

## 02087500 NEUSE RIVER NEAR CLAYTON, NC

LOCATION.--Lat 35°38'50", long 78°24'19", 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 mi<sup>2</sup>.

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 poor. Flow regulated by Falls Lake (station 02087182), since Dec. 7, 1983. The City of Raleigh diverts water upstream from station, most of which was returned upstream from station as treated effluent. Prior to regulation, maximum discharge: 22,900 ft<sup>3</sup>/s, Sept. 19, 1945; gage height: 22.12 ft; minimum discharge: 44 ft<sup>3</sup>/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 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	466	322	1,740	481	959	1,660	2,180	460	265	278	606	308
2	441	318	1,690	462	997	1,830	1,110	500	364	282	432	285
3	506	316	1,640	456	1,030	2,610	1,670	407	486	341	341	279
4	480	337	1,180	454	1,810	2,690	2,550	382	361	347	307	273
5	537	460	911	452	1,680	1,990	2,990	377	322	345	281	269
6	474	391	896	451	1,570	1,660	3,020	832	298	309	298	272
7	427	348	904	445	1,510	1,630	2,500	983	313	263	267	272
8	366	337	583	436	1,470	1,960	1,480	509	1,950	729	273	273
9	325	322	471	436	927	2,300	2,050	419	907	616	580	270
10	316	314	840	437	800	1,700	1,960	381	555	466	1,660	265
11	311	310	1,160	438	524	1,550	1,850	357	457	394	923	262
12	304	340	803	436	451	1,500	1,740	346	383	355	643	263
13	456	1,830	664	438	417	1,440	1,800	467	348	324	513	262
14	1,810	939	874	2,050	429	1,510	1,210	421	331	336	459	275
15	807	582	2,080	2,620	447	972	815	380	311	286	579	292
16	607	481	2,280	2,080	792	868	685	478	292	255	470	282
17	461	433	2,280	2,340	910	2,770	628	396	276	248	449	274
18	403	399	1,820	2,180	883	2,190	605	340	299	294	416	273
19	376	377	1,570	2,490	598	2,480	589	326	318	329	331	272
20	362	1,270	1,560	2,650	505	2,530	574	523	319	828	311	273
21	351	1,840	1,530	2,680	533	2,380	503	588	290	660	311	441
22	340	1,790	1,510	2,210	545	1,660	479	436	272	413	313	372
23	331	824	711	2,060	445	1,560	478	369	308	631	320	274
24	328	1,150	676	2,000	700	2,520	466	336	320	469	327	246
25	347	732	519	1,570	1,030	2,580	459	337	319	331	307	268
26	335	583	493	1,410	664	1,670	418	320	333	282	293	291
27	327	504	512	648	578	1,450	401	306	342	279	293	289
28	323	1,320	500	439	1,330	2,390	399	289	397	284	315	269
29	320	1,030	479	437	---	2,000	364	277	515	611	328	238
30	323	1,380	500	776	---	2,900	383	270	356	925	328	230
31	323	---	502	819	---	3,140	---	274	---	646	336	---
TOTAL	13,883	21,579	33,878	37,281	24,534	62,090	36,356	13,086	12,607	13,156	13,610	8,412
MEAN	448	719	1,093	1,203	876	2,003	1,212	422	420	424	439	280
MAX	1,810	1,840	2,280	2,680	1,810	3,140	3,020	983	1,950	925	1,660	441
MIN	304	310	471	436	417	868	364	270	265	248	267	230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2005,\* BY WATER YEAR (WY)

MEAN	710	690	932	1,347	1,792	2,253	1,773	887	648	606	667	887
MAX	3,822	2,201	2,623	2,821	4,961	5,688	4,813	2,864	2,170	1,841	1,539	6,620
(WY)	(2000)	(1996)	(2003)	(1984)	(1998)	(1998)	(2003)	(1989)	(2003)	(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)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1983 - 2005*	
ANNUAL TOTAL	304,380		290,472		1,095	
ANNUAL MEAN	832		796		2,052	
HIGHEST ANNUAL MEAN					425	2003
LOWEST ANNUAL MEAN					202	2002
HIGHEST DAILY MEAN	5,310	Aug 16	3,140	Mar 31	19,700	Sep 17, 1999
LOWEST DAILY MEAN	243	Jun 22	230	Sep 30	105	Sep 16, 1985
ANNUAL SEVEN-DAY MINIMUM	277	May 24	262	Sep 24	117	Sep 12, 1985
MAXIMUM PEAK FLOW			4,060	Jan 14	20,500	Sep 17, 1999
MAXIMUM PEAK STAGE			7.43	Jan 14	20.67	Sep 17, 1999
INSTANTANEOUS LOW FLOW			209	Sep 30	78	Sep 18, 1985
10 PERCENT EXCEEDS	1,800		1,960		3,120	
50 PERCENT EXCEEDS	586		460		472	
90 PERCENT EXCEEDS	315		282		257	

\* Regulated period only (1983-2005). See REMARKS.

