

Water-Data Report 2007

**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 mi<sup>2</sup>.

**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.--Records fair except those for estimated daily discharges and those above 300 ft<sup>3</sup>/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. Minimum discharge for current water year also occurred September 13.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1916 reached a stage of about 15 ft, from information by local residents, discharge, 16,000 ft<sup>3</sup>/s.

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**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	96	135	198	1,200	147	143	198	180	138	111	76	132
2	94	168	186	540	147	1,640	199	179	146	82	72	72
3	102	167	149	416	141	443	192	211	192	87	90	61
4	101	123	143	376	138	321	153	155	186	119	73	52
5	e102	109	178	411	154	292	182	147	141	85	72	51
6	e118	107	182	419	195	267	180	179	126	98	73	50
7	128	179	178	404	181	253	202	167	93	83	67	50
8	137	223	175	1,460	133	244	219	153	102	111	87	48
9	124	182	183	570	167	239	221	128	157	77	84	49
10	113	163	136	445	149	198	224	158	87	96	69	47
11	112	156	135	398	160	171	191	155	87	80	79	45
12	128	130	174	359	147	172	205	192	120	79	63	45
13	113	132	176	293	160	188	152	172	116	75	63	41
14	99	147	171	280	378	186	149	168	119	76	61	652
15	93	135	172	266	243	187	435	139	147	73	59	204
16	94	1,090	144	256	218	503	453	119	115	74	58	94
17	143	450	125	244	171	446	230	132	145	90	60	80
18	156	293	148	260	134	294	199	127	139	80	59	75
19	114	258	145	303	152	285	191	117	122	72	58	70
20	146	237	107	231	167	229	214	140	138	72	58	70
21	158	193	106	149	137	218	211	129	126	69	62	69
22	115	179	177	226	128	212	222	129	81	68	65	69
23	108	196	450	250	122	227	195	107	78	67	55	69
24	116	217	196	206	121	222	197	120	76	72	50	65
25	129	186	338	226	138	215	154	100	84	178	50	59
26	126	154	375	224	179	196	181	93	84	106	43	56
27	147	205	323	183	171	195	237	96	125	84	46	53
28	360	216	293	176	155	196	208	92	129	123	42	48
29	194	162	240	234	---	212	187	94	122	112	41	47
30	188	133	237	184	---	218	185	89	150	79	60	48
31	161	---	241	132	---	228	---	89	---	79	109	---
<b>Total</b>	4,115	6,425	6,181	11,321	4,633	9,040	6,366	4,256	3,671	2,757	2,004	2,571
<b>Mean</b>	133	214	199	365	165	292	212	137	122	88.9	64.6	85.7
<b>Max</b>	360	1,090	450	1,460	378	1,640	453	211	192	178	109	652
<b>Min</b>	93	107	106	132	121	143	149	89	76	67	41	41

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2007<sup>a</sup>, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	150	158	181	203	219	256	264	214	200	168	165	152
<b>Max</b>	543	327	479	424	463	571	677	405	719	425	514	630
<b>(WY)</b>	(1938)	(1980)	(1997)	(1978)	(1960)	(1993)	(1980)	(1949)	(2003)	(2003)	(1940)	(1979)
<b>Min</b>	49.7	61.3	77.5	76.2	94.9	94.2	118	95.3	77.9	54.8	52.5	50.4
<b>(WY)</b>	(1964)	(1954)	(1998)	(1956)	(1956)	(1981)	(2006)	(2000)	(2002)	(1986)	(1981)	(1968)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1938 - 2007 <sup>a</sup>	
<b>Annual total</b>	63,076		63,340			
<b>Annual mean</b>	173		174		194	
<b>Highest annual mean</b>					314	2003
<b>Lowest annual mean</b>					93.6	2002
<b>Highest daily mean</b>	1,500	Jun 27	1,640	Mar 2	6,830	Sep 22, 1979
<b>Lowest daily mean</b>	67	Aug 28	41	Aug 29	21	Sep 4, 1999
<b>Annual seven-day minimum</b>	80	Jun 4	46	Sep 7	28	Aug 24, 1981
<b>Maximum peak flow</b>			3,290	Mar 2	21,200	Aug 17, 1985
<b>Maximum peak stage</b>			5.84	Mar 2	19.50	Aug 17, 1985
<b>Instantaneous low flow</b>			<sup>b</sup> 40	Aug 29	7.1	Sep 8, 1932
<b>10 percent exceeds</b>	252		272		319	
<b>50 percent exceeds</b>	137		146		156	
<b>90 percent exceeds</b>	96		65		81	

<sup>a</sup> Regulated period only (1982-2007). See Period of Record.

<sup>b</sup> See Remarks.

