

Water-Data Report 2008

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

Pamlico Basin
Upper Tar Subbasin

LOCATION.--Lat 35°54'02", long 77°51'56" referenced to North American Datum of 1983, Nash County, NC, Hydrologic Unit 03020101, on left bank at 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.

SURFACE-WATER RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 84.85 ft above North American Vertical Datum of 1988. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. The city of Rocky Mount diverted an average of 12.7 ft³/s for municipal water supply, most of which was returned downstream of station as treated effluent. Minimum discharge for period of record and current water year due to regulation. Maximum gage height for period of record from floodmarks.

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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	18	7.2	12	1,830	223	359	512	2,480	204	57	61	64
2	19	6.7	13	1,570	344	313	1,450	1,170	194	65	60	74
3	18	6.5	13	853	427	292	1,640	704	187	66	60	97
4	17	7.0	14	541	562	282	1,120	501	177	68	60	113
5	16	7.0	13	393	500	526	1,330	386	146	103	59	109
6	14	9.1	15	324	401	1,330	2,650	329	121	345	62	356
7	15	13	27	285	315	2,840	3,170	280	104	248	61	1,330
8	14	15	39	253	274	2,520	2,240	251	87	198	60	2,850
9	13	15	42	236	251	2,840	1,400	265	75	206	61	3,470
10	13	16	40	214	236	3,250	1,010	268	65	198	66	2,490
11	11	16	20	214	191	1,850	798	285	73	178	65	767
12	11	16	16	190	183	984	703	342	83	156	65	460
13	12	15	17	189	242	729	651	458	54	134	65	336
14	11	16	25	182	335	579	532	445	57	117	64	285
15	11	15	37	165	440	478	458	352	56	104	62	216
16	12	9.6	50	150	573	569	400	313	62	87	62	177
17	12	8.3	72	152	498	849	356	295	79	77	61	171
18	13	9.1	157	174	511	1,160	322	336	71	72	61	150
19	14	14	185	198	486	908	297	354	71	68	61	145
20	12	15	155	292	432	665	497	335	70	64	61	149
21	11	16	117	295	361	537	831	370	72	67	53	131
22	11	18	97	260	378	456	1,060	342	73	60	44	108
23	11	19	92	249	391	386	908	294	76	62	54	88
24	11	14	86	237	394	350	693	267	75	72	54	73
25	7.3	12	69	221	394	323	539	243	73	64	54	69
26	4.9	13	167	203	382	298	420	230	70	64	56	320
27	4.3	12	244	183	409	274	341	216	64	63	53	968
28	4.1	12	318	174	420	253	584	207	58	63	52	1,570
29	11	13	383	175	405	236	1,660	206	57	64	52	1,500
30	18	12	335	174	---	246	2,670	199	56	63	54	842
31	12	---	711	155	---	306	---	209	---	62	58	---
Total	381.6	377.5	3,581	10,731	10,958	26,988	31,242	12,932	2,710	3,315	1,821	19,478
Mean	12.3	12.6	116	346	378	871	1,041	417	90.3	107	58.7	649
Max	19	19	711	1,830	573	3,250	3,170	2,480	204	345	66	3,470
Min	4.1	6.5	12	150	183	236	297	199	54	57	44	64
Cfsm	0.02	0.02	0.15	0.45	0.49	1.12	1.34	0.54	0.12	0.14	0.08	0.84
In.	0.02	0.02	0.17	0.51	0.52	1.29	1.50	0.62	0.13	0.16	0.09	0.93

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	376	568	751	1,236	1,302	1,623	1,115	671	525	434	379	562
Max	2,157	2,481	2,406	2,794	3,002	3,829	2,864	2,123	2,064	2,321	1,224	6,436
(WY)	(2000)	(2007)	(1973)	(1978)	(1998)	(1998)	(1987)	(1989)	(1982)	(1975)	(2004)	(1999)
Min	12.3	12.6	109	186	378	308	284	128	72.7	53.9	58.7	30.3
(WY)	(2008)	(2008)	(1992)	(1981)	(2008)	(2006)	(1981)	(2002)	(2002)	(2002)	(2008)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1972 - 2008	
Annual total	145,508.1		124,515.1			
Annual mean	399		340		794	
Highest annual mean					1,471	1973
Lowest annual mean					211	1981
Highest daily mean	3,810	Apr 18	3,470	Sep 9	25,000	Sep 17, 1999
Lowest daily mean	4.1	Oct 28	4.1	Oct 28	4.1	Oct 28, 2007
Annual seven-day minimum	7.7	Oct 22	7.7	Oct 22	7.7	Oct 22, 2007
Maximum peak flow			3,660	Sep 9	29,300	Sep 16, 1999
Maximum peak stage			11.01	Sep 9	^a 32.89	Sep 16, 1999
Instantaneous low flow			^a 3.4	Oct 27	^a 3.4	Oct 27, 2007
Annual runoff (cfs)	0.513		0.438		1.02	
Annual runoff (inches)	6.97		5.96		13.88	
10 percent exceeds	1,060		834		1,880	
50 percent exceeds	116		161		377	
90 percent exceeds	13		13		92	

^aSee Remarks.