

0208650112 FLAT RIVER TRIBUTARY NEAR WILLARDVILLE, NC

LOCATION.--Lat 36°07'54", long 78°50'00", Durham County, Hydrologic Unit 03020201, on left bank at culvert on Secondary Road 1680, 1.5 mi southeast of Willardville.

DRAINAGE AREA.--1.14 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1988 to September 1990, October 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 270 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No flow at times during most years. Maximum discharge for period of record, from rating curve extended above 70 ft<sup>3</sup>/s, on basis of computation of flow through culvert with road overflow. Maximum gage height for period of record from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.10	0.00	0.17	0.06	1.4	0.03	0.00	e0.06	0.00	4.4
2	0.00	0.01	0.09	0.01	0.25	0.15	0.72	0.04	0.00	e0.03	0.00	0.26
3	0.00	0.02	0.09	0.02	0.25	1.0	0.47	0.03	0.00	e0.01	0.00	0.07
4	0.00	0.02	0.06	0.02	0.25	0.49	0.35	0.04	0.00	e0.00	0.00	0.03
5	0.00	0.02	0.06	0.02	0.22	0.14	0.30	0.04	0.00	e0.00	0.00	0.02
6	0.00	0.02	0.07	0.25	0.23	0.08	0.26	0.02	e0.00	0.00	0.00	0.00
7	0.00	0.03	0.08	0.19	1.9	0.06	0.22	0.02	e0.00	0.00	0.00	0.00
8	0.00	0.03	0.09	0.10	1.4	0.04	0.22	0.01	e0.00	0.00	0.00	0.00
9	0.00	0.04	0.06	0.06	0.56	0.05	0.22	0.01	e0.00	0.00	0.00	0.00
10	0.00	0.04	0.10	0.07	0.33	0.04	0.32	0.01	e0.00	0.00	0.00	0.00
11	0.00	0.04	0.28	0.10	0.25	0.04	0.25	0.02	e0.00	0.00	0.00	0.00
12	0.00	0.04	0.02	0.05	0.19	0.08	0.20	0.02	e0.00	0.00	0.00	0.00
13	0.00	0.04	0.01	0.09	0.15	0.09	0.19	0.02	e0.00	0.00	0.00	0.00
14	0.07	0.05	0.01	0.05	0.14	0.09	0.16	0.03	e0.00	0.00	0.00	0.00
15	0.09	0.06	0.00	0.04	0.13	0.07	0.15	0.01	e0.00	0.00	0.00	0.06
16	0.00	0.06	0.00	0.03	0.13	0.09	0.13	0.00	e0.00	0.00	0.00	0.06
17	0.00	0.09	0.00	0.03	0.11	0.29	0.12	0.00	e0.00	0.00	0.00	0.02
18	0.00	0.09	0.04	0.03	0.09	1.4	0.10	0.01	e0.00	0.00	0.00	0.00
19	0.00	0.09	0.01	1.1	0.09	0.85	0.08	0.01	e0.00	0.00	0.00	0.00
20	0.00	0.09	0.01	3.3	0.10	0.49	0.07	0.00	e0.00	0.00	0.00	0.00
21	0.00	0.06	0.00	1.1	0.09	0.67	0.06	0.00	e0.00	0.00	0.00	0.00
22	0.00	0.06	0.00	0.90	0.09	0.66	0.06	0.01	e0.00	0.00	0.00	0.00
23	0.00	0.07	0.00	2.3	0.06	0.34	0.04	0.00	e0.00	0.00	0.00	0.00
24	0.00	0.17	0.02	1.6	0.06	0.26	0.04	0.00	e0.00	0.00	0.00	0.00
25	0.00	0.17	0.02	1.2	0.06	0.24	0.05	0.00	e0.00	0.00	0.00	0.00
26	0.00	0.13	0.01	0.53	0.07	0.26	0.04	0.00	e2.5	0.00	0.00	0.00
27	0.00	0.07	0.01	0.27	0.06	1.2	0.04	0.00	e1.8	0.00	0.00	0.00
28	0.00	0.06	0.00	0.20	0.06	0.67	0.05	0.00	e0.90	0.00	0.00	0.00
29	0.00	0.06	0.00	0.15	---	0.41	0.04	0.00	e0.40	0.00	0.00	0.00
30	0.00	0.08	0.00	0.13	---	0.36	0.03	0.00	e0.15	0.00	0.25	0.00
31	0.00	---	0.00	0.11	---	0.35	---	0.00	---	0.00	3.4	---
TOTAL	0.16	1.81	1.24	14.05	7.49	11.02	6.38	0.38	5.75	0.10	3.65	4.92
MEAN	0.005	0.060	0.040	0.453	0.268	0.355	0.213	0.012	0.192	0.003	0.118	0.164
MAX	0.09	0.17	0.28	3.3	1.9	1.4	1.4	0.04	2.5	0.06	3.4	4.4
MIN	0.00	0.00	0.00	0.00	0.06	0.04	0.03	0.00	0.00	0.00	0.00	0.00
CFSM	0.00	0.05	0.04	0.40	0.23	0.31	0.19	0.01	0.17	0.00	0.10	0.14
IN.	0.01	0.06	0.04	0.46	0.24	0.36	0.21	0.01	0.19	0.00	0.12	0.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2002,<sup>®</sup> BY WATER YEAR (WY)

	1987	1988	1989	2000	2001	2002	1995	1996	1997	1998	1999	2002
MEAN	0.357	0.394	0.717	1.788	2.109	2.351	1.312	0.617	0.527	0.263	0.112	1.456
MAX	1.46	1.27	3.26	3.17	5.41	8.30	2.46	2.20	4.07	1.26	0.50	8.60
(WY)	1990	1996	1990	1998	1998	1998	1997	1989	1995	1989	1989	1996
MIN	0.005	0.056	0.014	0.16	0.27	0.36	0.064	0.012	0.052	0.003	0.001	0.000
(WY)	2002	2001	1989	2001	2002	2002	1995	2002	1988	1988	1988	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1987 - 2002 <sup>®</sup>
ANNUAL TOTAL	162.87	56.95	
ANNUAL MEAN	0.446	0.156	1.026
HIGHEST ANNUAL MEAN			1.58
LOWEST ANNUAL MEAN			0.16
HIGHEST DAILY MEAN	23 Mar 30	4.4 Sep 1	225 Sep 6 1996
LOWEST DAILY MEAN	0.00 Jul 15	0.00 Oct 1	0.00 Jun 22 1988
ANNUAL SEVEN-DAY MINIMUM	0.00 Sep 12	0.00 Oct 1	0.00 Jul 2 1988
MAXIMUM PEAK FLOW		22 Aug 31	1410* Sep 6 1996
MAXIMUM PEAK STAGE		2.94 Aug 31	7.77* Sep 6 1996
INSTANTANEOUS LOW FLOW		0.00* Oct 1	0.00* Jun 15 1988
ANNUAL RUNOFF (CFSM)	0.39	0.14	0.90
ANNUAL RUNOFF (INCHES)	5.31	1.86	12.23
10 PERCENT EXCEEDS	0.44	0.31	1.8
50 PERCENT EXCEEDS	0.06	0.02	0.19
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated.

<sup>®</sup> See PERIOD OF RECORD.

\* See REMARKS.

0208650112 FLAT RIVER TRIBUTARY NEAR WILLARDVILLE, NC--Continued

