

Water-Data Report 2008

02084000 TAR RIVER AT GREENVILLE, NC

Pamlico Basin
Lower Tar Subbasin

LOCATION.--Lat 35°37'00", long 77°22'22" referenced to North American Datum of 1983, Pitt County, NC, Hydrologic Unit 03020103, on right bank approximately 1,500 ft downstream from railroad bridge, and 21 mi upstream from Pamlico River at Washington.

DRAINAGE AREA.--2,660 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1997 to current year. Gage height records collected at site 800 ft upstream from 1905 to 1935 and at site 200 ft upstream from 1935 to 1984, are in reports of the National Weather Service. Unpublished records of gage height for the period October 1984 to September 1990 are available from the USGS Water Science Center, Raleigh, NC.

REVISED RECORDS.--WDR NC-99-1A: 1997 (minimum discharge).

GAGE.--Water-stage recorder and acoustic velocity meter. Datum of gage is 3.54 ft below North American Vertical Datum of 1988. Satellite telemetry at station.

REMARKS.--Records fair except those for negative flow, which are poor. This site is affected by both astronomical and wind tides.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 22, 1940 reached a stage of 22.07 ft at site 200 ft upstream at present datum; discharge 36,500 ft³/s. Maximum observed stage during period 1905-39 (National Weather Service Records) 24.5 ft, July 28, 1919.

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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	5.6	132	9.4	1,940	770	2,150	1,450	5,370	757	132	e350	229
2	14	256	e140	2,480	892	1,920	1,560	6,110	623	4.5	e350	211
3	9.6	186	e250	3,170	1,270	1,750	1,960	6,380	691	123	e325	157
4	30	182	e50	2,930	1,620	1,530	3,040	5,180	618	128	e240	204
5	43	76	e90	2,320	1,950	1,870	3,370	3,580	585	153	e200	193
6	33	54	39	1,850	1,930	2,400	4,010	2,580	496	515	e250	390
7	62	52	96	1,560	1,800	2,930	5,120	2,090	425	2,010	e250	489
8	72	42	90	1,310	1,570	4,470	6,000	1,800	411	2,540	e225	832
9	64	16	65	1,190	1,350	5,700	7,020	1,590	316	1,640	193	e2,030
10	9.1	26	97	1,010	1,350	7,090	7,070	1,380	361	1,200	202	3,310
11	84	14	78	904	1,050	8,000	5,460	1,240	207	1,120	233	e3,830
12	-21	15	86	837	932	8,520	4,190	1,780	244	1,050	119	2,880
13	32	46	67	774	1,030	8,190	3,450	1,690	198	909	253	1,730
14	1.4	0.11	97	717	1,450	6,540	3,060	1,870	211	811	237	1,270
15	-32	23	22	709	1,980	4,330	2,390	2,010	279	636	190	1,030
16	45	-22	e450	584	2,060	3,330	2,120	1,880	221	516	207	829
17	31	-24	e200	622	2,060	3,060	2,030	1,680	138	401	141	685
18	41	-34	603	633	2,460	3,060	1,870	1,580	105	353	98	529
19	20	-49	461	661	3,080	3,310	1,700	1,450	205	367	121	474
20	64	38	395	834	2,980	3,380	1,500	1,410	165	352	48	424
21	3.4	-2.9	510	895	2,690	2,960	2,010	1,360	161	334	87	384
22	40	35	553	1,110	2,390	2,670	3,540	1,370	160	322	128	395
23	42	-37	540	1,190	2,380	2,330	5,140	1,270	200	242	164	302
24	34	-20	503	1,220	2,410	2,090	5,690	1,240	61	435	102	289
25	59	22	373	1,090	2,360	1,870	5,490	1,040	145	227	162	235
26	234	55	627	1,040	2,290	1,760	4,730	1,050	199	255	54	311
27	345	66	1,130	974	2,400	1,620	3,800	919	161	319	84	310
28	250	-5.2	1,910	864	2,340	1,500	3,190	794	117	141	208	518
29	279	87	1,720	841	2,190	1,370	3,310	752	143	220	234	1,230
30	217	126	1,710	809	---	1,130	4,390	791	122	e260	194	1,710
31	139	---	1,840	731	---	1,350	---	806	---	e300	220	---
Total	2,250.1	1,355.01	14,801.4	37,799	55,034	104,180	109,660	64,042	8,725	18,015.5	5,869	27,410
Mean	72.6	45.2	477	1,219	1,898	3,361	3,655	2,066	291	581	189	914
Max	345	256	1,910	3,170	3,080	8,520	7,070	6,380	757	2,540	350	3,830
Min	-32	-49	9.4	584	770	1,130	1,450	752	61	4.5	48	157
Cfs/m	0.03	0.02	0.18	0.46	0.71	1.26	1.37	0.78	0.11	0.22	0.07	0.34
In.	0.03	0.02	0.21	0.53	0.77	1.46	1.53	0.90	0.12	0.25	0.08	0.38

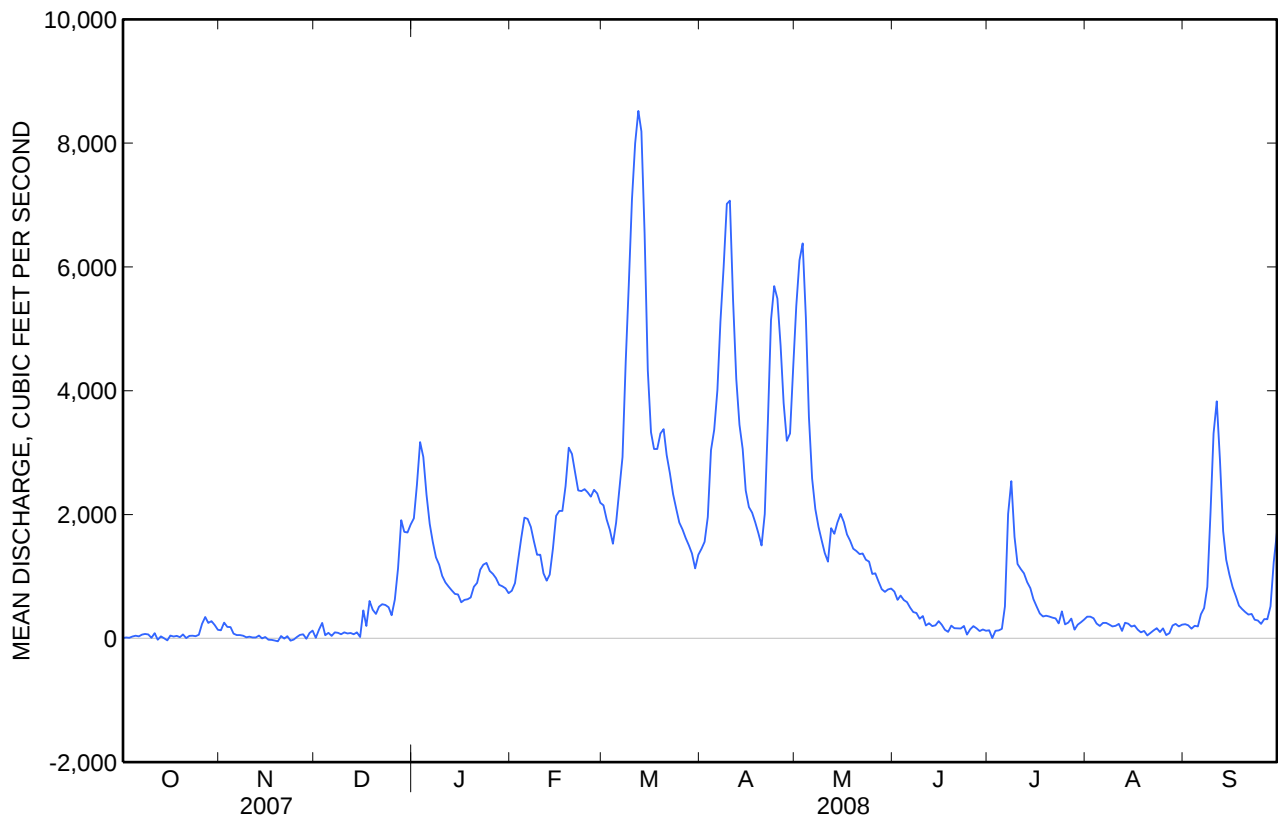
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,938	2,064	2,391	3,165	4,120	4,354	3,466	1,894	1,780	1,101	1,516	4,434
Max	11,690	8,492	5,521	6,167	13,280	12,020	8,873	4,968	6,939	3,988	4,658	29,850
(WY)	(2000)	(2007)	(2003)	(1999)	(1998)	(1998)	(2003)	(2003)	(2006)	(2006)	(2004)	(1999)
Min	72.6	45.2	455	1,133	1,706	1,065	1,002	528	190	265	189	62.0
(WY)	(2008)	(2008)	(2002)	(2001)	(2006)	(2006)	(2006)	(2002)	(2002)	(2002)	(2008)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1997 - 2008	
Annual total	473,364.58		449,141.01			
Annual mean	1,297		1,227		2,702	
Highest annual mean					5,052	2003
Lowest annual mean					1,227	2008
Highest daily mean	8,270	Jan 1	8,520	Mar 12	72,300	Sep 21, 1999
Lowest daily mean	-49	Nov 19	-49	Nov 19	-49	Nov 19, 2007
Annual seven-day minimum	-11	Nov 17	-11	Nov 17	-11	Nov 17, 2007
Maximum peak flow			8,980	Mar 12	73,000	Sep 21, 1999
Maximum peak stage			11.55	Mar 12	29.72	Sep 21, 1999
Instantaneous low flow			-651	Dec 15	-851	Aug 22, 1999
Annual runoff (cfs)	0.488		0.461		1.02	
Annual runoff (inches)	6.62		6.28		13.80	
10 percent exceeds	3,690		3,180		6,220	
50 percent exceeds	435		594		1,500	
90 percent exceeds	32		41		243	



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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	0.01	0.41	0.02	0.08	0.00	0.07	0.00	0.00	0.00
2	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.00
3	0.00	0.00	0.12	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.88	0.06	0.01	0.00	0.05	0.00	0.00
5	0.05	0.00	0.00	0.00	0.00	0.37	2.91	0.00	0.00	0.70	0.00	0.78
6	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.43	0.17	0.51
7	0.00	0.00	0.00	0.00	0.00	0.89	0.01	0.00	0.00	0.09	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.01	0.03	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.15	0.00	0.32	0.00	0.32
10	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.01	0.38	0.38
11	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.21	0.00	0.14	0.17	0.00
12	0.00	0.00	0.03	0.00	0.00	0.00	0.11	0.01	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	1.95	0.00	0.00	0.00	0.00	0.00	0.28	0.00
14	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.01	0.00
15	0.00	0.20	0.97	0.00	0.00	0.86	0.00	0.03	0.04	0.01	0.17	0.00
16	0.00	0.00	1.14	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.71
17	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
18	0.32	0.00	0.00	0.00	2.42	0.00	0.00	0.28	0.00	0.27	0.00	0.00
19	0.01	0.00	0.01	0.68	0.00	0.14	0.00	0.00	0.00	0.87	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.30	0.00	0.07	0.00	0.02
21	0.00	0.00	0.01	0.00	0.18	0.00	0.20	0.00	0.02	0.00	0.00	0.00
22	0.00	0.04	0.00	0.01	0.83	0.00	0.19	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.27	0.08	0.21	0.00	0.01	0.00	0.00	1.13	0.00	0.00
24	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.71	0.00	0.00
25	2.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
26	0.38	0.04	1.49	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.27	0.82
27	1.02	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.00	0.30	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.58	0.00	0.26	1.71	0.00
29	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.91	0.00
30	0.00	0.00	0.69	0.17	---	0.36	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.01	0.01	---	0.14	---	0.00	---	0.55	0.00	---
Total	4.49	0.29	4.77	1.30	6.41	3.96	5.14	1.86	0.35	5.64	5.14	3.92
Max	2.17	0.20	1.49	0.68	2.42	0.89	2.91	0.58	0.22	1.13	1.71	0.82

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