

Water-Data Report 2010

02071000 DAN RIVER NEAR WENTWORTH, NC

Roanoke Basin
Upper Dan Subbasin

LOCATION.--Lat 36°24'45", long 79°49'34" referenced to North American Datum of 1983, Rockingham County, NC, Hydrologic Unit 03010103, on right bank 600 ft downstream of Settles Bridge on Secondary Road 2150, 3.5 mi northwest of Wentworth, 7.5 mi downstream of Mayo River, and 103.7 mi upstream from mouth.

DRAINAGE AREA.--1,053 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--December 1939 to current year. Monthly discharge only for October 1939, published in WSP 1303.

REVISED RECORDS.--WDR NC-72-1: 1945 (maximum discharge). WRIR 96-4154: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 512.98 ft above National Geodetic Vertical Datum of 1929. Prior to August 3, 1949, water-stage recorder at site 150 ft upstream at same datum. Satellite telemetry at streamgage.

REMARKS.--No estimated daily discharges. Records fair. Slight fluctuation and regulation at low flow caused by Talbott and Townes Reservoirs. Maximum gage height for period of record, from high-water mark in gage well.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1908 reached a stage of 34.9 ft, from information by North Carolina State Highway Commission, and flood in 1937 reached a stage of 29.8 ft, from information by local resident.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	372	3,080	749	1,410	1,820	1,670	1,960	871	788	417	479	446
2	355	2,480	833	1,320	1,830	1,600	1,700	861	776	401	590	428
3	357	1,010	4,100	1,180	3,680	1,320	1,570	902	1,190	377	491	410
4	355	740	2,000	1,070	3,380	1,270	1,410	1,140	1,040	365	470	393
5	346	631	1,430	1,120	3,770	1,190	1,340	995	767	395	443	368
6	350	571	1,520	1,020	10,800	1,180	1,420	906	765	350	887	372
7	361	537	1,290	973	5,170	1,150	1,370	794	654	328	617	343
8	362	509	1,110	998	3,320	1,150	1,320	767	606	358	450	345
9	347	492	5,640	796	2,620	1,150	3,980	735	582	352	437	337
10	336	491	4,410	845	2,560	1,150	2,250	713	596	476	407	331
11	353	5,410	2,160	855	2,230	1,150	1,690	729	587	433	533	321
12	347	18,800	1,640	946	1,930	1,400	1,580	744	572	392	2,920	324
13	352	10,400	2,220	835	1,810	4,170	1,420	748	630	392	1,200	338
14	367	2,730	3,390	882	1,680	4,480	1,340	747	783	570	710	319
15	396	1,720	2,040	928	1,610	2,890	1,210	761	681	478	1,020	295
16	453	1,300	1,530	920	1,680	2,040	1,180	843	821	397	949	277
17	407	1,050	1,260	3,690	1,520	1,740	1,110	1,650	1,080	437	730	262
18	380	921	1,100	3,910	1,390	1,590	999	2,220	1,170	1,050	1,580	255
19	359	903	1,640	2,070	1,350	1,480	958	1,220	598	715	2,080	258
20	350	882	1,530	1,610	1,400	1,400	958	985	561	536	1,690	258
21	356	795	1,320	1,540	1,420	1,340	1,040	867	574	517	1,060	254
22	353	768	1,310	2,330	1,540	1,480	1,140	827	518	504	764	245
23	342	942	1,260	1,890	1,790	1,900	998	1,080	517	506	696	305
24	350	1,190	1,210	1,690	1,780	1,450	979	1,170	533	523	579	430
25	442	966	2,940	19,000	1,830	1,310	1,080	876	536	476	566	301
26	385	865	10,200	18,700	1,590	1,350	1,140	845	493	445	597	280
27	366	855	3,730	3,950	1,470	1,540	1,000	778	473	428	548	780
28	843	795	2,490	2,940	1,410	1,490	941	727	465	647	548	1,510
29	885	771	1,970	2,450	---	6,430	891	1,750	480	548	495	1,110
30	558	761	1,700	2,290	---	3,490	867	1,000	490	450	514	12,100
31	486	---	1,530	2,050	---	2,410	---	785	---	402	451	---
Total	12,671	63,365	71,252	86,208	68,380	59,360	40,841	30,036	20,326	14,665	25,501	23,995
Mean	409	2,112	2,298	2,781	2,442	1,915	1,361	969	678	473	823	800
Max	885	18,800	10,200	19,000	10,800	6,430	3,980	2,220	1,190	1,050	2,920	12,100
Min	336	491	749	796	1,350	1,150	867	713	465	328	407	245
Cfsm	0.39	2.01	2.18	2.64	2.32	1.82	1.29	0.92	0.64	0.45	0.78	0.76
In.	0.45	2.24	2.52	3.05	2.42	2.10	1.44	1.06	0.72	0.52	0.90	0.85

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	861	920	1,142	1,404	1,560	1,822	1,647	1,259	1,077	878	811	853
Max	3,676	2,963	2,458	3,274	4,308	5,345	4,951	3,149	4,220	2,345	3,067	3,667
(WY)	(1960)	(1958)	(1997)	(1978)	(1960)	(1975)	(1987)	(1972)	(1972)	(1949)	(1940)	(1979)
Min	219	231	398	392	518	661	520	411	233	202	102	166
(WY)	(2002)	(2002)	(2002)	(1956)	(2002)	(1985)	(2002)	(2002)	(2002)	(2002)	(2002)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1940 - 2010	
Annual total	411,340		516,600			
Annual mean	1,127		1,415		1,185	
Highest annual mean					1,985	1960
Lowest annual mean					373	2002
Highest daily mean	18,800	Nov 12	19,000	Jan 25	47,800	Jun 22, 1972
Lowest daily mean	253	Sep 16	245	Sep 22	63	Aug 12, 2002
Annual seven-day minimum	294	Sep 10	258	Sep 16	65	Aug 9, 2002
Maximum peak flow			28,900	Jan 26	54,200	Jun 22, 1972
Maximum peak stage			24.68	Jan 26	^a 31.60	Jun 22, 1972
Instantaneous low flow			211	Sep 23	51	Aug 26, 2008
10 percent exceeds	2,030		2,460		2,000	
50 percent exceeds	732		906		818	
90 percent exceeds	362		357		391	

^a See Remarks.

