

Water-Data Report 2007

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 NAVD 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.

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 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	181	235	373	375	197	335	487	163	50	33	20	8.2
2	125	188	438	607	239	e2,350	402	153	48	28	15	7.2
3	100	158	385	640	357	e1,700	362	144	123	24	12	6.2
4	89	135	382	456	327	e870	305	139	331	22	11	5.5
5	84	129	331	378	247	e560	250	141	170	21	10	4.8
6	100	124	274	1,100	196	393	212	149	107	19	9.2	4.4
7	481	206	246	1,840	185	307	202	135	122	18	8.7	4.0
8	516	2,120	220	1,150	181	259	194	124	93	17	8.4	3.7
9	361	2,660	193	2,050	164	225	181	132	73	17	8.1	3.4
10	290	829	181	914	156	201	170	167	62	22	6.8	2.9
11	199	554	177	587	151	190	171	185	55	31	6.8	2.5
12	158	1,440	171	478	145	174	581	147	52	143	9.2	2.4
13	131	4,070	166	416	e200	162	1,010	155	70	71	8.8	2.2
14	109	4,130	167	375	e600	160	591	139	58	43	8.0	4.4
15	98	969	163	336	804	163	879	117	54	32	7.2	12
16	91	1,360	155	308	526	470	3,400	106	54	26	6.5	15
17	96	4,320	152	270	356	2,880	4,210	110	54	23	6.2	7.7
18	205	5,630	e140	235	280	e1,700	1,170	120	48	67	6.0	5.2
19	363	1,730	e130	266	233	e900	632	108	43	76	6.4	4.3
20	238	686	e120	265	206	570	528	96	39	34	6.5	4.0
21	191	575	e130	242	197	481	456	88	41	25	8.0	4.0
22	149	2,100	e170	786	271	415	397	82	39	20	7.8	4.2
23	144	5,180	e300	1,130	412	372	345	77	36	17	7.4	4.6
24	138	5,910	e700	722	277	339	299	73	34	15	8.0	4.5
25	125	2,160	e1,400	518	238	307	266	68	33	13	7.6	4.1
26	111	767	e2,500	413	488	268	245	66	31	12	12	3.7
27	113	613	3,280	341	685	249	241	64	29	12	88	3.4
28	318	526	841	302	458	249	229	60	29	11	40	3.4
29	901	454	547	261	---	967	201	57	29	22	18	3.5
30	524	391	441	226	---	1,660	179	54	31	22	12	3.6
31	333	---	373	209	---	682	---	52	---	19	9.4	---
Total	7,062	50,349	15,246	18,196	8,776	20,558	18,795	3,471	2,038	955	399.0	149.0
Mean	228	1,678	492	587	313	663	626	112	67.9	30.8	12.9	4.97
Max	901	5,910	3,280	2,050	804	2,880	4,210	185	331	143	88	15
Min	84	124	120	209	145	160	170	52	29	11	6.0	2.2
Cfsm	0.53	3.93	1.15	1.37	0.73	1.55	1.47	0.26	0.16	0.07	0.03	0.01
In.	0.62	4.39	1.33	1.59	0.76	1.79	1.64	0.30	0.18	0.08	0.03	0.01

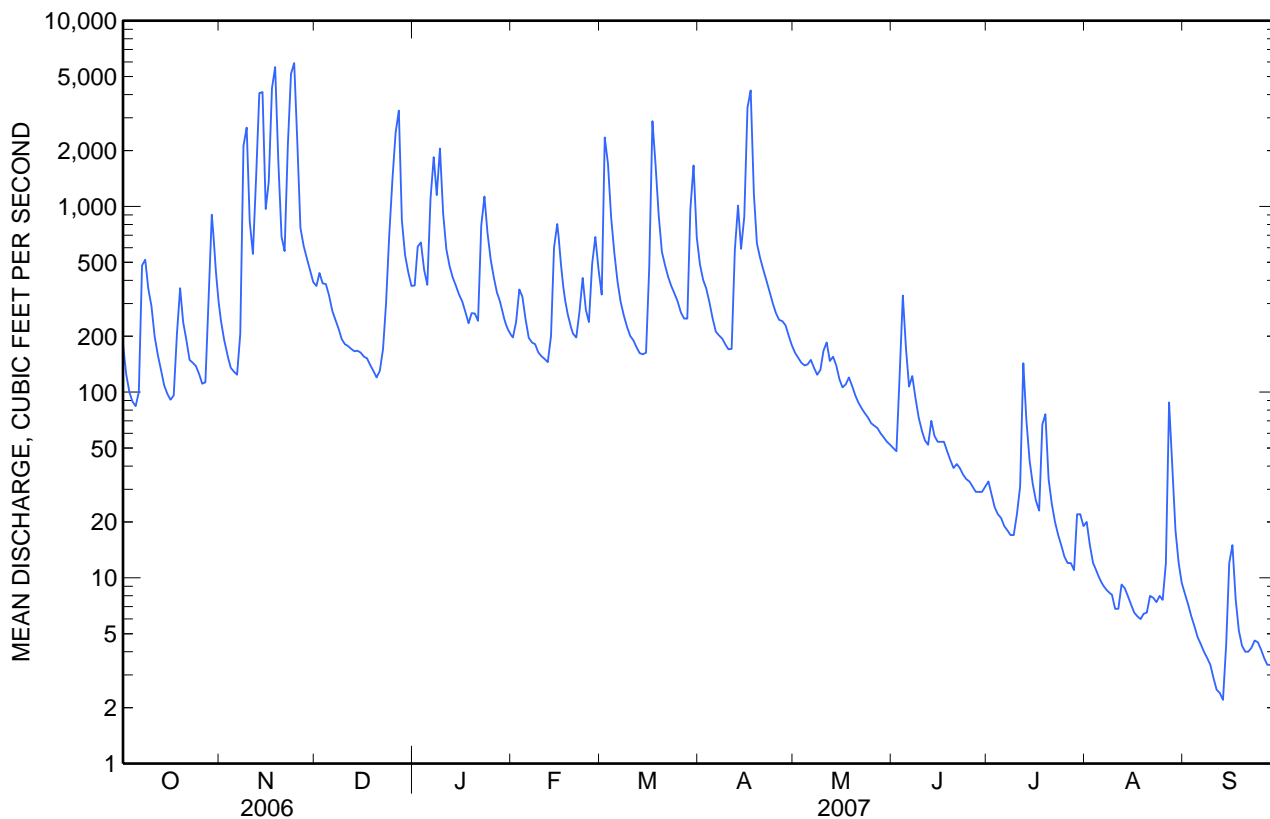
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	191	322	425	741	738	932	612	347	254	230	173	295
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	34.9	64.5	78.0	175	117	127	54.2	14.1	29.8	12.9	4.97
(WY)	(1987)	(1999)	(2002)	(1981)	(2002)	(2006)	(1995)	(2002)	(2002)	(2002)	(2007)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1964 - 2007	
Annual total	160,802		145,994.0			
Annual mean	441		400		437	
Highest annual mean					765	2003
Lowest annual mean					124	2002
Highest daily mean	5,910	Nov 24	5,910	Nov 24	22,400	Sep 17, 1999
Lowest daily mean	29	Aug 29	2.2	Sep 13	2.1	Aug 14, 2002
Annual seven-day minimum	34	Aug 23	3.0	Sep 7	2.7	Aug 11, 2002
Maximum peak flow			6,600	Nov 24	23,700	Sep 17, 1999
Maximum peak stage			19.63	Nov 24	26.05	Sep 17, 1999
Instantaneous low flow			1.9	Sep 13	1.7	Aug 15, 2002
Annual runoff (cfsm)	1.03		0.937		1.02	
Annual runoff (inches)	14.01		12.72		13.89	
10 percent exceeds	833		874		882	
50 percent exceeds	154		163		177	
90 percent exceeds	68		7.7		36	



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CLIMATOLOGICAL RECORDS

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 2006 TO SEPTEMBER 2007
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.01	0.00	0.13	0.19	0.23	0.14	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.03	0.51	0.00	0.00	0.05	0.00	0.00	0.00
3	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	1.81	0.00	0.00	0.00
4	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.00
5	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
6	1.42	0.00	0.00	0.57	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
7	0.25	1.60	0.06	0.11	0.00	0.00	0.12	0.01	0.00	0.00	0.00	0.00
8	0.00	0.09	0.00	0.21	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.28	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.18	0.04	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.36	0.01	0.00
12	0.02	1.80	0.00	0.00	0.00	0.00	1.04	0.01	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.01	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	1.14
15	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.00	0.01	0.00	0.00	0.05
16	0.00	1.61	0.00	0.01	0.00	1.22	0.92	0.01	0.22	0.00	0.00	0.00
17	0.51	0.00	0.00	0.00	0.00	0.09	0.07	0.01	0.00	0.36	0.04	0.00
18	0.20	0.00	0.00	0.20	0.00	0.01	0.00	0.08	0.00	0.14	0.00	0.00
19	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.18	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.11
21	0.00	0.64	0.00	0.66	0.04	0.00	0.00	0.00	0.00	0.00	0.09	0.02
22	0.12	0.81	0.80	0.16	0.23	0.00	0.00	0.00	0.01	0.00	0.00	0.00
23	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.96	0.00	0.36	0.00	0.00	0.00	0.02	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	0.00
27	0.47	0.00	0.01	0.00	0.00	0.00	0.20	0.00	0.00	0.17	0.00	0.00
28	0.25	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.04	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.24	0.00	0.00	0.23	0.00	0.00	0.00
30	0.00	0.13	0.00	0.00	---	0.00	0.00	0.00	0.01	0.02	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.03	0.00	---
Total	3.44	6.69	2.19	2.28	1.36	2.60	3.77	0.54	2.51	2.30	1.41	1.32

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