

02082506 TAR RIVER BELOW TAR RIVER RESERVOIR NEAR ROCKY MOUNT, NC

LOCATION.--Lat 35°53'59", long 77°51'56", Nash County, Hydrologic Unit 03020101, near center of span on downstream side of bridge on Secondary Road 1544, 1.8 mi downstream of Tar River Reservoir, 2.8 mi downstream of Sapony Creek, 2.9 mi upstream from Grape Branch, and 5.0 mi southwest of Rocky Mount.

DRAINAGE AREA.--777 mi².

PERIOD OF RECORD.--August 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 84.85 ft above NAVD of 1988 (levels by North Carolina State Highway Commission). Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. The city of Rocky Mount diverted an average of 5.3 ft³/s for municipal water supply, most of which was returned downstream of station as treated effluent. Minimum discharge for current water year due to regulation. Minimum discharge for period of record also occurred Oct. 29, 30, 1993. Maximum gage height for period of record from floodmarks. Minimum discharge for current water year also occurred Oct. 7.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131	2,500	371	968	2,210	4,180	2,920	712	880	318	253	208
2	127	1,520	364	1,470	2,750	5,170	3,140	608	732	408	290	228
3	149	964	342	2,450	1,710	5,410	1,800	623	641	1,450	440	292
4	113	686	336	2,250	1,190	4,860	1,230	619	580	2,610	456	311
5	111	551	713	1,840	1,030	3,210	1,040	548	523	3,100	413	295
6	106	729	1,780	1,500	945	2,680	932	541	875	1,730	350	311
7	109	1,100	2,950	1,170	1,340	3,350	1,070	555	1,380	753	596	324
8	125	1,680	3,000	973	2,060	3,530	1,810	563	2,470	519	705	329
9	131	1,270	2,150	828	2,900	2,650	4,040	544	3,180	449	2,010	311
10	132	851	1,560	747	2,410	1,730	5,900	534	3,520	460	3,080	279
11	134	637	1,370	685	1,740	1,390	7,000	492	3,570	347	3,180	251
12	1,130	625	1,410	611	1,550	1,170	8,090	447	2,550	331	3,210	235
13	3,160	1,460	2,070	562	1,330	1,040	9,800	429	1,060	314	2,070	230
14	4,500	2,750	2,940	513	1,060	963	9,040	422	708	328	1,190	216
15	5,800	2,920	3,440	497	916	930	6,410	390	597	602	884	211
16	5,360	1,750	3,870	475	909	953	1,900	355	531	813	1,320	908
17	1,860	1,420	3,830	489	1,310	1,060	840	328	639	572	1,320	1,030
18	2,370	1,680	1,900	487	1,400	1,400	802	407	1,120	470	907	332
19	1,470	2,500	1,130	480	1,530	1,200	949	1,200	1,210	389	732	111
20	781	2,350	1,020	455	1,640	2,150	881	2,320	1,210	334	588	563
21	724	1,420	1,090	435	1,990	4,830	870	2,920	1,460	324	508	2,090
22	892	1,080	1,460	451	2,120	5,640	877	2,180	1,000	319	461	1,150
23	1,010	858	1,300	444	3,150	5,820	820	3,070	721	274	406	668
24	933	706	1,060	432	3,900	7,120	747	4,330	561	258	365	870
25	769	607	1,370	393	4,070	6,740	679	4,490	474	273	294	2,190
26	582	531	2,350	382	3,330	2,100	704	4,930	404	331	241	1,490
27	467	485	3,250	e404	1,810	1,210	870	4,900	347	334	253	732
28	419	444	3,500	e405	2,860	1,040	1,130	3,600	328	281	238	518
29	522	422	1,960	391	---	1,020	1,250	2,570	325	249	224	397
30	2,200	394	1,190	450	---	e1,450	924	1,440	310	259	210	345
31	2,910	---	985	1,110	---	2,030	---	1,090	---	237	202	---
TOTAL	39,227	36,890	56,061	24,747	55,160	88,026	78,465	48,157	33,906	19,436	27,396	17,425
MEAN	1,265	1,230	1,808	798	1,970	2,840	2,616	1,553	1,130	627	884	581
MAX	5,800	2,920	3,870	2,450	4,070	7,120	9,800	4,930	3,570	3,100	3,210	2,190
MIN	106	394	336	382	909	930	679	328	310	237	202	111
CFSM	1.63	1.58	2.33	1.03	2.54	3.65	3.37	2.00	1.45	0.81	1.14	0.75
IN.	1.88	1.77	2.68	1.18	2.64	4.21	3.76	2.31	1.62	0.93	1.31	0.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2003, BY WATER YEAR (WY)

MEAN	396	537	736	1,323	1,400	1,737	1,166	710	526	459	388	572
MAX	2,157	1,876	2,406	2,794	3,002	3,829	2,864	2,123	2,064	2,321	1,147	6,436
(WY)	(2000)	(1973)	(1973)	(1978)	(1998)	(1998)	(1987)	(1989)	(1982)	(1975)	(2000)	(1999)
MIN	60.2	66.2	109	186	456	358	284	128	72.7	53.9	77.9	75.4
(WY)	(1994)	(1981)	(1992)	(1981)	(1991)	(1981)	(1981)	(2002)	(2002)	(2002)	(1988)	(1993)

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1972 - 2003	
ANNUAL TOTAL	243,510		524,896			
ANNUAL MEAN	667		1,438		827	
HIGHEST ANNUAL MEAN					1,471	1973
LOWEST ANNUAL MEAN					211	1981
HIGHEST DAILY MEAN	5,800	Oct 15	9,800	Apr 13	25,000	Sep 17, 1999
LOWEST DAILY MEAN	40	Jul 27	106	Oct 6	29	Oct 28, 1993
ANNUAL SEVEN-DAY MINIMUM	45	Jul 24	118	Oct 4	36	Oct 27, 1993
MAXIMUM PEAK FLOW			10,200	Apr 13	29,300	Sep 16, 1999
MAXIMUM PEAK STAGE			19.69	Apr 13	32.89*	Sep 16, 1999
INSTANTANEOUS LOW FLOW			105*	Oct 6	28*	Oct 28, 1993
ANNUAL RUNOFF (CFSM)	0.86		1.85		1.06	
ANNUAL RUNOFF (INCHES)	11.66		25.13		14.47	
10 PERCENT EXCEEDS	1,920		3,230		1,990	
50 PERCENT EXCEEDS	282		916		380	
90 PERCENT EXCEEDS	54		293		96	

e Estimated.
 * See REMARKS.

