

Water-Data Report 2008

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 mi².

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 station.

REMARKS.--Records poor. Minimum discharge for period of record also occurred Sept. 9, 19, 28, and Oct. 4-14, 1954. Minimum discharge for current water year also occurred December 7, 8.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e0.21	8.4	0.28	6.9	40	357	601	279	43	59	41	127
2	0.20	6.4	0.19	6.2	42	319	630	244	38	49	38	146
3	0.28	5.0	0.21	6.6	43	288	655	218	33	43	34	131
4	0.37	4.0	0.14	5.8	41	265	655	192	29	37	32	118
5	0.48	3.2	0.18	5.3	39	266	648	177	25	28	28	97
6	0.64	2.7	0.16	4.7	37	274	693	176	20	24	24	190
7	0.56	2.0	0.13	4.3	35	286	765	168	15	21	21	343
8	0.49	1.7	0.34	4.0	33	359	850	151	e9.5	20	18	395
9	0.44	1.5	0.26	3.6	31	445	1,050	136	e8.5	18	18	411
10	0.37	1.3	0.28	3.2	28	512	1,400	117	e8.4	18	19	384
11	0.30	1.1	0.32	3.5	24	566	1,490	117	e7.6	21	e20	399
12	e0.22	1.0	0.41	3.3	23	609	1,700	135	e6.6	24	e18	494
13	0.20	0.98	0.47	2.3	50	645	1,920	133	e6.2	24	e45	637
14	0.17	0.98	0.54	2.2	146	676	1,940	126	e6.6	21	e75	740
15	0.19	0.93	0.63	1.9	162	697	1,800	113	e6.1	22	e90	767
16	0.22	0.85	1.2	1.7	157	745	1,620	100	e6.6	27	e105	722
17	0.25	0.79	1.2	3.5	157	803	1,510	86	e7.4	30	e100	639
18	0.30	0.76	1.3	7.3	164	847	1,390	80	e6.2	28	e115	540
19	0.40	0.76	1.5	15	196	874	1,230	70	e5.2	32	104	442
20	0.37	0.73	1.7	41	199	903	1,060	63	e4.5	43	101	365
21	0.33	0.71	2.0	60	186	927	953	57	e4.1	43	95	324
22	0.36	0.67	2.9	62	288	949	866	58	68	38	89	330
23	0.40	0.51	3.5	64	446	947	752	53	105	34	81	352
24	0.46	0.45	4.3	66	498	930	663	49	136	47	73	362
25	0.86	0.42	5.1	61	517	896	599	47	164	87	70	383
26	1.1	0.46	7.6	56	508	844	542	44	132	102	63	554
27	12	0.47	11	54	478	785	481	41	96	112	69	796
28	17	0.36	6.6	49	433	721	427	38	77	96	102	977
29	13	0.31	4.9	46	393	657	376	49	71	77	103	1,040
30	12	0.27	4.7	42	---	600	325	57	65	57	101	1,060
31	9.7	---	5.8	42	---	581	---	51	---	46	92	---
Total	73.87	49.71	69.84	734.3	5,394	19,573	29,591	3,425	1,210.5	1,328	1,984	14,265
Mean	2.38	1.66	2.25	23.7	186	631	986	110	40.4	42.8	64.0	476
Max	17	8.4	11	66	517	949	1,940	279	164	112	115	1,060
Min	0.17	0.27	0.13	1.7	23	265	325	38	4.1	18	18	97
Cfsm	0.00	0.00	0.00	0.03	0.27	0.93	1.45	0.16	0.06	0.06	0.09	0.70
In.	0.00	0.00	0.00	0.04	0.30	1.07	1.62	0.19	0.07	0.07	0.11	0.78

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	526	364	505	1,014	1,318	1,379	943	366	307	478	627	850
Max	5,778	2,332	3,080	3,722	5,574	5,319	2,895	3,586	1,474	3,040	2,740	8,449
(WY)	(2000)	(1978)	(1949)	(1993)	(1998)	(1983)	(1973)	(1999)	(1969)	(1961)	(1981)	(1999)
Min	1.14	0.54	2.25	20.6	44.6	219	108	16.2	5.51	2.27	4.79	0.31
(WY)	(1941)	(1955)	(2008)	(1955)	(1941)	(1955)	(2002)	(2002)	(1952)	(2002)	(2007)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1939 - 2008	
Annual total	137,067.50		77,698.22			
Annual mean	376		212		721	
Highest annual mean					1,572	1999
Lowest annual mean					86.2	2002
Highest daily mean	4,400	Jan 1	1,940	Apr 14	30,600	Sep 21, 1999
Lowest daily mean	0.13	Dec 7	0.13	Dec 7	0.10	Aug 30, 1954
Annual seven-day minimum	0.18	Dec 1	0.18	Dec 1	0.10	Oct 4, 1954
Maximum peak flow			1,970	Apr 13	31,200	Sep 21, 1999
Maximum peak stage			13.35	Apr 13	19.30	Sep 21, 1999
Instantaneous low flow			^a 0.11	Dec 6	^a 0.10	Aug 30, 1954
Annual runoff (cfs)	0.552		0.312		1.06	
Annual runoff (inches)	7.50		4.25		14.40	
10 percent exceeds	1,470		721		1,880	
50 percent exceeds	16		44		354	
90 percent exceeds	0.41		0.46		26	

^aSee Remarks.