

Water-Data Report 2008

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.

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

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

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 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	244	515	391	1,620	892	515	853	1,180	538	555	366	381
2	248	495	387	1,030	2,240	510	863	974	556	374	367	346
3	253	447	387	810	1,230	500	776	881	485	314	301	313
4	253	431	389	668	935	525	1,380	786	566	284	293	297
5	279	419	379	725	1,080	1,530	2,640	732	516	284	207	286
6	276	415	390	678	1,030	1,270	4,520	693	457	339	185	421
7	261	405	384	608	915	929	3,740	672	430	454	184	501
8	248	395	380	582	852	1,680	1,970	654	408	347	181	333
9	245	395	385	566	759	1,650	1,440	9,700	421	344	197	280
10	235	412	389	559	699	1,160	1,150	3,790	382	546	163	271
11	224	402	389	617	622	953	1,020	1,870	427	491	139	345
12	216	393	391	663	608	839	1,060	1,780	444	359	125	395
13	205	396	391	594	753	758	1,200	1,250	408	303	124	337
14	209	405	390	559	1,000	700	994	1,030	399	358	179	313
15	214	435	390	539	842	676	846	943	434	383	239	281
16	222	440	496	519	731	745	779	922	498	281	217	315
17	214	414	675	554	681	698	746	899	378	241	212	474
18	215	396	506	672	694	626	724	795	333	225	172	413
19	234	398	450	662	685	619	700	757	307	210	149	318
20	300	397	458	628	611	823	777	710	297	205	132	280
21	288	396	441	521	585	981	921	694	289	245	117	269
22	259	403	454	590	557	774	1,180	638	286	199	110	265
23	242	407	473	604	558	716	1,080	606	351	223	106	260
24	275	402	653	522	559	686	896	604	601	203	102	254
25	629	384	651	472	561	649	806	612	367	218	90	240
26	3,390	404	574	534	566	610	750	573	306	189	102	309
27	3,470	441	740	508	603	594	949	558	318	173	993	941
28	1,240	433	675	466	566	584	1,940	572	330	215	2,750	1,180
29	768	406	1,180	464	527	581	2,580	634	336	161	796	705
30	617	396	1,530	470	---	579	1,580	554	947	133	522	490
31	553	---	3,530	472	---	603	---	521	---	148	429	---
Total	16,526	12,477	19,298	19,476	22,941	25,063	40,860	37,584	12,815	9,004	10,249	11,813
Mean	533	416	623	628	791	808	1,362	1,212	427	290	331	394
Max	3,470	515	3,530	1,620	2,240	1,680	4,520	9,700	947	555	2,750	1,180
Min	205	384	379	464	527	500	700	521	286	133	90	240
Cfs/m	0.51	0.39	0.59	0.60	0.75	0.77	1.29	1.15	0.41	0.28	0.31	0.37
In.	0.58	0.44	0.68	0.69	0.81	0.89	1.44	1.33	0.45	0.32	0.36	0.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	875	910	1,128	1,387	1,561	1,828	1,657	1,264	1,073	889	817	860
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 2007		Water Year 2008		Water Years 1940 - 2008	
Annual total	347,902		238,106			
Annual mean	953		651		1,186	
Highest annual mean					1,985	
Lowest annual mean					373	
Highest daily mean	16,700	Jan 2	9,700	May 9	47,800	Jun 22, 1972
Lowest daily mean	182	Sep 13	90	Aug 25	63	Aug 12, 2002
Annual seven-day minimum	203	Sep 7	108	Aug 20	65	Aug 9, 2002
Maximum peak flow			15,400	May 9	54,200	Jun 22, 1972
Maximum peak stage			17.30	May 9	^a 31.60	Jun 22, 1972
Instantaneous low flow			51	Aug 26	51	Aug 26, 2008
Annual runoff (cfs)	0.905		0.618		1.13	
Annual runoff (inches)	12.29		8.41		15.30	
10 percent exceeds	1,490		1,070		2,000	
50 percent exceeds	623		496		820	
90 percent exceeds	248		217		393	

^aSee Remarks.