	3920	343	364	346	232	245	309	250	268
25	313	440	248	1880	341	344	344	229	257	455	269	255
26	303	385	215	1240	343	337	356	278	277	1340	1070	256
27	291	267	211	828	e323	825	368	321	379	811	1020	275
28	286	238	205	646	334	787	389	321	520	468	562	268
29	297	213	206	542	---	554	349	315	650	356	410	254
30	321	220	202	477	---	455	333	294	407	299	747	240
31	382	---	197	437	---	453	---	267	---	263	1510	---
TOTAL	11164	8332	8492	26641	12665	13078	19057	9038	8521	11498	12239	14420
MEAN	360.1	277.7	273.9	859.4	452.3	421.9	635.2	291.5	284.0	370.9	394.8	480.7
MAX	1180	440	1100	3920	1370	825	4290	490	650	1340	1510	2640
MIN	271	213	187	196	312	284	333	219	218	210	207	239

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2002,* BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	711.1	635.7	813.0	1416	1829	2284	1695	880.0	595.7	594.9	595.9	895.2								
MAX	3822	2201	2013	2821	4961	5688	3426	2864	1211	1841	1539	6620								
(WY)	2000	1996	1986	1984	1998	1998	1998	1989	1995	1995	1989	1996								
MIN	212	215	237	375	452	422	290	292	267	234	204	136								
(WY)	1984	1992	1995	2001	2002	2002	1986	2002	1999	1983	1983	1985								

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	FOR WATER YEARS 1983 - 2002*
ANNUAL TOTAL	266181	155145			
ANNUAL MEAN	729.3	425.1			1075
HIGHEST ANNUAL MEAN					1760
LOWEST ANNUAL MEAN					425
HIGHEST DAILY MEAN	4830	Apr 2	4290	Apr 1	19700
LOWEST DAILY MEAN	187	Dec 10	187	Dec 10	105
ANNUAL SEVEN-DAY MINIMUM	194	Dec 4	194	Dec 4	117
MAXIMUM PEAK FLOW			5450	Apr 1	20500
MAXIMUM PEAK STAGE			9.10	Apr 1	20.67
INSTANTANEOUS LOW FLOW			141	Dec 10	78
10 PERCENT EXCEEDS	1940		648		3150
50 PERCENT EXCEEDS	383		319		449
90 PERCENT EXCEEDS	238		220		253

e Estimated.

* Regulated period only (1983-2002). See REMARKS.

02087500 NEUSE RIVER NEAR CLAYTON, NC--Continued

