

NEUSE RIVER BASIN

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 mi².

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 sea level, 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 ft³/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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.25	.02	.03	e.02	.08	.19	12	.13	4.0	.03	.12	.06
2	.26	.02	.03	e.03	.06	.18	5.2	.11	1.8	.04	.07	.03
3	.23	.03	.03	e.04	.06	.18	2.0	.09	.47	.02	.05	.03
4	.24	.03	.03	.06	.05	1.4	1.3	.08	.26	.05	.04	.04
5	.25	.05	.04	.06	.10	1.4	.92	.08	.19	.08	.03	.04
6	.25	.04	.04	.06	.07	.81	.76	.08	.13	.02	.02	.02
7	.17	.06	.03	.06	.06	.45	.64	.07	.12	.01	.01	.01
8	.11	.06	.02	.08	.06	.31	.55	.09	.10	.03	.01	.00
9	.13	.08	.02	.06	.06	.27	.49	.07	.08	.02	.01	.01
10	.12	.08	.02	.05	.07	.21	.42	.08	.06	.02	.02	.05
11	.10	.04	.02	.04	.06	.18	.36	.07	.05	.01	.21	.03
12	.08	.04	.02	.05	.09	.16	.34	.10	.05	.01	.11	.00
13	.06	.05	.02	.04	.16	.20	.33	.11	.08	.01	.09	.00
14	.04	.10	.04	.05	.19	.16	.30	.08	.16	.01	.04	.00
15	.03	.03	.03	.06	.19	.25	.28	.11	.12	.00	.02	.00
16	.03	.03	.05	.06	.21	.34	.26	.26	.08	.00	.02	.00
17	.02	.03	.44	.09	8.3	.27	.27	.28	.07	.00	.02	.00
18	.02	.03	.13	.14	1.4	.21	.25	.18	.04	.02	.04	.00
19	.04	.06	.10	.18	.64	.18	.22	.13	.04	.02	.04	.00
20	.03	.12	.12	1.5	.43	.65	.21	.10	.03	.01	.02	.00
21	.03	.06	.11	.59	.32	20	.20	.12	.03	.00	.02	.00
22	.04	.04	e.06	.29	.28	5.9	.18	.14	.16	.00	.01	.00
23	.03	.04	e.04	.21	.33	1.6	.18	.18	.21	.00	.00	.00
24	.03	.04	e.03	.17	.45	.99	.17	.14	.05	.01	.03	.05
25	.04	.17	e.03	.14	.38	.70	.34	.12	.04	.00	.02	.03
26	.03	.16	e.04	.13	.40	.53	.23	.99	.03	.04	.01	.00
27	.03	.06	e.03	.12	.27	.42	.18	.27	.03	12	.02	.00
28	.02	.04	e.03	.09	.23	.37	.17	.18	.02	.46	.08	.00
29	.02	.03	e.03	.09	---	16	.14	.17	.02	.32	.04	.00
30	.02	.03	e.02	.14	---	23	.13	.10	.02	.51	.08	.00
31	.02	---	e.02	.11	---	4.3	---	.07	---	.22	.03	---
TOTAL	2.77	1.67	1.70	4.81	15.00	81.81	29.02	4.78	8.54	13.97	1.33	0.40
MEAN	.089	.056	.055	.16	.54	2.64	.97	.15	.28	.45	.043	.013
MAX	.26	.17	.44	1.5	8.3	23	12	.99	4.0	12	.21	.06
MIN	.02	.02	.02	.02	.05	.16	.13	.07	.02	.00	.00	.00
CFSM	.08	.05	.05	.14	.47	2.31	.85	.14	.25	.40	.04	.01
IN.	.09	.05	.06	.16	.49	2.67	.95	.16	.28	.46	.04	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001,® BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	.39	.43	.78	1.92	2.31	2.55	1.42	.68	.56	.29	.11	1.59			
MAX	1.46	1.27	3.26	3.17	5.41	8.30	2.46	2.20	4.07	1.26	.50	8.60			
(WY)	1990	1996	1990	1998	1998	1998	1997	1989	1995	1989	1989	1996			
MIN	.009	.056	.014	.16	.54	.45	.064	.15	.052	.003	.001	.000			
(WY)	1999	2001	1989	2001	2001	1988	1995	2001	1988	1988	1988	1990			

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1987 - 2001®
ANNUAL TOTAL	223.10	165.80	
ANNUAL MEAN	.61	.45	1.12
HIGHEST ANNUAL MEAN			1.58
LOWEST ANNUAL MEAN			.45
HIGHEST DAILY MEAN	12	Apr 18	225
LOWEST DAILY MEAN	.00	Jul 10	.00
ANNUAL SEVEN-DAY MINIMUM	.01	Jul 5	.00
MAXIMUM PEAK FLOW		93	1410*
MAXIMUM PEAK STAGE		4.86	7.77*
INSTANTANEOUS LOW FLOW		.00*	.00*
ANNUAL RUNOFF (CFSM)	.53	.40	.98
ANNUAL RUNOFF (INCHES)	7.28	5.41	13.38
10 PERCENT EXCEEDS	1.7	.44	1.9
50 PERCENT EXCEEDS	.16	.06	.22
90 PERCENT EXCEEDS	.02	.01	.00

e Estimated.
® See PERIOD OF RECORD.
* See REMARKS.

0208650112 FLAT RIVER TRIBUTARY NEAR WILLARDVILLE, NC--Continued

