

Water-Data Report 2010

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, daily discharges. WSP 1112: 1941, calendar year statistics. WSP 1273: 1941, maximum discharge. 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 streamgage.

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 also occurred September 22-26.

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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	2.3	e18	89	194	164	107	153	23	62	3.8	5.0	1.1
2	2.0	168	181	175	169	94	124	22	45	2.8	4.2	0.92
3	2.1	70	3,800	140	654	102	100	20	38	2.1	3.4	0.73
4	2.1	34	958	118	1,050	115	87	19	33	1.9	2.8	0.68
5	1.8	21	392	104	856	104	81	19	28	2.0	9.7	0.59
6	1.6	13	643	94	4,580	88	73	18	24	2.1	26	0.50
7	2.1	9.8	298	87	1,270	82	66	19	21	2.0	36	0.47
8	2.0	7.8	202	86	424	78	60	17	18	1.9	17	0.40
9	2.1	4.5	1,710	82	292	73	59	14	16	2.2	9.4	0.27
10	1.7	4.0	1,860	e73	399	69	56	13	15	3.0	6.1	0.17
11	1.1	1,010	384	e69	305	71	51	11	14	2.1	3.7	0.12
12	1.8	3,400	227	68	213	164	48	11	13	1.4	2.9	0.14
13	e2.0	3,420	269	64	188	443	46	11	24	1.2	2.4	0.12
14	e1.8	1,010	1,010	62	182	462	42	12	27	4.9	1.8	0.09
15	e1.9	283	399	61	168	345	39	12	24	3.7	1.6	0.09
16	e2.8	168	250	60	176	202	39	17	50	1.9	1.4	0.08
17	e2.8	116	185	418	177	152	38	32	67	2.2	1.3	0.11
18	e2.3	85	157	872	147	131	35	243	55	5.1	1.2	0.07
19	e2.0	202	821	309	130	114	32	146	31	17	1.6	0.06
20	e1.9	453	846	197	118	95	31	79	22	5.6	4.3	0.04
21	e1.8	218	499	164	107	86	31	52	16	2.9	10	0.02
22	e3.0	136	366	702	110	83	33	36	13	2.0	6.7	0.00
23	e3.0	743	297	509	195	79	38	648	11	1.7	4.4	0.00
24	e3.1	1,500	258	266	185	74	35	391	9.0	1.5	3.9	0.00
25	e3.1	402	485	2,230	202	69	37	191	7.8	1.5	3.3	0.00
26	e3.0	225	3,070	1,760	188	72	39	125	7.3	1.2	2.5	0.06
27	e4.0	190	771	379	144	67	35	73	6.4	1.2	2.3	1.3
28	e6.0	170	345	236	123	65	29	51	5.6	3.9	1.9	2.8
29	e6.9	126	234	185	---	618	25	366	4.7	8.3	1.6	2.6
30	e6.7	99	181	178	---	590	23	223	4.3	9.2	1.5	119
31	e6.5	---	170	187	---	225	---	99	---	6.3	1.3	---
Total	87.3	14,306.1	21,357	10,129	12,916	5,119	1,585	3,013	712.1	108.6	181.2	132.53
Mean	2.82	477	689	327	461	165	52.8	97.2	23.7	3.50	5.85	4.42
Max	6.9	3,420	3,800	2,230	4,580	618	153	648	67	17	36	119
Min	1.1	4.0	89	60	107	65	23	11	4.3	1.2	1.2	0.00
Cfsm	0.02	2.86	4.13	1.96	2.76	0.99	0.32	0.58	0.14	0.02	0.04	0.03
In.	0.02	3.19	4.76	2.26	2.88	1.14	0.35	0.67	0.16	0.02	0.04	0.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	66.5	118	160	246	304	330	214	115	76.6	76.1	73.6	82.9
Max	565	599	689	819	798	1,047	739	475	488	677	542	939
(WY)	(1972)	(1973)	(2010)	(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 2009		Water Year 2010		Water Years 1940 - 2010	
Annual total	68,679.81		69,646.83			
Annual mean	188		191		155	
Highest annual mean					384	2003
Lowest annual mean					26.6	2002
Highest daily mean	3,800	Dec 3	4,580	Feb 6	10,800	Sep 7, 1996
Lowest daily mean	0.74	Sep 6	0.00	Sep 22	0.00	Sep 7, 2007
Annual seven-day minimum	0.81	Aug 31	0.02	Sep 19	0.00	Sep 7, 2007
Maximum peak flow			5,720	Feb 6	^a 19,900	Sep 6, 1996
Maximum peak stage			12.21	Feb 6	24.06	Sep 6, 1996
Instantaneous low flow			^a 0.00	Sep 21	0.00	Aug 14, 1977
Annual runoff (cfsm)	1.13		1.14		0.925	
Annual runoff (inches)	15.30		15.51		12.57	
10 percent exceeds	400		408		320	
50 percent exceeds	41		37		43	
90 percent exceeds	2.1		1.5		3.0	

^a See Remarks.

