



Water-Data Report 2010

## 02109500 WACCAMAW RIVER AT FREELAND, NC

Lower Pee Dee Basin  
Waccamaw Subbasin

LOCATION.--Lat 34°05'42", long 78°32'54" referenced to North American Datum of 1983, Brunswick County, NC, Hydrologic Unit 03040206, on left bank, 150 ft downstream of New Britton bridge on North Carolina Highway 130, 1 mi southwest of Freeland, 7 mi downstream of Juniper Creek, and 117 mi upstream from mouth in Winyah Bay.

DRAINAGE AREA.--680 mi<sup>2</sup>.

### **SURFACE-WATER RECORDS**

PERIOD OF RECORD.--July 1939 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 15.52 ft above National Geodetic Vertical Datum of 1929. Prior to July 15, 1943, nonrecording gage 150 ft upstream at same datum. Auxiliary nonrecording gage 3.3 mi downstream of base gage October 7, 1949, to July 14, 1952. Since July 15, 1952, auxiliary water-stage recorder at same site and datum. Satellite telemetry at streamgage.

REMARKS.--Records fair. Minimum discharge for period of record also occurred Sept. 9, 19, 28, and Oct. 4-14, 1954.

## 02109500 WACCAMAW RIVER AT FREELAND, NC—Continued

**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	39	38	646	4,060	2,910	1,560	653	44	54	160	8.9	4.6
2	42	35	586	3,860	2,860	1,490	693	41	118	365	8.5	4.3
3	46	33	887	3,440	2,730	1,480	691	38	223	599	8.3	4.2
4	48	32	e1,200	2,970	2,590	1,540	680	35	338	753	8.3	3.7
5	51	30	e1,440	2,620	2,480	1,580	674	36	438	762	7.7	3.3
6	62	27	1,650	2,430	2,510	1,590	667	34	518	681	e7.8	2.9
7	69	25	1,750	2,250	2,520	1,560	649	31	515	558	e10	2.6
8	65	23	1,870	2,090	2,530	1,520	619	31	422	418	e7.5	2.4
9	62	22	2,000	1,930	2,530	1,440	575	23	305	289	e7.7	2.1
10	60	22	2,100	1,780	2,560	1,350	524	18	217	205	e8.0	1.8
11	60	56	2,140	1,640	2,600	1,290	464	17	162	152	6.1	1.7
12	62	247	2,150	1,530	2,650	1,260	404	16	132	117	5.7	1.8
13	65	360	2,140	1,380	2,690	1,250	352	15	114	90	5.1	e1.6
14	67	434	2,090	1,250	2,700	1,250	302	14	109	72	4.9	1.3
15	68	485	2,020	1,130	2,670	1,260	264	13	104	69	4.9	1.2
16	69	510	1,930	1,020	2,610	1,240	227	12	96	93	4.6	1.1
17	67	593	1,830	967	2,500	1,200	192	11	88	108	4.2	1.1
18	64	820	1,730	946	2,380	1,130	159	11	80	91	3.7	e0.97
19	60	1,150	1,800	945	2,250	1,050	136	11	95	68	4.6	e0.89
20	56	1,450	1,790	946	2,120	978	119	15	119	50	5.4	e0.83
21	51	1,570	1,810	940	1,990	904	106	16	114	38	4.9	0.78
22	47	1,590	1,820	947	1,900	840	95	17	99	30	4.8	e0.78
23	43	1,580	1,790	977	1,860	784	86	19	80	25	6.1	e0.78
24	39	1,530	1,740	1,040	1,810	736	78	40	66	21	5.5	e0.73
25	34	1,410	1,720	1,190	1,780	690	74	48	53	17	6.8	e0.72
26	31	1,270	1,930	1,400	1,730	635	73	48	42	14	7.5	e1.4
27	33	1,120	2,120	1,570	1,680	575	68	52	33	12	7.2	6.5
28	42	993	2,260	1,740	1,620	524	61	49	32	11	6.6	19
29	48	874	2,440	2,070	---	487	54	44	35	11	6.1	20
30	44	754	2,990	2,490	---	514	49	43	34	9.7	5.7	229
31	41	---	3,820	2,790	---	580	---	39	---	9.5	5.2	---
<b>Total</b>	1,635	19,083	58,189	56,338	65,760	34,287	9,788	881	4,835	5,898.2	198.3	324.08
<b>Mean</b>	52.7	636	1,877	1,817	2,349	1,106	326	28.4	161	190	6.40	10.8
<b>Max</b>	69	1,590	3,820	4,060	2,910	1,590	693	52	518	762	10	229
<b>Min</b>	31	22	586	940	1,620	487	49	11	32	9.5	3.7	0.72
<b>Cfsm</b>	0.08	0.94	2.76	2.67	3.45	1.63	0.48	0.04	0.24	0.28	0.01	0.02
<b>In.</b>	0.09	1.04	3.18	3.08	3.60	1.88	0.54	0.05	0.26	0.32	0.01	0.02

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2010, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	517	365	525	1,017	1,317	1,365	929	365	313	468	611	827
<b>Max</b>	5,778	2,332	3,080	3,722	5,574	5,319	2,895	3,586	1,474	3,040	2,740	8,449
<b>(WY)</b>	(2000)	(1978)	(1949)	(1993)	(1998)	(1983)	(1973)	(1999)	(1969)	(1961)	(1981)	(1999)
<b>Min</b>	1.14	0.54	2.25	20.6	44.6	219	108	16.2	5.51	2.27	4.79	0.31
<b>(WY)</b>	(1941)	(1955)	(2008)	(1955)	(1941)	(1955)	(2002)	(2002)	(1952)	(2002)	(2007)	(1954)

02109500 WACCAMAW RIVER AT FREELAND, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1939 - 2010	
<b>Annual total</b>	188,142.1		257,216.58			
<b>Annual mean</b>	515		705		716	
<b>Highest annual mean</b>					1,572	1999
<b>Lowest annual mean</b>					86.2	2002
<b>Highest daily mean</b>	3,820	Dec 31	4,060	Jan 1	30,600	Sep 21, 1999
<b>Lowest daily mean</b>	7.0	Sep 21	0.72	Sep 25	0.10	Aug 30, 1954
<b>Annual seven-day minimum</b>	8.9	Sep 16	0.79	Sep 19	0.10	Oct 4, 1954
<b>Maximum peak flow</b>			4,130	Jan 1	31,200	Sep 21, 1999
<b>Maximum peak stage</b>			14.76	Jan 1	19.30	Sep 21, 1999
<b>Instantaneous low flow</b>			Not Determined		<sup>a</sup> 0.10	Aug 30, 1954
<b>Annual runoff (cfsm)</b>	0.758		1.04		1.05	
<b>Annual runoff (inches)</b>	10.29		14.07		14.30	
<b>10 percent exceeds</b>	1,440		2,120		1,860	
<b>50 percent exceeds</b>	342		119		351	
<b>90 percent exceeds</b>	31		5.3		25	

<sup>a</sup> See Remarks.

