

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

LOCATION.--Lat 36°05'35", long 78°17'47", Franklin County, 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 mi<sup>2</sup>.

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 Nov. 21, 1973, nonrecording gage at bridge 0.4 mi upstream at 178.53 ft; Nov. 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 fair except those for estimated daily discharges, which are poor. Minimum discharge for current water year also occurred Oct. 10.

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.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	680	156	611	1,790	3,840	2,320	317	385	252	116	200
2	24	449	148	1,540	697	3,080	764	417	363	537	163	219
3	23	328	139	1,070	495	2,460	573	354	324	1,840	160	130
4	22	261	136	952	425	1,470	492	304	297	2,830	158	120
5	22	233	418	716	420	759	448	286	738	731	141	176
6	21	420	1,800	536	393	967	424	308	907	362	153	164
7	20	1,020	1,620	456	771	1,920	607	307	456	275	141	158
8	18	576	1,040	398	1,920	1,140	2,660	281	1,100	232	443	117
9	17	389	722	367	1,110	692	4,810	258	2,750	198	837	113
10	18	299	638	335	604	564	6,370	249	3,320	180	798	105
11	261	255	609	306	601	481	7,090	276	1,170	210	1,540	89
12	3,250	316	1,250	281	533	434	5,660	288	477	203	583	79
13	7,150	1,470	1,240	264	430	402	3,280	266	391	202	331	76
14	e3,000	1,580	2,420	259	361	398	1,000	218	346	572	351	77
15	e600	649	3,630	250	343	427	707	196	314	426	440	79
16	795	474	2,160	240	364	444	602	225	496	245	270	75
17	1,970	536	628	241	465	795	533	298	816	189	232	70
18	773	1,610	485	234	470	707	482	329	775	172	186	131
19	425	1,320	412	212	634	522	455	1,250	606	178	158	e700
20	287	595	439	231	1,050	1,500	449	2,010	811	232	152	e1,750
21	240	458	839	224	957	4,960	426	705	481	e155	162	434
22	243	387	605	215	877	6,950	408	802	369	e127	132	272
23	347	322	450	211	2,320	3,570	376	2,750	294	168	117	578
24	321	266	430	184	3,250	934	339	4,410	252	219	106	1,900
25	232	234	1,470	209	e1,680	631	327	3,970	220	262	92	669
26	190	211	2,930	208	e900	535	406	e1,850	197	164	82	329
27	168	197	2,610	201	705	484	561	e2,700	180	129	76	244
28	204	182	701	168	2,730	440	717	1,460	164	112	71	200
29	1,350	168	529	211	---	422	452	652	176	102	67	170
30	1,660	162	456	270	---	605	359	511	167	114	62	146
31	1,410	---	397	1,190	---	2,100	---	435	---	122	84	---
TOTAL	25,087	16,047	31,507	12,790	27,295	44,633	44,097	28,682	19,342	11,740	8,404	9,570
MEAN	809	535	1,016	413	975	1,440	1,470	925	645	379	271	319
MAX	7,150	1,610	3,630	1,540	3,250	6,950	7,090	4,410	3,320	2,830	1,540	1,900
MIN	17	162	136	168	343	398	327	196	164	102	62	70
CFM	1.90	1.25	2.38	0.97	2.28	3.37	3.44	2.17	1.51	0.89	0.63	0.75
IN.	2.19	1.40	2.74	1.11	2.38	3.89	3.84	2.50	1.69	1.02	0.73	0.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2003, BY WATER YEAR (WY)

	193	283	399	786	781	988	639	374	251	231	169	307
MEAN	193	283	399	786	781	988	639	374	251	231	169	307
MAX	809	1,192	1,108	1,845	1,956	2,726	1,557	984	1,451	1,692	512	2,949
(WY)	(2003)	(1986)	(1984)	(1978)	(1998)	(1998)	(1993)	(1989)	(1982)	(1975)	(1986)	(1999)
MIN	28.5	34.9	64.5	78.0	175	214	127	54.2	14.1	29.8	26.8	19.7
(WY)	(1987)	(1999)	(2002)	(1981)	(2002)	(1988)	(1995)	(2002)	(2002)	(2002)	(1988)	(1980)

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1964 - 2003	
ANNUAL TOTAL	113,437.5		279,194			
ANNUAL MEAN	311		765		449	
HIGHEST ANNUAL MEAN					765 2003	
LOWEST ANNUAL MEAN					124 2002	
HIGHEST DAILY MEAN	7,150	Oct 13	7,150	Oct 13	22,400	Sep 17, 1999
LOWEST DAILY MEAN	2.1	Aug 14	17	Oct 9	2.1	Aug 14, 2002
ANNUAL SEVEN-DAY MINIMUM	2.7	Aug 11	20	Oct 4	2.7	Aug 11, 2002
MAXIMUM PEAK FLOW			8,000	Oct 13	23,700	Sep 17, 1999
MAXIMUM PEAK STAGE			21.77	Oct 13	26.05	Sep 17, 1999
INSTANTANEOUS LOW FLOW			16*	Oct 9	1.7	Aug 15, 2002
ANNUAL RUNOFF (CFSM)	0.73		1.79		1.05	
ANNUAL RUNOFF (INCHES)	9.88		24.32		14.29	
10 PERCENT EXCEEDS	720		1,910		910	
50 PERCENT EXCEEDS	117		408		177	
90 PERCENT EXCEEDS	9.9		128		38	

e Estimated.  
 \* See REMARKS.

