

Water-Data Report 2008

02081500 TAR RIVER NEAR TAR RIVER, NC

Pamlico Basin
Upper Tar Subbasin

LOCATION.--Lat 36°11'39", long 78°34'59" referenced to North American Datum of 1983, Granville County, NC, Hydrologic Unit 03020101, on right bank 90 ft upstream from bridge on North Carolina Highway 96, 1.2 mi upstream from Fishing Creek, 2.5 mi east of Tar River, and 8 mi south of Oxford.

DRAINAGE AREA.--167 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 972: 1940-41. WSP 1112: 1941 (calendar year figures). WSP 1273: 1941(M). WSP 1723: Drainage area.

GAGE.--Water-stage recorder and concrete control with sharp-crested weir. Datum of gage is 286.34 ft above North American Vertical Datum of 1988. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Occasional intermittent diversion for irrigation. Maximum discharge for period of record from rating curve extended above 11,500 ft³/s, by logarithmic plotting. Minimum discharge for the current water year occurred many days in October.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	0.29	0.17	238	20	34	767	149	10	5.8	0.98	56
2	0.00	0.28	0.16	88	122	28	416	97	8.5	4.0	0.58	25
3	0.00	0.22	0.17	50	137	25	217	74	7.5	2.6	0.31	15
4	0.00	0.15	0.16	33	77	24	388	58	7.1	1.7	0.18	11
5	0.00	0.16	0.16	25	55	1,380	1,190	43	6.4	1.6	0.14	7.7
6	0.00	0.16	0.16	21	47	576	786	34	5.5	5.2	0.09	2,110
7	0.00	0.13	0.16	18	45	345	456	28	4.6	9.0	0.13	4,200
8	0.00	0.09	0.16	15	38	1,750	244	23	4.2	10	0.21	266
9	0.00	0.08	0.16	13	31	614	163	20	3.3	7.4	0.22	105
10	0.00	0.08	0.16	11	25	257	124	20	2.7	5.5	0.50	83
11	0.00	0.08	0.19	9.8	20	174	100	24	2.1	3.9	1.3	98
12	0.00	0.05	0.36	8.9	16	133	84	29	1.5	3.2	0.54	108
13	0.00	0.04	0.31	8.2	25	106	76	40	1.4	2.8	0.30	68
14	0.00	0.04	2.3	7.8	247	82	66	30	1.2	2.4	0.24	45
15	0.00	0.15	1.5	7.0	137	73	55	21	1.5	2.0	0.46	32
16	0.00	0.16	3.2	6.4	101	291	46	29	1.2	1.7	0.48	27
17	0.00	0.12	2.6	7.5	71	334	40	37	0.82	1.6	0.33	44
18	0.00	0.12	1.9	11	58	179	36	29	0.57	1.4	0.27	50
19	0.00	0.12	1.8	12	47	131	34	63	0.48	1.3	0.25	37
20	0.00	0.12	1.6	30	39	115	35	39	0.47	1.2	0.18	26
21	0.00	0.12	1.7	28	33	95	73	27	0.43	1.7	0.25	20
22	0.00	0.15	1.3	24	31	78	100	19	0.37	1.3	e0.16	17
23	0.00	0.16	0.97	22	31	61	78	16	0.36	1.1	0.12	14
24	0.00	0.16	1.2	19	29	52	60	14	0.26	2.4	0.12	12
25	1.4	0.17	0.99	16	27	46	47	13	0.27	7.3	0.12	10
26	1.1	0.23	4.7	15	28	41	38	12	0.54	5.0	0.13	258
27	4.8	0.22	11	14	34	38	34	12	0.66	3.3	8.1	600
28	1.3	0.22	7.0	14	37	36	244	14	0.80	2.2	e982	318
29	0.58	0.25	5.7	13	41	36	1,470	14	1.6	1.7	e225	136
30	0.41	0.22	38	11	---	38	347	12	18	1.5	109	81
31	0.37	---	299	10	---	85	---	11	---	1.5	96	---
Total	9.96	4.54	388.94	806.6	1,649	7,257	7,814	1,051	94.33	103.3	1,428.69	8,879.7
Mean	0.32	0.15	12.5	26.0	56.9	234	260	33.9	3.14	3.33	46.1	296
Max	4.8	0.29	299	238	247	1,750	1,470	149	18	10	982	4,200
Min	0.00	0.04	0.16	6.4	16	24	34	11	0.26	1.1	0.09	7.7
Cfsm	0.00	0.00	0.08	0.16	0.34	1.40	1.56	0.20	0.02	0.02	0.28	1.77
In.	0.00	0.00	0.09	0.18	0.37	1.62	1.74	0.23	0.02	0.02	0.32	1.98

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	68.1	115	151	245	305	331	218	117	75.9	78.1	75.6	85.2
Max	565	599	558	819	798	1,047	739	475	488	677	542	939
(WY)	(1972)	(1973)	(1973)	(1978)	(1960)	(1998)	(2003)	(1978)	(1982)	(1975)	(1955)	(1999)
Min	0.32	0.15	4.39	7.04	44.4	25.3	33.1	12.1	2.36	0.92	0.30	0.04
(WY)	(2008)	(2008)	(1942)	(1942)	(2002)	(2006)	(1995)	(2002)	(2002)	(1966)	(2007)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1940 - 2008	
Annual total	26,421.73		29,487.06			
Annual mean	72.4		80.6		155	
Highest annual mean					384	2003
Lowest annual mean					26.6	2002
Highest daily mean	2,130	Apr 16	4,200	Sep 7	10,800	Sep 7, 1996
Lowest daily mean	0.00	Sep 7	0.00	Oct 1	0.00	Sep 7, 2007
Annual seven-day minimum	0.00	Sep 7	0.00	Oct 1	0.00	Sep 7, 2007
Maximum peak flow			6,900	Sep 7	^a 19,900	Sep 6, 1996
Maximum peak stage			13.48	Sep 7	24.06	Sep 6, 1996
Instantaneous low flow			^a 0.00	Oct 1	0.00	Aug 14, 1977
Annual runoff (cfs)	0.433		0.482		0.925	
Annual runoff (inches)	5.89		6.57		12.57	
10 percent exceeds	169		136		321	
50 percent exceeds	3.2		10		44	
90 percent exceeds	0.00		0.12		3.0	

^aSee Remarks.