

Water-Data Report 2010

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 streamgage.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. The city of Rocky Mount diverted an average of 4.12 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 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	65	47	425	902	1,050	669	1,960	224	697	73	69	66
2	69	49	423	878	988	628	1,180	210	521	72	68	64
3	75	51	893	820	1,190	790	850	203	437	72	66	63
4	75	53	2,980	713	1,780	828	698	205	352	70	68	66
5	74	62	4,410	618	3,050	831	616	202	303	72	78	66
6	76	62	5,310	544	4,980	735	533	190	258	82	74	65
7	74	61	4,720	501	5,480	633	462	173	218	80	66	66
8	73	61	1,740	481	5,640	560	407	173	192	79	68	70
9	67	52	2,030	460	6,170	516	408	152	173	77	70	69
10	57	24	2,970	441	5,830	488	667	138	149	76	68	70
11	57	85	3,710	407	2,240	485	690	128	125	66	73	71
12	58	91	3,790	377	1,680	547	558	122	117	63	74	69
13	61	2,330	1,930	389	1,370	673	438	99	120	64	71	68
14	61	3,950	1,110	385	1,180	892	358	104	110	64	69	65
15	65	4,620	1,560	370	1,060	1,280	329	101	133	72	71	65
16	64	5,330	1,550	366	976	1,130	306	98	155	71	69	66
17	60	3,300	1,030	721	886	896	284	121	169	68	64	64
18	60	516	948	1,540	844	719	269	1,080	358	69	68	67
19	58	327	860	2,730	776	646	256	2,400	411	68	68	67
20	56	503	1,420	2,040	710	567	242	2,000	298	68	67	65
21	55	695	2,550	1,290	666	496	247	1,060	208	69	67	65
22	56	779	1,890	1,790	632	505	276	606	157	69	68	65
23	56	660	1,280	2,240	650	e601	274	546	120	70	68	65
24	57	628	1,000	2,360	706	e630	279	785	92	71	70	66
25	60	1,980	933	2,580	866	559	301	1,680	68	72	70	67
26	60	1,960	1,230	3,190	837	506	315	1,180	60	70	69	70
27	58	935	2,360	3,900	804	473	336	813	56	71	72	79
28	49	646	3,290	4,110	737	464	318	577	61	69	75	72
29	50	572	2,670	2,230	---	3,330	276	481	73	69	76	57
30	42	502	1,170	1,260	---	5,430	244	801	74	69	73	59
31	45	---	917	1,120	---	3,820	---	1,120	---	69	69	---
Total	1,893	30,931	63,099	41,753	53,778	31,327	14,377	17,772	6,265	2,194	2,166	1,997
Mean	61.1	1,031	2,035	1,347	1,921	1,011	479	573	209	70.8	69.9	66.6
Max	76	5,330	5,310	4,110	6,170	5,430	1,960	2,400	697	82	78	79
Min	42	24	423	366	632	464	242	98	56	63	64	57
Cfsm	0.08	1.33	2.62	1.73	2.47	1.30	0.62	0.74	0.27	0.09	0.09	0.09
In.	0.09	1.48	3.02	2.00	2.57	1.50	0.69	0.85	0.30	0.11	0.10	0.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	362	572	788	1,225	1,294	1,623	1,086	658	516	415	363	537
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	342	308	284	128	72.7	53.9	58.7	30.3
(WY)	(2008)	(2008)	(1992)	(1981)	(2009)	(2006)	(1981)	(2002)	(2002)	(2002)	(2008)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1972 - 2010	
Annual total	247,018		267,552			
Annual mean	677		733		785	
Highest annual mean					1,471	1973
Lowest annual mean					211	1981
Highest daily mean	5,630	Mar 30	6,170	Feb 9	25,000	Sep 17, 1999
Lowest daily mean	24	Nov 10	24	Nov 10	4.1	Oct 28, 2007
Annual seven-day minimum	48	Oct 28	48	Oct 28	7.7	Oct 22, 2007
Maximum peak flow			6,700	Feb 10	29,300	Sep 16, 1999
Maximum peak stage			15.92	Feb 10	^a 32.89	Sep 16, 1999
Instantaneous low flow			^a 11	Nov 10	^a 3.4	Oct 27, 2007
10 percent exceeds	1,910		2,030		1,870	
50 percent exceeds	289		279		372	
90 percent exceeds	63		63		89	

^a See Remarks.

