

Water-Data Report 2008

02082585 TAR RIVER AT NORTH CAROLINA HIGHWAY 97 AT ROCKY MOUNT, NC

Pamlico Basin
Upper Tar Subbasin

LOCATION.--Lat 35°57'17", long 77°47'14" referenced to North American Datum of 1983, Edgecombe County, NC, Hydrologic Unit 03020101, on left bank 20 ft downstream of bridge on North Carolina Highway 97, 0.5 mi upstream from Cowlick Branch, and 1 mi north-northeast of Rocky Mount.

DRAINAGE AREA.--925 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1976 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 52.81 ft above North American Vertical Datum of 1988. City of Rocky Mount telephone telemetry at station. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Prior to October 1996, some regulation at low flow caused by mill above station. The city of Rocky Mount diverted an average of 15.3 ft³/s for municipal water supply, most of which was returned downstream of station as treated effluent. Minimum discharge for current water year and period of record, result of regulation.

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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	9.5	12	5.1	2,000	285	468	498	3,330	188	72	83	77
2	8.6	9.5	5.2	1,930	543	323	1,430	1,520	175	70	54	90
3	10	9.4	5.9	1,050	662	418	1,860	925	173	69	32	81
4	12	11	4.3	646	708	277	1,340	662	172	43	76	108
5	17	10	4.6	464	619	889	1,620	511	132	108	75	151
6	12	9.4	4.4	317	484	1,460	3,230	437	114	521	75	383
7	9.2	11	4.4	283	379	3,410	4,010	347	104	329	74	1,290
8	9.7	13	4.7	243	302	3,880	2,930	342	99	198	77	2,880
9	9.3	13	8.3	194	272	3,720	1,700	278	86	267	54	3,590
10	10	11	20	210	188	4,070	1,230	367	36	253	51	2,990
11	9.6	10	14	159	189	2,490	981	481	64	237	132	954
12	8.3	11	6.9	160	172	1,240	929	497	83	201	90	605
13	7.8	9.9	4.0	152	396	911	883	762	80	170	84	417
14	8.4	9.7	3.4	153	454	725	687	715	39	113	76	346
15	8.6	14	14	149	521	599	583	515	38	88	77	262
16	8.5	11	191	121	657	737	507	400	65	89	46	179
17	8.6	7.8	78	122	594	1,010	453	441	81	88	30	190
18	16	7.0	132	185	736	1,340	345	402	77	86	59	176
19	13	7.0	243	161	686	1,090	372	466	77	82	72	169
20	9.2	6.2	164	350	581	807	561	421	75	66	73	150
21	8.5	6.6	158	406	470	650	1,690	459	46	64	70	146
22	8.6	7.7	123	253	481	555	2,030	465	30	61	69	127
23	9.2	13	68	300	519	452	1,420	271	54	66	45	114
24	38	12	111	273	503	413	1,030	383	82	78	27	101
25	63	9.4	96	256	497	385	764	237	76	51	57	86
26	37	6.2	521	169	475	286	589	195	74	37	71	184
27	91	5.0	394	219	531	347	483	178	72	35	71	1,000
28	19	4.8	409	158	544	220	779	188	43	61	79	1,560
29	10	5.0	510	157	516	291	2,200	187	30	75	71	1,650
30	13	5.1	522	157	---	243	3,600	185	63	73	78	988
31	17	---	783	155	---	377	---	189	---	73	41	---
Total	519.6	277.7	4,612.2	11,552	13,964	34,083	40,734	16,756	2,528	3,824	2,069	21,044
Mean	16.8	9.26	149	373	482	1,099	1,358	541	84.3	123	66.7	701
Max	91	14	783	2,000	736	4,070	4,010	3,330	188	521	132	3,590
Min	7.8	4.8	3.4	121	172	220	345	178	30	35	27	77

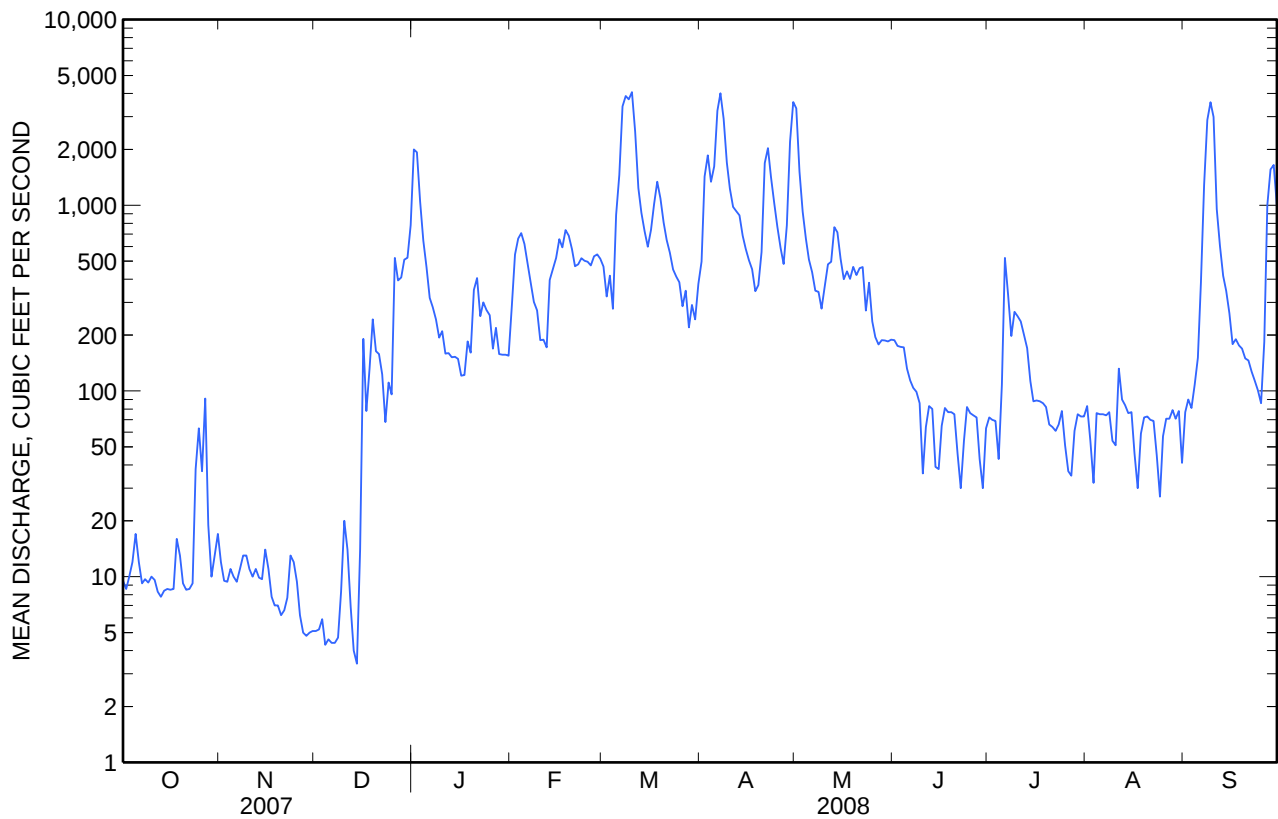
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	459	656	835	1,421	1,498	1,942	1,325	795	628	409	427	710
Max	2,918	3,230	2,318	3,230	3,920	4,507	3,447	2,725	2,532	1,368	1,482	8,135
(WY)	(2000)	(2007)	(2003)	(1978)	(1998)	(1998)	(1987)	(1989)	(2006)	(2000)	(2004)	(1999)
Min	16.8	9.26	125	254	482	343	332	148	67.3	54.1	64.7	17.9
(WY)	(2008)	(2008)	(1992)	(1981)	(2008)	(2006)	(1995)	(2002)	(2002)	(1986)	(2007)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1977 - 2008	
Annual total	171,853.6		151,963.5			
Annual mean	471		415		934	
Highest annual mean					1,764	2003
Lowest annual mean					262	1981
Highest daily mean	4,240	Apr 18	4,070	Mar 10	31,500	Sep 17, 1999
Lowest daily mean	3.4	Dec 14	3.4	Dec 14	3.4	Dec 14, 2007
Annual seven-day minimum	4.8	Dec 2	4.8	Dec 2	4.8	Dec 2, 2007
Maximum peak flow			4,630	Mar 7	34,100	Sep 17, 1999
Maximum peak stage			12.72	Mar 7	31.66	Sep 17, 1999
Instantaneous low flow			^a 3.3	Dec 14	^a 3.3	Dec 14, 2007
10 percent exceeds	1,220		1,000		2,200	
50 percent exceeds	113		158		467	
90 percent exceeds	9.0		9.4		90	

^aSee Remarks.

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PERIOD OF RECORD.--November 2003 to current year.

INSTRUMENTATION.--Tipping-bucket raingage. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	0.00	0.00	0.00	0.89	0.00	0.04	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.07	0.00	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	1.27	0.05	0.00	0.00	0.00	0.00	0.00
5	0.39	0.00	0.00	0.00	0.00	0.36	1.17	0.01	0.00	1.54	0.00	0.65
6	0.01	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.50	0.05	1.53
7	0.00	0.00	0.00	0.00	0.01	1.51	0.00	0.00	0.00	0.05	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.07	0.00	0.16	0.00	0.00
9	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.24	0.00	0.00
10	0.13	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.21	0.19
11	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.74	0.00	0.06	0.01	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.01	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	1.64	0.00	0.00	0.00	0.00	0.00	0.17	0.00
14	0.00	0.00	0.00	0.00	0.03	0.00	0.04	0.00	0.00	0.07	0.00	0.00
15	0.00	0.28	0.72	0.00	0.00	0.62	0.00	0.07	0.06	0.00	0.01	0.00
16	0.00	0.01	0.88	0.00	0.00	0.04	0.00	0.37	0.00	0.00	0.00	0.42
17	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.01
18	0.54	0.00	0.00	0.00	0.62	0.00	0.00	0.33	0.00	0.22	0.00	0.00
19	0.03	0.01	0.01	0.55	0.00	0.11	0.00	0.01	0.00	0.01	0.00	0.00
20	0.00	0.01	0.00	0.01	0.00	0.00	1.18	0.43	0.00	0.02	0.30	0.00
21	0.00	0.00	0.00	0.00	0.14	0.00	0.01	0.01	0.00	0.00	0.01	0.00
22	0.00	0.00	0.00	0.05	0.45	0.00	0.43	0.00	0.05	0.00	0.00	0.00
23	0.00	0.00	0.36	0.07	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00
24	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.05	0.00	0.00
25	0.85	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
26	0.31	0.12	2.14	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.12	0.56
27	0.93	0.00	0.00	0.00	0.01	0.00	0.41	0.00	0.00	0.00	0.08	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.51	0.00	0.00	0.47	0.05
29	0.00	0.00	0.00	0.00	0.00	0.08	0.01	0.00	0.58	0.00	0.00	0.00
30	0.00	0.00	0.78	0.06	---	0.37	0.00	0.00	0.01	0.00	0.82	0.00
31	0.00	---	0.01	0.00	---	0.14	---	0.00	---	0.21	0.09	---
Total	4.36	0.55	4.97	1.23	4.11	4.68	5.34	3.17	0.95	3.28	3.34	3.64

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