

Water-Data Report 2008

02081747 TAR RIVER AT U.S. HIGHWAY 401 AT LOUISBURG, NC

Pamlico Basin
Upper Tar Subbasin

LOCATION.--Lat 36°05'35", long 78°17'46" referenced to North American Datum of 1983, Franklin County, NC, Hydrologic Unit 03020101, on left bank 0.1 mi downstream of bridge on U.S. Highway 401 (Bickett Boulevard) at Louisburg, and 0.2 mi upstream from Fox Creek.

DRAINAGE AREA.--427 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1963 to current year. Published as "Tar River at Louisburg, NC" (02081740) October 1963 to September 1973. Prior to October 1972, medium- and high-water discharges only.

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

GAGE.--Water-stage recorder. Datum of gage is 175.75 ft above North American Vertical Datum of 1988. Prior to November 21, 1973, nonrecording gage at bridge 0.4 mi upstream at 178.53 ft; November 22, 1973, to June 24, 1980, at site 0.1 mi upstream at same datum. National Weather Service telephone telemetry at station. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minimum discharge for current year also occurred October 15-18.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of December 1934, September 1945, and August 1955 reached stages of 26, 24, and 24 ft, respectively, at site and datum 0.4 mi upstream, from U.S. Army Corps of Engineers.

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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	3.9	24	25	922	99	132	1,020	494	73	276	8.6	113
2	4.5	21	44	442	218	118	1,220	316	65	79	8.2	72
3	5.2	19	38	251	339	108	565	226	57	39	7.8	41
4	5.5	16	29	177	242	105	524	177	52	24	7.7	28
5	6.2	15	23	145	175	1,120	1,450	147	49	30	7.5	22
6	5.3	15	20	130	152	2,600	2,350	128	46	56	7.0	703
7	5.2	14	19	117	136	789	1,200	115	42	97	6.8	3,010
8	5.1	14	18	107	124	1,880	699	105	39	71	6.4	4,620
9	4.8	14	19	101	112	2,840	499	103	37	53	6.3	1,090
10	4.3	15	20	95	103	869	399	100	33	41	6.6	223
11	3.9	15	20	93	91	475	319	107	30	44	7.4	199
12	3.6	15	20	89	83	359	266	196	28	39	14	194
13	3.4	16	20	85	118	277	241	163	26	26	10	175
14	3.0	16	20	78	249	225	212	123	25	23	11	131
15	2.8	22	22	74	377	208	182	104	29	31	12	106
16	2.7	29	89	72	250	486	160	124	35	27	18	98
17	2.7	29	114	80	194	755	144	195	34	19	27	110
18	3.0	23	75	116	176	480	136	146	28	18	23	140
19	3.2	21	46	149	164	335	128	156	24	17	17	115
20	4.7	19	38	131	142	275	126	186	22	14	11	96
21	6.2	23	32	126	122	233	161	137	22	13	9.1	81
22	7.2	20	28	117	125	198	207	114	39	17	7.7	72
23	9.0	21	27	113	140	176	212	95	31	19	7.0	66
24	17	20	29	109	148	157	175	86	29	e18	6.6	61
25	58	23	28	98	134	143	145	84	25	e17	6.4	58
26	119	29	48	90	131	134	127	81	21	17	6.4	158
27	541	33	207	86	151	127	142	70	19	15	7.9	821
28	440	29	180	83	160	122	315	79	18	13	386	761
29	108	26	91	81	135	121	1,580	115	18	11	1,110	388
30	47	24	225	82	---	137	1,610	100	239	10	459	214
31	31	---	1,370	83	---	211	---	80	---	9.0	148	---
Total	1,466.4	620	2,984	4,522	4,790	16,195	16,514	4,452	1,235	1,183.0	2,377.4	13,966
Mean	47.3	20.7	96.3	146	165	522	550	144	41.2	38.2	76.7	466
Max	541	33	1,370	922	377	2,840	2,350	494	239	276	1,110	4,620
Min	2.7	14	18	72	83	105	126	70	18	9.0	6.3	22
Cfsm	0.11	0.05	0.23	0.34	0.39	1.22	1.29	0.34	0.10	0.09	0.18	1.09
In.	0.13	0.05	0.26	0.39	0.42	1.41	1.44	0.39	0.11	0.10	0.21	1.22

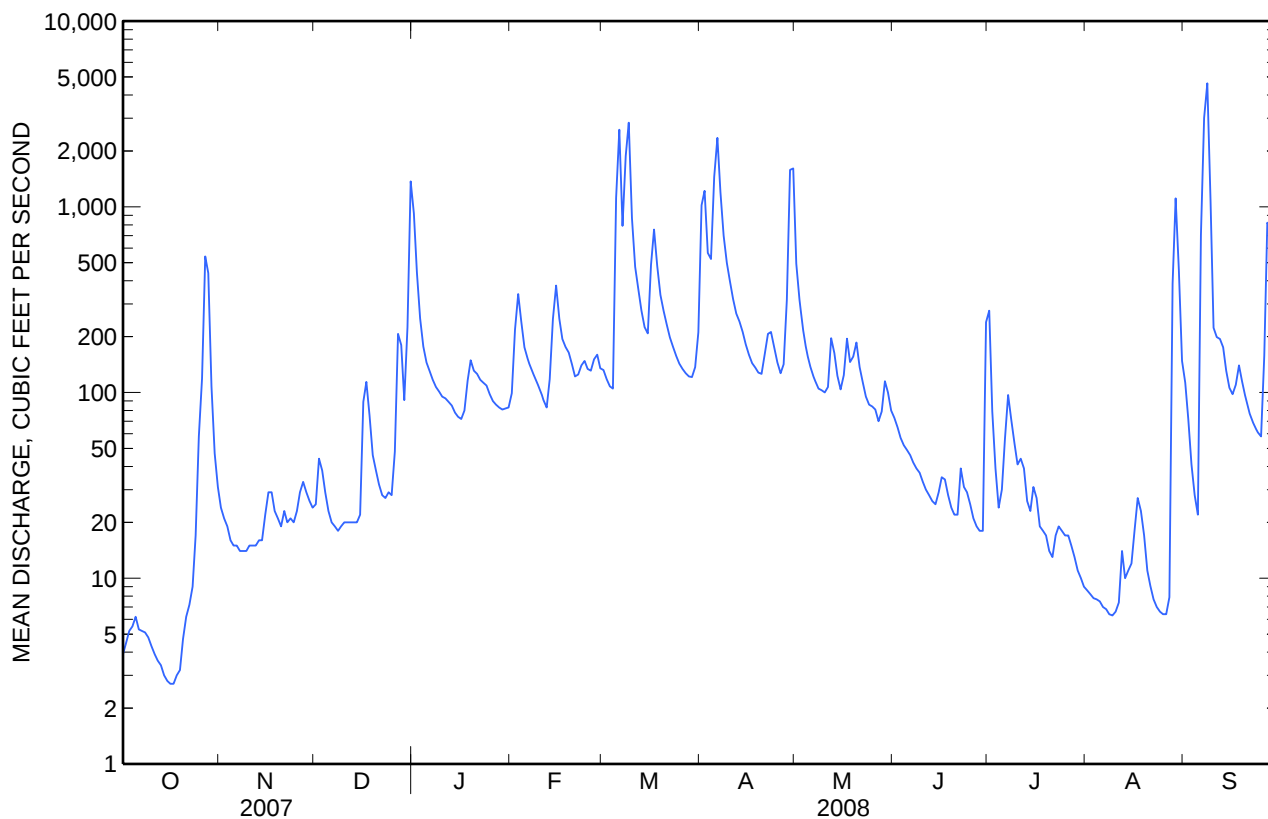
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	187	314	415	725	722	921	610	341	248	225	170	300
Max	809	1,678	1,108	1,845	1,956	2,726	1,557	984	1,451	1,692	657	2,949
(WY)	(2003)	(2007)	(1984)	(1978)	(1998)	(1998)	(1993)	(1989)	(1982)	(1975)	(2004)	(1999)
Min	28.5	20.7	64.5	78.0	165	117	127	54.2	14.1	29.8	12.9	4.97
(WY)	(1987)	(2008)	(2002)	(1981)	(2008)	(2006)	(1995)	(2002)	(2002)	(2002)	(2007)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1964 - 2008	
Annual total	78,407.4		70,304.8			
Annual mean	215		192		430	
Highest annual mean					765	2003
Lowest annual mean					124	2002
Highest daily mean	4,210	Apr 17	4,620	Sep 8	22,400	Sep 17, 1999
Lowest daily mean	2.2	Sep 13	2.7	Oct 16	2.1	Aug 14, 2002
Annual seven-day minimum	3.0	Oct 13	3.0	Oct 13	2.7	Aug 11, 2002
Maximum peak flow			5,020	Sep 8	23,700	Sep 17, 1999
Maximum peak stage			18.02	Sep 8	26.05	Sep 17, 1999
Instantaneous low flow			^a 2.6	Oct 14	1.7	Aug 15, 2002
Annual runoff (cfs)	0.503		0.450		1.01	
Annual runoff (inches)	6.83		6.12		13.67	
10 percent exceeds	527		391		871	
50 percent exceeds	52		81		172	
90 percent exceeds	5.0		7.9		34	

^aSee Remarks.

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

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

REMARKS.--Precipitation collected during freezing periods may not be accurately reflected in the 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	0.52	0.00	0.02	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	0.01	0.00	0.00	0.00	0.40	0.00	0.00	0.04	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.55	0.10	0.00	0.00	0.25	0.00	0.00
5	0.27	0.00	0.00	0.00	0.00	0.06	0.69	0.00	0.00	0.70	0.00	0.41
6	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.34	0.00	3.33
7	0.00	0.00	0.00	0.00	0.00	1.16	0.00	0.00	0.00	0.03	0.00	0.00
8	0.00	0.00	0.00	0.01	0.00	0.08	0.00	0.03	0.00	0.30	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.18	0.00	0.00
10	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.86
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.14	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.04	0.00	0.08	0.04	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.73	0.00	0.00	0.00	0.00	0.00	0.06	0.00
14	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.15	0.53	0.01	0.00
15	0.00	0.40	0.65	0.00	0.00	0.85	0.00	0.12	0.20	0.00	0.10	0.00
16	0.00	0.00	0.23	0.00	0.00	0.08	0.00	0.60	0.00	0.00	0.00	0.92
17	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
18	0.09	0.00	0.00	0.00	0.27	0.00	0.00	0.37	0.00	0.72	0.00	0.00
19	0.15	0.03	0.00	0.20	0.00	0.04	0.00	0.01	0.00	0.00	0.00	0.00
20	0.00	0.00	0.01	0.01	0.00	0.08	0.21	0.23	0.00	0.00	0.12	0.00
21	0.00	0.00	0.00	0.00	0.04	0.00	0.09	0.00	0.37	0.00	0.00	0.00
22	0.00	0.00	0.00	0.05	0.43	0.00	0.07	0.00	0.04	0.00	0.00	0.00
23	0.00	0.00	0.16	0.02	0.13	0.00	0.00	0.00	0.00	1.23	0.00	0.01
24	0.81	0.00	0.01	0.00	0.02	0.00	0.00	0.12	0.00	0.00	0.00	0.00
25	0.79	0.04	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.10
26	1.20	0.08	0.79	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.26	2.16
27	1.61	0.00	0.00	0.00	0.01	0.00	1.08	0.00	0.00	0.00	0.64	0.25
28	0.00	0.00	0.00	0.00	0.00	0.00	1.19	0.47	0.00	0.01	1.12	0.01
29	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.63	0.00	0.00	0.00
30	0.00	0.00	1.44	0.05	---	0.32	0.00	0.00	1.91	0.00	1.43	0.01
31	0.00	---	0.02	0.00	---	1.26	---	0.00	---	0.00	0.06	---
Total	4.93	0.56	3.32	0.61	2.51	4.56	4.08	3.27	3.63	4.33	4.44	8.06

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