

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 sea level. 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 85.7 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	491	303	376	332	385	400	3090	437	368	361	455	633
2	465	313	363	341	357	389	4830	404	2710	319	393	508
3	436	307	373	334	343	397	2390	397	1290	370	386	398
4	415	305	368	332	337	1390	1740	390	1070	402	350	345
5	406	313	360	335	e445	1420	1810	373	995	1730	478	320
6	393	330	357	338	e430	1130	2590	384	550	837	476	291
7	376	329	352	338	394	1020	3340	371	398	395	397	272
8	359	337	330	352	363	922	3810	368	364	346	420	282
9	354	342	333	392	352	863	3970	366	e350	485	400	309
10	353	348	363	355	353	819	3990	378	e360	547	394	322
11	352	342	345	344	356	796	3950	390	e380	534	431	611
12	347	331	319	342	355	524	4010	360	391	396	1340	399
13	340	333	359	339	503	429	4060	386	404	339	977	292
14	327	389	333	335	483	384	4040	383	633	296	1800	249
15	324	556	313	339	515	446	4000	362	1590	299	2120	243
16	325	383	296	340	447	604	3970	692	1010	284	2090	338
17	326	353	891	330	1070	471	3940	593	2150	269	1290	372
18	324	353	809	328	1250	423	3920	491	e1700	256	588	351
19	328	356	535	337	735	397	3480	481	e600	e280	497	314
20	322	534	513	578	583	396	1930	451	438	e290	522	328
21	315	476	465	689	494	e3550	880	517	354	265	451	348
22	315	386	431	478	494	3890	1330	506	408	309	410	325
23	318	361	404	420	568	1910	2560	418	477	321	321	317
24	313	336	376	387	487	1450	2490	365	701	292	301	410
25	316	379	364	375	455	1860	2780	342	505	392	348	812
26	313	1160	334	356	487	2800	2640	345	457	382	287	390
27	314	682	370	354	445	2980	2000	382	429	1950	294	271
28	310	504	361	346	416	3260	858	371	410	1990	283	283
29	309	433	350	340	---	2570	511	444	455	713	325	377
30	308	398	353	368	---	4340	467	438	329	695	312	395
31	305	---	339	459	---	2080	---	370	---	577	579	---
TOTAL	10799	12272	12435	11633	13902	44310	85376	12955	22276	16921	19715	11105
MEAN	348	409	401	375	496	1429	2846	418	743	546	636	370
MAX	491	1160	891	689	1250	4340	4830	692	2710	1990	2120	812
MIN	305	303	296	328	337	384	467	342	329	256	283	243

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2001,* BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	730	655	841	1446	1901	2382	1751	911	612	607	607	917							
MAX	3822	2201	2013	2821	4961	5688	3426	2864	1211	1841	1539	6620							
(WY)	2000	1996	1986	1984	1998	1998	1998	1995	1995	1995	1989	1996							
MIN	212	215	237	375	496	483	290	309	267	234	204	136							
(WY)	1984	1992	1995	2001	2001	1988	1986	1995	1999	1983	1983	1985							

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR WATER YEARS 1983 - 2001*
ANNUAL TOTAL	380268	273699	
ANNUAL MEAN	1039	750	1109
HIGHEST ANNUAL MEAN			1760
LOWEST ANNUAL MEAN			458
HIGHEST DAILY MEAN	4310	Feb 13	19700
LOWEST DAILY MEAN	296	Dec 16	105
ANNUAL SEVEN-DAY MINIMUM	307	Oct 29	117
MAXIMUM PEAK FLOW			20500
MAXIMUM PEAK STAGE		9.13	20.67
INSTANTANEOUS LOW FLOW		184	78
10 PERCENT EXCEEDS	2890	1940	3230
50 PERCENT EXCEEDS	547	392	463
90 PERCENT EXCEEDS	327	313	256

e Estimated.

* Regulated period only (1983-2001). See REMARKS.

02087500 NEUSE RIVER NEAR CLAYTON, NC--Continued

