

Water-Data Report 2008

02068500 DAN RIVER NEAR FRANCISCO, NC

Roanoke Basin
Upper Dan Subbasin

LOCATION.--Lat 36°30'54", long 80°18'11" referenced to North American Datum of 1983, Stokes County, NC, Hydrologic Unit 03010103, on left bank 200 ft upstream from bridge on State Highway 704, 700 ft downstream of remains of Georges Mill, 0.2 mi downstream of Elk Creek, 3 mi east of Francisco, and 7.9 mi downstream of Little Dan River.

DRAINAGE AREA.--129 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1924 to September 1987, December 1991 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 1303: 1938-50 (monthly runoff). WSP 1433: 1925-26, 1928-29, 1931, 1942, 1948. WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 831.99 ft above NGVD of 1929. Prior to Nov. 15, 1929, nonrecording gage at same site and datum. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair except those daily discharges above 300 ft³/s, which are poor. Since 1938, considerable diurnal fluctuation and regulation by Talbott and Townes Reservoirs and Pinnacles Hydroelectric Plant in Virginia, 28 mi upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1916 reached a stage of about 15 ft, from information by local residents, discharge, 16,000 ft³/s.

02068500 DAN RIVER NEAR FRANCISCO, NC—Continued

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	47	81	64	169	227	112	159	199	129	81	96	76
2	46	69	65	145	186	113	159	187	76	73	75	70
3	46	65	66	152	131	113	131	136	75	70	83	69
4	50	64	66	183	129	125	173	133	74	70	70	68
5	48	64	67	122	142	181	170	131	71	85	74	59
6	44	66	67	101	134	136	377	129	69	129	69	53
7	43	62	66	98	167	158	264	137	65	88	81	53
8	45	63	67	91	156	236	211	171	89	93	81	54
9	43	73	68	89	145	203	189	682	87	171	69	57
10	42	65	68	94	128	181	176	255	126	145	63	74
11	41	62	68	111	118	159	162	215	65	100	61	68
12	41	62	65	103	152	144	146	214	67	93	62	62
13	43	64	68	95	184	134	139	183	69	130	62	61
14	42	68	67	94	162	127	133	169	69	115	68	59
15	41	69	67	90	118	131	129	165	115	84	70	58
16	39	66	116	87	114	150	123	176	73	80	74	77
17	38	65	84	95	111	142	120	141	68	78	69	71
18	46	65	93	100	116	148	118	101	65	77	66	61
19	50	65	82	96	102	152	119	99	65	80	58	55
20	48	65	72	90	97	256	146	94	64	120	59	56
21	42	65	75	223	97	160	139	92	63	80	60	55
22	41	67	72	129	98	143	158	88	67	74	56	56
23	43	64	89	91	98	135	152	89	200	74	54	54
24	48	64	110	87	102	130	134	98	90	77	55	51
25	116	65	83	154	106	125	121	91	75	75	54	49
26	779	71	101	105	110	122	143	90	75	86	58	58
27	230	70	114	85	115	118	200	90	78	119	273	156
28	128	65	113	85	108	116	276	135	78	67	121	114
29	100	64	217	84	109	116	300	78	145	69	82	70
30	89	64	223	83	---	114	213	74	128	68	84	60
31	86	---	253	78	---	131	---	78	---	82	80	---
Total	2,585	1,982	2,896	3,409	3,762	4,511	5,180	4,720	2,580	2,833	2,387	1,984
Mean	83.4	66.1	93.4	110	130	146	173	152	86.0	91.4	77.0	66.1
Max	779	81	253	223	227	256	377	682	200	171	273	156
Min	38	62	64	78	97	112	118	74	63	67	54	49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2008^a, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	149	157	179	201	217	255	263	213	199	167	164	150
Max	543	327	479	424	463	571	677	405	719	425	514	630
(WY)	(1938)	(1980)	(1997)	(1978)	(1960)	(1993)	(1980)	(1949)	(2003)	(2003)	(1940)	(1979)
Min	49.7	61.3	77.5	76.2	94.9	94.2	118	95.3	77.9	54.8	52.5	50.4
(WY)	(1964)	(1954)	(1998)	(1956)	(1956)	(1981)	(2006)	(2000)	(2002)	(1986)	(1981)	(1968)

02068500 DAN RIVER NEAR FRANCISCO, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1938 - 2008 ^a	
Annual total	54,082		38,829			
Annual mean	148		106		193	
Highest annual mean					314	2003
Lowest annual mean					93.6	2002
Highest daily mean	1,640	Mar 2	779	Oct 26	6,830	Sep 22, 1979
Lowest daily mean	38	Oct 17	38	Oct 17	21	Sep 4, 1999
Annual seven-day minimum	41	Oct 11	41	Oct 11	28	Aug 24, 1981
Maximum peak flow			2,290	May 9	21,200	Aug 17, 1985
Maximum peak stage			4.73	May 9	19.50	Aug 17, 1985
Instantaneous low flow			36	Oct 17	7.1	Sep 8, 1932
10 percent exceeds	244		171		317	
50 percent exceeds	111		87		154	
90 percent exceeds	50		56		80	

^aRegulated period only (1982-2008). See Period of Record.

