

Water-Data Report 2009

02129000 PEE DEE RIVER NEAR ROCKINGHAM, NC

Lower Pee Dee Basin
Lower Pee Dee Subbasin

LOCATION.--Lat 34°56'45", long 79°52'11" referenced to North American Datum of 1983, Richmond County, NC, Hydrologic Unit 03040201, on left bank at U.S. Highway 74 West bridge, 2.5 mi upstream from Falling Creek, 3.3 mi downstream from Blewett Falls Hydroelectric Plant of Progress Energy and 6 mi west of Rockingham, NC, 192 miles upstream from mouth in Winyah Bay.

DRAINAGE AREA.--6,863 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1906 to January 1912, October 1927 to current year. August 1906 to January 1912 published as "Yadkin River near Pee Dee".

REVISED RECORDS.--WSP 1203: 1928-37. WSP 1303: 1928-42 (monthly and yearly runoff), 1943-46 (adjusted monthly runoff). WSP 1503: 1906-12, 1928-32(m). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 119.52 ft above North American Vertical Datum of 1988 (from Trimble GPS). August 1906 to January 1912 nonrecording gage at site 3.3 mi upstream at different datum. September 1927 to September 30, 1931, water-stage recorder at present site at 121.68 ft. above National Geodetic Vertical Datum of 1929. Telephone and satellite telemetry at streamgage.

REMARKS.--No estimated daily discharges. Records good except those below 1000 ft³/s, which are fair. Flow regulated since 1928 by Blewett Falls Lake and five other reservoirs upstream. Prior to regulation, maximum discharge: 276,000 ft³/s, August 27, 1908; gage height: 31.28 ft, present site and datum, from records of State Highway Commission. Prior to regulation, minimum discharge: 2,210 ft³/s, September 3, 1907. Minimum discharge for period of record also occurred December 2, 3, 1951; minimum daily discharge for period of record: 58 ft³/s, December 2, 1951, a result of abnormally low flow during shutdown of Blewett Falls hydroelectric plant to produce steady flow for current-meter measurements at this gaging station. Minimum discharge from normal regulations: 96 ft³/s, October 25, 1943; minimum daily discharge: 120 ft³/s, October 8, 1961.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2,180	2,130	3,790	3,500	1,740	15,500	10,600	1,150	11,400	2,700	1,430	2,370
2	1,390	1,410	3,920	5,090	3,240	63,700	10,500	1,020	11,500	2,760	3,880	3,240
3	2,690	1,180	2,550	4,230	3,180	44,300	10,300	1,140	8,300	2,180	2,270	1,560
4	2,390	1,170	2,540	4,020	5,170	21,300	10,700	2,720	4,840	1,150	3,110	1,590
5	2,410	2,270	2,000	5,720	5,810	14,000	9,920	5,950	9,330	1,070	3,270	1,580
6	3,670	1,810	1,580	7,480	4,100	11,300	9,790	6,960	34,900	1,790	2,870	1,450
7	3,990	1,070	1,100	22,100	2,320	10,400	6,240	8,660	40,100	2,360	2,380	1,280
8	3,760	1,140	3,510	27,600	1,420	9,300	4,510	9,160	20,300	2,070	2,460	3,170
9	3,030	1,390	2,590	35,300	2,390	3,250	4,890	7,360	13,900	1,860	2,210	3,040
10	1,370	1,250	6,140	13,700	2,440	4,640	5,760	7,440	11,100	2,290	3,450	1,300
11	1,060	1,490	8,480	9,760	2,460	4,710	7,000	3,920	10,500	1,180	3,780	1,140
12	1,540	1,860	19,800	9,560	2,870	6,160	23,500	7,490	12,000	1,360	3,560	2,340
13	2,610	1,600	27,700	9,450	3,570	5,850	15,200	6,390	11,700	3,150	1,440	3,050
14	3,140	3,070	20,600	4,120	1,510	4,120	10,400	5,000	8,850	3,320	2,290	3,100
15	3,040	1,980	11,200	2,650	1,510	8,340	9,610	4,670	8,310	3,030	1,200	1,950
16	3,640	1,730	7,380	4,730	3,660	20,400	8,110	5,180	4,610	3,720	1,610	1,180
17	1,500	2,900	6,830	5,890	3,200	25,100	6,430	8,270	6,240	2,630	1,850	1,290
18	1,290	3,850	4,180	2,560	5,520	15,800	5,380	6,270	9,980	1,240	1,940	1,190
19	1,600	2,880	5,120	4,590	6,260	9,490	6,090	2,010	14,800	1,080	2,960	1,030
20	1,880	2,090	5,540	5,510	6,760	8,470	5,890	1,950	11,300	2,730	2,530	1,060
21	2,140	2,630	8,160	6,300	3,850	8,310	6,160	2,090	6,830	3,420	2,310	1,870
22	1,930	3,330	9,520	3,570	2,740	7,720	7,370	4,080	7,760	3,570	1,370	3,090
23	1,380	1,660	9,310	2,580	4,560	6,680	5,900	4,320	7,800	4,150	1,270	3,010
24	1,270	3,490	5,960	2,520	4,990	6,440	4,900	4,070	5,610	8,770	1,930	4,610
25	1,210	1,340	5,710	2,650	6,630	9,460	4,780	4,610	4,980	3,690	1,870	4,310
26	991	1,620	5,030	5,340	4,710	9,700	4,450	7,900	4,500	3,620	3,160	2,240
27	1,170	1,870	5,860	5,280	7,080	9,590	5,350	9,710	1,660	1,960	3,750	1,470
28	1,650	1,280	4,800	5,850	4,780	9,570	4,370	14,200	1,170	6,690	3,740	2,620
29	1,970	1,850	4,160	3,370	---	18,200	4,500	26,100	2,530	10,900	1,980	3,470
30	1,930	3,620	4,570	3,760	---	23,500	3,200	21,400	2,160	12,800	2,060	2,650
31	1,940	---	5,190	2,420	---	12,300	---	13,600	---	3,420	2,820	---
Total	65,761	60,960	214,820	231,200	108,470	427,600	231,800	214,790	308,960	106,660	76,750	67,250
Mean	2,121	2,032	6,930	7,458	3,874	13,790	7,727	6,929	10,300	3,441	2,476	2,242
Max	3,990	3,850	27,700	35,300	7,080	63,700	23,500	26,100	40,100	12,800	3,880	4,610
Min	991	1,070	1,100	2,420	1,420	3,250	3,200	1,020	1,170	1,070	1,200	1,030

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2009^a, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	5,702	5,512	7,444	10,740	12,020	13,240	10,650	7,065	5,937	5,175	5,291	5,359
Max	25,850	16,120	20,300	31,270	36,040	34,480	31,340	17,410	20,260	16,790	19,180	35,690
(WY)	(1991)	(1958)	(1933)	(1937)	(1960)	(1993)	(1936)	(2003)	(2003)	(1975)	(1928)	(1928)
Min	503	419	1,598	2,475	3,032	3,589	2,692	1,955	1,853	1,668	979	1,008
(WY)	(2002)	(2002)	(2002)	(1956)	(2001)	(2006)	(1981)	(2002)	(1986)	(2002)	(2002)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1928 - 2009 ^a	
Annual total	1,516,164		2,115,021			
Annual mean	4,143		5,795		7,824	
Highest annual mean					14,980	2003
Lowest annual mean					2,310	2002
Highest daily mean	30,500	Aug 29	63,700	Mar 2	242,000	Sep 18, 1945
Lowest daily mean	985	Aug 22	991	Oct 26	^b 58	Dec 2, 1951
Annual seven-day minimum	1,110	Aug 6	1,370	Sep 15	185	Sep 28, 1985
Maximum peak flow			68,400	Mar 2	^b 270,000	Sep 18, 1945
Maximum peak stage			11.89	Mar 2	^b 30.80	Sep 18, 1945
Instantaneous low flow			286	Nov 11	^b 50	Dec 2, 1951
10 percent exceeds	8,330		11,200		14,100	
50 percent exceeds	3,030		3,720		5,490	
90 percent exceeds	1,230		1,380		1,430	

^a Regulated period only (1928-2009). See Remarks.

^b See Remarks

