



Water-Data Report 2010

**02082585 TAR RIVER AT NORTH CAROLINA HIGHWAY 97 AT ROCKY MOUNT, NC**

Pamlico Basin  
Upper Tar Subbasin

LOCATION.--Lat 35°57'17", long 77°47'14" referenced to North American Datum of 1983, Edgecombe County, NC, Hydrologic Unit 03020101, on left bank 20 ft downstream of bridge on North Carolina Highway 97, 0.5 mi upstream from Cowlick Branch, and 1.0 mi north-northeast of Rocky Mount.

DRAINAGE AREA.--925 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--August 1976 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 52.81 ft above North American Vertical Datum of 1988. Satellite telemetry at streamgage.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Prior to October 1996, some regulation at low flow caused by mill above station. The city of Rocky Mount diverted an average of 14.3 ft<sup>3</sup>/s for municipal water supply, most of which was returned downstream of station as treated effluent. Minimum discharge for period of record, result of regulation. Minimum discharge for current water year also occurred October 11.

## 02082585 TAR RIVER AT NORTH CAROLINA HIGHWAY 97 AT ROCKY MOUNT, NC—Continued

**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	86	62	499	1,160	1,310	804	3,290	247	935	83	62	85
2	79	79	551	1,110	1,280	774	1,580	224	676	85	80	65
3	53	93	1,060	1,020	1,610	1,080	1,170	214	568	86	75	58
4	35	89	3,080	876	2,220	1,180	970	213	408	84	71	62
5	76	89	4,910	760	3,760	1,160	873	210	366	82	66	60
6	93	87	5,790	668	6,850	966	762	214	318	81	130	59
7	91	82	5,880	616	7,260	807	672	189	270	79	86	53
8	88	76	2,430	586	7,330	702	597	184	216	62	59	54
9	44	87	2,930	560	7,130	639	604	182	186	37	50	54
10	34	88	3,780	538	7,290	603	986	144	160	79	51	51
11	35	260	4,780	496	3,710	600	1,100	137	130	67	52	53
12	66	601	4,730	453	2,120	703	826	140	130	94	67	54
13	96	2,030	2,670	453	1,680	893	652	82	139	80	71	52
14	108	4,370	1,360	462	1,470	1,110	529	64	129	75	69	75
15	79	5,010	1,630	437	1,340	1,460	484	136	126	74	60	65
16	51	5,670	1,790	429	1,250	1,350	448	122	152	54	52	45
17	52	4,530	1,230	1,130	1,130	1,100	412	140	177	44	53	42
18	53	825	1,100	2,060	1,060	884	379	1,400	307	55	54	42
19	100	342	1,130	3,310	977	776	420	3,150	458	101	53	43
20	109	584	1,540	2,650	884	697	e303	3,020	319	74	53	63
21	103	746	2,840	1,590	821	620	e353	1,550	206	45	53	58
22	74	898	2,290	2,440	794	641	377	824	160	45	63	33
23	80	822	1,480	2,880	824	686	372	747	129	49	104	40
24	52	691	1,180	3,140	880	744	364	929	99	58	82	53
25	51	1,920	1,160	4,020	1,060	700	414	1,860	38	59	77	57
26	79	2,270	1,500	4,290	1,040	637	470	1,400	69	80	72	139
27	100	1,120	2,580	4,930	978	572	447	1,000	68	77	76	368
28	96	751	3,680	5,010	896	557	414	728	66	57	56	201
29	83	651	3,340	3,130	---	4,810	345	653	73	49	55	312
30	80	584	1,440	1,530	---	8,140	276	955	95	55	57	1,530
31	50	---	1,150	1,370	---	6,650	---	1,450	---	57	73	---
<b>Total</b>	2,276	35,507	75,510	54,104	68,954	43,045	20,889	22,508	7,173	2,107	2,082	3,926
<b>Mean</b>	73.4	1,184	2,436	1,745	2,463	1,389	696	726	239	68.0	67.2	131
<b>Max</b>	109	5,670	5,880	5,010	7,330	8,140	3,290	3,150	935	101	130	1,530
<b>Min</b>	34	62	499	429	794	557	276	64	38	37	50	33

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2010, BY WATER YEAR (WY)**

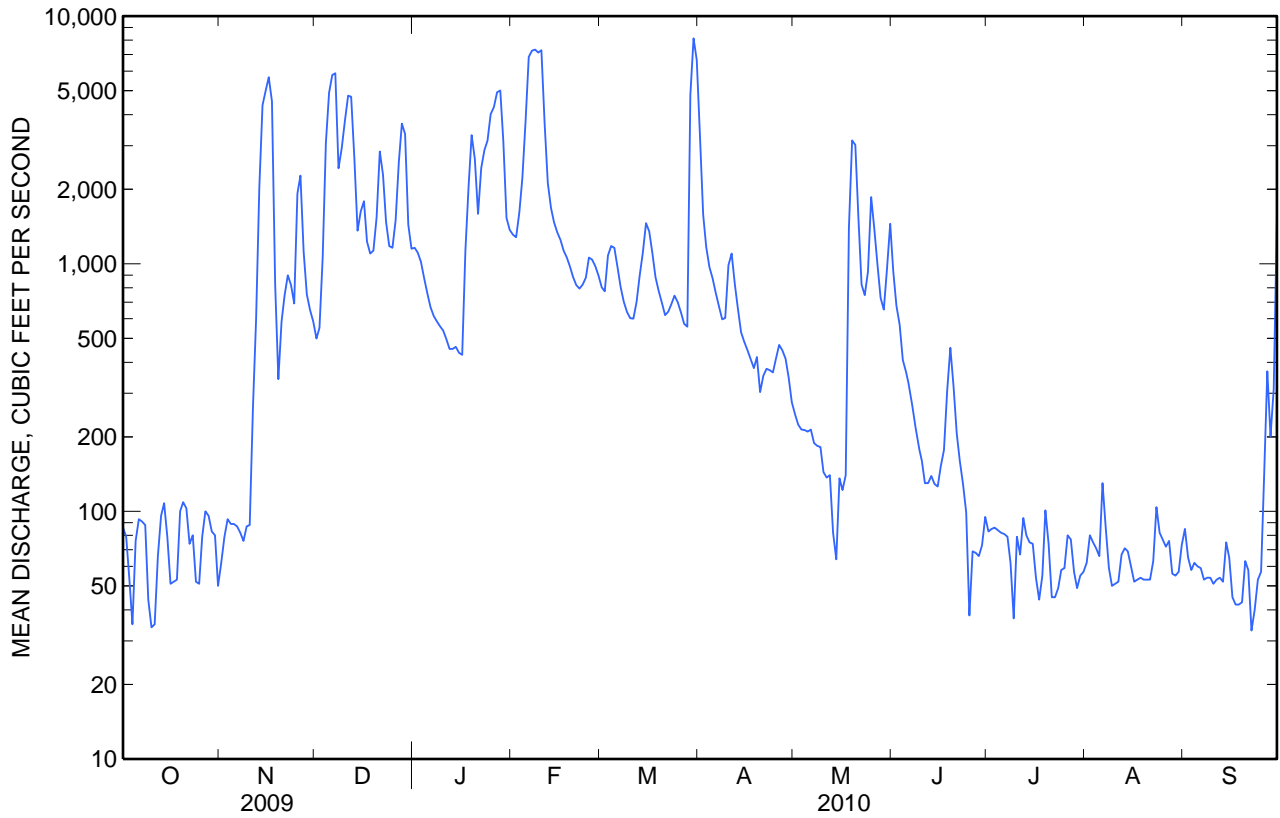
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	436	660	887	1,414	1,494	1,945	1,292	780	614	390	407	674
<b>Max</b>	2,918	3,230	2,436	3,230	3,920	4,507	3,447	2,725	2,532	1,368	1,482	8,135
<b>(WY)</b>	(2000)	(2007)	(2010)	(1978)	(1998)	(1998)	(1987)	(1989)	(2006)	(2000)	(2004)	(1999)
<b>Min</b>	16.8	9.26	125	254	412	343	332	148	67.3	54.1	64.7	17.9
<b>(WY)</b>	(2008)	(2008)	(1992)	(1981)	(2009)	(2006)	(1995)	(2002)	(2002)	(1986)	(2007)	(2007)

02082585 TAR RIVER AT NORTH CAROLINA HIGHWAY 97 AT ROCKY MOUNT, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1977 - 2010	
<b>Annual total</b>	292,265		338,081			
<b>Annual mean</b>	801		926		924	
<b>Highest annual mean</b>					1,764	2003
<b>Lowest annual mean</b>					262	1981
<b>Highest daily mean</b>	6,120	Mar 30	8,140	Mar 30	31,500	Sep 17, 1999
<b>Lowest daily mean</b>	34	Oct 10	33	Sep 22	3.4	Dec 14, 2007
<b>Annual seven-day minimum</b>	64	Oct 6	46	Sep 17	4.8	Dec 2, 2007
<b>Maximum peak flow</b>			8,340	Mar 30	34,100	Sep 17, 1999
<b>Maximum peak stage</b>			19.59	Mar 30	31.66	Sep 17, 1999
<b>Instantaneous low flow</b>			<sup>a</sup> 22	Oct 10	<sup>a</sup> 3.3	Dec 14, 2007
<b>10 percent exceeds</b>	2,200		2,740		2,180	
<b>50 percent exceeds</b>	355		377		458	
<b>90 percent exceeds</b>	79		53		87	

<sup>a</sup> See Remarks.



## 02082585 TAR RIVER AT NORTH CAROLINA HIGHWAY 97 AT ROCKY MOUNT, NC—Continued

## CLIMATOLOGICAL RECORDS

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

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

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record.

**PRECIPITATION, TOTAL, INCHES**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**  
**DAILY SUM VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	0.35	0.00	0.00	---	0.00	0.00	0.00	0.14	0.00	0.02	0.00
2	0.00	0.00	1.16	0.01	---	0.58	0.00	0.00	0.27	0.00	0.00	0.00
3	0.00	0.00	0.11	0.00	---	0.44	0.00	0.04	0.01	0.00	0.00	0.01
4	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00
5	0.01	0.00	0.66	0.00	1.65	0.00	0.00	0.00	0.00	0.00	1.17	0.00
6	0.05	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.20	0.00	0.01	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00
8	0.00	0.00	0.14	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	1.74	0.00	0.28	0.00	0.21	0.00	0.00	0.00	0.00	0.00
10	0.01	0.88	0.00	0.00	0.02	0.03	0.00	0.00	0.00	0.94	0.00	0.00
11	0.00	2.40	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.07
12	0.16	1.56	0.00	0.00	---	0.09	0.00	0.00	0.00	0.09	0.02	0.11
13	0.00	0.09	0.19	0.00	---	0.21	0.00	0.03	0.34	0.01	0.00	0.00
14	0.13	0.03	0.00	0.00	---	0.08	0.00	0.00	0.00	0.00	0.00	0.00
15	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.12	0.38	0.00	0.00	0.00
17	0.00	0.00	0.00	1.37	0.00	0.00	0.00	1.51	0.01	0.05	0.00	0.00
18	0.01	0.28	0.21	0.00	0.00	0.00	0.00	0.76	0.00	0.02	0.09	0.00
19	0.00	0.18	0.51	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
21	0.00	0.01	0.00	1.11	0.00	0.00	0.58	0.00	0.00	0.00	0.00	0.00
22	0.00	0.19	0.00	0.07	0.24	0.32	0.01	0.08	0.00	0.00	0.56	0.00
23	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	1.03	0.00
24	0.00	0.00	0.00	0.00	0.16	0.00	0.09	0.67	0.00	0.00	0.07	0.00
25	0.00	0.01	0.75	1.72	0.00	0.00	0.45	0.03	0.00	0.01	0.03	0.00
26	0.09	0.00	0.02	0.00	0.00	0.22	0.01	0.00	0.00	0.00	0.00	2.17
27	0.11	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	1.83
28	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.14
29	0.00	0.00	0.00	---	---	2.80	0.00	0.92	0.03	0.31	0.00	2.99
30	0.00	0.19	0.00	---	---	0.00	0.00	0.00	0.01	0.01	0.00	2.45
31	0.04	---	0.50	---	---	0.00	---	0.00	---	0.02	0.00	---
<b>Total</b>	1.11	6.47	6.04	---	---	5.18	1.35	4.67	1.53	1.46	3.72	9.77

02082585 TAR RIVER AT NORTH CAROLINA HIGHWAY 97 AT ROCKY MOUNT, NC—Continued

