

Water-Data Report 2010

02091814 NEUSE RIVER NEAR FORT BARNWELL, NC

Neuse Basin
Middle Neuse Subbasin

LOCATION.--Lat 35°18'50", long 77°18'10" referenced to North American Datum of 1983, Craven County, NC, Hydrologic Unit 03020202, on left bank 0.25 mi upstream from bridge on Secondary Road 1470, 1.5 mi upstream from Core Creek and 2.0 mi east of Fort Barnwell.

DRAINAGE AREA.--3,900 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1996 to current year, occasional measurements water years 1955-1995.

REVISED RECORDS.--WDR NC-02-1A: 2001 (daily discharges)

GAGE.--Water-stage recorder and acoustic velocity meter. Datum of gage is at National Geodetic Vertical Datum of 1929. Satellite telemetry at streamgage.

REMARKS.--Records poor. Maximum gage height for period of record, from floodmarks. Flow regulated by Falls Lake (station 02087182) and is affected by both astronomical and wind tides. The astronomical tides occur at primary harmonic periods of 12.42 hours and 24.84 hours. Daily mean discharge for this site may be affected by aliasing due to tides and can contain fluctuations that are not representative of net downstream discharge.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,570	554	4,230	8,870	13,700	7,720	5,150	1,220	3,820	810	699	2,530
2	1,180	675	4,210	9,000	13,500	7,600	6,190	1,130	4,130	745	723	1,650
3	1,020	605	4,890	9,330	13,200	8,120	7,370	1,020	4,340	652	994	1,110
4	905	588	5,400	9,420	12,500	8,790	9,000	1,030	4,490	616	979	827
5	778	e650	6,130	9,310	11,700	9,470	10,500	977	4,410	604	899	684
6	715	e700	6,850	9,100	12,900	10,200	11,500	936	4,350	536	861	576
7	702	726	7,300	8,880	14,200	10,600	11,200	883	4,360	467	869	539
8	647	e700	7,790	8,560	14,900	10,500	9,830	943	4,250	411	877	552
9	e600	e650	8,670	8,130	15,700	9,940	8,170	862	4,210	383	1,330	467
10	e575	e600	9,890	7,550	15,800	9,350	6,330	739	4,160	470	1,560	461
11	e550	1,090	10,500	6,380	15,900	8,030	5,010	684	3,920	785	1,280	447
12	e550	3,730	10,700	4,940	15,800	6,800	4,230	677	3,490	754	1,010	496
13	e575	5,230	10,800	4,050	16,600	5,860	3,800	605	2,390	678	821	460
14	e600	6,270	10,500	3,630	15,900	5,280	3,420	580	1,410	740	703	472
15	661	6,940	10,300	3,300	15,900	5,250	3,010	600	980	898	552	455
16	568	7,290	10,200	3,050	15,300	5,380	2,690	572	918	790	510	443
17	597	7,550	10,200	2,990	14,400	5,730	2,400	734	1,420	562	564	423
18	e675	7,640	10,400	3,530	13,300	6,100	2,160	859	1,690	449	509	429
19	e600	7,730	10,500	4,160	11,900	6,270	2,030	1,010	1,430	322	512	429
20	660	8,090	10,300	4,890	10,700	5,930	1,860	1,440	1,090	422	548	415
21	598	7,980	9,970	5,640	9,740	5,150	1,760	2,450	1,170	488	583	415
22	586	7,470	9,410	6,720	9,150	4,510	1,660	3,150	1,050	730	579	412
23	546	6,820	9,050	7,920	8,690	4,350	1,590	3,490	915	658	689	365
24	554	6,130	8,590	8,870	8,380	4,300	1,630	3,500	813	638	1,020	388
25	508	5,220	8,050	10,000	8,180	4,440	1,620	3,280	717	688	1,130	357
26	555	4,540	8,290	11,900	7,930	4,720	1,530	3,360	669	624	1,050	362
27	565	4,260	8,570	13,100	7,880	4,730	1,400	3,670	703	529	1,600	681
28	564	4,040	8,760	13,800	7,880	4,330	1,380	3,990	754	407	2,310	2,010
29	498	4,040	8,720	13,700	---	3,790	1,400	4,170	675	582	2,680	3,110
30	494	4,170	8,570	13,700	---	3,680	1,250	4,010	799	786	2,880	6,040
31	540	---	8,710	13,800	---	4,240	---	3,750	---	672	2,970	---
Total	20,736	122,678	266,450	248,220	351,630	201,160	131,070	56,321	69,523	18,896	34,291	28,005
Mean	669	4,089	8,595	8,007	12,560	6,489	4,369	1,817	2,317	610	1,106	934
Max	1,570	8,090	10,800	13,800	16,600	10,600	11,500	4,170	4,490	898	2,970	6,040
Min	494	554	4,210	2,990	7,880	3,680	1,250	572	669	322	509	357

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3,764	3,215	4,207	4,999	6,285	5,984	5,233	2,874	2,282	1,776	2,284	4,287
Max	23,040	9,390	8,595	8,707	19,110	15,340	11,760	6,973	6,429	5,764	7,856	26,590
(WY)	(2000)	(2007)	(2010)	(1998)	(1998)	(1998)	(1998)	(2003)	(2003)	(2003)	(2003)	(1999)
Min	648	732	952	1,501	1,988	1,638	1,318	893	573	610	594	593
(WY)	(2008)	(2002)	(2002)	(2001)	(2001)	(2006)	(2006)	(2002)	(2002)	(2010)	(2007)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1997 - 2010	
Annual total	1,240,604		1,548,980			
Annual mean	3,399		4,244		3,916	
Highest annual mean					6,376	2003
Lowest annual mean					1,766	2002
Highest daily mean	11,000	Mar 10	16,600	Feb 13	57,000	Sep 20, 1999
Lowest daily mean	494	Oct 30	322	Jul 19	289	Oct 23, 2007
Annual seven-day minimum	532	Oct 25	388	Sep 20	320	Oct 18, 2007
Maximum peak flow			17,400	Feb 13	57,200	Sep 20, 1999
Maximum peak stage			12.18	Feb 13	^a 22.75	Sep 20, 1999
Instantaneous low flow			Not Determined		41	Jul 11, 1999
10 percent exceeds	8,240		10,400		8,410	
50 percent exceeds	2,060		2,680		2,520	
90 percent exceeds	643		540		721	

^a See Remarks.

