

NEUSE RIVER BASIN

02087359 WALNUT CREEK AT SUNNYBROOK DRIVE AT RALEIGH, NC

LOCATION.--Lat 35°45'30", long 78°34'58", Wake County, Hydrologic Unit 03020201, at bridge on Secondary Road 2544, 0.9 mi upstream from Big Branch, and 3.5 mi southeast of Raleigh.

DRAINAGE AREA.--29.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1996 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 190.8 ft above sea level. Satellite and telephone telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Maximum discharge for period of record from computation of peak flow through culvert; maximum gage height, 17.03 ft, from high-water mark in gage shelter. Minimum discharge for period of record also occurred on Aug. 5, 6, 7, 8, 1999.

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	14	e7.7	11	8.6	13	12	299	8.9	87	8.3	13	28
2	13	e7.6	10	8.4	11	12	337	8.6	414	7.4	10	18
3	12	e8.3	12	8.6	10	28	69	8.2	52	6.7	9.2	11
4	12	e8.2	9.7	8.5	9.4	207	41	7.9	22	33	8.0	9.4
5	11	e9.0	9.7	8.8	34	90	30	7.4	14	552	7.2	8.5
6	11	e8.7	9.6	8.8	17	56	25	6.9	12	55	6.5	7.4
7	9.8	e8.8	8.6	8.7	13	26	22	6.3	9.7	24	6.3	6.3
8	9.1	e9.7	8.7	14	12	19	20	6.2	8.1	40	5.9	5.4
9	8.9	e10	9.2	13	10	16	19	6.2	7.3	30	6.5	5.0
10	8.5	e13	8.6	11	12	12	17	7.6	6.8	164	5.2	5.1
11	8.5	e14	9.4	10	11	11	15	7.5	6.2	54	46	18
12	8.5	e14	9.5	9.4	25	11	14	6.5	6.1	23	182	6.1
13	8.0	e14	8.6	9.2	32	14	14	15	44	15	65	4.6
14	7.8	e43	8.6	8.9	29	12	13	10	111	12	65	4.3
15	7.8	25	8.7	11	21	38	12	6.8	193	9.4	26	e4.0
16	7.8	14	13	10	16	17	12	63	70	8.4	15	e3.8
17	7.8	14	115	8.7	149	11	12	27	973	7.5	11	e4.0
18	8.3	11	32	8.7	52	9.1	12	17	118	6.7	11	e4.0
19	8.8	25	23	10	24	8.4	10	12	30	6.6	29	e3.8
20	8.5	44	25	77	18	29	9.3	10	18	6.3	30	e4.9
21	8.7	22	16	31	15	418	9.0	24	25	5.7	15	e4.7
22	8.7	14	15	19	31	240	8.9	24	22	5.2	9.7	e4.0
23	8.4	12	13	14	25	64	9.2	20	70	5.1	7.9	e5.0
24	8.3	9.8	11	12	17	32	15	11	54	10	14	e67
25	8.5	70	10	11	19	20	107	8.3	22	11	9.5	41
26	8.5	80	9.9	11	19	21	40	31	18	20	7.6	13
27	8.0	44	9.9	9.3	15	18	21	16	14	309	6.6	7.5
28	7.9	22	10	9.1	13	16	15	21	11	97	6.9	5.7
29	7.4	13	9.3	8.7	---	227	11	25	9.8	29	9.8	4.7
30	7.3	11	9.4	27	---	332	9.9	16	8.9	35	18	4.1
31	7.5	---	9.2	17	---	87	---	10	---	18	51	---
TOTAL	280.3	606.8	472.6	430.4	672.4	2113.5	1248.3	455.3	2456.9	1614.3	713.8	318.3
MEAN	9.04	20.2	15.2	13.9	24.0	68.2	41.6	14.7	81.9	52.1	23.0	10.6
MAX	14	80	115	77	149	418	337	63	973	552	182	67
MIN	7.3	7.6	8.6	8.4	9.4	8.4	8.9	6.2	6.1	5.1	5.2	3.8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001
MEAN	26.5	21.3	26.8	55.4	45.4	60.1
MAX	45.5	26.9	34.1	106	98.0	123
(WY)	1997	1997	1999	1998	1998	1997
MIN	9.04	15.5	15.2	13.9	21.9	30.8
(WY)	2001	2000	2001	2001	1999	2000

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1996 - 2001

ANNUAL TOTAL	10531.1	11382.9	
ANNUAL MEAN	28.8	31.2	38.3
HIGHEST ANNUAL MEAN			47.7
LOWEST ANNUAL MEAN			31.2
HIGHEST DAILY MEAN	402	Sep 26	973
LOWEST DAILY MEAN	5.9	Aug 24	3.8
ANNUAL SEVEN-DAY MINIMUM	7.6	Oct 27	4.1
MAXIMUM PEAK FLOW			1560
MAXIMUM PEAK STAGE			10.58
INSTANTANEOUS LOW FLOW			NOT DETERMINED
10 PERCENT EXCEEDS	62		54
50 PERCENT EXCEEDS	16		11
90 PERCENT EXCEEDS	8.3		6.7

e Estimated.
* See REMARKS.

02087359 WALNUT CREEK AT SUNNYBROOK DRIVE AT RALEIGH, NC--Continued

