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Water Resources Data North Carolina Water Year 1997

Volume 1. Surface-Water Records

U.S. GEOLOGICAL SURVEY
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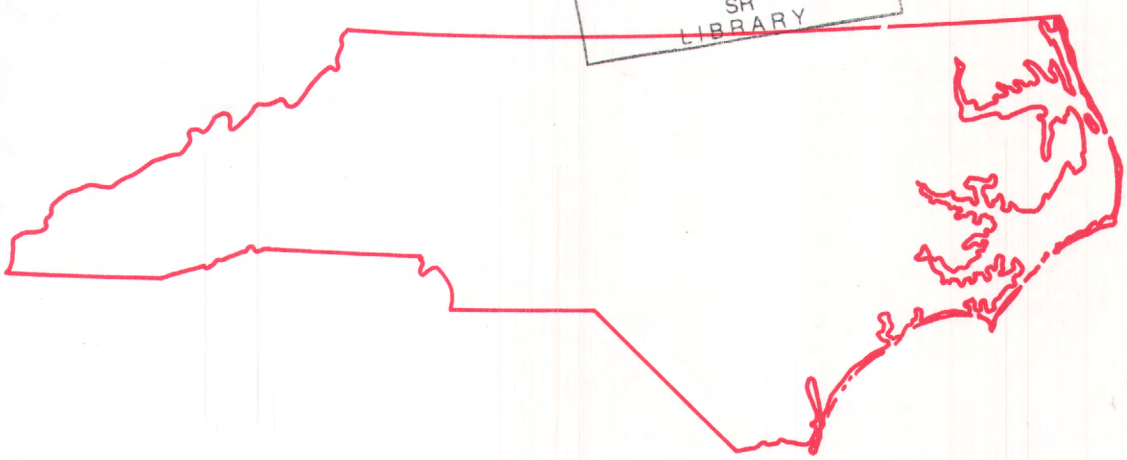

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NC-97-1
Prepared in cooperation with the North Carolina Department of Environment, Health, and Natural Resources, and with other State, municipal, and Federal agencies

CALENDAR FOR WATER YEAR 1997

1996

OCTOBER

S	M	T	W	T	F	S
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1997

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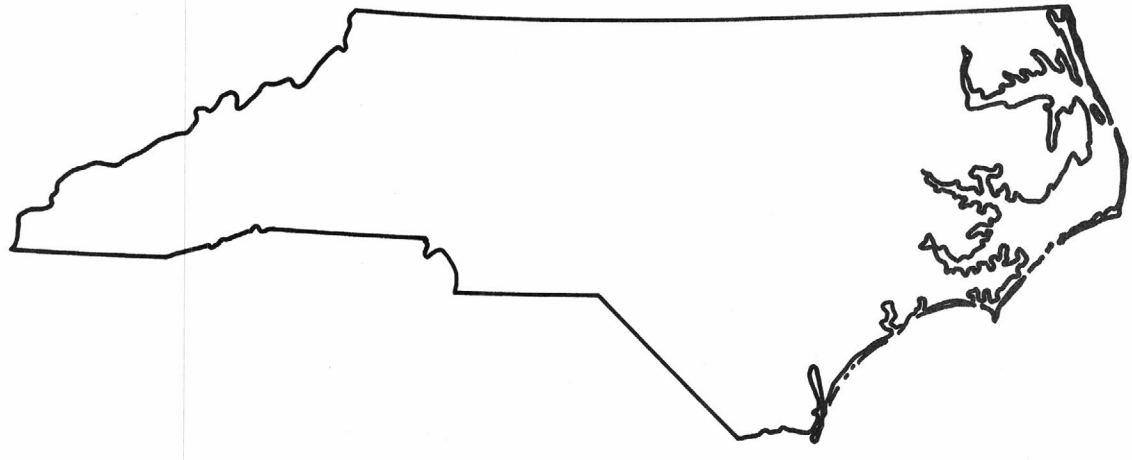
Water Resources Data North Carolina Water Year 1997

Volume 1. Surface-Water Records

by B.C. Ragland, D.G. Smith, R.G. Barker, and J.B. Robinson



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Prepared in cooperation with the North Carolina Department of Environment, Health, and Natural Resources, and with other State, municipal, and Federal agencies

U. S. DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

GEOLOGICAL SURVEY

TOM CASADEVALL, Acting Director

For information on the water program in North Carolina write to:

District Chief
U.S. Geological Survey
3916 Sunset Ridge Road
Raleigh, NC 27607

1998

PREFACE

This volume of the annual hydrologic-data report of North Carolina is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow and quality of water provide hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for North Carolina are contained in this volume.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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Pamilee L. Breton edited much of the text, tables and graphs of this report. Pamilee L. Breton, Bobby C. Ragland, assembled the report.

This report was prepared in cooperation with the State of North Carolina, other agencies, and under the general supervision of Gerald L. Ryan, District Chief; and Wanda C. Meeks, Regional Hydrologist, Southeastern Region.

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY *(Leave blank)*	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	March 30, 1998	Annual Data - Oct. 1, 1996 thru Sept. 30, 1997

4. TITLE AND SUBTITLE
Water Resources Data, North Carolina, Water Year 1997
Volume 1. Surface-Water Data

5. FUNDING NUMBERS

6. AUTHOR(S)
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7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
U.S. Geological Survey
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3916 Sunset Ridge Road
Raleigh, North Carolina 27607

8. PERFORMING ORGANIZATION REPORT NUMBER
USGS-WDR-NC-97-1

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)
U.S. Geological Survey
Water Resources Division
3916 Sunset Ridge Road
Raleigh, North Carolina 27607

10. SPONSORING / MONITORING AGENCY REPORT NUMBER
USGS-WDR-NC-97-1

11. SUPPLEMENTARY NOTES
Prepared in cooperation with the State of North Carolina and other agencies

12a. DISTRIBUTION / AVAILABILITY STATEMENT
No restriction on distribution. This report may be purchased from:

National Technical Information Center
Springfield, VA 22161

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*

Water-resources data for the 1997 water year for North Carolina consist of records of stage, discharge, and water quality of streams; and stage and contents of lakes and reservoirs. This report contains discharge records for 163 gaging stations; stage and contents for 56 lakes and reservoirs; water quality for 29 gaging stations and 38 miscellaneous sites; and continuous daily tide stage at 1 site. Additional water data were collected at 100 sites not involved in the systematic data-collection program, and are published as miscellaneous measurements in this report. The collection of water-resources data in North Carolina is part of the National Water-Data System operated by the U.S. Geological Survey in cooperation with State, municipal, and Federal agencies.

14. SUBJECT TERMS
North Carolina, Hydrologic data, Surface water, Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analysis, Sediments, Water temperature, Sampling, Water level, Water analysis, Elevation

15. NUMBER OF PAGES
562

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED

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Cataloochee Creek near Cataloochee (d)	03460000	470-471
Pigeon River below power plant near Waterville (d,t,b)	03460795	472-477
North Toe River (head of Nolichucky River):		
South Toe River near Celo (d)	03463300	478-479
South Fork Holston River:		
Watauga River near Sugar Grove (d)	03479000	480-481
Tennessee River:		
Little Tennessee River near Prentiss (d)	03500000	482-483
Cartoogechaye Creek near Franklin (d)	03500240	484-485
Little Tennessee River at Needmore (d)	03503000	486-487
Nantahala River near Rainbow Springs (d)	03504000	488-489
Tuckasegee River:		
Oconaluftee River at Birdtown (d)	03512000	490-491
Tuckasegee River at Bryson City (d)	03513000	492-493
Hiwassee River above Murphy (d)	03548500	494-495
Valley River at Tomotla (d)	03550000	496-497
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DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

The following continuous-record streamflow stations in North Carolina have been discontinued or converted to partial-record stations. Daily streamflow or stage records were collected and published for the period of record shown for each station.

Station number	Station name	Drainage area (mi^2)	Period of record
	Chowan River Basin		
02053400	Ahoskie Creek near Rich Square, NC	3.70	1964-73
02053450	Ahoskie Creek at Mintons Store, NC	24.0	1964-73
02053510	Ahoskie Creek tributary at Poortown, NC	2.60	1963-73
	Roanoke River Basin		
02068000	Dan River near Asbury, NC	71.4	1924-26
02069000	Dan River at Pine Hall, NC	501	1924-26
			1986-90
02070500	Mayo River near Price, NC	260	1929-71
02071500	Dan River at Leaksville, NC	1,150	1929-49
02074218	Dan River near Mayfield, NC	1,778	1976-84
02075160	Moon Creek near Yanceyville, NC	32.8	1961-74
			1988-89
02077230	South Hyco Creek near Hesters Store, NC	29.9	1964-67
02077240	Double Creek near Roseville, NC	7.47	1964-75
			1977-82
02077250	South Hyco Creek near Roseville, NC	56.5	1966-78
02077300	Hyco River at McGhees Mill, NC	191	1964-73
02077660	Mayo Creek near Woodsdale, NC	52.7	1975-77
	Pamlico River Basin		
02081800	Cedar Creek near Louisburg, NC	47.8	1956-75
02082000	Tar River near Nashville, NC	701	1928-71
02082500	Sapony Creek near Nashville, NC	64.8	1950-70
0208273070	Devils Cradle Creek at NC 39 near Kearney, NC	2.9	1984-85
02082731	Devils Cradle Creek nr Alert, NC	13.4	1993-96
02083833	Pete Mitchell Swamp at Sr1409 nr Penny Hill, NC	11.0	1993-96
02084070	Green Mill Run at Arlington Boulevard at Greenville, NC	9.10	1980-85
02084164	Juniper Branch near Simpson, NC	7.5	1975-86
0208423100	Flat Swamp at SR 1157 near Robersonville, NC	21.3	1986-88
02084317	Black Swamp near Batts Crossroads, NC	1.02	1982
02084500	Herring Run near Washington, NC	9.59	1950-80
02084556	North Lake Canal above Pungo Lake near Wenona, NC	29	1976-80
02084558	Albemarle Canal near Swindell, NC	68.0	1977-81
0208463120	Outflow Ditch from Jennett Sedge at Buxton, NC	Indeterminate	1994-95
	Neuse River Basin		
02084903	Sevenmile Creek tributary at SR 1120 near Buckhorn, NC	1.34	1981-82
02084904	Sevenmile Creek tributary at I-85 near Miles, NC	.004	1981-82
02084905	Sevenmile Creek tributary at SR 1144 near Miles, NC	1.57	1981-82
02084908	Sevenmile Creek tributary at I-85 near Efland, NC	.29	1981-82
02085220	Little River near Orange Factory, NC	80.4	1962-87
02086000	Dial Creek near Bahama, NC	4.71	1925-71
			1989-91
0208650112	Flat River tributary near Willardsville, NC	1.14	1988-90
02086624	Knap of Reeds Creek near Butner, NC	43.0	1982-95
02086849	Ellerbee Creek nr Gorman, NC	21.9	1982-89
			1991-95
02087000	Neuse River near Northside, NC	535	1927-80
0208700780	Little Lick Creek above Secondary Road 1814 near Oak Grove, NC	10.1	1982-95
0208705200	Smith Creek at Grissom, NC	6.2	1984-85

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS--Continued

Station number	Station name	Drainage area (mi^2)	Period of record
	Neuse River Basin--Continued		
0208721055	Perry Creek at SR 2012 near Millbrook, NC	2.43	1986-89
0208726005	Crabtree Creek at SR1649 near Raleigh, NC	76.0	1988-92
0208732810	Marsh Creek at SR 2030 at Millbrook, NC	1.44	1986-89
02087570	Neuse River at Smithfield, NC	1,206	1959-80
02088315	Beaverdam Creek near Grantham, NC	5.01	1978-82
02088470	Little River near Kenly, NC	191	1964-89
02088682	Big Ditch at Retha Street at Goldsboro, NC	2.17	1980-84
02089216	Daileys Creek near Liddell, NC	3.80	1978-81
02089222	Bear Creek near Parkstown, NC	4.27	1978-82
02090500	Contentnea Creek near Wilson, NC	236	1930-54
02090512	Hominy Swamp at Phillips Street at Wilson, NC	7.90	1978-85
02090625	Turner Swamp near Eureka, NC	2.1	1968-87
02091700	Little Contentnea Creek near Farmville, NC	93.3	1956-87
02091960	Creeping Swamp near Calico, NC	9.80	1971-77
02091970	Creeping Swamp near Vanceboro, NC	27.0	1971-85
02092000	Swift Creek near Vanceboro, NC	182	1950-89
02092020	Palmetto Swamp near Vanceboro, NC	24.0	1971-76
0209257120	W. P. Brice Creek below SR 1101 near Riverdale, NC	11.2	1986-91
	Hewletts Creek Basin		
02093229	Hewletts Creek at SR 102 near Wilmington, NC	1.98	1977-90
	Cape Fear River Basin		
0209330990	Brooks Lake tributary near Browns Summit, NC	.06	1985-90
0209331325	Candy Creek at SR 2700 near Monticello, NC	1.10	1985-90
02093500	Haw River near Benaja, NC	168	1928-71
02094000	Horsepen Creek at Battle Ground, NC	15.9	1925-31, 1934-59
02095000	South Buffalo Creek near Greensboro, NC	33.6	1928-58
0209509100	South Buffalo Creek at SR 2821 at McLeansville, NC	43.5	1986-88
02095500	North Buffalo Creek near Greensboro, NC	37.1	1929-90
0209555450	Buffalo Creek at SR 2719 near Osceola, NC	97.4	1986-87
0209560800	Reedy Fork Creek at NC 61 near Osceola, NC	243	1986-88
02096000	Stony Creek near Burlington, NC	44.2	1952-59
02096700	Big Alamance Creek near Elon College, NC	116	1957-80
02096842	Cane Creek 0.1mile above SR 1126 near Buckhorn, NC	.64	1979-81
02096850	Cane Creek near Teer, NC	33.7	1959-73
02097000	Haw River near Pittsboro, NC	1,310	1928-73
02097243	Third Fork Creek at Durham, NC	16.7	1968-73
02097500	Morgan Creek near Chapel Hill, NC	30.1	1923-32
0209782150	New Hope River tributary at SR 1716 near Farrington, NC	2.05	1986-88
02098000	New Hope River near Pittsboro, NC	285	1949-73
02098500	West Fork Deep River near High Point, NC	32.1	1923-26, 1928-58
02100000	Muddy Creek near Archdale, NC	16.7	1934-41
02101000	Bear Creek at Robbins, NC	134	1939-71
0210106600	Deep River nr Glendon, NC	859	1993-96
0210108450	Suck Creek tributary near Zion Grove, NC	.67	1986-88
02103000	Little River at Manchester, NC	348	1938-50
02103500	Little River at Linden, NC	460	1928-71
02104000	Cape Fear River at Fayetteville, NC	4,395	1889-1903, 1928-40
02104387	Buckhead Creek near Owens, NC	2.62	1976-80

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS--Continued

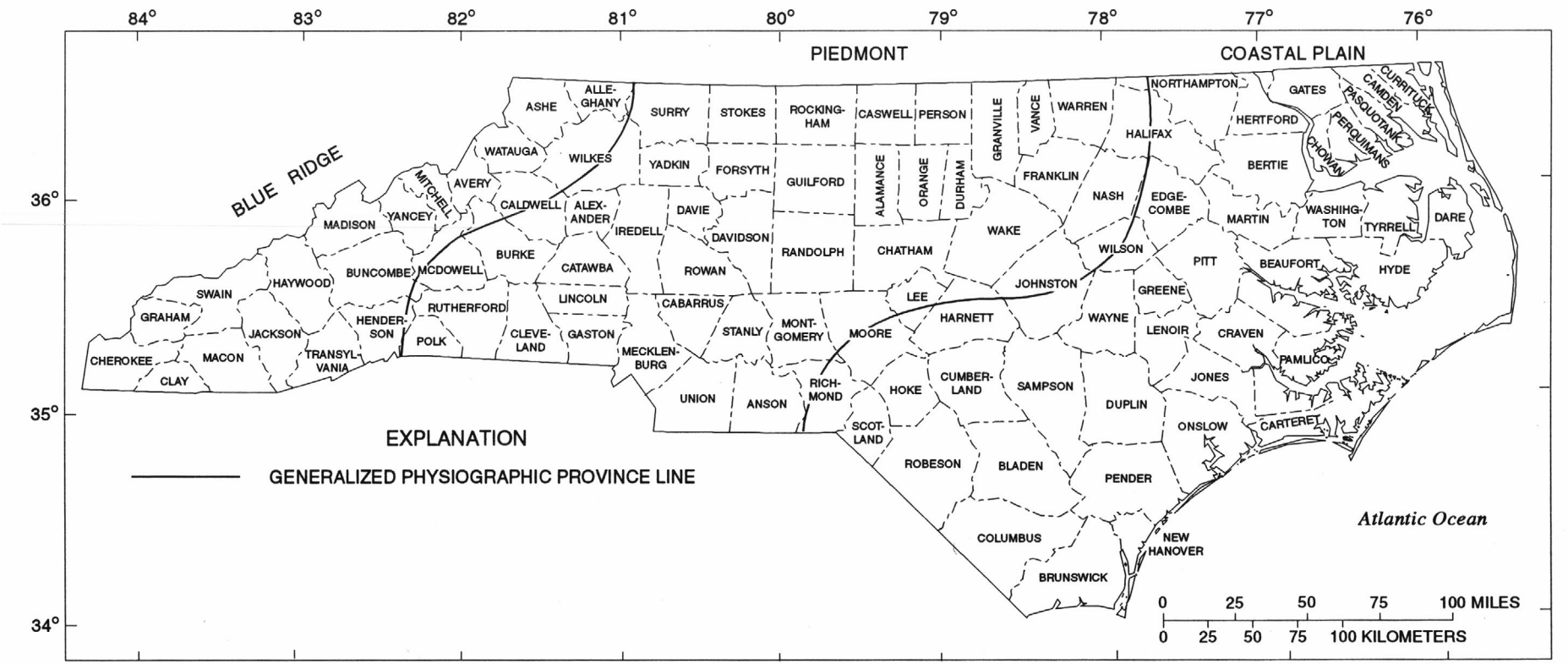
Station number	Station name	Drainage area (mi^2)	Period of record
	Cape Fear River Basin--Continued		
02104500	Rockfish Creek near Hope Mills, NC	284	1929-31, 1939-54
02105524	Ellis Creek tributary at SR 1325 near White Oak, NC	1.81	1979-81
02106000	Little Coharie Creek near Roseboro, NC	92.8	1950-92
02106681	Black River near Dunn, NC	48.3	1976-77
02107000	South River near Parkersburg, NC	379	1951-86
02107500	Colly Creek near Kelly, NC	103	1950-71
02107600	Northeast Cape Fear River near Seven Springs, NC	47.5	1958-75
0210782005	Nahunga Creek at SR 1301 near Warsaw, NC	8.28	1983-90
0210789100	Grove Creek at Kenansville, NC	22.6	1983-90
0210797940	Limestone Creek at NC 24 near Hadley, NC	1.61	1986-88
02108500	Rockfish Creek near Wallace, NC	69.3	1955-81
02108548	Little Rockfish Creek at Wallace, NC	7.8	1976-92
	Pee Dee River Basin		
02112500	Fisher River near Dobson, NC	109	1920-32
02113500	Yadkin River at Siloam, NC	1,226	1976-87
02115500	Forbush Creek near Yadkinville, NC	21.7	1940-71
02115750	Muddy Creek near Lewisville, NC	82.8	1964-70
02115800	Silas Creek near Clemmons, NC	11.8	1964-70
02115842	Tar Branch tributary at First Street at Winston-Salem, NC	.05	1979-82
02115850	Salem Creek at Winston-Salem, NC	51.3	1964-70
02115854	Salem Creek tributary at Hawthorne Road, Winston-Salem, NC	.50	1979-82
02115856	Salem Creek near Atwood, NC	65.6	1971-82
02115860	Muddy Creek near Muddy Creek, NC	178	1964-79, 1988-91
02115900	South Fork Muddy Creek near Clemmons, NC	42.2	1964-79, 1988-91
02117030	Humpy Creek near Fork, NC	1.05	1968-83
02117500	Rocky Creek at Turnersburg, NC	102	1940-71
02119000	South Yadkin River at Cooleemee, NC	569	1928-65
02119400	Third Creek near Stony Point, NC	4.84	1956-69
02120500	Third Creek at Cleveland, NC	87.4	1940-71
02121000	Yadkin River near Salisbury, NC	3,470	1895-1927
02121180	North Potts Creek at Linwood, NC	9.62	1980-90
02121493	Leonard Creek near Bethesda, NC	5.16	1978-81
02122500	Yadkin River at High Rock, NC	4,000	1919-27
02123000	Uwharrie River near Trinity, NC	11.3	1934-41
02123500	Uwharrie River near Eldorado, NC	347	1938-71
02124471	Dutch Buffalo Creek at NC 49 near Mount Pleasant, NC	45.1	1985-87
02125500	Richardson Creek near Marshville, NC	170	1940-44
02125557	Gourdvine Creek at SR 1715 near Olive Branch, NC	8.75	1978-82
02125696	Lane Creek at SR 2115 near Trinity, NC	3.98	1969-79
02125699	Wicker Branch at SR 1940 near Trinity, NC	5.83	1978-82
02125816	Lane's Creek near Marshville, NC	87.8	1985-87
02126500	Little Brown Creek near Polkton, NC	13.5	1935-41
02127000	Brown Creek near Polkton, NC	110	1937-71
02127500	Pee Dee River near Ansonville, NC	6,330	1938-42
02129500	North Fork Jones Creek near Wadesboro, NC	9.43	1935-41
0213228795	Jordan Creek near Silver Hill, NC	0.36	1983-93
	Santee River Basin		
02137000	Mill Creek at Old Fort, NC	20.7	1960-75
02138000	Catawba River near Marion, NC	172	1941-81
0213875850	High Shoals Creek near Dysartsville, NC	2.38	1986-88

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS--Continued

Station number	Station name	Drainage area (mi^2)	Period of record
	Santee River Basin--Continued		
02139200	Bailey Fork near Morganton, NC	7.86	1966-70
02139650	East Prong near Morganton, NC	8.94	1966-74
0214042720	North Harper Creek near Kawana, NC	1.25	1986-88
02141150	Lower Creek at Mulberry Street at Lenoir, NC	31.0	1966-78
02141245	Lower Creek at SR1501 near Morganton, NC	89.5	1993-94
0214183365	Upper Little River at SR1740 near Petra Mills, NC	33.9	1993-94
0214192500	Middle Little River at Moretz Dam near Bethlehem, NC	46.1	1993-94
02142500	Catawba River at Catawba, NC	1,535	1896-99
			1935-62
02142600	Mountain Creek near Terrell, NC	42.4	1957-62
0214620760	Irwin Creek at Starita Road at Charlotte, NC	4.40	1989-94
02146211	Irwin Creek at Statesville Avenue at Charlotte, NC	5.97	1982-94
02146450	Briar Creek at Sharon Road, Charlotte, NC	18.5	1962-73
02146470	Little Hope Creek at Seneca Place, Charlotte, NC	2.63	1983-90
02146500	Little Sugar Creek near Charlotte, NC	41.0	1924-78
02146579	Irvin's Creek at Lebanon Road near Mint Hill, NC	5.27	1983-90
0214678230	Walker Branch at SR1123 near Pine Harbor, NC	4.52	1991-94
02148500	Broad River near Chimney Rock, NC	97.0	1927-58
02149702	Green River near Saluda, NC	104	1972-75
02150000	Green River near Mill Spring, NC	174	1940-54
02152000	Sandy Run Creek near Boiling Springs, NC	67.0	1925-28
02152500	First Broad River near Lawndale, NC	200	1940-71
02152610	Sugar Branch near Boiling Springs, NC	1.42	1968-87
	Kanawha River Basin		
03161500	South Fork New River near Crumpler, NC	325	1908-16
03162500	North Fork New River at Crumpler, NC	277	1908-16
			1928-58
	Tennessee River Basin		
03439500	French Broad at Calvert, NC	103	1924-55
03440500	Davidson River near Davidson River, NC	31.0	1904-09
03441440	Little River above High Falls near Cedar Mountain, NC	26.8	1963-90
03441500	Little River near Penrose, NC	41.4	1942-55
03442000	Crab Creek near Penrose, NC	10.9	1942-55
03444000	Boylston Creek near Horseshoe, NC	14.8	1942-55
03444500	South Fork Mills River at the Pink Beds, NC	9.99	1926-49
			1965-73
03445000	South Fork Mills River near Sitton, NC	40.0	1904-09
			1925-26
03445500	North Fork Mills River at Pinkbed, NC	23.1	1904-09
03446500	Clear Creek near Hendersonville, NC	42.2	1945-55
03447000	Mud Creek at Naples, NC	109	1938-55
03447500	Cane Creek at Fletcher, NC	63.1	1942-58
03448000	French Broad River at Bent Creek, NC	676	1933-86
03448500	Hominy Creek at Candler, NC	79.8	1942-77
03448960	North Fork Swannanoa River below Burnett Reservoir near Black Mountain, NC	22.1	1976-77
03449000	North Fork Swannanoa River near Black Mountain, NC	23.8	1926-58
03449500	Swannanoa River at Swannanoa, NC	58.8	1907-09
			1926-31
0345092550	Ross Creek at Beaucatcher Road at Asheville, NC	2.46	1986-89
0345112600	Nasty Branch at Asheville, NC	1.19	1986-89
03451510	Reed Creek above Barnard Avenue at Asheville, NC	2.13	1986-89
03452000	Sandymush Creek near Alexander, NC	79.5	1942-55
03452001	Sandymush Creek 1.1 mile above mouth near Alexander, NC	79.6	1975-77

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS--Continued

Station number	Station name	Drainage area (mi^2)	Period of record
	Tennessee River Basin--Continued		
03454000	Big Laurel Creek near Stackhouse, NC	126	1934-71
03454500	French Broad River at Hot Springs, NC	1,567	1934-49
03456000	West Fork Pigeon River below Lake Logan near Waynesville, NC	55.3	1954-80
03457000	Pigeon River at Canton, NC	133	1907-09
			1928-83
03457500	Allen Creek near Hazelwood, NC	14.4	1949-72
03458500	Pigeon River near Crabtree, NC	243	1920-29
03459000	Jonathan Creek near Cove Creek, NC	65.3	1930-72
03460500	Pigeon River near Mount Sterling, NC	460	1924-30
03462000	North Toe River at Altapass, NC	104	1938-57
03462500	North Toe River above Spruce Pine, NC	111	1934-38
03463500	South Toe River at Newdale, NC	60.8	1934-52
03464000	Cane River near Sioux, NC	157	1934-71
03464500	Nolichucky River at Poplar, NC	608	1925-55
03480500	Elk River near Banner Elk, NC	17.8	1934-40
03481000	Elk River near Elk Park, NC	42.0	1934-55
03500500	Cullasaja River at Highlands, NC	14.9	1931-71
03501000	Cullasaja River at Cullasaja, NC	86.5	1907-09
			1921-71
03501500	Little Tennessee River at Franklin, NC	295	1909-10
			1921-25
03502000	Little Tennessee River at Iotla, NC	323	1929-45
03502500	Little Tennessee River at Etna, NC	374	1926-29
03503500	Little Tennessee River at Almond, NC	451	1912-17
03505500	Nantahala River at Nantahala, NC	144	1942-81
03506500	Nantahala River at Almond, NC	174	1912-17
			1920-43
03507000	Little Tennessee River at Judson, NC	664	1912-44
03508000	Tuckasegee River at Tuckasegee, NC	143	1934-76
03508136	Caney Fork near Cowarts, NC	32.0	1975-76
03508910	Scott Creek at Willets-Ochre Hill, NC	22.4	1993-95
03509000	Scott Creek above Sylva, NC	51.0	1941-75
			1993-95
03509500	Scott Creek at Sylva, NC	55.0	1928-41
03510500	Tuckasegee River at Dillsboro, NC	347	1933-81
03511000	Oconaluftee River at Cherokee, NC	131	1921-49
03513500	Noland Creek near Bryson City, NC	13.8	1935-71
03514000	Hazel Creek at Proctor, NC	44.4	1942-52
03515000	Little Tennessee River at Fontana Dam, NC	1,571	1938-55
03516000	Snowbird Creek near Robbinsville, NC	42.0	1942-52
03517000	Cheoah River at Johnson, NC	177	1912-18
			1920-26
03517500	Cheoah River at Tapoco, NC	215	1924-27
03546000	Shooting Creek near Hayesville, NC	37.6	1922-24
			1942-45
			1946-55
03547000	Hiwassee River below Chatuge Dam near Hayesville, NC	901	1942-74
03548000	Hiwassee River below Hayesville, NC	252	1934-45
03554000	Nottely River near Ranger, NC	272	1901-05
			1914-17
			1919-29
			1932-45
03555000	Hiwassee River at Hiwassee Dam, NC	968	1934-43



COUNTIES AND PHYSIOGRAPHIC PROVINCES OF NORTH CAROLINA

INTRODUCTION

Water-resources data for the 1997 water year for North Carolina consist of records of stage, discharge, and water-quality for streams; stage and contents for lakes and reservoirs; and ground water levels and water-quality of ground-water. This report contains discharge records for 171 gaging stations; stage and contents for 59 lakes and reservoirs; water quality for 29 gaging stations and 38 miscellaneous sites; and continuous daily tide stage at 1 site. Additional water data were collected at 100 sites not involved in the systematic data-collection program, and are published as miscellaneous measurements in this report. The collection of water-resources data in North Carolina is a part of the National Water-Data System operated by the U.S. Geological Survey in cooperation with State, municipal, and Federal agencies.

Stream-discharge records, and contents and stage for lakes or reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were published annually; beginning in 1961, these water-supply papers were published every 5 years through 1970. Records of chemical quality, water temperature, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Water-supply papers can be found in the libraries of principal cities and universities throughout the United States or can be purchased from the U.S. Geological Survey, Earth Science Information Center, Open-File Reports Section, Denver Federal Center, Box 25286, Mail Stop 517, Denver, Colorado 80225.

Streamflow data since the 1961 water year and water-quality data since the 1964 water year have been released by the U.S. Geological Survey in annual reports on a State-by-State basis. These reports provide timely release of water data in each State for each water year. Through 1970 these data also were released in the water-supply paper series mentioned above.

Publication of streamflow and water-quality data, beginning with the 1971 water year, and ground-water data, beginning with the 1975 water year currently is limited to reports on a State-by-State basis. Beginning with the 1975 water year, these Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report NC-96-1." Water-data reports are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161.

Additional information for ordering specific reports, can be obtained from the District Chief at the address listed on the back of the title page of this report or by calling (919) 571-4000.

COOPERATION

Cooperative agreements between the U.S. Geological Survey (USGS) and organizations of the State of North Carolina for the systematic collection of water-resources data began in 1895 and continued through 1909. Following a lapse of 8 years, the State of North Carolina resumed cooperation in October 1918. Organizations that assisted in collecting the data contained in this report through cooperative agreements with the USGS are:

North Carolina Cooperative Extension Service
North Carolina Department of Environment and Natural Resources
North Carolina Department of Transportation, Division of Highways
City of Asheville
City of Brevard
City of Charlotte
City of Danville, Virginia
City of Durham
City of Morganton
City of Greensboro
City of Raleigh
City of Rocky Mount
Town of Bethel
Town of Chapel Hill
Triangle Area Water Supply Monitoring Steering Committee
Winston-Salem/Forsyth County Utility Commission
Mecklenburg County
Orange County

The following Federal agencies assisted in the data-collection program by furnishing funds or services:

Corps of Engineers, U.S. Army
Tennessee Valley Authority
National Weather Service, NOAA, U.S. Department of Commerce
Fort Bragg, Camp Lejeune, Department of Defense
Agriculture Research Station, U.S. Department of Agriculture

The following organizations aided in collecting records:

Carolina Power and Light Co.; Champion International Corp.; Duke Power Co.; Yadkin, Inc.; Weyerhauser Co.; Virginia Power

SUMMARY OF WATER-RESOURCES CONDITIONS

Precipitation

Precipitation totals for the first quarter, October through December, of the 1997 water year varied from 1.64 inches (Asheville) and 2.31 inches (Charlotte) below average in the western part of the State to 3.61 inches (Elizabeth City) above average in the eastern part of the State. Average precipitation amounts are based on data from the 30-year base period 1961-90. Rainfall data collected at key National Weather Service stations (fig. 1) indicate that rainfall totals for the quarter were at or above average from the Coastal Plain to the central Piedmont Provinces and below average in the western Piedmont and Blue Ridge Provinces of North Carolina.

The second quarter (January through March) rainfall totals for the 1997 water year resulted in drier conditions in the Coastal Plain and Piedmont Provinces. Three index stations observed below-average rainfall amounts, with Elizabeth City reporting the greatest deficiency at 3.21 inches below average. Asheville and Raleigh reported quarterly totals of 3.42 and 1.56 inches above average, respectively.

Varied amounts of rainfall occurred across the State during spring (April through June). The Coastal Plain Province experienced unusually dry conditions; rainfall amounts of 5.74 and 3.53 inches below average were observed at Elizabeth City and Wilmington for these months, respectively. In the Piedmont Province, near- to above-average rainfall amounts were observed. However, Charlotte and Asheville, in the western part of the State, experienced quarterly rainfall totals of more than 3.50 inches above average.

The remnants of Hurricane Danny brought torrential rains and flooding to parts of the State in late July. The National Weather Service reported record rainfall totals in Charlotte and Raleigh; 6.26 inches of rain was recorded in Charlotte on July 23, breaking the previous daily record of 5.91 inches set in 1944, and a record rainfall total of 4.18 inches for July 24 was set at the Raleigh-Durham Airport. Although July brought record daily rainfall amounts to some areas of the State, the fourth quarter (July through September) totals indicated below-average rainfall amounts across the State. Charlotte was the only index station that reported above-average rainfall for the entire period.

In summary, above-average annual precipitation occurred in the Blue Ridge Province and in most areas of the Piedmont Province of North Carolina during the 1997 water year. Annual precipitation amounts were well below average in the Coastal Plain Province. The National Weather Service reported the following annual rainfall amounts for the following selected stations (fig. 2): Asheville, 49.96 inches (2.37 inches above average); Charlotte, 44.78 inches (1.69 inches above average); Greensboro, 41.01 inches (1.61 inches below average); Raleigh, 44.59 inches (3.16 inches above average); Elizabeth City, 40.19 inches (8.29 inches below average); Wilmington, 47.53 inches (6.74 inches below average).

Surface Water

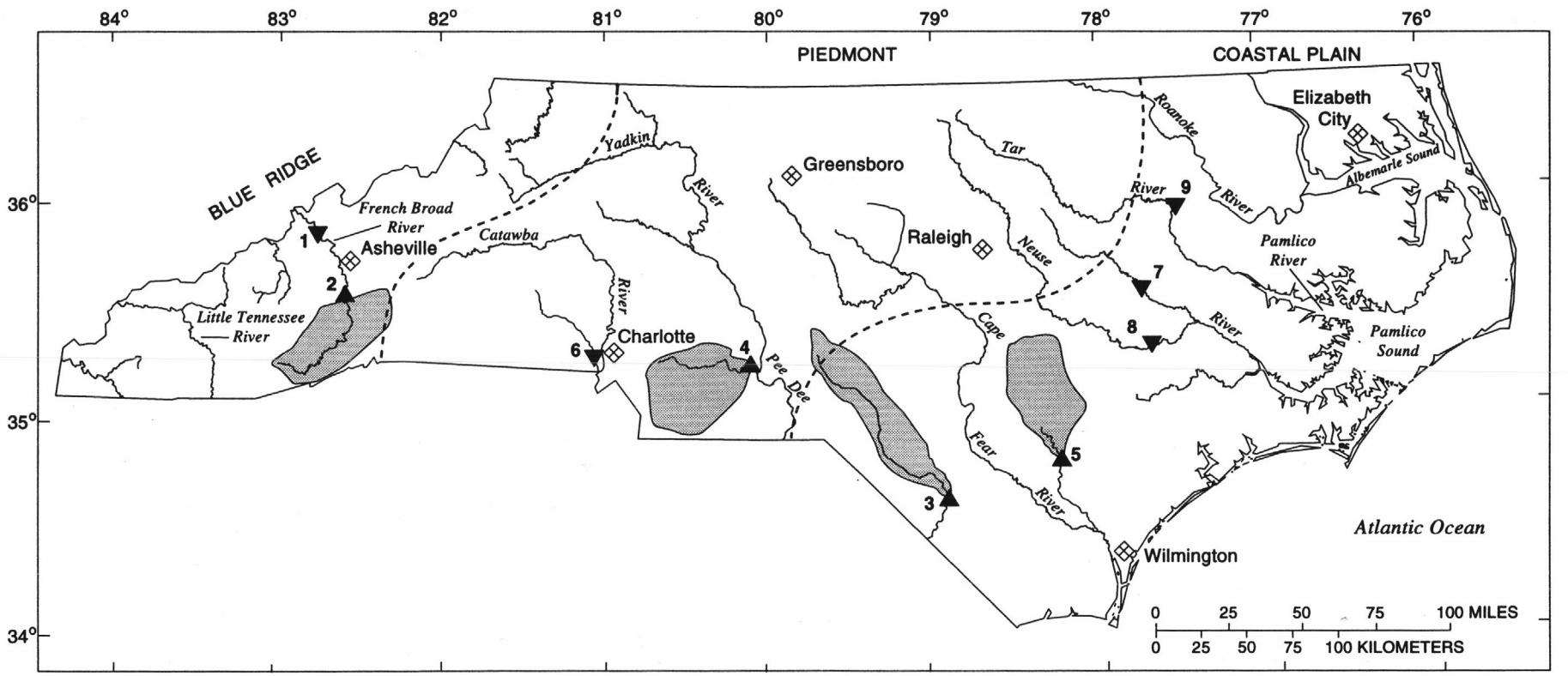
Streamflow conditions in North Carolina are greatly influenced by precipitation. Excess rainfall may produce rapid responses in streamflow activity. Streamflow also declines following periods of deficient rainfall. The rate and magnitude of decline depend on the season (when evapotranspiration is a factor) and on the amount of ground water in storage at the onset of the dry period. The effects on streamflow of changing rainfall patterns in North Carolina during the 1997 water year are illustrated in figures 3-8. Monthly conditions are depicted in maps (figs. 3 and 4) that show the regions of above-normal (excessive), normal, and below-normal (deficient) streamflow.

Data from the 30-year base period 1961-90 for 35 index gaging stations across the State were used to compute monthly flow statistics. These stations are located on streams that are free of significant regulations or diversions. The descriptors, "above normal," "normal," and "below normal," refer to flow in the upper quartile, the middle two quartiles, and the lower quartile, respectively.

Responses of daily streamflow to basinwide weather patterns throughout the year at four long-term index stations across the State (fig. 1) are shown in figures 5-8. These figures show the daily mean discharge hydrograph for the 1997 water year superimposed on the median daily discharge hydrograph for each index station. Median daily discharge was computed using the 1961-90 base period.

The Piedmont and Coastal Plain Provinces had above-average precipitation during October 1996. As a result, 54 percent of the index sites had excessive flows (fig. 3-A). The remaining sites were at normal flow conditions. Five index sites had third greatest or greater monthly mean discharge for periods of record greater than 30 years. The site names and rankings for the period of data collection are Swift Creek at Hillardston (3rd greatest); Trent River near Trenton, Black River near Tomahawk and Lumber River at Boardman (2nd greatest). The Northeast Cape Fear River near Chinquapin experienced the highest monthly mean flow since 1943.

Above-average precipitation totals in the Asheville and Raleigh areas resulted in excessive monthly mean discharges for some streams in those parts of the State during November 1996 (fig. 3-B). Although the rainfall at the Wilmington airport was reported to be almost 2 inches below normal for the month, monthly mean discharge for streams in that area were at normal or greater flow conditions.



EXPLANATION

GENERALIZED PHYSIOGRAPHIC PROVINCE LINE

SURFACE-WATER INDEX STATION, BASIN AND MAP NUMBER

WATER-QUALITY INDEX STATION AND MAP NUMBER

NATIONAL WEATHER SERVICE STATION

MAP NUMBER	STATION NUMBER	STATION NAME
1	03453500	French Broad River at Marshall
2	03451500	French Broad River at Asheville
3	02134500	Lumber River at Boardman
4	02126000	Rocky River near Norwood
5	02106500	Black River near Tomahawk
6	02145112	South Fork Catawba River at McAdenville
7	02091500	Contentnea Creek near Hookerton
8	02089500	Neuse River at Kinston
9	02083500	Tar River at Tarboro

Figure 1.--Location of selected long-term index stations for precipitation, discharge, and water-quality.

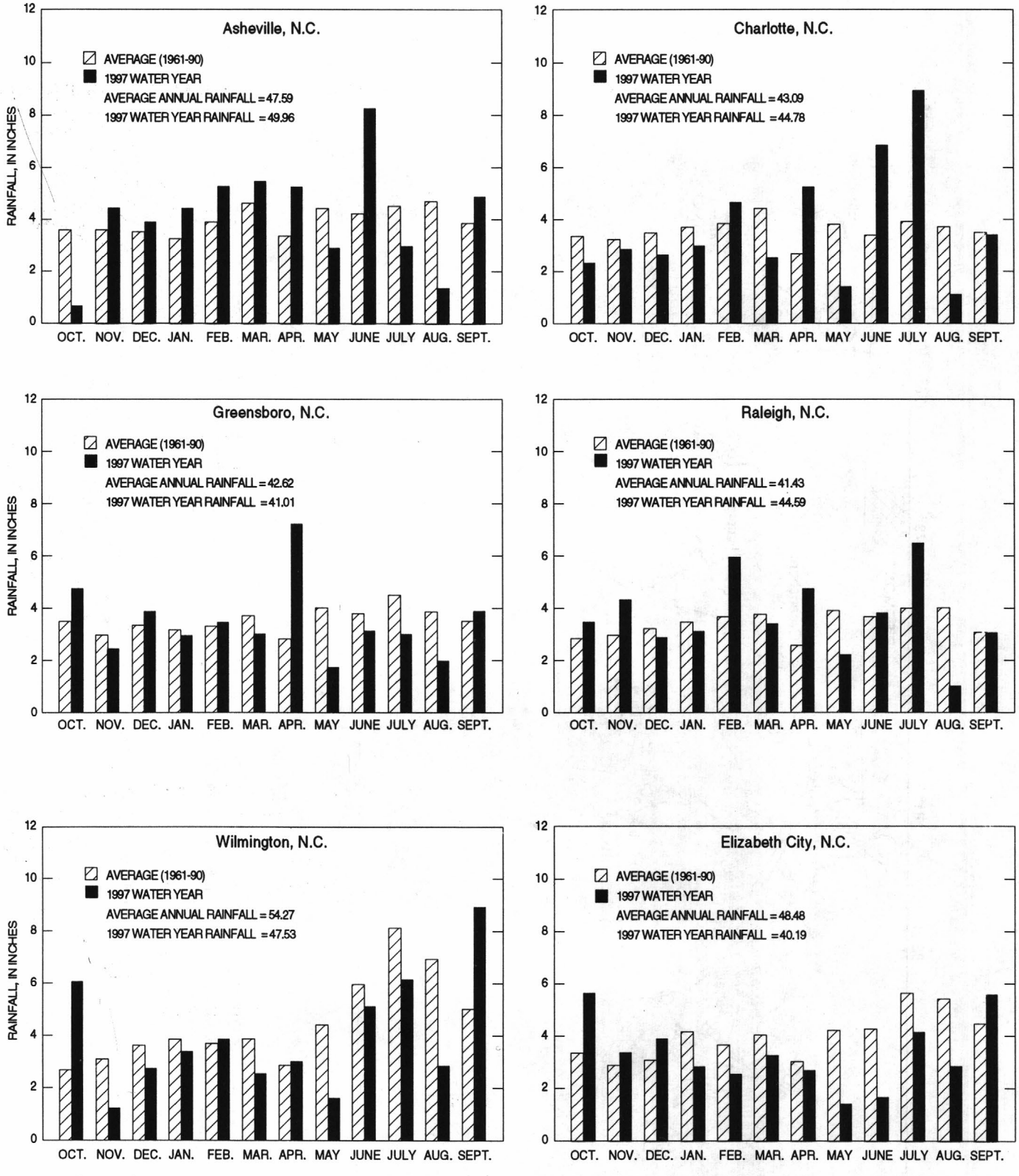


Figure 2.--Monthly rainfall at index stations for 1997 water year and average monthly rainfall for the period 1961-90 (data from National Oceanic and Atmospheric Administration reports).

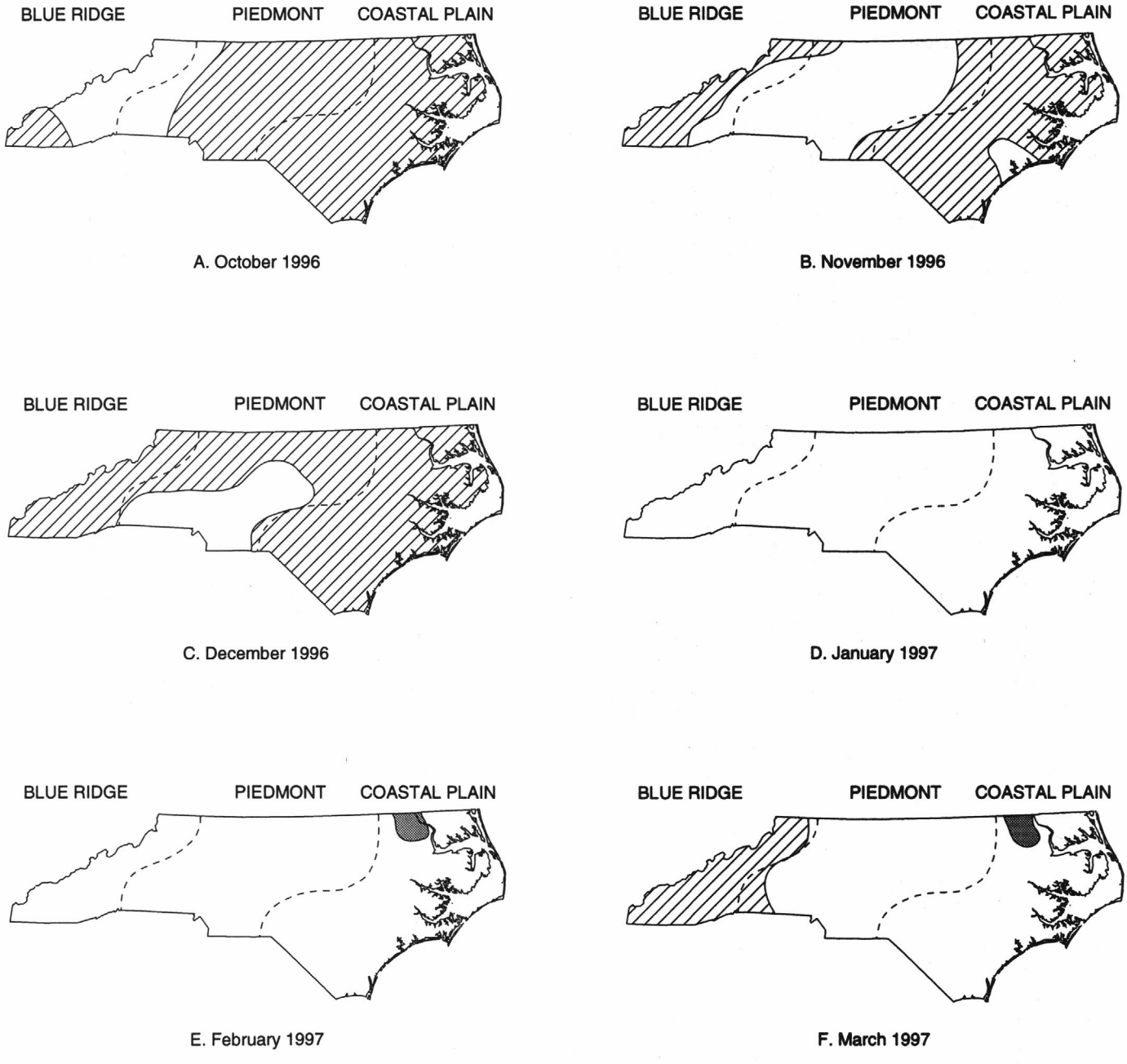


Figure 3.--Monthly streamflow during October - March 1997 water year.

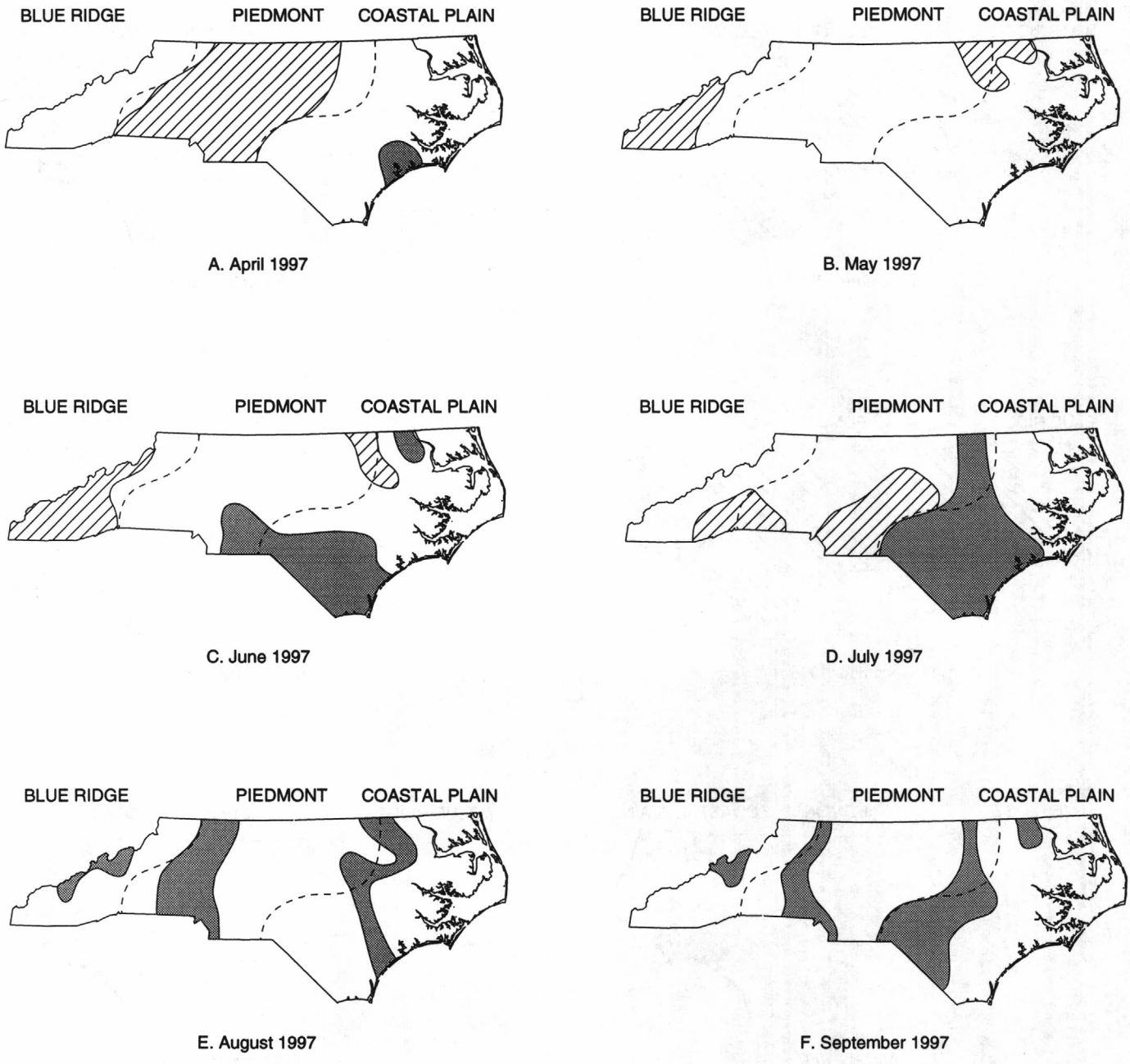


Figure 4.--Monthly streamflow during April - September 1997 water year.

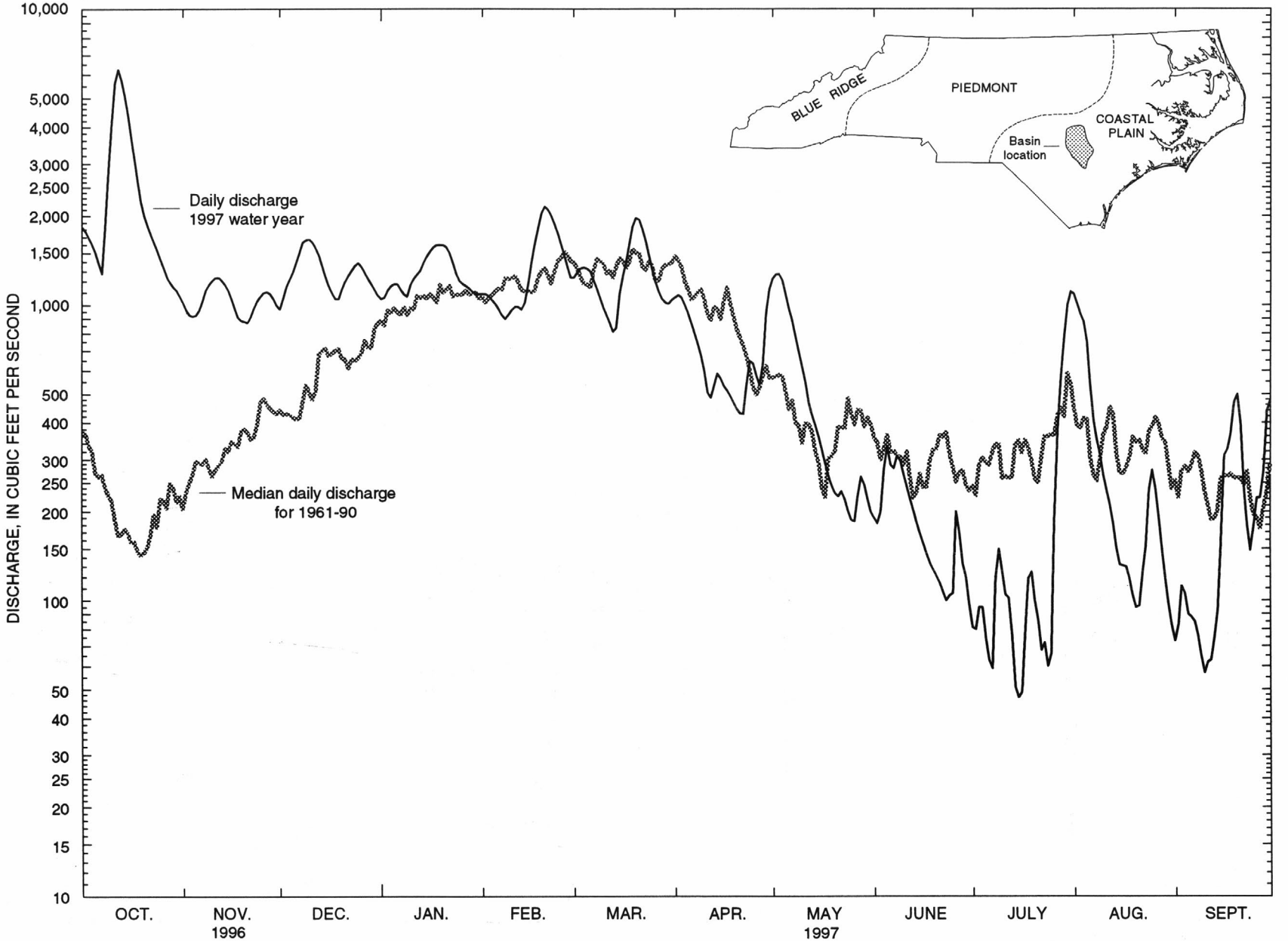


Figure 5.--Daily and median discharge for Black River near Tomahawk (02106500), 1997 water year. Located on figure 1.

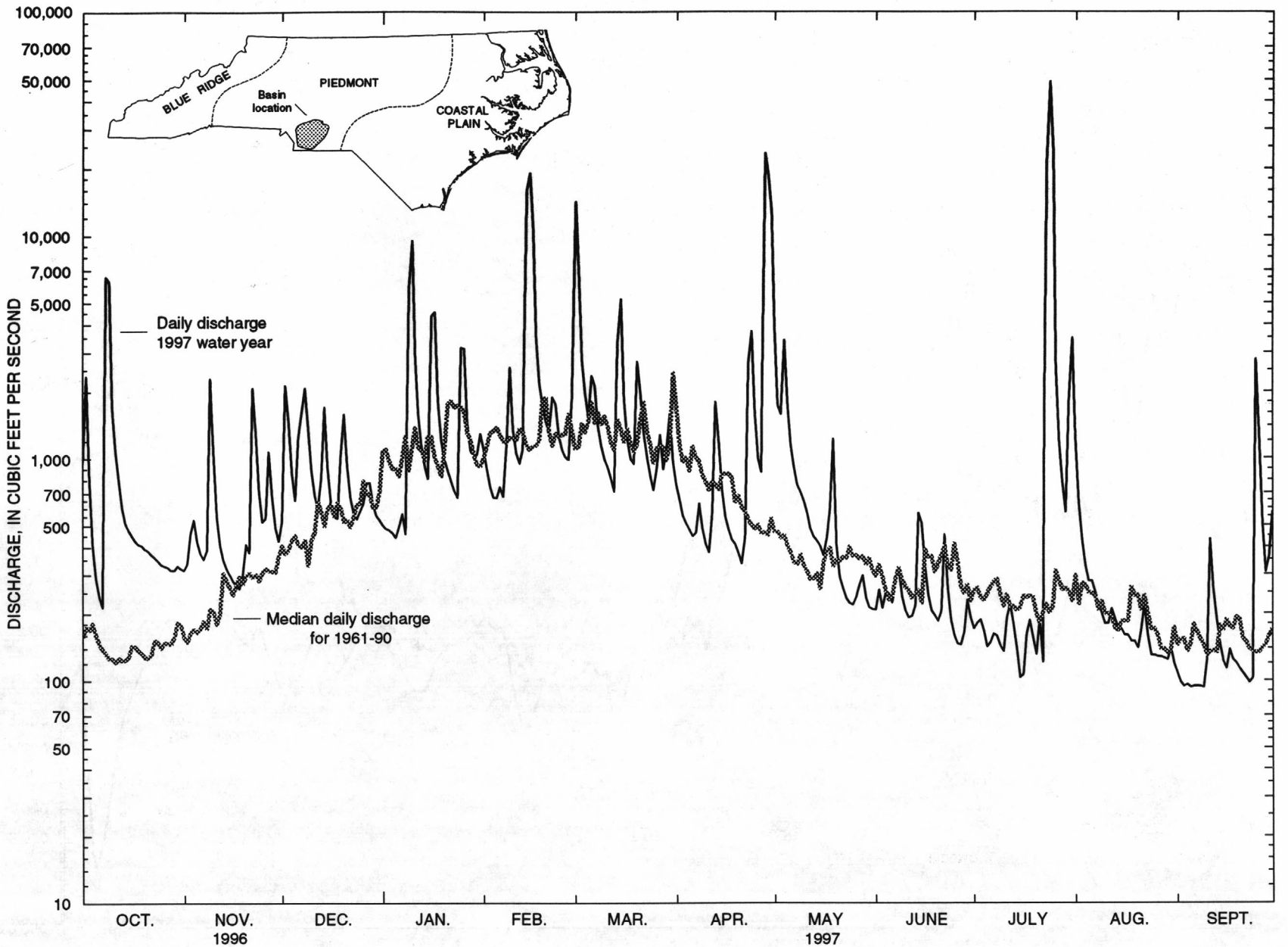


Figure 6.--Daily and median discharge for Rocky River near Norwood (02126000), 1997 water year. Located on figure 1.

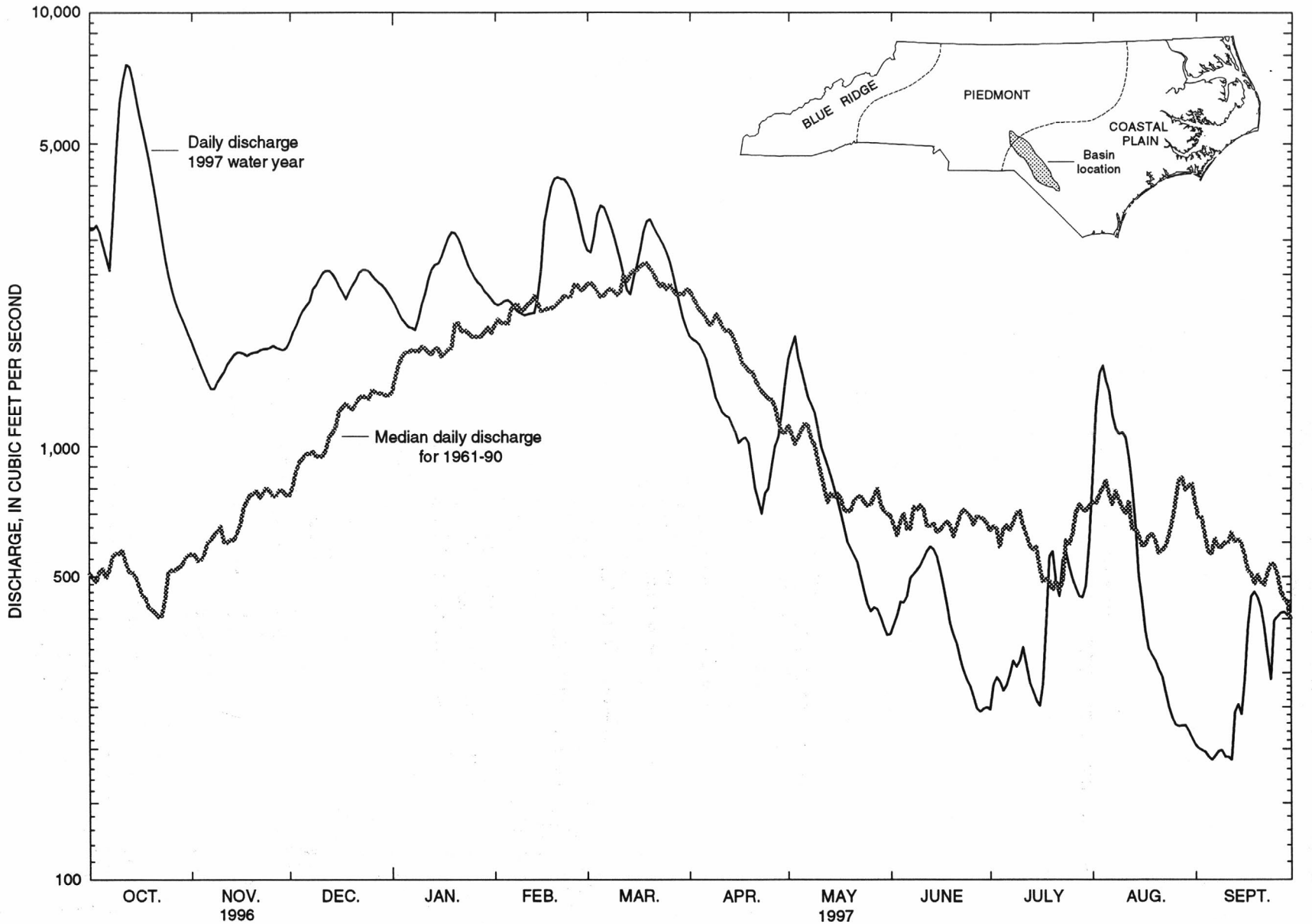


Figure 7.--Daily and median discharge for Lumber River at Boardman (02134500), 1997 water year. Located on figure 1.

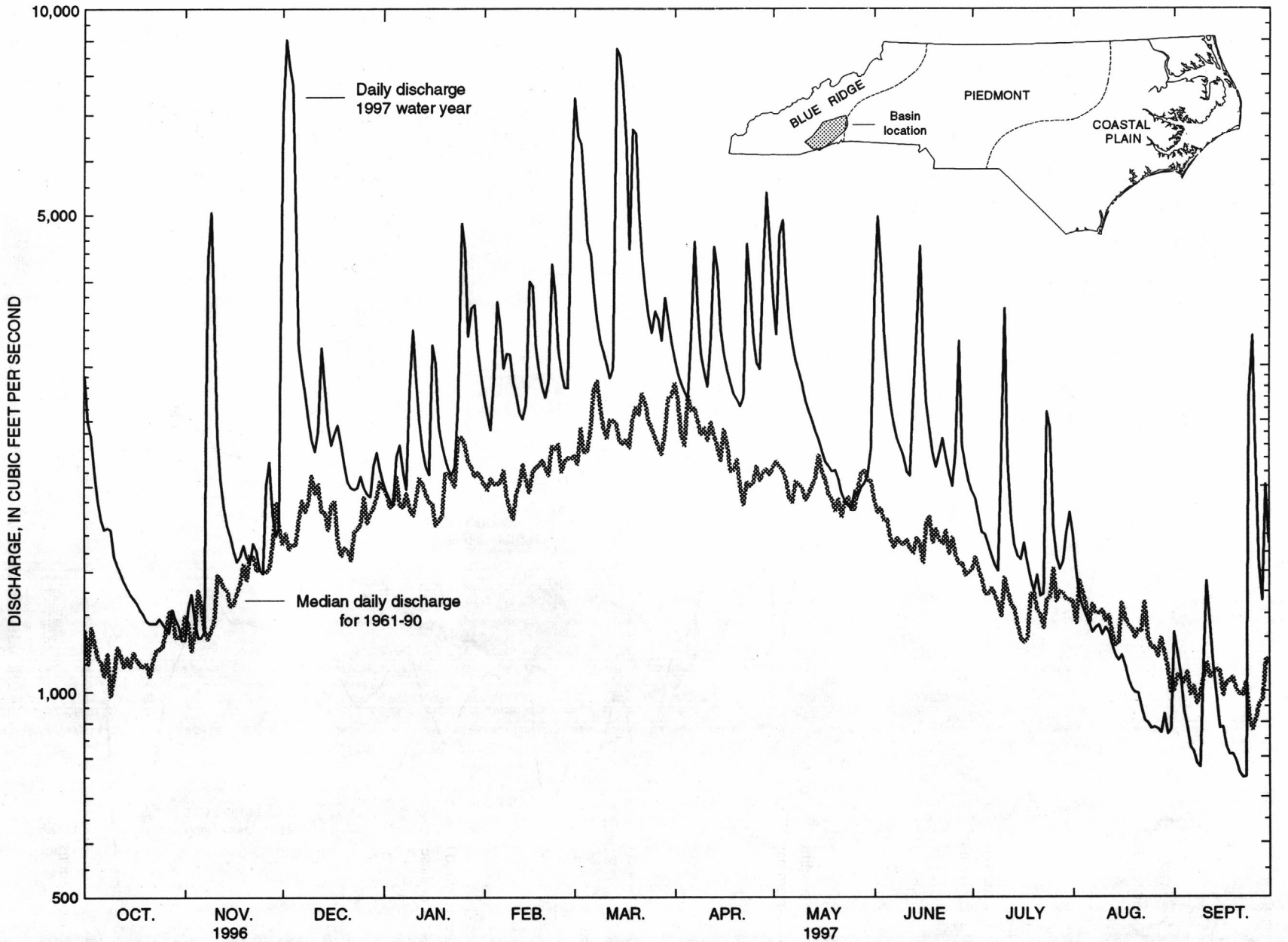


Figure 8.--Daily and median discharge for French Broad River at Asheville (03451500), 1997 water year. Located on figure 1.

December 1996 rainfall totals were near average across the State; however, 77 percent of the index sites had excessive flow conditions for the month (fig. 3-C). Five index sites had third greatest or greater monthly mean discharge for periods of record greater than 30 years. The site names and rankings for the period of data collection are Hyco Creek near Leasburg, and Elk Creek at Elkville (3rd greatest); Potecasi Creek near Union, Little Fishing Creek near White Oak, and Fisher River near Copeland (2nd greatest).

January 1997 rainfall totals were below average at all index weather stations, except for Asheville, across the State. Asheville received more than an inch above-average rainfall amount for the month. The monthly mean discharge was in the normal range across the State (fig. 3-D).

February 1997 precipitation totals were above average at all weather index stations except for the Elizabeth City station in the northeastern part of the State. Monthly mean discharge for all index sites remained in the normal range (fig. 3-E) except for Potecasi Creek near Union (near Elizabeth City), which fell into the deficient range.

Except for Asheville, all weather index stations reported below-average rainfall totals for March 1997. Above-average rainfall in the western part of the State resulted in increased discharge in 10 of 12 index sites in that area into the excessive monthly mean discharge range (fig. 3-F). The remainder of the State experienced the similar streamflow conditions as in the previous month.

Heavy showers and thunder storms in April 1997 brought above-average rainfall totals to the Blue Ridge and Piedmont Provinces of the State. Parts of the northwestern Piedmont received more than 3 inches of rain during a 3-day period late in the month. A monthly mean discharge record for the month of April was set at Hyco Creek near Leasburg exceeding the previous record set in 1978. Flood warnings were issued by the National Weather Service for the Haw River at Haw River and at Bynum, and for the Rocky River at Norwood. Normal streamflow conditions existed throughout much of the State except in the Piedmont Province where streamflow conditions were in the excessive range (fig. 4-A).

In May 1997, rainfall totals across the State ranged from 1.5 inches below average in the west to 2.8 inches below average in the east. Streamflow conditions were normal across the State except for five index sites in the extreme western part of the State and two index sites in the northeastern part of the State. These index sites reported excessive streamflow conditions during May (fig. 4-B).

Rainfall totals for June 1997 were above average in the western part of the State and near or below average in the central and eastern part of the State, however, excessive monthly mean streamflow conditions occurred in the southern Blue Ridge (fig. 4-C). Below-average rainfall for the previous two months resulted in deficient monthly mean streamflow conditions in areas of the south-central and southeastern parts of the State.

The remnants of Hurricane Danny moved through North Carolina during the latter part of July 1997. Record rainfall totals were observed in Charlotte and Raleigh. Record monthly mean discharges were recorded at Rocky River near Norwood (record dating back to 1929) and at Little River near Star (record dating back to 1954). Both of these stations are located in the Piedmont Province. Although part of the State received record monthly rainfall amounts, monthly mean discharge conditions were variable across the State (fig. 4-D). Streamflow conditions ranged from normal, in the Blue Ridge and northern part of the State, to excessive conditions in the central and southern Piedmont and deficient conditions in the southeastern Coastal Plain.

August 1997 rainfall totals across the State were below average. Weather index stations in the northwestern Piedmont and Coastal Plain Provinces reported below-average monthly rainfall amounts for the previous four months. These conditions resulted in deficient monthly mean streamflow in these areas of the State (fig. 4-E). Normal streamflow conditions occurred throughout the remainder of the State, with exception of a few index sites reporting deficient streamflow conditions in the western part of the State.

September 1997 rainfall totals rebounded, with the Blue Ridge and Coastal Plain weather stations reporting totals of more than an inch above the monthly average. Even with above-average rainfall, 26 percent of the 35 index stations across the State had deficient monthly mean streamflow conditions (fig. 4-F). The remainder of the index sites reported normal streamflow conditions for the month.

Water Quality

Five sites were selected as water-quality index stations--Tar River at Tarboro (2,183 mi^2 drainage area), Neuse River at Kinston (2,692 mi^2), Contentnea Creek near Hookerton (733 mi^2), South Fork Catawba River at McAdenville (632 mi^2), and French Broad River at Marshall (1,332 mi^2). These stations drain watersheds in the Blue Ridge (French Broad River), Piedmont (South Fork Catawba River), and Coastal Plain (Tar River, Neuse River, and Contentnea Creek) Provinces of North Carolina. The USGS collected water samples at these sites during the 1997 water year as part of the USGS National Water-Quality Assessment Program (NAWQA).

Concentrations of total dissolved solids, dissolved oxygen, total phosphorus, total nitrogen, and suspended-sediment; and instantaneous discharge measured during the 1997 water year are shown with boxplot distributions of data for the 1987 through 1996 water years (fig. 9). South Fork Catawba River boxplots are of data collected during the 1995 and 1996 water years. A box plot consists of an inner box with two vertical lines extending above and below the box. The bottom of the box indicates the 25th percentile (25 percent of data are less than this value);

the top of the box indicates the 75th percentile (75 percent of data are less than this value). A horizontal line within each box indicates the median (half of the data exceed this value and half are less). Vertical lines outside of the boxes indicate the extremes; one extends from the top of the box up to the 90th percentile and one from the bottom of the box down to the 10th percentile. Viewed in total, the box plot illustrates the overall distribution of data for the constituent or discharge.

When comparing concentrations sampled in the 1997 water year with the long-term distribution of concentrations in figure 9, streamflow conditions at the time of sample collection must be considered because concentrations of many constituents vary with stream discharge. Suspended sediment-concentrations and the concentration of chemicals adsorbed to sediment generally increase when rainfall runoff causes streamflow to increase. In contrast, chemicals in the dissolved phase generally are diluted under those conditions. For example, the concentration of total phosphorus typically increases with increased rainfall runoff whereas the concentration of total dissolved solids typically decreases. For Neuse River, Contentnea Creek, and South Fork Catawba River, 1997 water-year samples were collected under a wide range of discharge conditions. Only two samples were collected for Tar River and both were during high flow conditions. One sample was collected for French Broad River at near median discharge.

Total dissolved-solids concentrations were similar for sites in the Piedmont and Coastal Plain Provinces and were greater than concentrations in the French Broad River. Differences in concentrations of total dissolved-solids indicate, in part, differences in drainage-basin geology. Streams draining granites of the Blue Ridge Province generally yield smaller total dissolved-solids concentrations compared to streams draining the Piedmont and Coastal Plain that contain more soluble rocks. During the 1997 water year, total dissolved-solids concentrations for the Neuse River, Contentnea Creek, and South Fork Catawba River were similar to the long-term distribution. Dissolved solids concentrations in the Tar River were less than the long-term median because samples were collected during high flow conditions.

Dissolved-oxygen concentrations measured during the 1997 water year also were similar to the long-term distribution for Tar, Neuse, and South Fork Catawba Rivers and Contentnea Creek and were greater than or equal to 5 milligrams per liter (mg/L). The only dissolved-oxygen concentration measurement for the French Broad River was less than the 10th percentile for that station but was 7.7 mg/L. The State standard for the protection of aquatic life is 4 mg/L of dissolved oxygen (North Carolina Department of Environment, Health, and Natural Resources, 1996).

Nitrogen and phosphorus are nutrients that typically are associated with excessive algal growth. During the 1997 water year, most total nitrogen and phosphorus concentrations were within the long-term 10th- to 90th-percentile range. Concentrations of phosphorus less than the long-term 10th percentile occurred in samples collected in the Tar River, Neuse River, and Contentnea Creek. Highest concentrations of total phosphorus occurred in the South Fork Catawba River at various times throughout the year. This included a phosphorus concentration of almost 0.8 mg/L during very high flow in April. Concentrations of total nitrogen were similar to the long-term distribution for Neuse River, Contentnea Creek, and French Broad River. The highest nitrogen concentration occurred in the South Fork Catawba River during the same high flow event that produced a high phosphorus concentration.

Suspended Sediment

Concentrations of all but two suspended-sediment samples collected at these stations during the 1997 water year were less than the long-term 75-percentile concentrations. The highest concentrations occurred for South Fork Catawba River. No suspended-sediment samples were collected from French Broad River.

References cited

North Carolina Department of Environment, Health, and Natural Resources, 1996, Administrative code section 15A NCAC 2B.0200--Classification and water quality standards applicable to surface waters of North Carolina: Division of Environmental Management, 38 p.

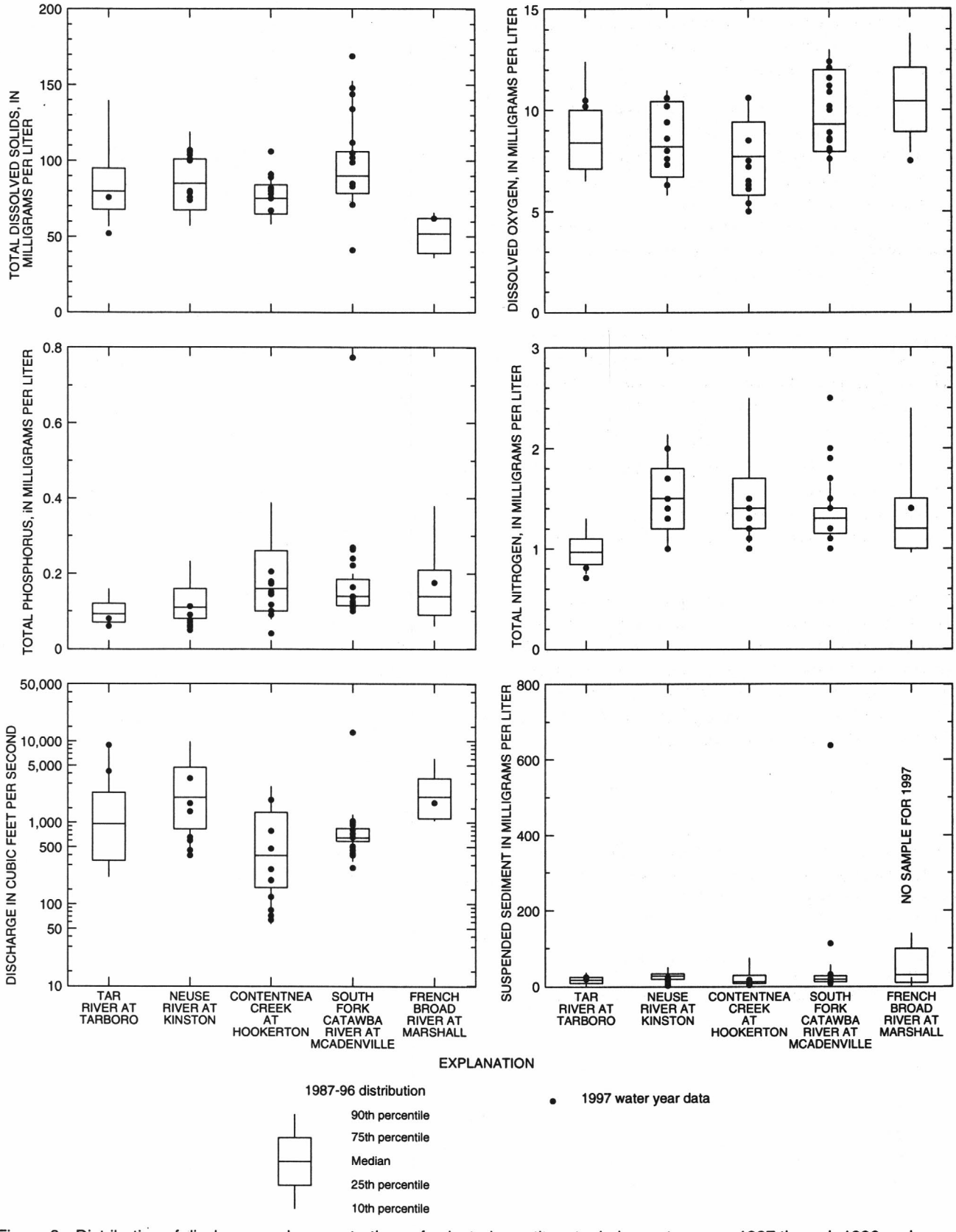


Figure 9.--Distribution of discharge and concentrations of selected constituents during water years 1987 through 1996 and discharge and concentrations for samples collected during the 1997 water year at selected index stations. [Distributions for South Fork Catawba River are based on data from 1995-96 only]

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives; (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites. (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO2 emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred. (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO2 and NOx scheduled to begin in 2000.

Data from the network, as well as information about individual sites, are available through the world wide web at:

http://nadp.nrel.colostate.edu/NADP

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 53 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key federal, State, and local water resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies.

Additional information about the NAWQA Program is available through the world wide web at:

http://wwwrvares.er.usgs.gov/nawqa/nawqa_home.html

EXPLANATION OF RECORDS

The surface-water records published in this report are for the 1997 water year that began October 1, 1996, and ended September 30, 1997. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, and water-quality data. Locations of the stations where the data were collected are shown in figures. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems

Downstream Order System

used by the USGS to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order number" system is used for surface-water stations, and the "latitude-longitude" system is used for miscellaneous surface-water sites and wells.

Since October 1, 1950, the order of listing hydrologic-station records in USGS reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indention in the "List of Stations" in the front of this report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight- or ten-digit number for each station, such as 02053200 (0208700780), which appears just to the left of the station name, includes the two-digit part number "02" plus the six- or eight digit downstream-order number "053200." The part number designates the major river basin; for example, part "02" is the South Atlantic Slope Basin.

Latitude-Longitude System

The identification numbers for wells and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude; the next seven digits denote degrees, minutes, and seconds of longitude; and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site identification number, once assigned, is a part number, and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description (fig.).

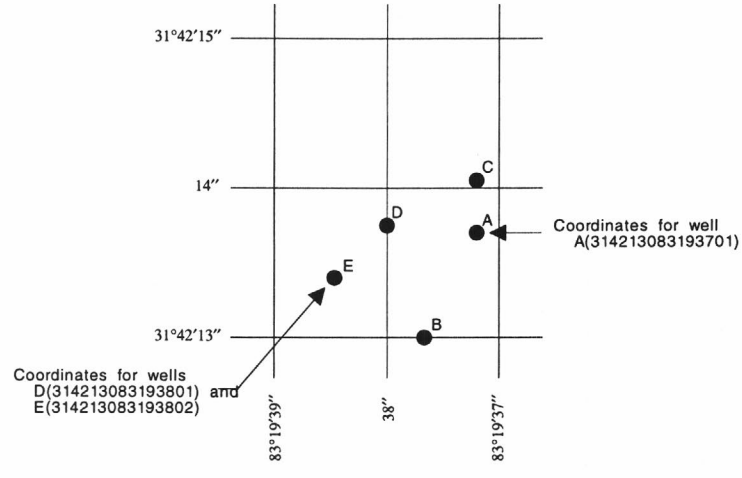


Figure 10.--System for numbering miscellaneous sites and wells.

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges can be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content can be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles, such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, and they are presented separately in this report.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consists of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that can affect the relationships between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that can affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained by analog-digital recorders that punch stage values on paper tapes at selected time intervals, or electronic data loggers that either store data electronically on site or transmit it by satellite or telephone telemetry to a computer at the office. Measurements of discharge are made with current meters using methods adapted by the USGS as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations (TWRI), Book 3, Chapter A6.

In computing streamflow records, results of individual discharge measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables are prepared indicating the approximate discharge for any stage within the range of the measurements. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual discharge measurements, and notes of the personnel making the measurements, are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter can so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations, the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

In computing records of lake or reservoir contents, it is necessary to have surveys available from curves or tables that define the relationship of stage and content. The tables are developed from bathymetric surveys. The application of stage to stage-content curves or tables gives the contents from which daily, monthly, or yearly changes are then determined. If the stage-content relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. Even when this is done, the computed contents may become increasingly in error over time, as time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

For some gaging stations there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents can be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections.

Data Presentation

Streamflow data in this report are presented in a new format that is considerably different from the format in data reports prior to the 1991 wateryear. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data

Data Presentation--Continued

table, and less information is provided in the text or station manuscript above the table. These changes were made as a result of a pilot program to reformat the annual water-data report to meet current user and data preferences.

The records published for each continuous-record surface-water discharge station (gaging station) now consist of five parts: (1) the manuscript or station description; (2) the data table of daily mean values of discharge for the current water year with summary data; (3) a tabular statistical summary of monthly mean flow data for a designated period, by water year; (4) a summary statistics table that includes statistical data of annual, daily, and instantaneous flow as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration; (5) and a hydrograph of discharge.

Station manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.-- Information on site locations is obtained from the most accurate maps available. The location of the gage is given with respect to cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name. River miles, given for only a few stations, were either determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council, or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time when the present station was not, and in a location such that records from it can reasonably be considered equivalent to records from the present station.

REVISED RECORDS.--Because of new information, published records occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all of the reports in which revisions have been published for the station and the water years for which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" means that only the instantaneous minimum was revised; and "(P)" means that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referenced to sea level (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station, information regarding extremes for period of record and current year data and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. This information may or may not have been obtained by the USGS.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there possibly would be no current or, future station manuscript published to document the revision in a "Revised Records" entry, data users who obtained the record from previously published data reports may wish to contact the District office to determine if the published records were ever revised after the station was discontinued. If the data were obtained by computer retrieval, however, the data would be current, and any published revision of data is always accompanied by revision of the corresponding data in computer storage. Manuscript information for lake or reservoir

Data Presentation--Continued

stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

Headings for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, AND EXTREMES FOR CURRENT YEAR which were included prior to the 1987 water year have been deleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. No changes have been made to the data presentations of lake contents.

Data table of daily mean values

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed "TOTAL" gives the sum of the daily figures for each month; the line headed "MEAN" gives the average flow in cubic feet per second for the month; and the lines headed "MAX" and "MIN" give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"); or in inches (line headed "IN."); or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. At some stations, monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS ____-____, BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "FOR WATER YEARS ____-____," will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (See line headings below.), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments that follow clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.--The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

Data Presentation--Continued

HIGHEST ANNUAL MEAN.--The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge occurring for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.--The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1 - March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day, 10-year low-flow statistic.)

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in district computer files for stations meeting certain criteria. Those discharge values can be obtained by writing to the District office. (See address on back of title page of this report.)

INSTANTANEOUS PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.--The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF (AC-FT).--Indicates the depth, in acre-feet, to which the drainage area would be covered if all of the runoff for the year were uniformly distributed on it.

ANNUAL RUNOFF (CFSM).--Indicates the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area for the year.

ANNUAL RUNOFF (INCHES).--Indicates the depth to which the drainage area would be covered if all the runoff for the year were uniformly distributed on it.

10 PERCENT EXCEEDS.--The discharge that has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.--The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.--The discharge that has been exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first table presents annual maximum stage and discharge at crest-stage stations, and the second table presents discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter "e" and noting in a table footnote, "e Estimated," and/or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Accuracy of the Records--Continued

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second (ft^3/s) for values less than 1 ft^3/s; to the nearest tenth, between 1.0 and 10 ft^3/s; to whole numbers, between 10 and 1,000 ft^3/s; and to three significant figures for values more than 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation as a result of artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes affected by use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison to the observed discharge.

Other Records Available

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables, are on file in the North Carolina District office. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of unpublished information or on the results of statistical analyses of published records can be obtained from the District office.

Records of Discharge Collected by Agencies Other Than the U.S. Geological Survey

Records of stream stage not published by the USGS were collected in North Carolina during the 1997 water year by the National Weather Service, NOAA, U.S. Department of Commerce, and other Federal agencies. The USGS National Water Data Exchange (NAWDEX), National Center, Reston, Virginia 22092, maintains an index of such sites. Information on records available at specific sites can be obtained upon request.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency can be one or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing- or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in a stream basin.

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values recorded at short intervals. Some records of water quality, such as temperature and specific conductance, can be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figures 14 and 15.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern is assuring that the data obtained represent the naturally occurring quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the naturally occurring water, carefully prescribed procedures must be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on site measurements and for collecting, treating, and shipping samples are given in TWRI's Book 1, Chap. D2; Book

On-Site Measurements and Sample Collection--Continued

3, Chap. C2; Book 5, Chaps. A1, A3, and A4. All of these references are listed on pages 32 through 35 of this report. Also, detailed information on collecting, treating, and shipping samples can be obtained from the USGS North Carolina District office.

It is possible for one sample to adequately define the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section can vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample for use in determining an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several vertical depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) can be obtained from the USGS North Carolina District office at the address given on the back of the title page of this report.

NOTICE: Values of dissolved and total selenium exceeding 5 mg/L in samples collected prior to 1975 are probably incorrect and should only be used with caution. Values of dissolved selenium greater than 1 mg/L collected prior to 1975 should also be considered questionable, although a fair percentage of them may, in fact, be correct.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the District office.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Sediment samples, and samples for biochemical oxygen demand (BOD), and indicator bacteria are analyzed locally. All other samples are

Laboratory Measurements--Continued

analyzed in the USGS laboratory in Arvada, Colorado, unless otherwise noted. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the USGS laboratories are given in the TWRI's, Book 1, Chap. D2; Book 3, Chap: C2; and Book 5, Chaps. A1, A3, and A4.

In March 1990 the National Water-Quality Laboratory discovered a bias in the turbidimetric method for sulfate analysis, indicating that values below 75 mg/L have a median positive bias of 2 mg/L above the true value for the period between 1982 and 1990.

MBAS determinations made from January 1, 1970 through August 29, 1993, at the National Water Quality Laboratory in Denver (Analyzing Agency Code 80020) are positively biased. These data can be corrected on the basis of the following equation, if concentrations of dissolved nitrate plus nitrate, as nitrogen, and dissolved chloride, determined concurrently with the MBAS data, are applied:

MBASCOR = M - 0.0088N - 0.00019C

where:

MBASCOR = corrected MBAS concentration, in mg/L;
M = reported MBAS concentration, in mg/L;
N = dissolved nitrate plus nitrate, as nitrogenconcentration, in mg/L; and
C = dissolved chloride concentration, in mg/L.

The detection limit of the new method is 0.02 mg/L, whereas the detection limit for the old method was 0.01 mg/L. A detection limit of 0.02 mg/L should be used with corrected MBAS data from January 1, 1970 through August 29, 1993.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. For parameters measured weekly or less frequently, true maximums or minimums may not have been obtained. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the water-quality file in the USGS computer data system, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document these changes in the State data-report series or elsewhere, potential users of USGS water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

The surface-water quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following

Data Presentation--Continued

the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remarks Codes

The following remarks codes may appear with the water-quality data in this report:

PRINTED OUTPUT	REMARK
E	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (nonideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.
V	Analyte was detected in both the environmental sample and the associated blanks.

Dissolved Trace-Element Concentrations

NOTE.--Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (ug/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the ug/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994.

Change in National Trends Network Procedures

NOTE.--Sample handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences based on a special intercomparison study, is available from the NADP/NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone: 303-491-5643).

Water Quality-Control Data

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this district are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated by the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured

value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. There are many types of blank samples possible, each designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this district are:

Field blank - a blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank - a blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank - a blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank - a blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Filter blank - a blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank - a blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank - a blank solution that is treated with the sampler preservatives used for an environmental sample.

Reference Samples

Reference material is a solution or material prepared by a laboratory whose composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples

Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. There are many types of replicate samples possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are:

Sequential samples - a type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample - a type of replicate sample in which a sample is split into subsamples contemporaneous in time and space.

Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the world wide web (WWW). These data may be accessed at

http://water.usgs.gov

Some water-quality and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3-1/2 inch floppy disk. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division District Offices (See address on the back of the title page.)

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting English units to International System of Units (SI) on the inside of the back cover.

Algae are mostly aquatic single-celled, colonial, or multicelled plants, containing chlorophyll and lacking roots, stems, and leaves.

Annual runoff indicates the total quantity of water in runoff for a drainage area for the year.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet (ft^3) for about 326,000 gallons or 1,233 cubic meters (m^3).

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile area drained, assuming the runoff is distributed uniformly in time and area.

Inches (IN., in.) indicates the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials, such as decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms which produce colonies within 24 hours when incubated at 35°C plus or minus 0.5°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters (mL) of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C plus or minus 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria also found in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C plus or minus 0.5°C on KF streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by micro-organisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter, and periphyton and benthic organisms in grams per square meter.

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and at not more than 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

DEFINITION OF TERMS--Continued

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 ft^3, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 m^3.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Color unit is produced by 1 milligram per liter (mg/L) of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second (FT^3/s, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second (gps) or 448.8 gallons per minute (gpm) or 0.02832 cubic meters per second (m^3/s).

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Annual 7-day minimum is the lowest mean discharge for 7 consecutive days for a calender year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

Dissolved is that material in a representative water sample which passes through a 0.45 micron (μm) membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Flow-duration curve percentiles refer to interpolated values taken from a cumulative frequency curve that shows the percent of the time specified discharges were equaled or exceeded during a given period.

Gage height (G.H.) is the water-surface elevation referred to an arbitrarily selected gage datum. Gage height is often used interchangeably with the general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Gas Chromatography/Flame Ionization Detector (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate ($CaCo_3$).

DEFINITION OF TERMS--Continued

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in solution as the weight (micrograms) (ug) of solute per unit volume (liter)(L) of water. One thousand micrograms per liter (ug/L) is equivalent to 1 mg/L.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in milligrams per liter, and is based on the mass of dry sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place. This term is no longer used in this series of reports.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area of habitat, usually square meters (m^2), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters or liters. Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter Code is a 5-digit number used in the U.S. Geological Survey's data system, National Water Information System (NWIS), to uniquely identify a specific constituent. The codes used in NWIS are the same as those used in the U.S. Environmental Protection Agency's data system, STORET.

Partial-record station is a particular site where limited streamflow and (or) water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle-size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology.

The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	0.00024 - 0.004	Sedimentation
Silt	.004 - .062	Sedimentation
Sand	.062 - 2.0	Sedimentation or sieve
Gravel	2.0 - 64.0	Sieve

The particle-size distribution given in this report is not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass or volume.

DEFINITION OF TERMS--Continued

Periphyton is the assemblage of micro-organisms attached to and growing on submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 disintegrations per minute (dpm).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open waters of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to water currents. Phytoplankton growth is dependent upon solar radiation and nutrients. Because they are able to incorporate as well as release materials to the surrounding water, phytoplankton have a profound effect upon the quality of water. They are the primary food producers in the aquatic environment and are commonly known as algae.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Sea level in this report refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level nets of the United States and Canada, formerly called Sea Level Datum of 1929.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are steepness of slope, length of slope, soil characteristics, land useage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 feet above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture.

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times milligrams per liter times 0.0027.

Suspended-sediment load is quantity of suspended sediment passing a section in a specified period.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same stream with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

DEFINITION OF TERMS--Continued

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water suspended-sediment sample that is retained on a 0.45 um membrane filter has been digested by a method (usually using a dilute acid solution) that results in a dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water suspended-sediment sample that is retained on a 0.45 µm membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required todetermine when the results should be reported as "suspended, total." Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order.	Ephemeroptera
Family	Ephemeridae
Genus	Hexageria
Species	Hexagenia limbata

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

Total is the total amount of a given constituent in a representative water suspended-sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" has double meaning here, indicating both that the sample consists of a water suspended-sediment mixture and that the analytical method determines all of the constituent in the sample.)

Total load (tons) is the total quantity of any individual constituent, as measured mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge times the milligrams per liter of the constituent times the factor 0.027 times the number of days.

Total, recoverable is the amount of a given constituent that is in solution after a representative water suspended-sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment; thus, the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment; thus, the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

DEFINITION OF TERMS--Continued

Water year in the USGS reports is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1997, is called the "1997 water year."

WRD is used as an abbreviation for "Water-Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Branch of Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

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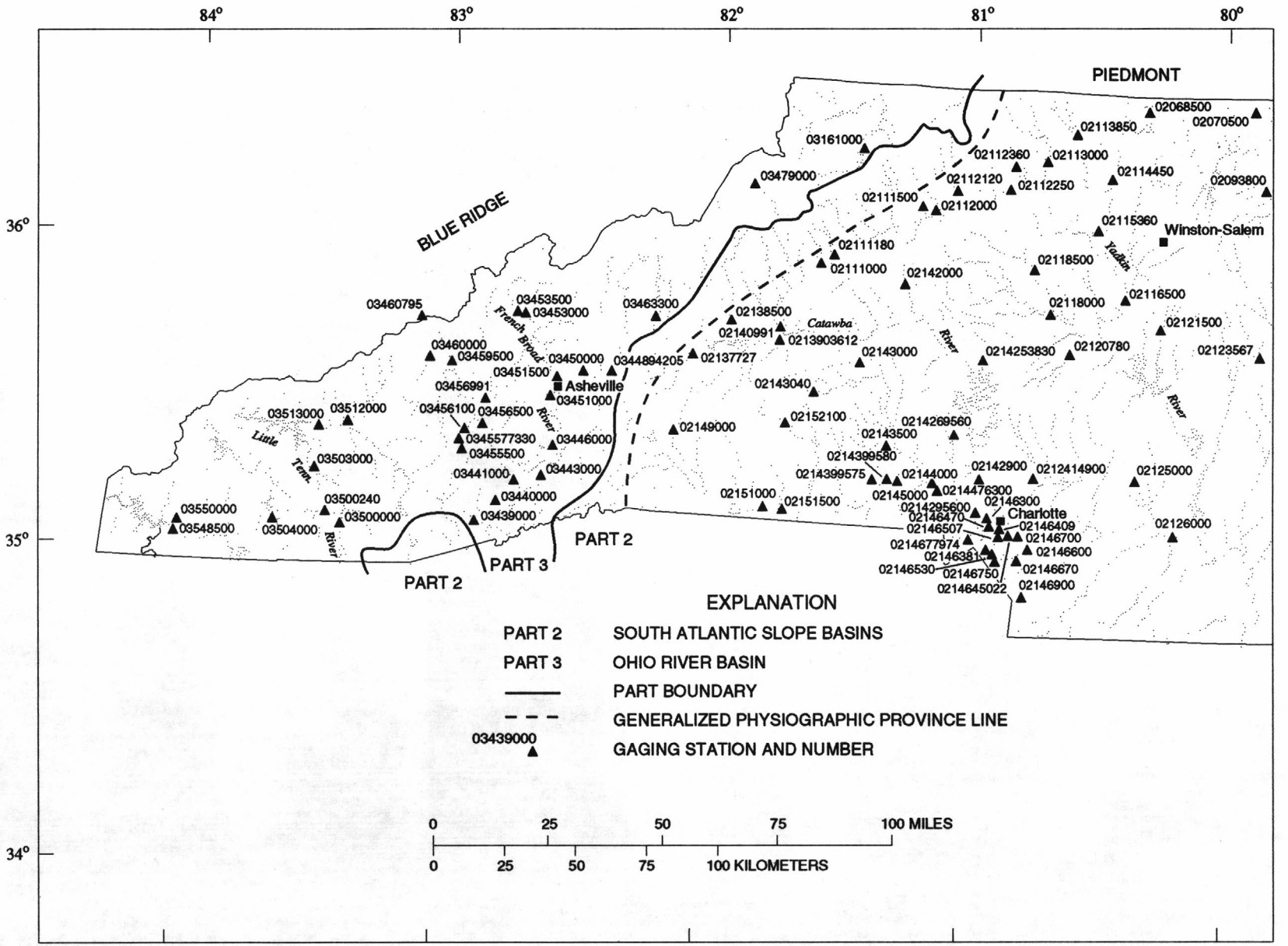


Figure 11.--Locations of gaging stations in western North Carolina.

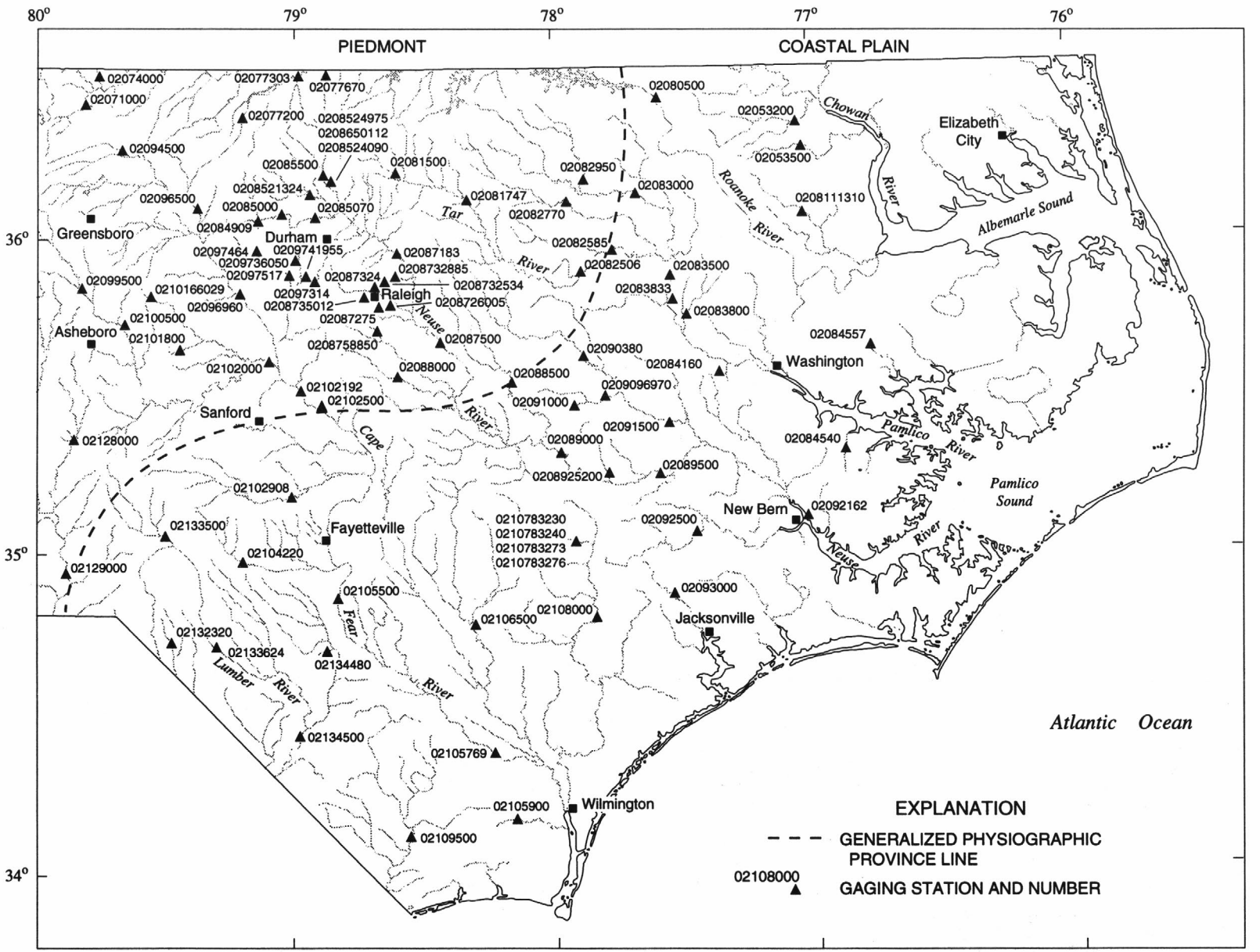


Figure 12.--Locations of gaging stations in eastern North Carolina.

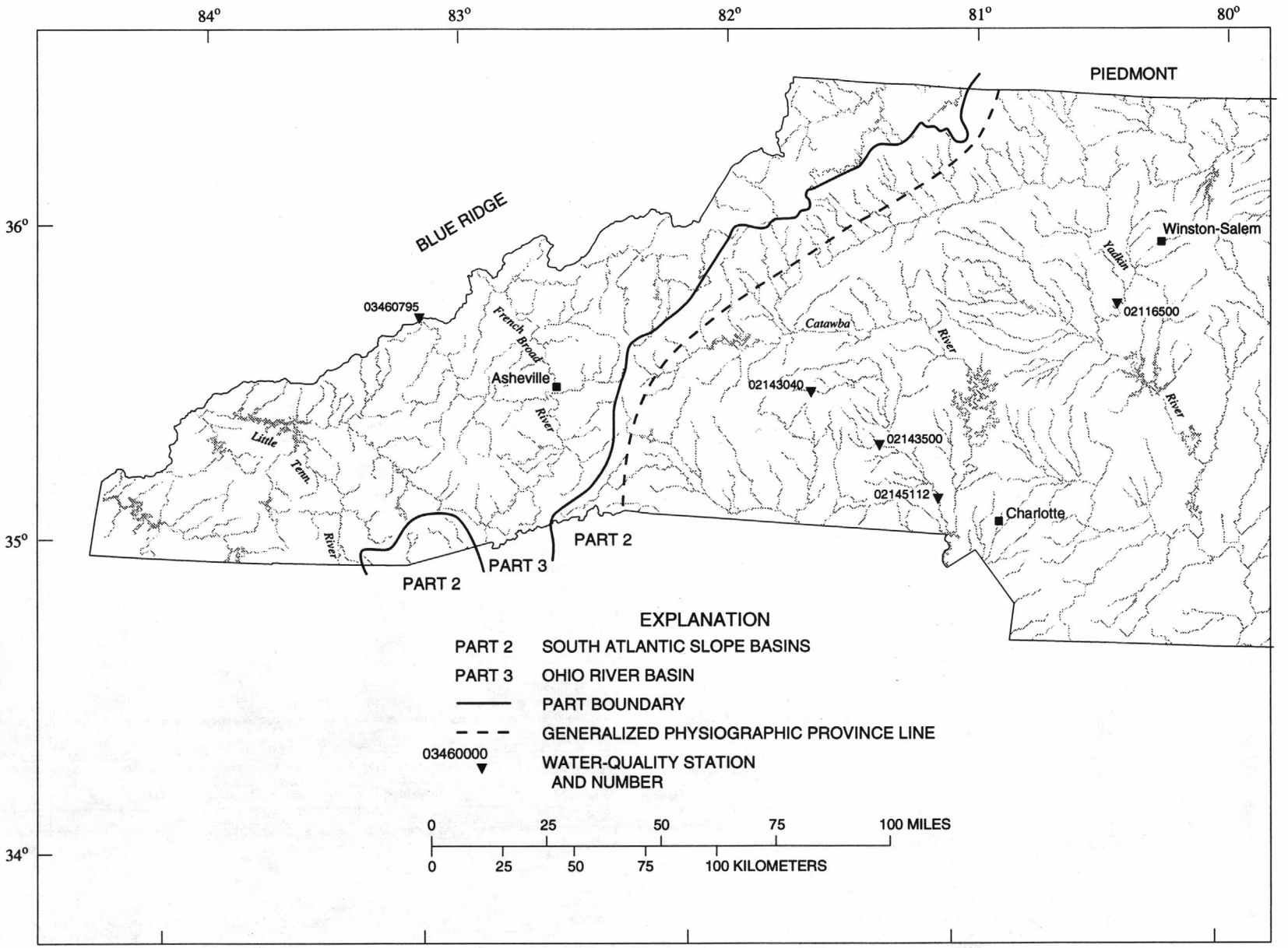


Figure 13.--Locations of water-quality stations in western North Carolina.

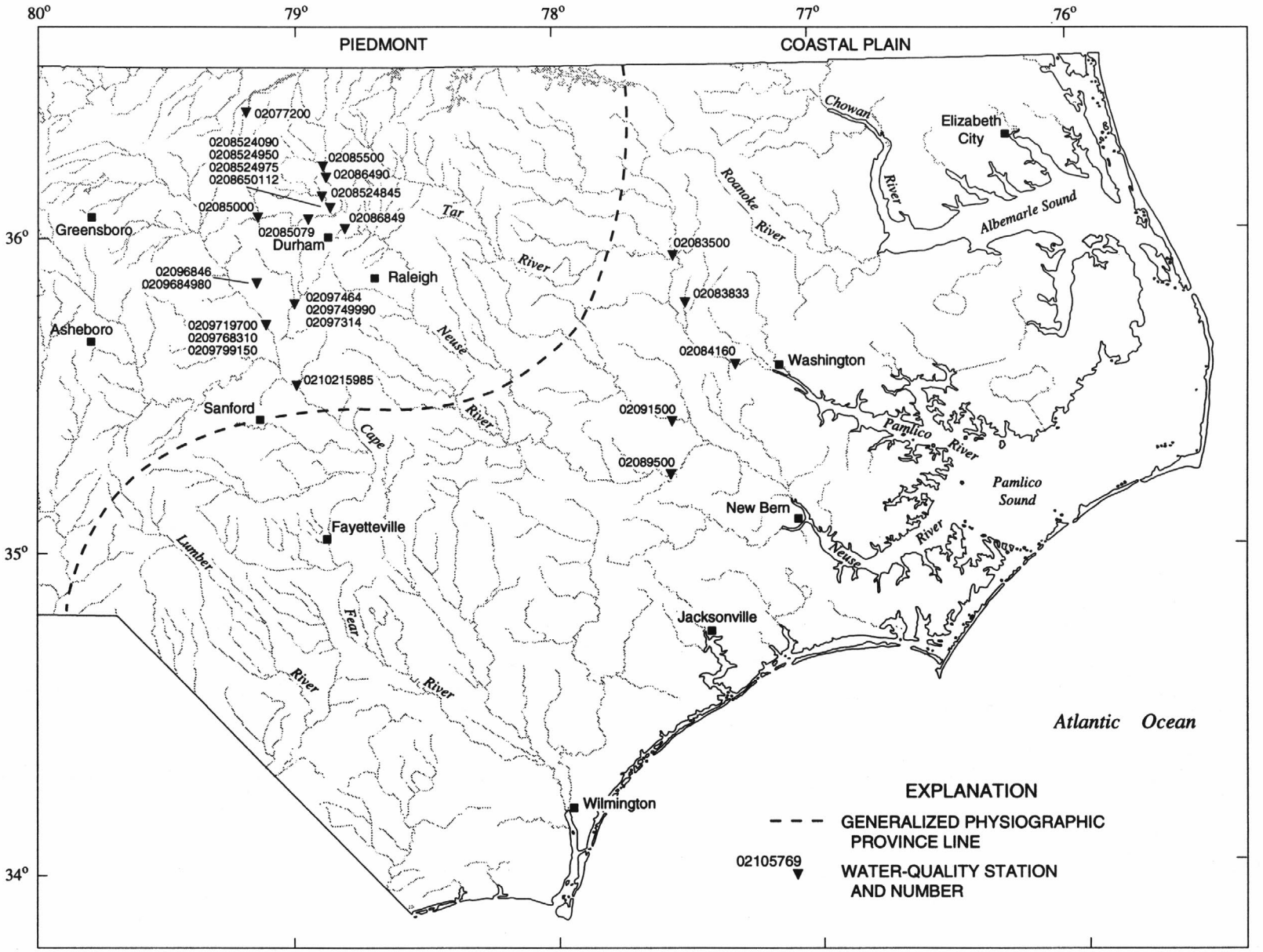


Figure 14.--Locations of water-quality stations in eastern North Carolina.

CHOWAN RIVER BASIN

0204382800 PASQUOTANK RIVER NEAR SOUTH MILLS, NC

LOCATION.--Lat 36°25'18", long 76°20'34", Camden County, Hydrologic Unit 03020205, at bridge on US Highway 17, 1 mi below Newland Canal and 2 mi southwest of South Mills.

DRAINAGE AREA.--Approximately 64.0 mi^2.

PERIOD OF RECORD.--October 1995 to current year.

GAGE.--Water-stage recorder and acoustic velocity meter. Datum of gage is 3.0 ft above sea level from topographic map. Satellite telemetry at station.

ANNUAL MEAN AND SUMMARY STATISTICS.--Values represent two complete water years of discharge (1996-97).

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.0	3.4	e14	18	187	140	208	158	78	63	166	156
2	e1.0	6.0	e13	21	187	154	215	150	75	50	274	128
3	e.80	10	e14	18	e200	159	184	135	69	51	282	114
4	e2.0	8.3	e12	16	e250	151	167	123	66	48	265	113
5	e10	3.2	e10	19	e220	139	170	122	72	42	246	134
6	e30	-.01	6.1	20	e180	142	171	142	71	39	226	-65
7	e36	6.0	e9.5	55	e160	158	197	157	54	31	209	144
8	e20	27	7.0	127	158	198	193	160	56	26	200	231
9	e10	e40	19	85	210	201	205	164	52	46	184	218
10	e50	e26	27	69	226	185	223	161	62	39	184	185
11	e60	e30	19	55	217	160	207	138	75	33	180	e179
12	3.2	e50	19	111	210	142	184	153	73	30	150	e189
13	-2.5	e80	17	185	193	132	176	152	88	89	150	197
14	-40	e100	17	116	167	124	176	136	78	277	174	206
15	8.5	e120	16	e90	170	123	167	120	71	260	170	188
16	17	e80	16	e110	169	154	179	125	90	216	158	172
17	6.3	e60	15	e120	167	183	217	152	90	207	149	134
18	4.7	e50	14	e130	165	206	193	144	79	189	149	235
19	3.7	e40	27	e140	162	167	175	137	71	247	149	251
20	-2.6	e30	35	e150	158	144	159	125	64	294	144	235
21	72	e26	27	e250	192	157	161	107	65	270	130	221
22	119	e28	26	e150	223	162	166	114	51	239	120	206
23	50	e24	24	e120	222	131	143	104	50	211	117	213
24	24	e18	23	100	215	115	164	93	38	194	113	200
25	16	e16	17	150	208	108	146	99	106	183	116	178
26	9.9	e16	24	129	193	119	135	93	119	205	114	181
27	-2.2	e14	19	96	178	110	155	93	88	218	128	165
28	-9.8	e14	18	176	161	131	141	104	79	190	156	142
29	17	e13	19	170	153	231	123	100	70	174	175	146
30	2.6	e14	20	163	---	231	101	96	e58	180	170	178
31	3.6	---	22	173	---	215	---	83	---	161	174	---
TOTAL	521.20	952.89	565.6	3332	5501	4872	5201	3940	2158	4502	5322	5174
MEAN	16.8	31.8	18.2	107	190	157	173	127	71.9	145	172	172
MAX	119	120	35	250	250	231	223	164	119	294	282	251
MIN	-40	-.01	6.1	16	153	108	101	83	38	26	113	-65

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

MEAN	16.8	31.8	18.2	107	190	157	173	127	71.9	145	172	172
MAX	16.8	31.8	18.2	107	190	157	173	127	71.9	145	172	172
(WY)	1996	1996	1996	1996	1996	1996	1996	1996	1996	1996	1996	1996
MIN	16.8	31.8	18.2	107	190	157	173	127	71.9	145	172	172
(WY)	1996	1996	1996	1996	1996	1996	1996	1996	1996	1996	1996	1996

NEUSE RIVER BASIN

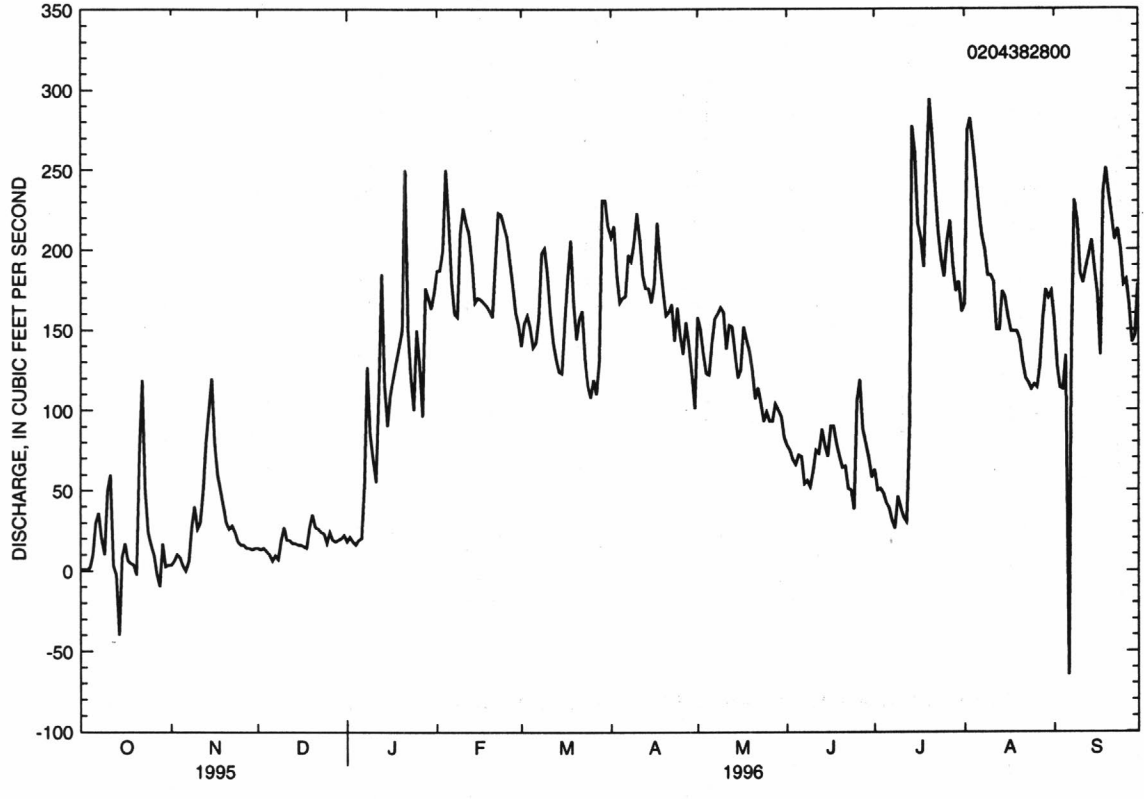
0204382800 PASQUOTANK RIVER NEAR SOUTH MILLS, NC--Continued

SUMMARY STATISTICS FOR 1996 WATER YEAR

ANNUAL TOTAL	42041.69	
ANNUAL MEAN	115	
HIGHEST DAILY MEAN	294	Jul 20
LOWEST DAILY MEAN	-65	Sep 6
ANNUAL SEVEN-DAY MINIMUM	-.40	Oct 12
INSTANTANEOUS PEAK FLOW	302	Jul 20
INSTANTANEOUS PEAK STAGE	7.55	Sep 7
INSTANTANEOUS LOW FLOW	-240	Sep 6
10 PERCENT EXCEEDS	210	
50 PERCENT EXCEEDS	125	
90 PERCENT EXCEEDS	14	

e Estimated.

Note.--Negative values indicate reverse flow.



NEUSE RIVER BASIN

0204382800 PASQUOTANK RIVER NEAR SOUTH MILLS, NC--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174	148	108	189	152	193	170	185	e28	e14	18	27
2	162	158	125	181	160	181	159	175	e80	e18	12	39
3	168	183	149	179	152	190	143	156	e60	e26	18	26
4	166	168	146	183	150	187	143	165	e50	e24	15	17
5	147	170	131	168	149	172	148	164	e48	e23	17	11
6	134	176	155	172	164	182	137	131	e46	e22	14	14
7	119	166	169	179	160	188	142	140	e50	e26	e17	19
8	183	136	206	173	183	179	159	134	e48	e24	e22	22
9	333	171	225	166	221	179	152	133	e44	e22	16	36
10	334	205	210	202	226	165	140	130	e40	e20	17	100
11	303	204	184	215	225	166	117	103	e36	e18	12	25
12	268	186	176	225	201	159	116	76	e34	e17	16	61
13	234	165	178	213	209	151	136	103	e30	e16	20	39
14	207	154	189	196	214	154	144	86	e26	e16	17	27
15	201	147	167	180	277	295	130	78	e25	e15	14	20
16	191	135	146	171	294	297	109	96	e24	e30	11	26
17	183	125	124	198	276	270	121	90	e23	34	12	23
18	180	118	126	195	256	249	114	77	e22	20	15	22
19	201	123	158	172	241	248	100	68	e21	16	15	17
20	223	129	215	163	228	279	94	73	e20	16	e4.2	12
21	227	126	222	166	215	272	88	57	e19	13	22	23
22	216	178	213	158	203	257	102	44	e18	23	20	16
23	200	180	199	165	215	241	101	e42	e18	15	16	19
24	188	164	177	163	207	225	100	e40	e17	14	18	17
25	191	167	187	157	200	202	89	e38	e17	59	16	15
26	185	152	179	171	192	184	97	e40	e16	23	13	19
27	177	176	173	166	184	204	86	e36	e16	20	21	20
28	164	154	173	159	197	199	73	e36	e15	23	10	e2.4
29	166	140	174	e160	---	184	165	e34	e15	29	18	32
30	144	127	176	e165	---	182	210	e32	e14	20	12	42
31	144	---	180	158	---	194	---	e30	---	19	14	---
TOTAL	6113	4731	5340	5508	5751	6428	3785	2792	920	675	482.2	788.4
MEAN	197	158	172	178	205	207	126	90.1	30.7	21.8	15.6	26.3
MAX	334	205	225	225	294	297	210	185	80	59	22	100
MIN	119	118	108	157	149	151	73	30	14	13	4.2	2.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1997, BY WATER YEAR (WY)

MEAN	107	94.7	95.3	143	197	182	150	109	51.3	83.5	93.6	99.4
MAX	197	158	172	178	205	207	173	127	71.9	145	172	172
(WY)	1997	1997	1997	1997	1997	1997	1996	1996	1996	1996	1996	1996
MIN	16.8	31.8	18.2	107	190	157	126	90.1	30.7	21.8	15.6	26.3
(WY)	1996	1996	1996	1996	1996	1996	1997	1997	1997	1997	1997	1997

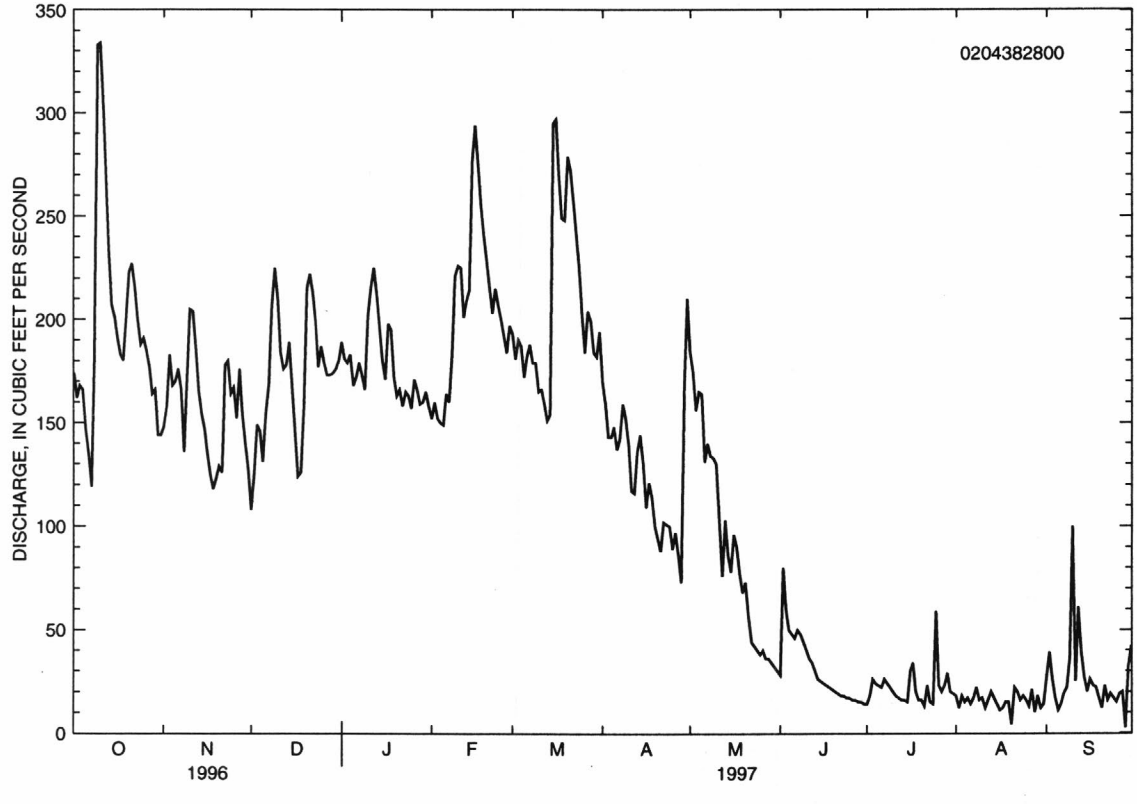
NEUSE RIVER BASIN

0204382800 PASQUOTANK RIVER NEAR SOUTH MILLS, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1996 - 1997	
ANNUAL TOTAL	56186		43313.6			
ANNUAL MEAN	154		119		117	
HIGHEST ANNUAL MEAN					119	1997
LOWEST ANNUAL MEAN					115	1996
HIGHEST DAILY MEAN	334	Oct 10	334	Oct 10	334	Oct 10 1996
LOWEST DAILY MEAN	-65	Sep 6	2.4	Sep 28	-65	Sep 6 1996
ANNUAL SEVEN-DAY MINIMUM	24	Jan 1	13	Aug 14	-.40	Oct 12 1995
INSTANTANEOUS PEAK FLOW			350	Oct 9	350	Oct 9 1996
INSTANTANEOUS PEAK STAGE			7.45	Oct 10	7.55	Sep 7 1996
INSTANTANEOUS LOW FLOW			-144	Jun 21	-240	Sep 6 1996
10 PERCENT EXCEEDS	217		213		210	
50 PERCENT EXCEEDS	160		140		131	
90 PERCENT EXCEEDS	71		16		16	

e Estimated.

Note.--Negative values indicate reverse flow.



CHOWAN RIVER BASIN

02053200 POTECASI CREEK NEAR UNION, NC

LOCATION.--Lat 36°22'14", long 77°01'36", Hertford County, Hydrologic Unit 03010204, on right bank at downstream side of bridge on State Highway 11, 2.8 mi north of Union, 3 mi downstream of Cutawhiskie Swamp, and 3.5 mi upstream from Bells Branch.

DRAINAGE AREA.--225 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1953-57. March 1958 to current year.

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

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 3.53 ft above sea level. Prior to Dec. 1, 1958, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, and those below 50 ft^3/s, which are poor. Maximum gage height for period of record from floodmark. Minimum discharge for current water year also occurred Sept. 10, 22, 23, 24.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1929 reached a stage of 19.1 ft; discharge, 4,050 ft^3/s; and flood of August 1940 reached a stage of 24.1 ft; discharge, 7,000 ft^3/s, from rating curve extended above 4,000 ft^3/s, from information furnished by North Carolina State Highway Commission.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	77	332	420	243	e155	e110	1270	12	4.6	147	2.9
2	47	84	374	407	238	e152	96	1280	34	5.1	60	2.8
3	51	118	438	368	227	148	84	1140	28	5.4	28	3.0
4	61	126	453	333	211	178	74	961	21	5.3	22	3.4
5	62	109	497	298	193	175	67	749	16	5.0	34	3.2
6	61	110	535	265	177	200	65	552	22	5.8	35	2.6
7	58	121	589	234	162	256	75	403	26	5.9	22	2.3
8	261	123	706	206	165	231	78	281	22	5.3	17	2.1
9	1080	125	770	211	295	231	67	197	18	5.4	15	1.9
10	1420	128	691	e900	322	224	55	137	16	5.2	13	2.0
11	1640	125	597	e590	296	203	50	93	13	5.0	11	49
12	1590	115	508	472	309	174	49	65	11	5.0	8.4	38
13	1310	154	427	476	295	145	61	73	11	4.7	7.0	8.1
14	964	168	363	448	378	130	62	174	11	4.7	5.8	4.8
15	670	151	316	390	778	178	53	101	9.6	4.8	5.0	3.6
16	447	132	275	349	1000	219	48	60	8.2	4.7	4.6	3.2
17	288	119	245	418	1050	187	46	43	7.4	6.5	4.3	3.0
18	198	109	225	390	1020	179	44	34	6.8	7.1	4.4	2.5
19	215	108	313	307	901	210	44	28	6.3	6.8	4.4	2.3
20	375	108	712	306	731	485	39	23	6.2	32	4.7	2.3
21	345	111	743	282	562	542	36	20	6.0	28	7.0	2.0
22	315	171	713	246	e460	e470	40	18	5.3	12	5.7	1.9
23	302	237	691	237	e370	e390	49	16	5.1	38	5.1	1.8
24	275	210	619	244	e290	e330	71	14	5.0	127	4.5	1.9
25	268	212	530	244	244	e290	92	13	4.6	578	3.9	2.9
26	248	230	452	251	209	e270	88	14	4.8	723	3.5	2.9
27	204	232	397	247	184	222	90	14	4.7	811	3.4	2.6
28	162	245	409	235	168	185	126	13	4.9	751	3.1	3.0
29	128	256	402	253	---	156	561	12	4.8	617	3.2	3.1
30	104	286	399	264	---	137	1090	12	4.6	e480	3.5	2.6
31	87	---	401	248	---	123	---	11	---	299	3.1	---
TOTAL	13295	4600	15122	10539	11478	7175	3510	7821	355.3	4598.3	498.6	167.7
MEAN	429	153	488	340	410	231	117	252	11.8	148	16.1	5.59
MAX	1640	286	770	900	1050	542	1090	1280	34	811	147	49
MIN	47	77	225	206	162	123	36	11	4.6	4.6	3.1	1.8
CFSM	1.91	.68	2.17	1.51	1.82	1.03	.52	1.12	.05	.66	.07	.02
IN.	2.20	.76	2.50	1.74	1.90	1.19	.58	1.29	.06	.76	.08	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1997, BY WATER YEAR (WY)

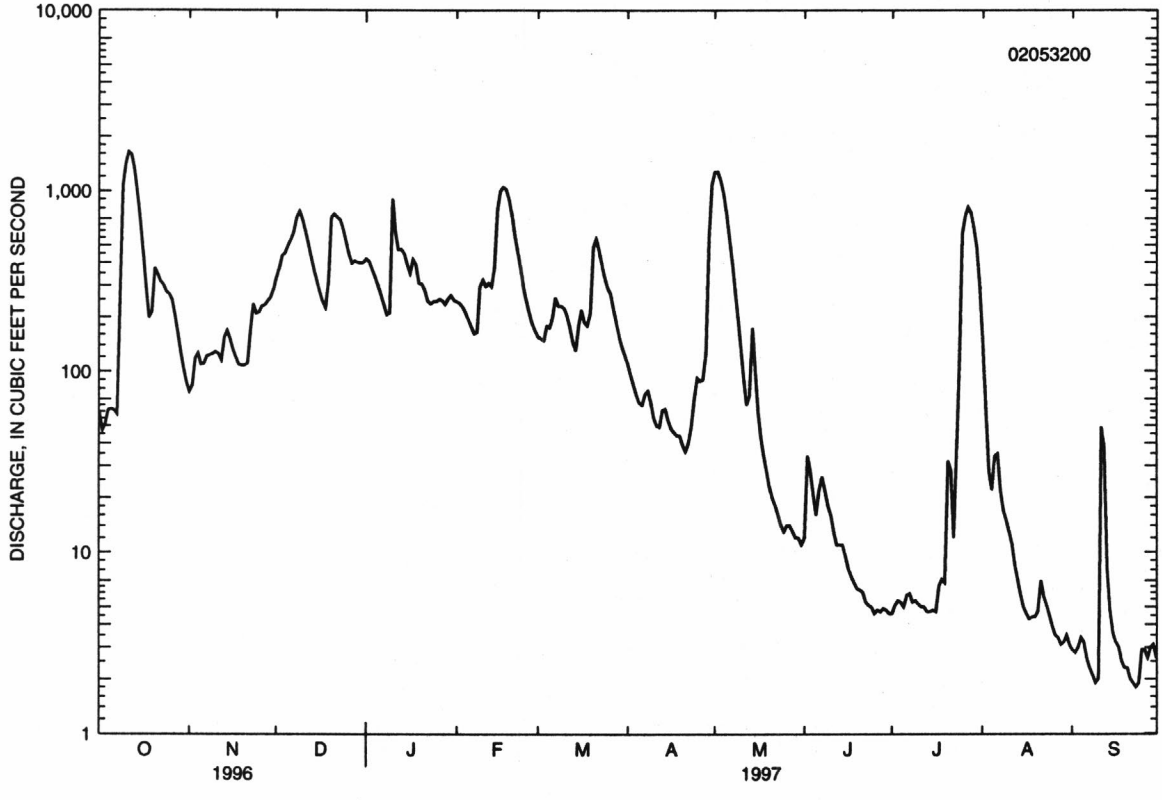
MEAN	119	104	209	408	488	475	308	153	110	108	164	85.3
MAX	1108	619	619	957	1135	1439	994	925	700	531	1131	809
(WY)	1960	1986	1990	1987	1960	1989	1983	1979	1979	1975	1992	1960
MIN	2.12	5.64	12.0	51.3	54.9	46.7	27.7	5.36	4.71	2.32	2.50	1.65
(WY)	1995	1982	1995	1981	1991	1988	1995	1994	1986	1983	1987	1995

CHOWAN RIVER BASIN

02053200 POTECASI CREEK NEAR UNION, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1959 - 1997	
ANNUAL TOTAL	103534		79159.9			
ANNUAL MEAN	283		217		226	
HIGHEST ANNUAL MEAN					458	1979
LOWEST ANNUAL MEAN					73.0	1981
HIGHEST DAILY MEAN	1640	Oct 11	1640	Oct 11	5380	Aug 18 1992
LOWEST DAILY MEAN	14	Jun 30	1.8	Sep 23	.30	Jun 30 1959
ANNUAL SEVEN-DAY MINIMUM	16	Jun 29	2.1	Sep 18	.51	Jun 25 1959
INSTANTANEOUS PEAK FLOW			1680	Oct 11	5650	Aug 19 1992
INSTANTANEOUS PEAK STAGE			13.35	Oct 11	21.77*	Aug 19 1992
INSTANTANEOUS LOW FLOW			1.8*	Sep 9	.20	Jul 1 1959
ANNUAL RUNOFF (CFSM)	1.26		.96		1.01	
ANNUAL RUNOFF (INCHES)	17.12		13.09		13.67	
10 PERCENT EXCEEDS	674		568		647	
50 PERCENT EXCEEDS	198		123		76	
90 PERCENT EXCEEDS	30		4.5		5.4	

e Estimated.
* See REMARKS.



CHOWAN RIVER BASIN

02053500 AHOSKIE CREEK AT AHOSKIE, NC

LOCATION.--Lat 36°16'48", long 77°00'00", Hertford County, Hydrologic Unit 03010203, on right bank 10 ft downstream of bridge on State Highways 11 and 42, 0.5 mi upstream from Seaboard Coast Line Railroad bridge, and 0.8 mi southwest of Ahoskie.

DRAINAGE AREA.--63.3 mi^2.

PERIOD OF RECORD.--January 1950 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 17.46 ft above sea level (Soil Conservation Service bench mark). Prior to Jan. 4, 1963, present site at 21.46 ft. Jan. 20, 1950, to May 24, 1951, nonrecording gage. Satellite telemetry at station.

REMARKS.--Records poor. Entire basin above station canalized since July 1964. Excavation began downstream in July 1962 and reached the station in December 1962. Reach was recanalized beginning in September 1984 and completed October 1984. Minimum discharge since canalization also occurred Oct. 9, 1988. Prior to canalization, no flow occurred periodically.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1940 reached a stage of 15.1 ft, present datum, from floodmark witnessed by local resident; discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	11	26	74	41	26	23	308	24	6.0	9.4	3.2
2	6.3	31	102	71	37	25	21	139	233	6.2	8.6	3.3
3	5.9	45	67	64	34	36	19	104	74	6.4	8.2	9.0
4	5.5	28	49	54	31	53	18	110	e44	6.2	13	11
5	5.0	23	41	48	30	42	17	66	31	8.9	36	4.7
6	5.4	21	82	43	30	57	18	46	22	19	11	4.2
7	6.6	20	90	38	28	50	28	35	18	12	7.7	3.7
8	516	20	232	33	67	38	25	28	15	7.6	6.4	3.6
9	883	30	119	120	130	31	20	26	13	6.5	5.6	3.7
10	826	26	75	261	84	28	17	27	11	6.6	5.4	6.5
11	264	22	59	130	67	26	16	22	10	7.1	5.4	77
12	108	19	49	86	55	23	17	19	9.5	6.0	5.2	23
13	70	18	43	65	47	21	22	32	9.4	5.5	5.1	8.2
14	51	17	42	54	305	28	22	40	9.0	5.3	4.9	5.4
15	38	16	37	47	515	77	18	25	9.3	5.1	4.5	4.7
16	31	15	33	100	356	53	16	19	10	12	4.4	4.4
17	26	15	31	119	175	38	15	16	9.0	59	4.0	4.4
18	23	14	31	76	112	31	14	14	8.1	11	3.9	4.0
19	79	16	303	55	85	172	14	13	7.7	6.8	3.9	4.0
20	62	16	416	45	69	395	13	12	7.8	67	12	4.0
21	41	19	172	42	57	189	13	11	7.7	22	15	4.3
22	32	61	109	41	52	109	16	11	7.9	11	8.3	3.5
23	26	46	84	44	45	72	23	10	7.8	13	5.5	3.4
24	22	35	71	43	38	53	39	9.5	7.1	237	4.7	3.9
25	20	30	70	47	34	42	39	9.3	8.7	412	4.3	4.5
26	17	28	63	50	31	39	29	9.8	6.5	80	4.1	3.8
27	15	26	68	42	29	38	22	9.7	6.0	35	4.0	3.8
28	14	23	70	41	27	34	51	9.4	5.8	23	3.9	4.7
29	13	21	61	54	---	30	625	8.7	5.9	17	3.9	4.0
30	13	20	54	46	---	26	750	8.7	5.9	13	3.6	3.8
31	12	---	60	43	---	24	---	8.5	---	11	3.3	---
TOTAL	3243.8	732	2809	2076	2611	1906	1980	1206.6	644.1	1144.2	225.2	231.7
MEAN	105	24.4	90.6	67.0	93.3	61.5	66.0	38.9	21.5	36.9	7.26	7.72
MAX	883	61	416	261	515	395	750	308	233	412	36	77
MIN	5.0	11	26	33	27	21	13	8.5	5.8	5.1	3.3	3.2
CFSM	1.65	.39	1.43	1.06	1.47	.97	1.04	.61	.34	.58	.11	.12
IN.	1.91	.43	1.65	1.22	1.53	1.12	1.16	.71	.38	.67	.13	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997*, BY WATER YEAR (WY)

MEAN	38.0	23.6	48.8	103	123	129	74.4	46.9	32.6	33.6	48.1	22.5
MAX	297	120	177	260	262	303	243	238	112	126	381	132
(WY)	1972	1986	1990	1979	1971	1989	1983	1979	1979	1975	1992	1964
MIN	3.01	3.21	3.10	7.66	18.9	17.3	8.73	4.21	5.43	3.55	3.59	3.41
(WY)	1977	1982	1995	1981	1968	1988	1985	1986	1986	1987	1983	1980

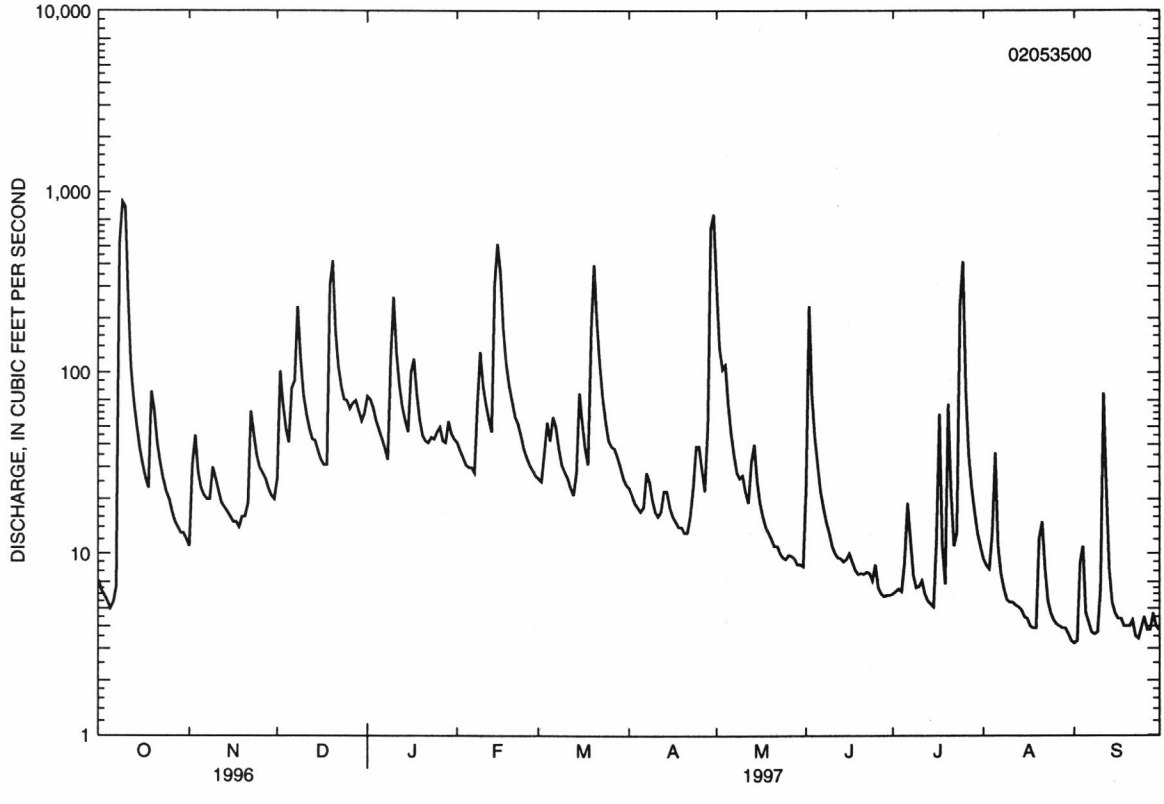
CHOWAN RIVER BASIN

02053500 AHOSKIE CREEK AT AHOSKIE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997*	
ANNUAL TOTAL	22141.5		18809.6			
ANNUAL MEAN	60.5		51.5		60.0	
HIGHEST ANNUAL MEAN					109	1979
LOWEST ANNUAL MEAN					14.7	1981
HIGHEST DAILY MEAN	883	Oct 9	883	Oct 9	2490	Oct 6 1964
LOWEST DAILY MEAN	2.3	Sep 3	3.2	Sep 1	.61	Oct 8 1988
ANNUAL SEVEN-DAY MINIMUM	4.2	Jun 30	3.6	Aug 27	.85	Sep 27 1988
INSTANTANEOUS PEAK FLOW			922	Oct 8	2580	Oct 5 1964
INSTANTANEOUS PEAK STAGE			9.35	Oct 8	12.49	Jun 1 1984
INSTANTANEOUS LOW FLOW			2.8	Sep 3	.45*	Oct 8 1988
ANNUAL RUNOFF (CFSM)	.96		.81		.95	
ANNUAL RUNOFF (INCHES)	13.01		11.05		12.89	
10 PERCENT EXCEEDS	137		94		136	
50 PERCENT EXCEEDS	29		23		17	
90 PERCENT EXCEEDS	5.4		4.8		4.4	

e Estimated.

* Canalized period only (1964-1997). See REMARKS.



ROANOKE RIVER BASIN

02068500 DAN RIVER NEAR FRANCISCO, NC

LOCATION.--Lat 36°30'53", long 80°18'11", Stokes County, Hydrologic Unit 03010103, on left bank 200 ft upstream from bridge on State Highway 704, 700 ft downstream of remains of Georges Mill, 0.2 mi downstream of Elk Creek, 3 mi east of Francisco, and 7.9 mi downstream of Little Dan River.

DRAINAGE AREA.--129 mi^2.

PERIOD OF RECORD.--August 1924 to September 1987. December 1991 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 1303: 1938-50 (monthly runoff). WSP 1433: 1925-26, 1928-29, 1931, 1942, 1948. WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 831.99 ft above sea level. Prior to Nov. 15, 1929, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good except those for discharges above 1,000 ft^3/s, which are fair. Since 1938, considerable diurnal fluctuation and regulation by Talbott and Townes Reservoirs (stations 02067800 and 02067820, respectively) and Pinnacles Hydroelectric Plant in Virginia, 28 mi upstream. Minimum discharge for current water year also occurred Sept. 23.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1916 reached a stage of about 15 ft, from information by local residents, discharge, 16,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	238	123	2520	279	251	608	229	424	356	182	118	80
2	296	130	1810	275	233	541	258	366	227	180	113	157
3	227	143	754	239	175	1150	263	350	597	158	111	169
4	162	153	599	229	169	865	208	308	301	195	112	78
5	148	141	538	262	216	513	223	278	204	140	113	72
6	168	120	461	248	236	537	324	271	210	169	107	67
7	196	123	442	186	245	493	310	262	285	133	103	66
8	203	659	451	200	371	529	262	254	220	124	101	64
9	261	449	420	225	223	548	209	255	175	146	102	64
10	312	464	411	281	191	331	238	252	173	167	103	108
11	258	383	273	212	247	252	269	246	173	124	104	107
12	173	329	256	195	214	241	478	242	227	119	140	85
13	241	280	436	225	250	228	455	239	276	123	160	81
14	178	187	361	222	274	535	339	237	281	155	143	77
15	199	223	320	196	608	580	374	237	225	183	174	90
16	179	196	312	365	394	516	374	231	170	185	170	75
17	172	131	332	298	325	402	331	229	203	161	174	74
18	182	134	222	222	329	441	277	230	219	119	143	69
19	224	140	315	256	262	570	261	190	292	129	96	69
20	174	140	341	223	251	504	255	267	212	111	173	70
21	126	139	241	284	417	381	258	182	223	110	122	65
22	139	209	228	382	632	363	287	158	187	124	99	61
23	154	152	245	257	433	398	418	157	186	178	96	59
24	137	141	340	246	424	325	330	164	208	137	91	93
25	133	157	388	303	255	259	275	180	231	140	92	93
26	134	509	296	255	300	305	262	221	228	178	93	74
27	138	287	316	243	311	352	277	229	244	177	86	69
28	172	188	336	352	566	437	425	190	157	125	84	72
29	146	173	308	420	---	388	1260	170	146	225	86	101
30	126	360	282	269	---	306	506	221	150	149	128	72
31	164	---	284	356	---	246	---	252	---	131	78	---
TOTAL	5760	6963	14838	8205	8802	14144	10235	7492	6986	4677	3615	2481
MEAN	186	232	479	265	314	456	341	242	233	151	117	82.7
MAX	312	659	2520	420	632	1150	1260	424	597	225	174	169
MIN	126	120	222	186	169	228	208	157	146	110	78	59
†	+3	+6	-3	+4	-4	-4	+4	-12	-4	-13	-22	-8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1997*@, BY WATER YEAR (WY)

MEAN	153	160	182	201	224	265	272	222	201	170	169	151
MAX	543	327	479	424	463	571	677	405	438	373	514	630
(WY)	1938	1980	1997	1978	1960	1993	1980	1949	1972	1938	1940	1979
MIN	49.7	61.3	85.6	76.2	94.9	94.2	120	109	78.3	54.8	52.5	50.4
(WY)	1964	1954	1961	1956	1956	1981	1967	1986	1967	1986	1981	1968

ROANOKE RIVER BASIN

02068500 DAN RIVER NEAR FRANCISCO, NC--Continued

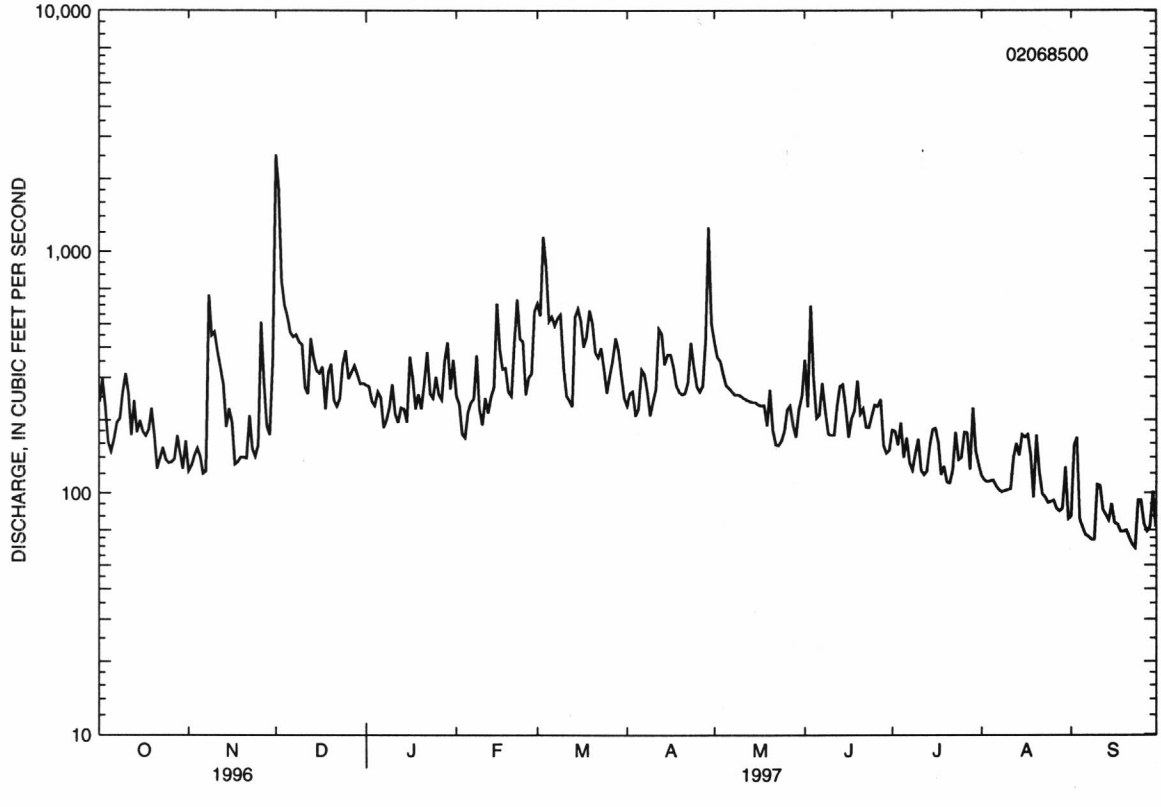
SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1938 - 1997*@	
ANNUAL TOTAL	92122		94198			
ANNUAL MEAN	252	‡257	258	‡254	198	(UNADJUSTED)
HIGHEST ANNUAL MEAN					300	1960
LOWEST ANNUAL MEAN					97.5	1956
HIGHEST DAILY MEAN	2520	Dec 1	2520	Dec 1	6830	Sep 22 1979
LOWEST DAILY MEAN	98	Jul 24	59	Sep 23	27	Aug 24 1981
ANNUAL SEVEN-DAY MINIMUM	116	Jan 1	67	Sep 17	28	Aug 24 1981
INSTANTANEOUS PEAK FLOW			3990	Dec 1	21200	Aug 17 1985
INSTANTANEOUS PEAK STAGE			6.54	Dec 1	19.50	Aug 17 1985
INSTANTANEOUS LOW FLOW			56*	Sep 22	7.1	Sep 8 1932
10 PERCENT EXCEEDS	412		436		320	
50 PERCENT EXCEEDS	200		225		158	
90 PERCENT EXCEEDS	126		101		86	

† Change in contents, equivalent in cubic feet per second, in Talbott and Townes Reservoirs by City of Danville, Virginia.

‡ Adjusted for change in contents.

* Regulated period only (1938-1997). See REMARKS.

@ See PERIOD OF RECORD.



ROANOKE RIVER BASIN

02070500 MAYO RIVER NEAR PRICE, NC

LOCATION.--Lat 36°32'05", long 79°59'30", Rockingham County, Hydrologic Unit 03010103, on right bank 350 ft downstream from Anglins Bridge on Secondary Road 1358, 0.5 mi downstream from confluence of North and South Mayo Rivers, 0.8 mi downstream from Virginia-North Carolina State line, and 4.0 mi west of Price.

DRAINAGE AREA.--242 mi^2, revised.

PERIOD OF RECORD.--July 1929 to September 1971. October 1993 to current year.

REVISED RECORDS.--WSP 2104: Drainage area. WRIR 96-4154: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 689.95 ft above sea level. Prior to Oct. 29, 1929, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minimum discharge for the current water year also occurred Sept. 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	414	274	3520	350	e370	541	406	700	365	271	196	144
2	766	294	2650	346	e370	2320	403	584	443	309	184	144
3	573	284	977	343	e380	2020	402	551	1410	263	176	141
4	392	251	671	338	e370	865	399	512	576	245	185	134
5	337	251	585	365	e365	918	397	475	425	249	204	124
6	313	252	801	377	346	675	422	458	380	242	175	122
7	301	255	724	342	373	586	459	438	367	234	168	120
8	530	505	769	330	403	536	398	425	353	229	168	118
9	777	836	560	410	371	511	390	424	342	222	164	120
10	656	425	488	462	366	484	380	415	333	220	162	264
11	427	355	457	491	351	460	380	401	323	214	161	324
12	371	321	437	e400	345	443	629	397	333	207	157	207
13	343	305	608	e380	396	960	786	393	365	205	153	176
14	324	296	501	e360	1130	860	519	390	334	198	158	162
15	307	288	444	e350	850	589	463	389	329	194	173	183
16	298	279	421	e340	560	523	438	368	322	191	161	168
17	290	277	415	e330	474	496	425	364	331	262	144	158
18	289	282	407	e320	439	e580	408	365	340	209	132	153
19	311	295	473	e320	416	e880	398	360	319	194	129	150
20	284	281	417	e320	414	872	395	369	293	196	365	148
21	277	277	387	e310	843	623	392	359	286	187	347	140
22	273	320	382	e350	637	556	440	348	276	220	204	132
23	271	284	380	e400	499	508	587	358	270	271	175	135
24	274	275	387	e420	455	480	545	369	260	250	165	166
25	266	272	425	e450	431	464	465	369	259	238	160	206
26	266	498	380	e420	421	546	430	385	269	225	181	171
27	268	410	375	e400	571	491	442	375	344	228	168	155
28	268	340	367	e390	653	464	788	332	277	210	160	153
29	268	317	363	e380	---	459	3280	317	262	193	154	208
30	271	333	356	e380	---	441	988	328	252	205	144	172
31	268	---	357	e370	---	437	---	332	---	228	141	---
TOTAL	11273	9932	20484	11544	13599	21588	17254	12650	11038	7009	5514	4898
MEAN	364	331	661	372	486	696	575	408	368	226	178	163
MAX	777	836	3520	491	1130	2320	3280	700	1410	309	365	324
MIN	266	251	356	310	345	437	380	317	252	187	129	118
CFSM	1.50	1.37	2.73	1.54	2.01	2.88	2.38	1.69	1.52	.93	.74	.67
IN.	1.73	1.53	3.15	1.77	2.09	3.32	2.65	1.94	1.70	1.08	.85	.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1997@, BY WATER YEAR (WY)

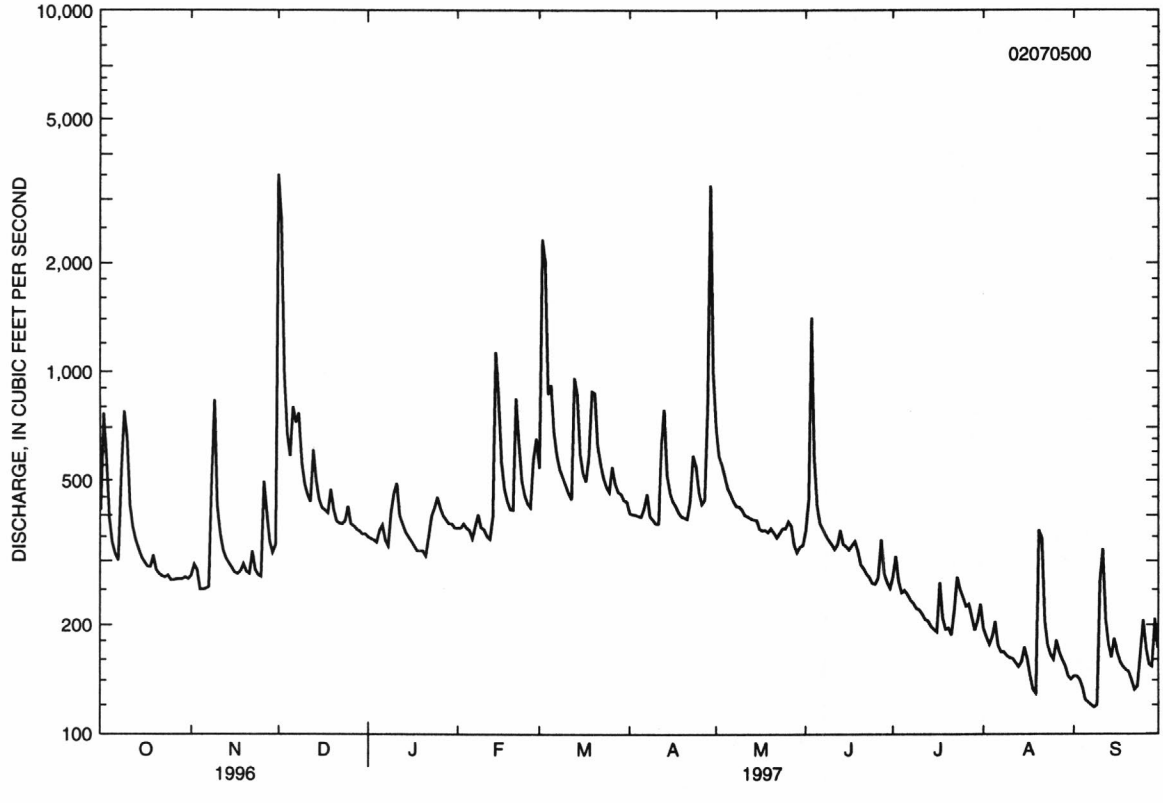
MEAN	282	251	298	362	398	433	397	326	295	260	262	249
MAX	1250	578	661	1022	900	982	694	659	654	609	943	1003
(WY)	1938	1958	1997	1936	1960	1994	1958	1949	1943	1949	1940	1945
MIN	84.5	95.9	118	112	139	221	175	157	123	103	89.9	62.0
(WY)	1932	1932	1956	1956	1931	1940	1967	1956	1956	1966	1930	1954

ROANOKE RIVER BASIN

02070500 MAYO RIVER NEAR PRICE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1929 - 1997@	
ANNUAL TOTAL	168137		146783			
ANNUAL MEAN	459		402		317	
HIGHEST ANNUAL MEAN					479	1949
LOWEST ANNUAL MEAN					170	1956
HIGHEST DAILY MEAN	4430	Jun 9	3520	Dec 1	11400	Sep 18 1945
LOWEST DAILY MEAN	142	Jan 7	118	Sep 8	35	Oct 8 1954
ANNUAL SEVEN-DAY MINIMUM	180	Jul 18	126	Sep 3	45	Sep 19 1956
INSTANTANEOUS PEAK FLOW			6300	Dec 1	30000	Oct 19 1937
INSTANTANEOUS PEAK STAGE			6.98	Dec 1	14.00	Oct 19 1937
INSTANTANEOUS LOW FLOW			117*	Sep 7	32	Oct 8 1954
ANNUAL RUNOFF (CFSM)	1.90		1.66		1.31	
ANNUAL RUNOFF (INCHES)	25.85		22.56		17.81	
10 PERCENT EXCEEDS	630		586		500	
50 PERCENT EXCEEDS	320		356		239	
90 PERCENT EXCEEDS	237		167		128	

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



ROANOKE RIVER BASIN

02071000 DAN RIVER NEAR WENTWORTH, NC

LOCATION.--Lat 36°24'45", long 79°49'35", Rockingham County, Hydrologic Unit 03010103, on right bank 600 ft downstream of Settles Bridge on Secondary Road 2150, 3.5 mi northwest of Wentworth, 7.5 mi downstream of Mayo River, and 103.7 mi upstream from mouth.

DRAINAGE AREA.--1,053 mi^2, revised

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for October 1939, published in WSP 1303.

REVISED RECORDS.--WDR NC-72-1: 1945(M). WDR NC-81-1: Drainage area. WRIR 96-4154: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 512.98 ft above sea level. Prior to Aug. 3, 1949, water-stage recorder at site 150 ft upstream at same datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Slight fluctuation and regulation at low flow caused by Talbott and Townes Reservoirs (stations 02067800 and 02067820). Maximum gage height for period of record, from high-water mark in gage well.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1908 reached a stage of 34.9 ft, from information by North Carolina State Highway Commission, and flood in 1937 reached a stage of 29.8 ft, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1950	856	7450	1590	1290	3020	1420	2860	1150	806	736	414
2	5510	919	12900	1850	1280	2430	1350	2250	1380	879	652	410
3	3260	922	3720	1940	1280	4760	1360	1990	4970	910	614	443
4	1700	849	2420	1920	1250	7930	1360	1930	2700	855	598	439
5	1350	846	2040	1600	1250	2940	1340	1620	1460	837	654	363
6	1330	847	4030	1490	1230	3490	1540	1540	1300	809	687	341
7	1420	826	2350	1460	1210	2500	2120	1460	1240	821	591	335
8	2040	1080	2870	1360	1350	2070	1560	1410	1240	795	544	330
9	2140	3530	2080	1320	1620	1910	1410	1390	1210	775	530	343
10	2680	1610	1810	1290	1380	1880	1350	1360	1170	768	522	861
11	1630	1410	1730	1270	1340	1700	1330	1320	1140	757	520	1040
12	e1350	1250	1700	1350	1320	1600	1610	1310	1120	716	513	678
13	e1250	1170	1640	1280	1290	1540	3250	1300	1120	696	523	495
14	e1100	1090	1560	1270	1480	2510	2090	1290	1180	701	545	446
15	e1060	989	1510	1280	6110	3430	1740	1270	1180	709	550	846
16	e1070	987	1470	1300	4460	2260	1670	1250	1130	709	574	746
17	e1050	953	1450	1440	2180	1890	1590	1210	988	777	591	505
18	e1150	903	1600	1570	1750	1670	1420	1200	1080	723	563	434
19	e1200	979	2040	1610	1560	3030	1350	1200	1080	606	498	425
20	e1250	950	2350	1470	1440	4640	1340	1160	1060	593	553	415
21	e1100	927	1990	1400	1530	2690	1330	1170	1010	597	1090	402
22	e1000	1120	1810	1400	2750	2000	1650	1070	1020	610	630	378
23	e950	1080	1670	1350	2610	1790	3150	1020	1020	1050	486	376
24	e900	959	1590	1330	1800	1660	3280	1020	969	1250	435	470
25	e890	922	1540	1350	1640	1600	1860	1020	939	867	424	824
26	e880	2370	1510	1350	1470	2000	1600	1160	914	809	431	630
27	e870	1930	1480	1360	1570	2020	1570	1310	1010	842	448	509
28	e860	1340	1470	1320	1950	1790	4220	1210	1040	862	427	465
29	e850	1180	1470	1360	---	1780	15500	1210	848	698	418	538
30	865	1170	1480	1340	---	1680	6170	1180	808	775	421	601
31	833	---	1470	1300	---	1590	---	1220	---	769	424	---
TOTAL	45488	35964	76200	44520	51390	77800	72530	42910	38476	24371	17192	15502
MEAN	1467	1199	2458	1436	1835	2510	2418	1384	1283	786	555	517
MAX	5510	3530	12900	1940	6110	7930	15500	2860	4970	1250	1090	1040
MIN	833	826	1450	1270	1210	1540	1330	1020	808	593	418	330
CFSM	1.39	1.14	2.33	1.36	1.74	2.38	2.30	1.31	1.22	.75	.53	.49
IN.	1.61	1.27	2.69	1.57	1.82	2.75	2.56	1.52	1.36	.86	.61	.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

MEAN	922	932	1163	1411	1633	1909	1704	1315	1111	925	846	868
MAX	3676	2963	2458	3274	4308	5345	4951	3149	4220	2345	3067	3667
(WY)	1960	1958	1997	1978	1960	1975	1987	1972	1972	1949	1940	1979
MIN	237	297	422	392	771	661	592	515	333	268	218	166
(WY)	1954	1954	1956	1956	1941	1985	1985	1981	1986	1986	1981	1954

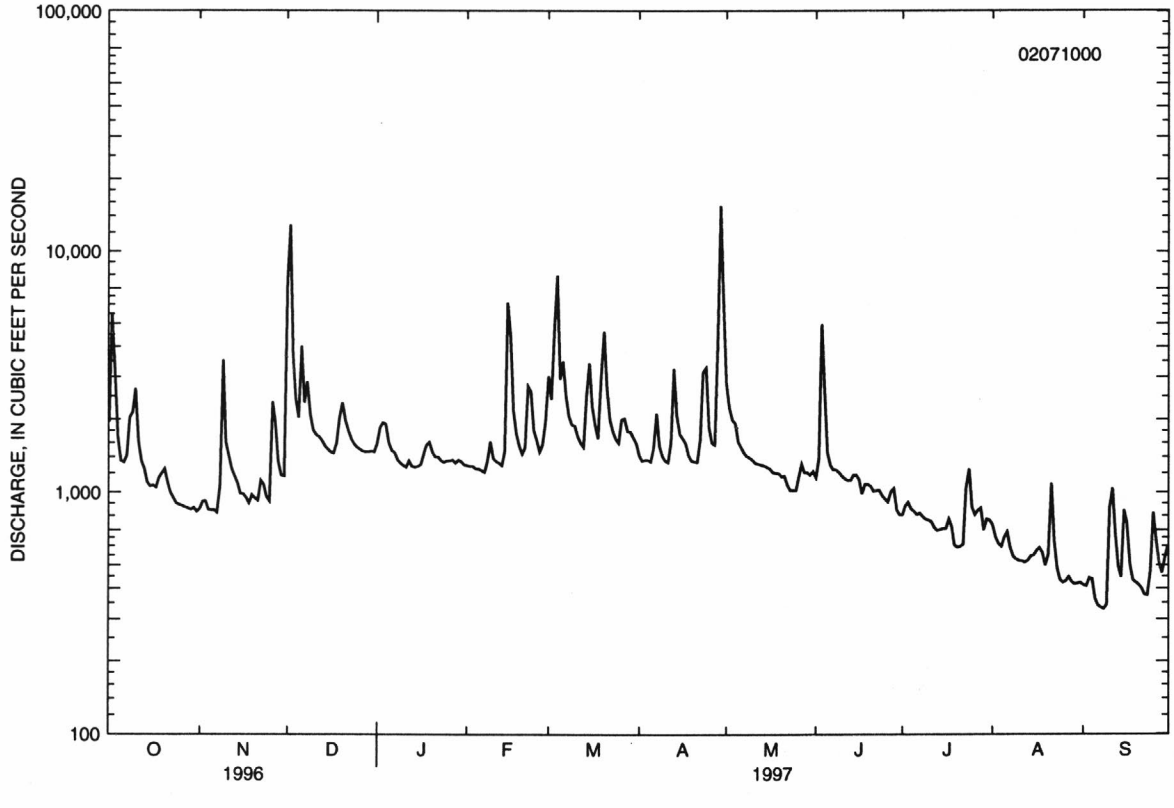
ROANOKE RIVER BASIN

02071000 DAN RIVER NEAR WENTWORTH, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1940 - 1997	
ANNUAL TOTAL	577232		542343			
ANNUAL MEAN	1577		1486		1227	
HIGHEST ANNUAL MEAN					1985	1960
LOWEST ANNUAL MEAN					587	1981
HIGHEST DAILY MEAN	15000	Sep 6	15500	Apr 29	47800	Jun 22 1972
LOWEST DAILY MEAN	486	Jul 23	330	Sep 8	107	Oct 2 1954
ANNUAL SEVEN-DAY MINIMUM	545	Jul 18	371	Sep 3	126	Oct 6 1954
INSTANTANEOUS PEAK FLOW			16800	Apr 29	54200	Jun 22 1972
INSTANTANEOUS PEAK STAGE			19.45	Apr 29	31.60*	Jun 22 1972
INSTANTANEOUS LOW FLOW			326	Sep 8	65	Oct 8 1954
ANNUAL RUNOFF (CFSM)	1.50		1.41		1.17	
ANNUAL RUNOFF (INCHES)	20.39		19.16		15.84	
10 PERCENT EXCEEDS	2440		2360		2060	
50 PERCENT EXCEEDS	1080		1280		840	
90 PERCENT EXCEEDS	688		535		421	

e Estimated.

* See REMARKS.



ROANOKE RIVER BASIN

02074000 SMITH RIVER AT EDEN, NC

LOCATION.--Lat 36°31'31", long 79°45'57", Rockingham County, Hydrologic Unit 03010103, on right bank at Eden, 0.3 mi downstream of bridge on State Highway 14, 0.8 mi upstream from bridge on Secondary Road 1714, 1.2 mi south of Virginia-North Carolina State line, 1.3 mi downstream of Stuart Creek, and 3.9 mi upstream from mouth.

DRAINAGE AREA.--538 mi^2.

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1970, published as "Smith River at Spray".

REVISED RECORDS.--WSP 1433: 1946.

GAGE.--Water-stage recorder. Datum of gage is 539.56 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated since August 1950 by Philpott Lake, 40 mi upstream (usable capacity, 6,325,000,000 ft^3). Additional regulation by hydroelectric plant at Martinsville, Virginia, 18 mi upstream. Maximum discharge prior to regulation: 45,600 ft^3/s, Aug. 15, 1940, from rating curve extended above 12,000 ft^3/s on the basis of computation of peak flow over dam 1.5 mi downstream; gage height: 19.28 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	770	653	3930	882	e1100	1810	1050	1440	1020	e480	579	415
2	1210	582	2760	951	e1000	1800	1060	1370	1450	870	293	570
3	946	391	1670	934	e920	1440	1060	1280	1090	823	292	547
4	913	504	1900	886	e1050	1260	1060	1250	1270	693	778	492
5	687	542	2010	1040	992	1580	579	1230	1250	482	734	212
6	415	531	2500	955	790	1100	571	e1220	1240	392	606	292
7	563	510	2390	1010	738	707	854	e1200	1180	635	520	427
8	1180	767	2520	1240	571	1240	775	e1200	983	620	464	927
9	1440	1400	2090	1200	916	1790	783	1080	741	748	233	980
10	1490	517	1450	608	956	1420	1090	624	1040	697	270	678
11	1050	621	1250	560	932	1320	720	495	908	651	569	377
12	822	897	1210	923	955	1260	1150	612	478	333	569	562
13	492	863	1390	942	1350	1230	691	906	542	332	614	583
14	618	1000	1290	1130	2100	e1200	1110	879	908	704	630	435
15	847	1070	1220	1340	999	e1150	1220	895	1040	731	501	214
16	816	1060	1190	1090	1030	e1100	1220	867	736	751	215	331
17	830	1060	1180	892	1210	e1050	1170	508	660	577	240	423
18	829	1070	1170	601	1360	e1000	1120	462	684	529	643	656
19	744	1110	1280	892	817	e950	481	819	370	261	1780	549
20	389	1080	1190	863	829	e900	490	875	459	309	1420	518
21	553	1080	879	822	1150	e800	891	863	630	768	619	385
22	663	1230	482	840	1100	e850	919	861	626	1050	568	274
23	575	903	610	846	1090	e900	1140	863	794	810	349	564
24	857	419	655	574	1330	e1100	1090	505	947	608	339	437
25	788	524	709	734	971	e1200	870	616	437	561	685	435
26	629	1020	662	855	655	1360	814	753	433	436	e700	429
27	377	972	630	794	4640	1250	1620	729	e550	522	e480	435
28	518	773	489	1050	2280	1230	5190	708	e700	734	435	255
29	663	733	450	984	---	659	2010	735	e500	742	424	237
30	674	865	645	805	---	539	1610	520	e400	579	250	434
31	656	---	841	890	---	1000	---	688	---	550	261	---
TOTAL	24004	24747	42642	28133	33831	36195	34408	27053	24066	18978	17060	14073
MEAN	774	825	1376	908	1208	1168	1147	873	802	612	550	469
MAX	1490	1400	3930	1340	4640	1810	5190	1440	1450	1050	1780	980
MIN	377	391	450	560	571	539	481	462	370	261	215	212
†	-26	+35	+26	-4	+26	+22	+56	-60	+28	-85	-126	-84
‡	351	426	476	556	597	517	425	402	398	176	89	128

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1997*, BY WATER YEAR (WY)

MEAN	524	514	603	699	738	915	905	715	653	519	501	536
MAX	1572	1530	1376	1453	1521	2519	3016	1567	2026	1374	1454	2030
(WY)	1990	1986	1997	1979	1960	1993	1987	1978	1972	1989	1985	1996
MIN	201	211	273	291	325	331	294	266	213	214	194	248
(WY)	1952	1982	1981	1989	1968	1967	1967	1964	1964	1981	1953	1951

ROANOKE RIVER BASIN

02074000 SMITH RIVER AT EDEN, NC--Continued

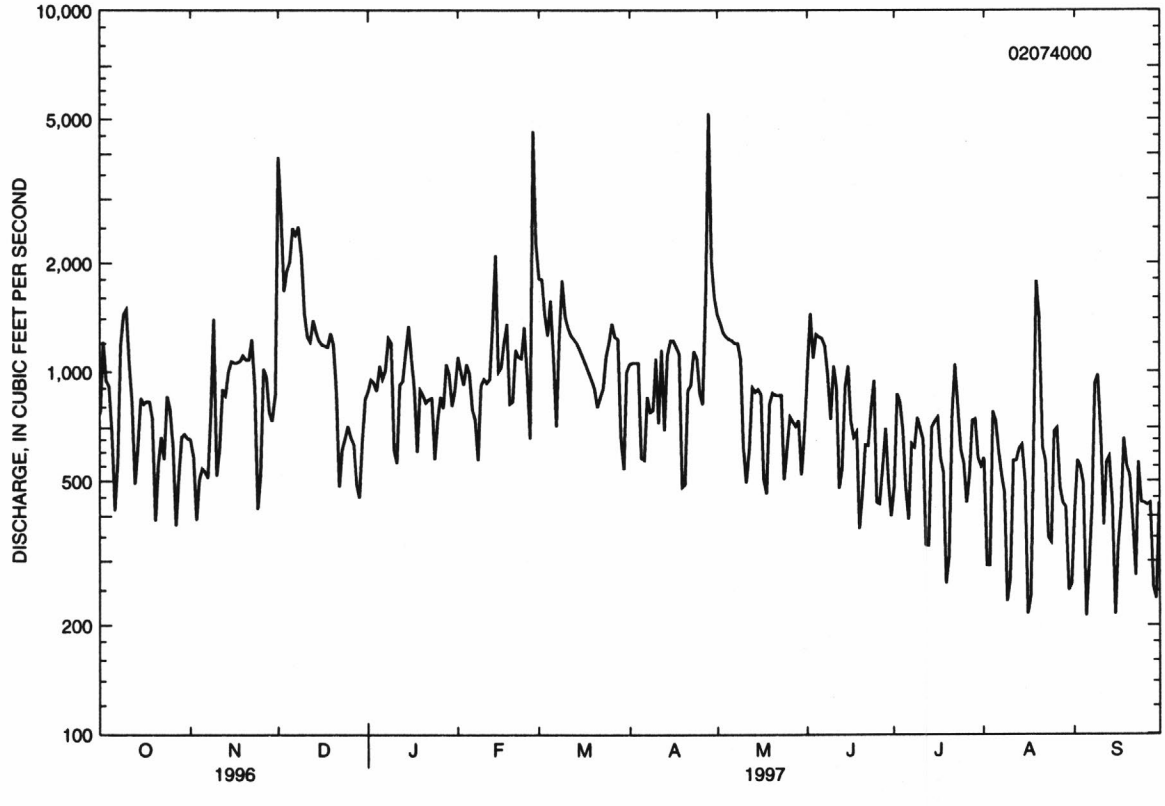
SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1951 - 1997*	
ANNUAL TOTAL	377166		325190			
ANNUAL MEAN	1031	‡1042	891	‡874	651	(UNADJUSTED)
HIGHEST ANNUAL MEAN					1010	1987
LOWEST ANNUAL MEAN					309	1981
HIGHEST DAILY MEAN	14100	Sep 6	5190	Apr 28	16700	Jun 21 1972
LOWEST DAILY MEAN	150	Jan 7	212	Sep 5	46	Aug 14 1967
ANNUAL SEVEN-DAY MINIMUM	176	Jan 3	380	Sep 24	130	Aug 21 1964
INSTANTANEOUS PEAK FLOW			7810	Apr 28	24800	Jun 21 1972
INSTANTANEOUS PEAK STAGE			8.59	Apr 28	16.24	Jun 21 1972
INSTANTANEOUS LOW FLOW			162	Sep 5	38	Aug 7 1967
10 PERCENT EXCEEDS	1900		1330		1190	
50 PERCENT EXCEEDS	768		819		461	
90 PERCENT EXCEEDS	356		431		227	

e Estimated.

† Change in contents, equivalent in cubic feet per second, in Philpott Lake provided by U.S. Army Corps of Engineers.

‡ Adjusted for change in contents.

* Regulated period only (1951-1997). See REMARKS.



ROANOKE RIVER BASIN

02077200 HYCO CREEK NEAR LEASBURG, NC

LOCATION.--Lat 36°23'57", long 79°11'50", Caswell County, Hydrologic Unit 03010104, on right bank 10 ft upstream from bridge on U.S. Highway 158, 1.5 mi upstream from Kilgore Creek, and 2.5 mi west of Leasburg.

DRAINAGE AREA.--45.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1964 to current year. Prior to October 1968 published as "North Hyco Creek near Leasburg".

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 400.08 ft above sea level. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, and those below 1 ft^3/s, which are poor. Periods of no flow occur most years. Maximum gage-height and discharge for period of record occurred Aug. 27, 1995; discharge not determined. Minimum discharge for current water year, no flow, also occurred Sept. 6, 7, 8, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAYOCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	12	12	217	37	52	e35	e31	111	8.9	2.8	.87	.11
2	88	24	406	33	45	e92	28	74	15	6.4	.81	.08
3	48	27	118	31	e41	e120	26	75	22	5.4	.66	.05
4	26	17	78	28	e39	e275	24	73	32	3.8	.61	.02
5	17	14	75	29	e37	e110	22	52	17	2.9	.81	0
6	14	14	245	33	e35	e190	22	45	11	2.8	.73	0
7	13	14	141	27	e34	e90	31	38	12	2.7	1.1	0
8	144	62	183	23	e57	e65	22	32	10	2.3	.99	0
9	184	129	e110	103	e130	e55	18	31	9.3	1.9	.74	.01
10	70	60	e89	218	e72	e49	16	29	8.4	1.6	.58	1.0
11	44	43	e74	112	e57	e45	15	26	7.6	e1.5	.48	2.3
12	31	31	e63	73	e49	e41	26	24	7.0	e1.4	.44	4.0
13	24	26	e59	57	e46	e39	51	22	7.7	e1.3	.35	1.9
14	21	22	58	e51	e215	e82	31	22	10	e1.1	.56	1.1
15	17	19	47	e45	e580	e160	24	20	9.5	e.96	.56	.98
16	15	17	41	e188	e185	e69	21	17	7.6	e.75	.38	.92
17	14	15	39	e125	e98	e49	19	15	6.9	.53	.26	.73
18	15	15	39	e61	e77	e42	18	14	6.6	.39	.36	.52
19	69	21	55	e51	e65	e170	16	13	6.1	.77	.12	.45
20	41	19	54	e47	e55	e400	15	12	4.8	.59	19	.36
21	27	16	41	e42	e49	e145	14	11	4.6	.59	7.5	.29
22	23	41	36	41	e48	e97	111	10	4.1	.92	2.8	.21
23	18	36	e35	e41	e43	e74	279	9.4	3.3	2.0	1.4	.18
24	17	27	35	36	e38	e61	328	9.2	3.2	2.6	.98	.36
25	16	27	46	47	e34	e53	e109	9.4	2.6	3.6	.77	3.4
26	14	39	38	48	e32	e48	e80	16	2.5	2.8	.61	5.0
27	14	39	54	37	e36	e90	e70	13	3.1	2.4	.48	2.6
28	13	27	55	59	e80	e44	e1650	10	4.2	1.8	.36	1.7
29	13	24	47	93	---	41	2230	8.8	3.6	1.2	.31	1.8
30	13	24	42	62	---	35	285	8.6	2.7	1.1	.25	1.7
31	12	---	39	58	---	35	---	8.6	---	.99	.15	---
TOTAL	1087	901	2659	1936	2329	2901	5632	859.0	253.3	61.89	46.02	31.77
MEAN	35.1	30.0	85.8	62.5	83.2	93.6	188	27.7	8.44	2.00	1.48	1.06
MAX	184	129	406	218	580	400	2230	111	32	6.4	19	5.0
MIN	12	12	35	23	32	35	14	8.6	2.5	.39	.12	0
CFSM	.76	.65	1.87	1.36	1.81	2.04	4.09	.60	.18	.04	.03	.02
IN.	.88	.73	2.16	1.57	1.89	2.35	4.56	.70	.21	.05	.04	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

MEAN	25.9	28.9	48.5	85.5	90.7	92.8	61.6	34.6	26.1	24.9	23.3	22.7
MAX	131	137	144	278	244	266	188	184	233	274	264	193
(WY)	1996	1973	1973	1978	1979	1975	1997	1978	1995	1975	1995	1996
MIN	0	2.63	4.77	6.15	19.7	23.1	8.63	4.30	1.80	.11	.026	0
(WY)	1969	1968	1966	1981	1968	1976	1995	1995	1986	1966	1987	1968

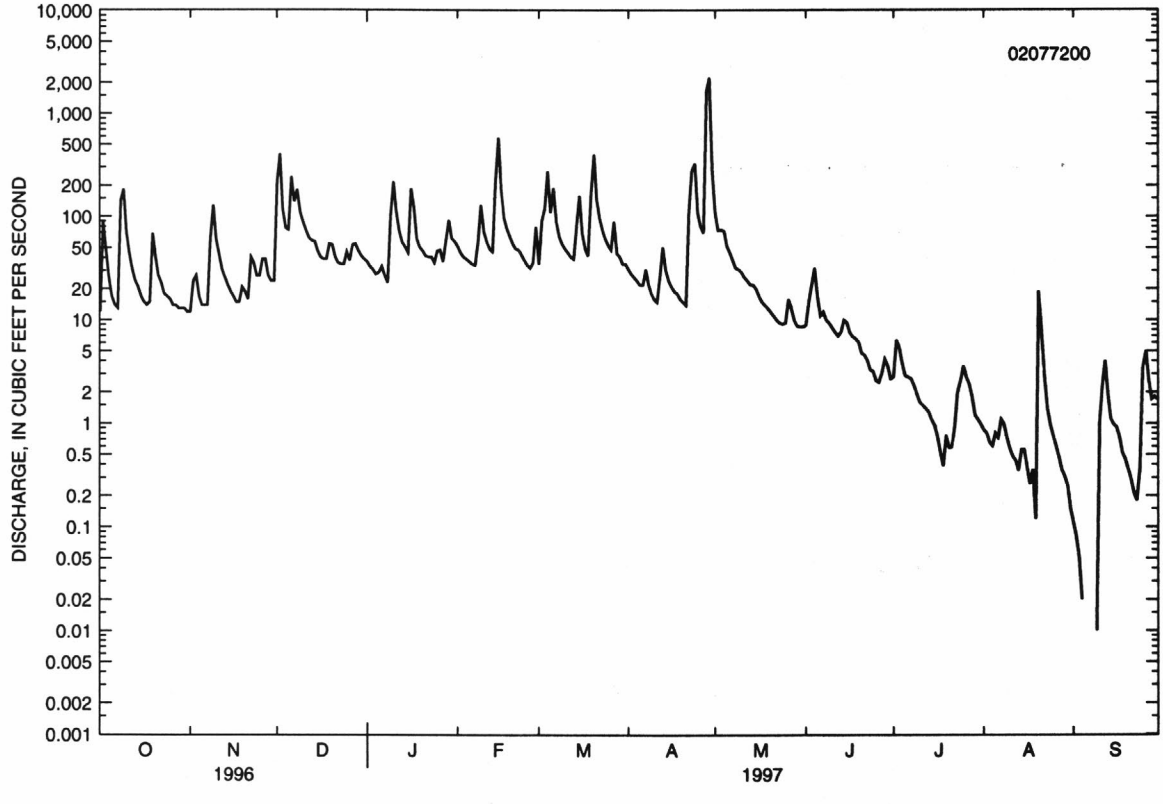
ROANOKE RIVER BASIN

02077200 HYCO CREEK NEAR LEASBURG, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997	
ANNUAL TOTAL	22150.00		18696.98			
ANNUAL MEAN	60.5		51.2		47.0	
HIGHEST ANNUAL MEAN					92.3	1975
LOWEST ANNUAL MEAN					15.2	1981
HIGHEST DAILY MEAN	3800	Sep 6	2230	Apr 29	7400	Aug 28 1995
LOWEST DAILY MEAN	.24	Jul 24	0*	Sep 5	0*	Jul 9 1966
ANNUAL SEVEN-DAY MINIMUM	.56	Jul 18	.01	Sep 3	0*	Jul 9 1966
INSTANTANEOUS PEAK FLOW			4630*	Apr 29	NOT DETERMINED*	
INSTANTANEOUS PEAK STAGE			37.42	Apr 29	48.53	Aug 27 1995
INSTANTANEOUS LOW FLOW			0*	Sep 5	0*	Jul 8 1966
ANNUAL RUNOFF (CFSM)	1.32		1.12		1.02	
ANNUAL RUNOFF (INCHES)	17.95		15.15		13.91	
10 PERCENT EXCEEDS	109		97		90	
50 PERCENT EXCEEDS	29		22		15	
90 PERCENT EXCEEDS	2.8		.61		.99	

e Estimated.

* See REMARKS.



02077200 HYCO CREEK NEAR LEASBURG, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May 1964 to current year.

INSTRUMENTATION.--Water-temperature recorder since May 1964.

REMARKS.--Miscellaneous water-quality data published for water years, 1959, 1965-67; 1959 data published as "North Hyco Creek near Leasburg" (station 02077202). Prior to Oct. 1967, daily water-temperature data published as "North Hyco Creek near Leasburg". Interruptions in the record due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 31.3°C, July 17, 1996; minimum recorded, 0.0°C, several days during winter months in most years.

EXTREMES FOR PERIOD OCTOBER 1996 TO SEPTEMBER 1997.--

WATER TEMPERATURE: Maximum recorded, 30.1°C, Aug. 17; minimum, not determined.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.2	17.7	17.9	15.5	14.4	14.8	10.8	5.6	8.6	---	---	---
2	18.0	17.5	17.7	14.7	11.6	13.5	10.9	8.8	10.1	---	---	---
3	19.2	17.9	18.5	11.6	9.1	10.1	8.8	6.6	7.2	---	---	---
4	18.5	15.0	16.6	9.4	7.4	8.6	6.7	5.4	6.0	---	---	---
5	15.0	12.7	13.8	10.3	8.3	9.3	5.7	4.5	4.9	---	---	---
6	14.7	13.4	13.9	13.4	10.3	11.8	6.5	4.9	5.6	---	---	---
7	14.0	13.0	13.4	15.1	12.6	13.8	6.8	6.1	6.4	---	---	---
8	14.8	13.4	14.3	17.4	14.9	16.1	6.5	5.0	5.6	---	---	---
9	15.7	14.6	15.1	14.9	10.7	12.7	---	---	---	---	---	---
10	15.6	13.9	14.6	10.7	7.4	8.8	---	---	---	---	---	---
11	14.2	12.6	13.4	7.4	5.8	6.4	---	---	---	---	---	---
12	13.2	11.2	12.3	5.9	4.2	5.1	---	---	---	---	---	---
13	13.4	11.0	12.3	5.8	3.5	4.7	---	---	---	---	---	---
14	14.7	12.2	13.4	6.2	5.8	6.0	---	---	---	---	---	---
15	15.5	13.4	14.4	5.8	4.3	5.0	---	---	---	---	---	---
16	16.3	13.8	15.0	4.7	3.0	4.0	---	---	---	---	---	---
17	17.2	14.7	15.9	5.0	3.1	4.1	---	---	---	---	---	---
18	17.7	15.8	16.5	7.1	4.9	6.0	---	---	---	---	---	---
19	15.8	12.6	13.8	9.1	7.1	8.3	---	---	---	---	---	---
20	13.2	11.5	12.3	---	---	---	---	---	---	---	---	---
21	13.4	10.9	12.2	9.2	7.3	8.4	---	---	---	---	---	---
22	15.3	12.6	13.7	7.3	6.3	6.9	---	---	---	---	---	---
23	15.2	14.1	14.6	6.3	4.6	5.5	---	---	---	---	---	---
24	15.0	12.7	13.9	6.1	4.1	5.3	---	---	---	---	---	---
25	14.6	12.5	13.5	8.8	5.4	6.6	---	---	---	---	---	---
26	15.0	13.8	14.3	11.1	8.8	10.0	---	---	---	---	---	---
27	17.0	14.7	15.7	9.6	6.0	7.6	---	---	---	---	---	---
28	17.4	15.0	16.3	6.0	4.1	4.8	---	---	---	---	---	---
29	17.1	15.1	16.1	4.3	2.8	3.6	---	---	---	---	---	---
30	18.7	15.8	17.1	5.6	4.1	4.7	---	---	---	---	---	---
31	17.5	15.4	16.3	---	---	---	---	---	---	---	---	---
MONTH	19.2	10.9	14.8	---	---	---	---	---	---	---	---	---

ROANOKE RIVER BASIN

02077200 HYCO CREEK NEAR LEASBURG, NC--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	13.4	9.3	11.1	17.0	15.3	16.1
2	---	---	---	---	---	---	13.8	8.9	11.7	17.1	14.8	16.2
3	---	---	---	---	---	---	14.8	9.9	12.7	16.7	16.2	16.5
4	---	---	---	---	---	---	16.6	11.4	14.3	16.2	14.5	15.3
5	---	---	---	---	---	---	17.5	14.7	16.3	16.2	12.9	14.6
6	---	---	---	---	---	---	16.9	16.3	16.6	18.0	14.7	16.3
7	---	---	---	---	---	---	19.2	15.3	17.0	18.1	14.5	16.4
8	---	---	---	---	---	---	17.4	13.4	15.5	17.9	14.5	16.4
9	---	---	---	---	---	---	16.2	13.2	14.6	18.5	16.4	17.5
10	---	---	---	---	---	---	13.7	9.8	12.0	17.3	14.4	15.4
11	---	---	---	---	---	---	14.6	9.8	12.2	16.2	11.8	14.1
12	---	---	---	---	---	---	14.2	13.5	13.8	17.1	13.7	15.5
13	---	---	---	---	---	---	17.5	13.8	15.2	17.9	16.0	16.9
14	---	---	---	---	---	---	15.5	11.7	13.8	17.6	14.2	16.2
15	---	---	---	---	---	---	15.3	10.7	13.3	19.3	16.3	17.7
16	---	---	---	---	---	---	15.9	11.4	13.9	18.6	15.0	16.7
17	---	---	---	---	---	---	15.3	12.6	13.9	18.2	13.8	15.9
18	---	---	---	---	---	---	13.6	9.8	11.8	20.7	15.7	17.9
19	---	---	---	---	---	---	13.2	9.9	11.6	22.7	18.3	20.3
20	---	---	---	---	---	---	15.1	10.3	12.7	22.4	20.7	21.4
21	---	---	---	---	---	---	13.8	12.3	12.9	21.4	18.3	19.7
22	---	---	---	---	---	---	12.7	11.5	11.9	19.6	15.8	17.7
23	---	---	---	---	---	---	12.0	10.3	11.0	19.3	14.9	17.0
24	---	---	---	---	---	---	13.0	9.6	10.9	20.0	15.8	17.9
25	---	---	---	---	---	---	13.3	11.3	12.4	20.3	18.5	19.3
26	---	---	---	---	---	---	---	---	---	20.0	18.7	19.6
27	---	---	---	---	---	---	---	---	---	18.7	17.4	18.0
28	---	---	---	---	---	---	---	---	---	19.1	15.4	17.1
29	---	---	---	---	---	---	14.7	12.6	13.2	17.8	15.9	16.9
30	---	---	---	---	---	---	15.9	12.6	14.1	19.2	16.8	17.8
31	---	---	---	---	---	---	---	---	---	21.0	17.7	19.2
MONTH	---	---	---	---	---	---	---	---	---	22.7	11.8	17.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	21.2	19.6	20.3	22.7	21.8	22.2	24.4	19.2	21.3	22.6	20.3	21.5
2	21.6	19.8	20.6	24.2	21.6	22.7	25.0	19.7	21.9	22.6	20.5	21.6
3	20.7	16.9	18.9	26.6	22.7	24.4	24.8	20.8	22.7	22.4	20.8	21.5
4	16.9	15.7	16.3	26.5	22.5	24.5	24.8	21.7	22.7	21.3	17.5	18.9
5	17.4	14.2	15.9	25.4	23.2	24.2	23.5	20.7	21.9	17.8	15.3	16.6
6	16.5	14.8	15.3	24.0	22.5	23.1	23.6	19.5	21.3	17.6	15.2	16.4
7	15.3	14.4	14.8	23.9	21.5	22.8	22.5	20.2	21.2	18.5	16.8	17.6
8	15.4	13.7	14.6	25.1	21.1	23.1	23.3	18.9	20.8	19.1	17.5	18.3
9	16.7	13.9	15.2	25.5	22.0	23.6	23.3	19.6	21.2	20.0	18.9	19.4
10	18.9	14.3	16.4	24.4	23.1	23.8	22.9	20.2	21.5	20.6	19.1	19.9
11	20.1	16.3	18.1	25.6	21.4	23.1	24.9	20.4	22.2	21.5	19.6	20.4
12	21.0	18.6	19.8	22.8	21.0	21.3	25.2	21.4	23.0	21.2	18.7	20.1
13	22.6	19.9	21.1	---	---	---	25.7	22.2	23.7	21.5	19.0	20.3
14	22.1	21.2	21.6	---	---	---	26.3	23.0	24.3	20.9	19.1	20.1
15	22.4	19.9	21.0	25.5	22.9	23.9	26.2	23.4	24.6	20.8	19.8	20.2
16	22.1	19.0	20.5	23.8	22.0	22.7	28.3	23.6	25.4	21.2	18.7	19.8
17	23.2	19.8	21.3	24.6	21.6	22.9	30.1	24.5	26.4	21.4	18.5	19.9
18	25.2	21.4	23.1	26.3	22.9	24.3	26.8	24.8	25.6	22.4	20.0	21.0
19	25.4	22.5	23.9	25.8	23.8	24.9	25.3	23.6	24.4	22.9	20.3	21.4
20	25.0	21.8	23.5	26.6	23.8	25.0	24.1	22.6	23.0	23.2	20.1	21.5
21	25.7	22.4	24.1	26.0	24.4	25.0	24.2	22.1	23.0	22.2	18.8	20.4
22	26.3	23.2	24.7	25.8	23.9	24.6	22.9	20.6	21.8	18.8	16.5	17.5
23	26.4	23.3	24.7	24.6	23.7	24.2	21.8	18.7	20.3	18.9	15.8	17.2
24	26.0	22.4	24.2	25.5	23.7	24.4	21.3	18.2	19.7	18.4	16.0	17.0
25	26.1	23.1	24.6	24.6	22.8	23.7	21.8	18.4	19.9	16.0	15.3	15.7
26	26.5	23.5	24.9	25.1	22.7	23.9	22.5	18.7	20.4	17.1	14.2	15.6
27	25.8	23.7	24.6	27.0	24.1	25.4	23.0	19.3	20.9	17.5	15.7	16.7
28	24.3	22.0	23.1	28.5	24.9	26.4	23.8	20.0	21.6	17.6	17.2	17.4
29	24.1	20.7	22.5	26.7	24.5	25.6	23.5	20.3	21.6	18.8	17.1	17.7
30	23.3	21.0	22.2	24.5	21.3	22.9	22.7	19.2	20.8	18.5	16.1	17.3
31	---	---	---	24.1	19.3	21.3	22.3	19.5	20.8	---	---	---
MONTH	26.5	13.7	20.7	---	---	---	30.1	18.2	22.3	23.2	14.2	19.0

ROANOKE RIVER BASIN

02077303 HYCO RIVER BELOW AFTERBAY DAM NEAR MCGEHEES MILL, NC

LOCATION.--Lat 36°31'24", long 78°59'48", Person County, Hydrologic Unit 03010104, on left bank 200 ft downstream from Afterbay Reservoir dam of Carolina Power and Light Company, 1.2 mi upstream from Ghent Creek, and 1.8 mi east-northeast of McGehees Mill.

DRAINAGE AREA.--202 mi^2.

PERIOD OF RECORD.--October 1973 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 342.98 ft above sea level (levels by Carolina Power and Light Company). From August 1964 to September 1973, records published as "Hyco River at McGehees Mill, NC" at site 2.8 mi upstream, at datum 349.78 ft. Water-temperature recorder operated at site 600 ft downstream on right bank from June 1974 to Sept. 1995.

REMARKS.-- Records good except those for estimated daily discharges, and discharges above 150 ft^3/s, which are poor. Flow regulated by Roxboro Steam-Electric Generating Plant Afterbay Reservoir.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	86	353	99	104	229	e310	e2700	e81	66	36	22
2	72	87	674	100	105	108	307	793	e81	67	37	21
3	68	91	604	100	106	136	178	1340	80	67	35	21
4	68	95	585	101	106	779	97	929	83	68	33	21
5	67	94	572	127	107	1470	102	93	82	67	31	22
6	67	94	649	141	108	1490	105	92	81	69	34	21
7	67	94	457	141	108	1080	105	92	77	71	33	26
8	384	94	351	141	110	876	106	94	67	71	34	34
9	465	94	327	142	111	97	106	93	67	71	35	35
10	228	94	328	144	112	99	106	92	67	71	34	38
11	83	93	320	148	113	101	106	93	67	71	36	37
12	84	93	314	150	114	101	e105	93	66	72	33	32
13	85	93	313	446	115	102	e105	92	66	68	18	32
14	85	93	310	723	425	102	e105	92	65	67	18	32
15	85	92	306	335	1090	104	e105	87	65	67	21	32
16	85	92	226	110	2130	107	e104	72	65	66	23	34
17	86	92	230	194	1750	e106	104	72	65	66	24	33
18	86	92	228	374	933	e108	104	73	66	66	24	33
19	87	92	227	368	312	128	103	75	67	66	24	32
20	87	92	226	359	309	312	103	75	66	57	22	32
21	87	93	172	351	305	700	103	75	66	43	22	31
22	87	92	94	342	310	848	103	76	66	44	23	31
23	87	92	93	333	304	670	104	77	66	43	23	33
24	87	92	94	326	300	268	112	77	65	43	23	30
25	88	92	94	319	295	106	363	79	65	e43	24	29
26	87	92	95	99	290	e109	658	78	65	e43	22	32
27	87	92	96	96	284	e107	635	79	65	e43	22	32
28	87	92	97	97	284	e105	e850	78	65	e44	23	29
29	88	91	97	99	---	e165	e2800	79	65	e44	22	32
30	87	92	98	101	---	e320	3950	81	65	e38	23	34
31	86	---	99	103	---	e315	---	82	---	39	24	---
TOTAL	3364	2767	8729	6709	10740	11348	12244	8003	2077	1821	836	903
MEAN	109	92.2	282	216	384	366	408	258	69.2	58.7	27.0	30.1
MAX	465	95	674	723	2130	1490	3950	2700	83	72	37	38
MIN	67	86	93	96	104	97	97	72	65	38	18	21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1997, BY WATER YEAR (WY)

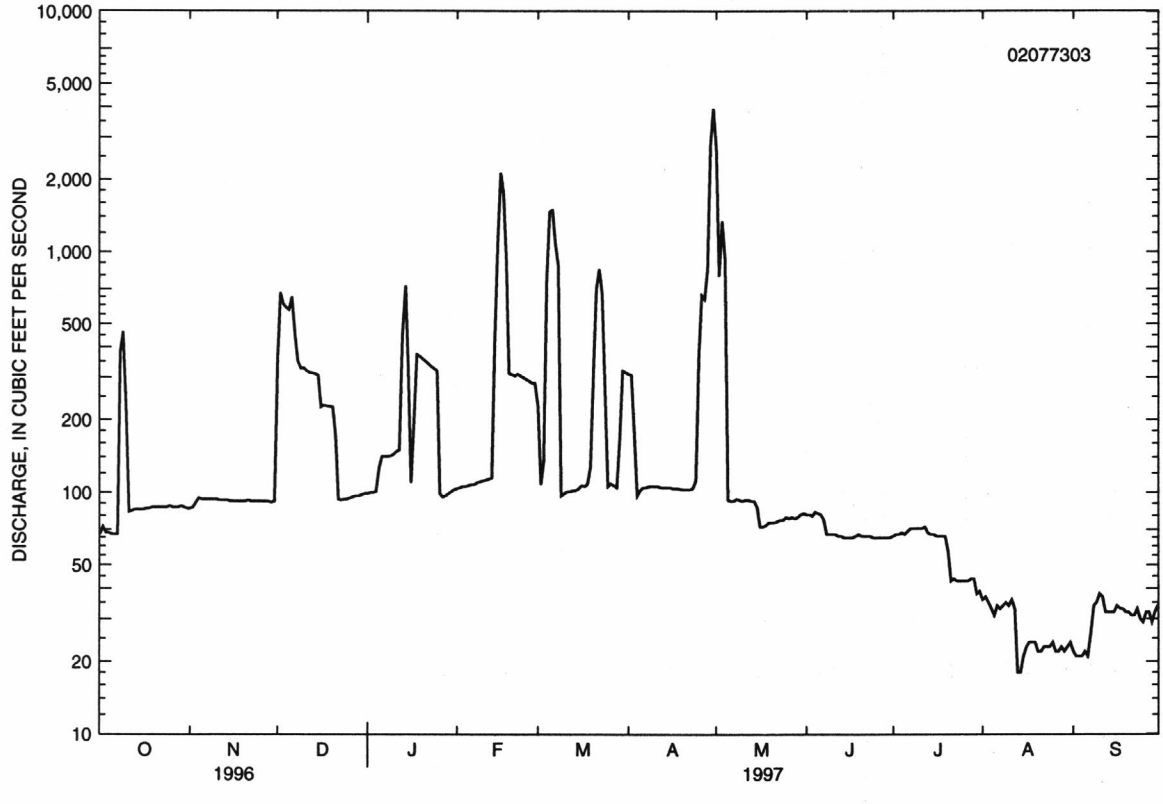
MEAN	58.6	64.5	126	380	329	429	242	122	79.1	108	75.5	126
MAX	351	334	361	1201	926	1165	692	864	456	1058	294	675
(WY)	1996	1986	1983	1978	1979	1993	1983	1978	1982	1975	1982	1974
MIN	6.56	6.78	12.1	18.9	11.0	18.3	12.9	7.90	3.96	9.60	1.43	1.55
(WY)	1974	1974	1985	1981	1981	1981	1985	1981	1974	1985	1977	1977

ROANOKE RIVER BASIN

02077303 HYCO RIVER BELOW AFTERBAY DAM NEAR MCGEHEES MILL, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1974 - 1997	
ANNUAL TOTAL	76851		69541			
ANNUAL MEAN	210		191		178	
HIGHEST ANNUAL MEAN					392	1975
LOWEST ANNUAL MEAN					17.9	1981
HIGHEST DAILY MEAN	7000	Sep 7	3950	Apr 30	9280	Jul 14 1975
LOWEST DAILY MEAN	14	Jul 21	18	Aug 13	.31	Sep 21 1977
ANNUAL SEVEN-DAY MINIMUM	14	Jul 18	22	Aug 13	.48	Sep 16 1977
INSTANTANEOUS PEAK FLOW			4200	Apr 30	11300	Jul 14 1975
INSTANTANEOUS PEAK STAGE			17.00	Apr 30	24.40	Jul 14 1975
INSTANTANEOUS LOW FLOW			3.2	Jan 15	0	Jun 26 1980
10 PERCENT EXCEEDS	350		355		395	
50 PERCENT EXCEEDS	95		92		36	
90 PERCENT EXCEEDS	18		32		11	

e Estimated.



ROANOKE RIVER BASIN

02077670 MAYO CREEK NEAR BETHEL HILL, NC

LOCATION.--Lat 36°32'26", long 78°52'21" Person County, Hydrologic Unit 03010104, on right bank 0.1 mi upstream from Virginia State line, 0.3 mi downstream of Mayo Steam Electric Generating Plant Dam, 2.9 mi northeast of Bethel Hill, and 4.8 mi downstream of Spoonwater Creek.

DRAINAGE AREA.--53.5 mi^2.

PERIOD OF RECORD.--August 1977 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 338.84 ft above sea level. (levels by Carolina Power & Light Co.). Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated by Mayo Steam Electric Generating Plant. Minimum discharge for period of record, no flow, occurred periodically in 1977, 1980, 1981, and 1982 as a result of regulation. Minimum discharge for the current water year not determined due to beaver activity.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 4, 1974, reached a stage of 11.11 ft, from floodmarks; discharge, 4,300 ft^3/s; no flow July 31, 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	5.9	58	44	59	97	66	344	15	3.2	3.5	e3.7
2	44	11	110	42	56	98	60	270	43	3.2	3.5	e3.7
3	40	10	108	40	53	119	55	236	40	3.2	3.5	e3.7
4	33	8.7	99	37	50	166	50	193	42	3.4	3.5	e3.6
5	27	7.5	94	39	50	159	46	154	39	3.5	3.6	e3.6
6	23	7.2	134	37	49	186	46	126	36	3.4	3.5	e3.6
7	20	7.2	148	33	46	164	46	106	34	3.4	3.5	e3.6
8	45	14	172	30	53	141	41	93	31	3.4	3.6	e3.5
9	60	21	152	48	61	122	35	83	28	3.4	3.5	e3.5
10	56	19	129	75	62	110	31	73	25	3.4	3.5	e3.5
11	49	17	112	78	60	100	29	64	23	3.4	e3.5	e3.5
12	43	15	100	74	57	90	32	58	23	3.4	e3.4	e3.4
13	38	13	94	68	55	83	38	49	30	3.3	3.6	e3.4
14	34	11	85	63	85	87	34	46	27	3.3	3.6	e3.5
15	30	9.2	76	58	250	92	32	41	24	3.4	3.6	e4.1
16	27	7.9	69	79	306	86	30	34	22	3.5	3.6	e3.4
17	24	7.1	64	88	266	80	27	31	20	3.5	3.7	e3.3
18	25	7.4	60	82	226	72	23	29	19	3.5	3.7	e3.3
19	29	8.5	63	75	185	106	21	28	15	3.7	3.7	e3.3
20	24	8.0	58	69	152	167	19	25	13	3.6	3.8	e3.3
21	21	9.0	52	63	136	161	18	22	11	3.4	3.7	3.2
22	19	14	47	59	139	141	29	19	8.9	e3.3	e3.7	3.2
23	19	15	44	56	121	123	53	16	6.3	e3.4	e3.8	3.2
24	15	14	43	52	108	109	84	14	5.1	e3.4	e3.8	3.2
25	13	14	44	55	96	97	86	15	4.0	3.4	e3.8	3.2
26	12	18	42	53	87	110	80	17	3.6	3.4	e3.9	3.2
27	11	19	48	50	83	115	76	15	3.4	3.4	e3.8	3.5
28	11	18	49	55	90	107	141	12	3.3	3.3	e3.8	3.3
29	9.4	17	49	61	---	99	447	10	3.2	3.4	e3.8	3.2
30	9.2	18	47	59	---	90	421	9.1	3.2	3.5	e3.8	3.2
31	6.8	---	46	61	---	79	---	8.6	---	3.5	e3.7	---
TOTAL	861.4	371.6	2496	1783	3041	3556	2196	2240.7	601.0	105.5	113.0	102.9
MEAN	27.8	12.4	80.5	57.5	109	115	73.2	72.3	20.0	3.40	3.65	3.43
MAX	60	21	172	88	306	186	447	344	43	3.7	3.9	4.1
MIN	6.8	5.9	42	30	46	72	18	8.6	3.2	3.2	3.4	3.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1997, BY WATER YEAR (WY)

MEAN	11.0	16.6	24.2	66.6	63.9	99.2	69.5	40.5	17.2	18.2	12.8	26.3
MAX	62.2	76.0	80.5	254	190	247	214	210	73.4	118	56.1	350
(WY)	1990	1980	1997	1978	1979	1987	1993	1978	1995	1995	1984	1996
MIN	.011	.011	.016	.003	.28	.14	.20	.12	.075	.24	.038	0
(WY)	1981	1981	1981	1981	1981	1981	1981	1981	1981	1981	1981	1980

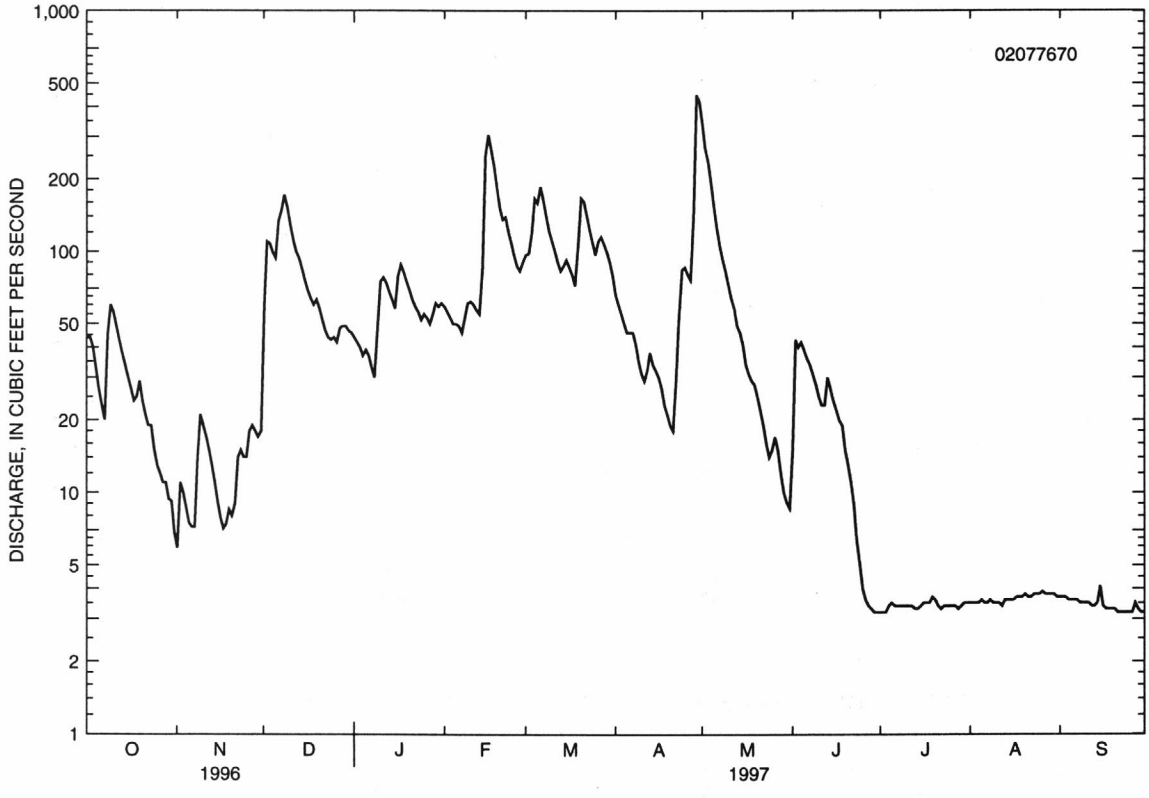
ROANOKE RIVER BASIN

02077670 MAYO CREEK NEAR BETHEL HILL, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1977 - 1997	
ANNUAL TOTAL	27972.7		17468.1			
ANNUAL MEAN	76.4		47.9		38.8	
HIGHEST ANNUAL MEAN					87.8	1978
LOWEST ANNUAL MEAN					.11	1981
HIGHEST DAILY MEAN	2260	Sep 7	447	Apr 29	2260	Sep 7 1996
LOWEST DAILY MEAN	2.9	Jul 14	3.2	Jun 29	0	Jul 31 1977
ANNUAL SEVEN-DAY MINIMUM	3.0	Jul 14	3.2	Sep 20	0	Jul 31 1977
INSTANTANEOUS PEAK FLOW			471	Apr 29	3950	Apr 26 1978
INSTANTANEOUS PEAK STAGE			4.85	Apr 29	10.83	Apr 26 1978
INSTANTANEOUS LOW FLOW			NOT DETERMINED*		0*	Aug 1 1977
10 PERCENT EXCEEDS	131		111		99	
50 PERCENT EXCEEDS	40		29		8.4	
90 PERCENT EXCEEDS	7.0		3.4		.37	

e Estimated.

* See REMARKS.



ROANOKE RIVER BASIN

02080500 ROANOKE RIVER AT ROANOKE RAPIDS, NC

LOCATION.--Lat 36°27'37", long 77°38'04", Halifax County, Hydrologic Unit 03010107, on right bank 1.2 mi downstream of bridge on State Highway 48 at Roanoke Rapids, 2.5 mi upstream from Chockoyotte Creek, 2.8 mi downstream of Roanoke Rapids dam, and 133.6 mi upstream from mouth in Albemarle Sound.

DRAINAGE AREA.--8,384 mi^2.

PERIOD OF RECORD.--December 1911 to current year. Prior to January 1933, published as "Roanoke River at Old Gaston". Records published for both sites February 1930 to December 1932. Gage-height records collected at site of auxiliary gage since November 1890 are contained in reports of National Weather Service, NOAA, U.S. Department of Commerce.

REVISED RECORDS.--WSP 712: 1930. WSP 822: 1936. WSP 1032: 1912, 1928(M), 1930(M), 1932-33(M). WSP 1433: 1912-23, 1925-28, 1930, 1932-33, 1935, 1937-39. WSP 1904: 1958, 1960. WDR NC-83-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 43.84 ft above sea level. Dec. 7, 1911, to Nov. 21, 1921, and Apr. 7 to Dec. 31, 1932, nonrecording gage and Nov. 21, 1921, to Apr. 7, 1932, water-stage recorder, both at site 9 mi upstream at different datum. Aug. 6, 1941, to Mar. 1, 1973, auxiliary water-stage recorder, 3.6 mi downstream of base gage. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated since August 1950 by Philpott Lake on Smith River, usable capacity, 6,325,000,000 ft^3; since September 1950 by John H. Kerr Reservoir, usable capacity, 101,247,000,000 ft^3; since June 1955 by Roanoke Rapids Lake (station 02080100); since September 1962 by Leesville Lake; since October 1962 by Lake Gaston (station 02079964); and since September 1963 by Smith Mountain Lake. Prior to regulation, maximum discharge: 261,000 ft^3/s, Aug. 18, 1940; gage height: 39.0 ft, from floodmarks; minimum discharge: about 250 ft^3/s, Dec. 16, 1955.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in November 1877, discharge, 212,000 ft^3/s, reached a stage about 2 ft lower at Old Gaston than flood in August 1940 which was 21.5 ft. Flood in August 1940 is the maximum known since at least 1771.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18800	4840	12200	19200	11600	16200	e9640	22300	7510	7460	2990	2620
2	18200	4700	13900	19300	15400	16300	8410	22400	7510	7840	2980	4980
3	19300	4610	13800	18000	9910	15500	6700	22400	7500	6420	4250	6420
4	19100	2080	14000	13600	11500	16300	6750	22400	7470	6310	5330	3070
5	19300	1900	14000	14000	13600	16000	6730	22400	7480	3800	4510	3850
6	19800	1900	13600	14000	15700	17200	6720	22500	7460	5180	4890	3770
7	19200	6990	14200	14000	15600	17200	6720	22500	7500	3610	2640	3200
8	19600	6730	14200	11400	15600	21500	6670	22500	7490	7970	2760	2810
9	19300	4110	16300	11400	15600	21500	7100	22500	7500	10200	2800	2770
10	19300	2710	19400	11100	15500	21500	7850	22500	7510	3350	2860	2780
11	19300	6990	19300	14000	12700	21500	7880	22500	7520	4910	4810	3330
12	19200	10200	19100	14100	15400	21500	7920	22500	7520	3650	6490	4130
13	19300	10200	19600	14100	14700	20100	7920	22500	7500	3610	4080	2550
14	19300	8560	19800	11600	18000	21500	9190	22600	7510	3450	6350	3010
15	19300	11000	19800	14400	15700	21600	11000	19100	7540	5580	7230	3160
16	18300	3940	20000	11900	15500	21600	10900	14500	7510	8120	6560	3030
17	14300	2350	20400	14500	15500	20500	9650	14500	7520	3800	3330	2840
18	13200	5390	19100	13700	11400	21500	7350	13200	10000	e5110	2730	2970
19	13400	7070	19000	14200	1940	18700	7320	10400	12200	3170	2760	3010
20	13400	7290	19500	14500	1830	13700	7360	10400	11400	3210	3070	2990
21	12200	11400	19600	11700	6430	14400	7310	9640	11600	9020	4800	2310
22	9710	13500	19600	11900	9010	12400	7250	7570	11800	3900	2240	2650
23	9810	11200	19600	11700	8150	12200	7370	7590	11500	3730	2390	2810
24	9050	4750	19500	14900	8330	16200	11600	7610	11700	7560	2580	2810
25	8480	8630	19500	11600	8700	16600	16100	7650	11300	3150	2570	3420
26	7910	5840	19500	15000	13000	13400	15800	7640	11500	3510	3710	2810
27	7850	11300	19300	11300	15400	15300	15300	7580	11600	4050	4230	2790
28	e7840	4450	19500	11000	10500	9340	15800	7560	7640	9500	6630	2840
29	e7870	10500	19500	14800	---	10100	18500	7550	7480	7350	2560	2690
30	e7900	8370	19300	11200	---	9240	22300	7520	7560	3890	3110	2290
31	e7930	---	14900	15200	---	e9280	---	7510	---	e3360	3100	---
TOTAL	457450	203500	551000	423300	342200	519860	297110	482020	264830	165770	121340	94710
MEAN	14760	6783	17770	13650	12220	16770	9904	15550	8828	5347	3914	3157
MAX	19800	13500	20400	19300	18000	21600	22300	22600	12200	10200	7230	6420
MIN	7840	1900	12200	11000	1830	9240	6670	7510	7460	3150	2240	2290
†	-7767	+1304	+530	-2803	+3152	+1402	+4336	-5006	-806	-1052	-1327	-364

ROANOKE RIVER BASIN

02080500 ROANOKE RIVER AT ROANOKE RAPIDS, NC--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997*, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5850	6620	7705	10060	10570	11020	11190	10580	7618	6054	5318	5441
MAX	20360	17690	18380	17850	19590	23950	32660	31750	15260	20560	9755	25970
(WY)	1980	1986	1973	1991	1978	1979	1993	1978	1982	1972	1975	1996
MIN	2031	1987	3417	3540	2613	2259	2527	3974	2365	2581	2519	2186
(WY)	1971	1987	1981	1989	1981	1981	1985	1981	1977	1970	1993	1968

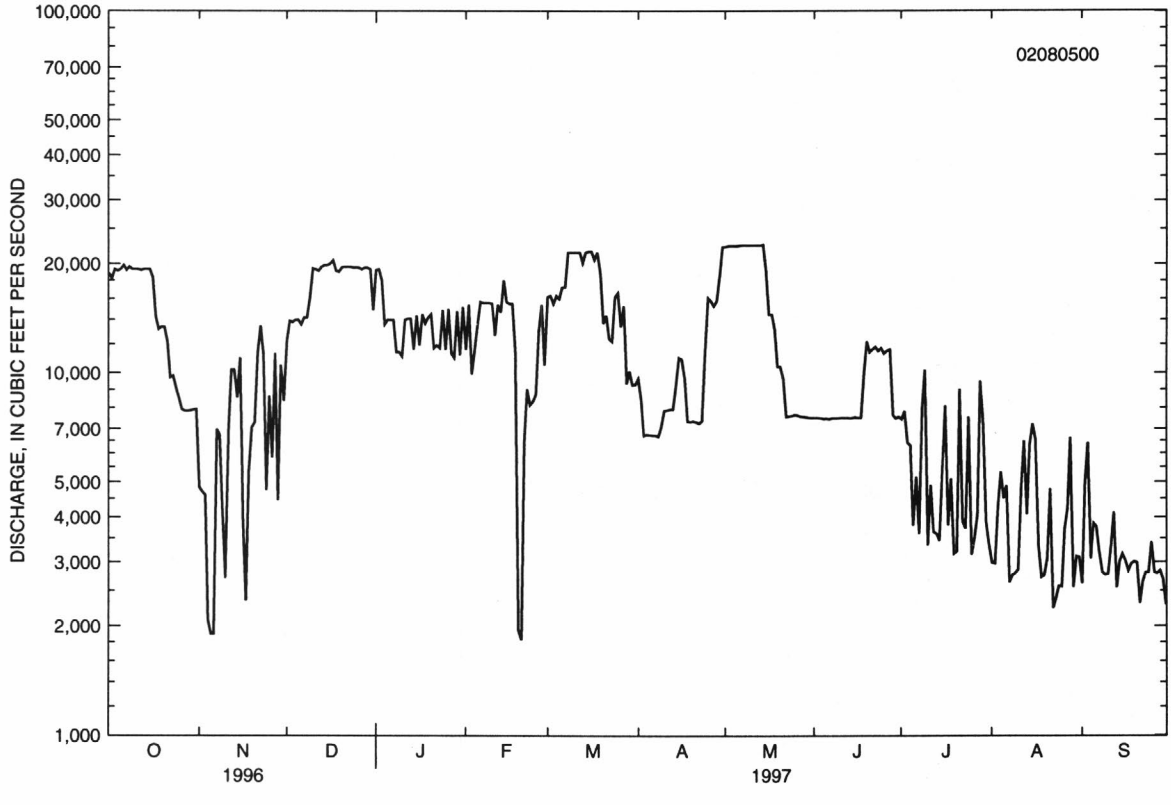
SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997*	
ANNUAL TOTAL	4609050		3923090			
ANNUAL MEAN	12590		10750	‡10002	8014	(UNADJUSTED)
HIGHEST ANNUAL MEAN					12920	1973
LOWEST ANNUAL MEAN					3117	1981
HIGHEST DAILY MEAN	36000	Sep 11	22600	May 14	36000	Sep 11 1996
LOWEST DAILY MEAN	1790	Mar 31	1830	Feb 20	818	Nov 15 1970
ANNUAL SEVEN-DAY MINIMUM	2690	Jul 25	2790	Sep 18	989	Nov 5 1986
INSTANTANEOUS PEAK FLOW			22800	Oct 5	37700	Apr 16 1993
INSTANTANEOUS PEAK STAGE			9.35	Oct 5	11.87	Apr 16 1993
INSTANTANEOUS LOW FLOW			1140	Feb 3	760	Nov 23 1970
10 PERCENT EXCEEDS	19500		19500		18900	
50 PERCENT EXCEEDS	11400		9650		6200	
90 PERCENT EXCEEDS	3830		2990		2020	

e Estimated.

† Change in contents, equivalent in cubic feet per second, in Leeville and Smith Mountain Lake, provided by Appalachian Power Co.; Philpott and Kerr Reservoirs, provided by U.S. Army Corps of Enginers; and Lake Gaston and Roanoke Rapids Lake, provided by North Carolina Power Company.

‡ Adjusted for change in contents.

* Regulated period only (1964-1997). See REMARKS.



ROANOKE RIVER BASIN

0208111310 CASHIE RIVER AT SECONDARY ROAD 1257 NEAR WINDSOR, NC

LOCATION.--Lat 36°02'51", long 76°59'07", Bertie County, Hydrologic Unit 03010107, at downstream side of bridge on Secondary Road 1257, 2.0 mi upstream from State Highway 13 near Windsor.

DRAINAGE AREA.--108 mi^2.

PERIOD OF RECORD.--1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is 15 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges and those below 10 ft^3/s, which are poor. Periods of no flow occur periodically. Minimum discharge for the current water year also occurred Aug. 19, 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	14	134	e123	109	86	75	596	4.2	.28	4.7	.07
2	6.8	18	149	e130	104	80	61	540	83	.20	2.4	.06
3	5.6	27	167	e140	97	77	50	387	254	.15	1.3	.06
4	4.3	32	239	e120	91	81	42	281	287	.12	.65	2.0
5	3.6	33	292	e95	93	88	34	222	318	.11	.33	6.5
6	3.3	34	256	e90	93	111	28	174	251	.14	.17	3.1
7	3.4	38	223	e330	94	137	30	138	153	.12	.11	.82
8	161	46	194	e290	101	139	29	107	88	.10	.08	.27
9	909	68	161	e250	149	122	33	82	54	.09	.07	.32
10	1350	88	134	e230	211	105	32	64	34	.09	.06	5.4
11	1140	91	114	e190	222	94	30	49	20	.09	.06	2.4
12	716	69	100	e170	215	84	34	34	17	.08	.07	1.1
13	433	54	89	e150	191	72	40	26	32	.08	.05	.48
14	275	47	81	e200	194	73	38	20	31	.07	.05	.19
15	183	40	106	e180	346	117	33	15	28	.07	.04	.12
16	128	37	257	e170	622	190	28	13	43	.06	.05	.11
17	92	35	465	e150	668	219	24	11	32	.21	.04	.11
18	67	33	480	e130	534	193	20	8.0	22	.16	.03	.09
19	63	35	397	e120	382	176	18	5.6	25	.08	.03	.08
20	60	35	295	e100	283	271	15	3.6	19	.07	.04	.08
21	65	35	235	e120	226	501	14	3.4	11	.16	.11	.07
22	58	e73	197	e115	193	548	31	2.6	5.9	.13	.08	.05
23	64	e95	e178	e120	166	416	54	1.8	3.1	.09	.07	.05
24	86	e105	e160	e122	144	285	89	1.2	1.8	.08	.06	.04
25	82	72	e160	119	125	201	113	.82	.74	5.5	.07	.05
26	66	64	e150	118	110	155	120	.91	.43	1.3	.09	.05
27	50	59	e160	120	101	130	117	1.0	1.3	5.9	.09	.05
28	39	66	e175	116	93	115	131	1.2	2.0	30	.10	.07
29	30	85	153	116	---	110	280	1.4	1.1	32	.09	.07
30	22	123	138	116	---	103	576	1.7	.55	17	.07	.05
31	17	---	130	114	---	92	---	1.4	---	8.4	.07	---
TOTAL	6191.2	1651	6169	4654	5957	5171	2219	2793.63	1823.12	102.93	11.23	23.91
MEAN	200	55.0	199	150	213	167	74.0	90.1	60.8	3.32	.36	.80
MAX	1350	123	480	330	668	548	576	596	318	32	4.7	6.5
MIN	3.3	14	81	90	91	72	14	.82	.43	.06	.03	.04
CFSM	1.85	.51	1.84	1.39	1.97	1.54	.68	.83	.56	.03	0	.01
IN.	2.13	.57	2.12	1.60	2.05	1.78	.76	.96	.63	.04	0	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1997, BY WATER YEAR (WY)

MEAN	44.7	45.0	90.3	188	182	271	149	68.7	49.6	33.4	99.0	46.3
MAX	200	158	254	509	294	663	326	321	129	102	488	369
(WY)	1997	1993	1990	1993	1996	1989	1989	1989	1992	1991	1992	1996
MIN	0	.065	1.70	52.6	64.1	58.3	5.25	1.07	.010	0	.009	0
(WY)	1995	1995	1995	1995	1991	1988	1995	1994	1994	1994	1993	1994

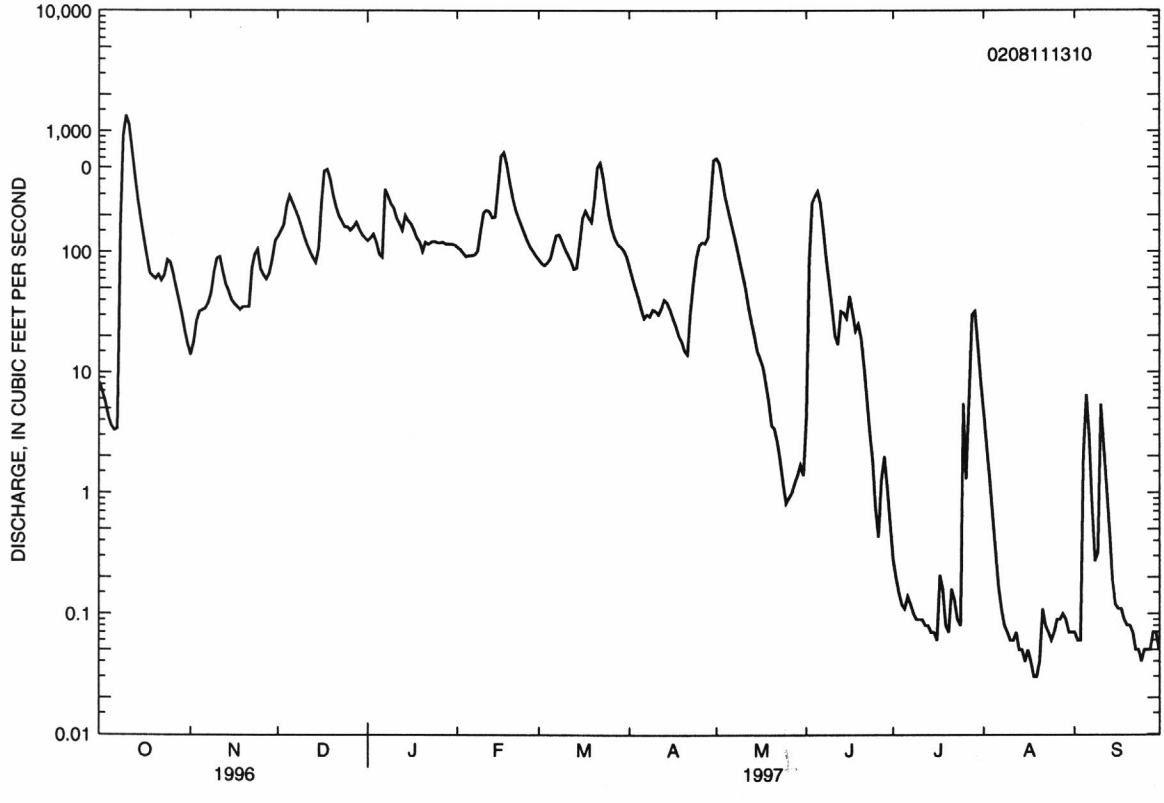
ROANOKE RIVER BASIN

0208111310 CASHIE RIVER AT SECONDARY ROAD 1257 NEAR WINDSOR, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1987 - 1997	
ANNUAL TOTAL	56704.00		36767.02			
ANNUAL MEAN	155		101		107	
HIGHEST ANNUAL MEAN					156	1989
LOWEST ANNUAL MEAN					57.1	1988
HIGHEST DAILY MEAN	1350	Oct 10	1350	Oct 10	3000	Aug 19 1992
LOWEST DAILY MEAN	.04	Jul 11	.03	Aug 18	0	Jul 30 1987
ANNUAL SEVEN-DAY MINIMUM	.06	Jul 5	.04	Aug 14	0	Oct 8 1987
INSTANTANEOUS PEAK FLOW			1400	Oct 10	3150	Aug 18 1992
INSTANTANEOUS PEAK STAGE			8.92	Oct 10	11.51	Aug 18 1992
INSTANTANEOUS LOW FLOW			.03*	Aug 18	0*	Jul 29 1987
ANNUAL RUNOFF (CFSM)	1.43		.93		.99	
ANNUAL RUNOFF (INCHES)	19.53		12.66		13.48	
10 PERCENT EXCEEDS	387		250		278	
50 PERCENT EXCEEDS	92		50		27	
90 PERCENT EXCEEDS	3.4		.08		.08	

e Estimated.

* See REMARKS.



PAMLICO RIVER BASIN

02081500 TAR RIVER NEAR TAR RIVER, NC

LOCATION.--Lat 36°11'41", long 78°35'00", Granville County, Hydrologic Unit 03020101, on right bank 90 ft upstream from bridge on State Highway 96, 1.2 mi upstream from Fishing Creek, 2.5 mi east of town of Tar River, and 8 mi south of Oxford.

DRAINAGE AREA.--167 mi^2.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 972: 1940-41. WSP 1112: 1941 (calendar year figures). WSP 1273: 1941(M). WSP 1723:

GAGE.--Water-stage recorder with satellite telemetry and concrete control with sharp-crested weir. Datum of gage is 287.25 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Occasional intermittent diversion for irrigation. Maximum discharge for period of record from rating curve extended above 11,500 ft^3/s, by logarithmic plotting. Minimum discharge for the current water year also occurred on Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	34	822	e145	206	302	79	363	31	16	10	3.0
2	51	50	2310	e125	165	232	71	232	79	15	9.7	3.4
3	65	82	624	e105	132	227	69	300	1440	15	8.8	3.0
4	51	60	308	100	116	595	66	456	434	14	8.2	2.6
5	39	49	220	93	115	305	63	214	175	14	8.0	2.2
6	34	46	978	97	143	487	64	139	89	13	7.9	1.8
7	32	45	546	93	128	344	71	104	78	12	7.5	1.8
8	889	447	707	81	162	206	66	87	69	11	7.1	1.9
9	1210	1230	391	435	447	158	59	78	58	11	7.2	1.7
10	284	313	249	1050	254	130	53	74	49	10	6.9	2.0
11	144	163	187	447	187	118	51	69	44	9.8	6.5	3.3
12	90	108	157	260	153	102	63	64	41	8.9	6.2	4.6
13	70	85	141	184	129	91	210	60	69	8.1	5.7	3.1
14	60	75	150	145	1010	109	138	57	82	7.7	5.3	2.3
15	53	67	131	123	2140	243	84	56	86	7.1	5.1	2.7
16	48	61	108	651	1580	176	69	51	56	6.7	4.3	4.9
17	43	58	100	685	450	113	63	47	44	6.9	4.0	6.3
18	42	58	103	269	293	95	59	45	37	7.8	3.6	6.1
19	248	66	198	166	229	302	53	43	33	10	3.2	4.5
20	111	69	272	138	190	1090	50	41	30	10	69	3.5
21	69	73	157	130	161	396	49	38	26	9.0	405	2.9
22	55	379	116	124	151	246	173	36	25	10	70	2.5
23	48	246	103	140	140	173	658	34	23	20	33	2.1
24	44	133	101	132	116	126	728	33	21	69	19	2.2
25	42	99	167	370	101	105	314	32	20	51	12	4.6
26	39	302	164	391	97	109	170	39	19	40	8.2	4.0
27	40	509	357	210	101	145	120	38	18	24	6.4	2.9
28	40	199	349	291	133	121	1330	35	16	17	5.1	2.7
29	35	130	222	609	---	100	3380	32	16	13	4.2	2.4
30	36	107	176	296	---	91	1220	30	16	12	3.4	2.0
31	35	---	148	232	---	86	---	31	---	11	3.1	---
TOTAL	4091	5343	10762	8317	9229	7123	9643	2958	3224	490.0	763.6	93.0
MEAN	132	178	347	268	330	230	321	95.4	107	15.8	24.6	3.10
MAX	1210	1230	2310	1050	2140	1090	3380	456	1440	69	405	6.3
MIN	32	34	100	81	97	86	49	30	16	6.7	3.1	1.7
CFSM	.79	1.07	2.08	1.61	1.97	1.38	1.92	.57	.64	.09	.15	.02
IN.	.91	1.19	2.40	1.85	2.06	1.59	2.15	.66	.72	.11	.17	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

MEAN	66.9	115	150	256	320	328	215	123	78.9	80.6	79.0	73.3
MAX	565	599	558	819	798	917	676	475	488	677	542	825
(WY)	1972	1973	1973	1978	1960	1975	1978	1978	1982	1975	1955	1996
MIN	.41	.28	4.39	7.04	62.6	61.0	33.1	16.9	4.30	.92	1.39	.28
(WY)	1971	1942	1942	1942	1968	1981	1995	1941	1970	1966	1976	1968

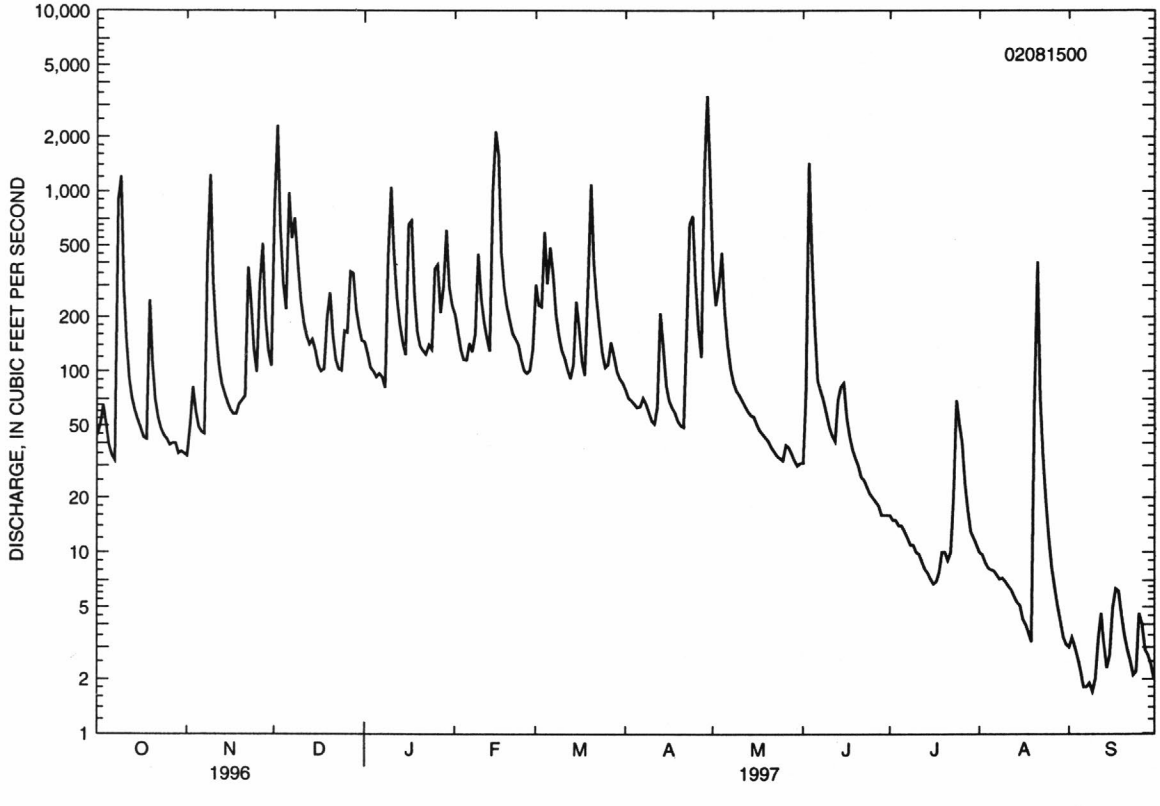
PAMLICO RIVER BASIN

02081500 TAR RIVER NEAR TAR RIVER, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1940 - 1997	
ANNUAL TOTAL	89376.2		62036.6			
ANNUAL MEAN	244		170		156	
HIGHEST ANNUAL MEAN					336	1973
LOWEST ANNUAL MEAN					51.0	1981
HIGHEST DAILY MEAN	10800	Sep 7	3380	Apr 29	10800	Sep 7 1996
LOWEST DAILY MEAN	4.9	Jul 11	1.7	Sep 9	.02	Aug 13 1977
ANNUAL SEVEN-DAY MINIMUM	5.8	Jul 2	2.0	Sep 4	.07	Aug 8 1977
INSTANTANEOUS PEAK FLOW			3780	Apr 29	19900*	Sep 6 1996
INSTANTANEOUS PEAK STAGE			10.14	Apr 29	24.06	Sep 6 1996
INSTANTANEOUS LOW FLOW			1.6*	Sep 6	0	Aug 14 1977
ANNUAL RUNOFF (CFSM)	1.46		1.02		.94	
ANNUAL RUNOFF (INCHES)	19.91		13.82		12.72	
10 PERCENT EXCEEDS	455		391		328	
50 PERCENT EXCEEDS	98		69		45	
90 PERCENT EXCEEDS	17		5.1		3.7	

e Estimated.

* See REMARKS.



PAMLICO RIVER BASIN

02081747 TAR RIVER AT U.S. 401 AT LOUISBURG, NC

LOCATION.--Lat 36°05'34", long 78°17'48", Franklin County, Hydrologic Unit 03020101, on left bank 0.1 mi downstream of bridge on U.S. Highway 401 (Bickett Boulevard) at Louisburg, and 0.2 mi upstream from Fox Creek.

DRAINAGE AREA.--427 mi^2.

PERIOD OF RECORD.--October 1963 to current year. Published as "Tar River at Louisburg, NC" (02081740) October 1963 to September 1973. Prior to October 1972, medium- and high-water discharges only.

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

GAGE.--Water-stage recorder. Datum of gage is 176.71 ft above sea level. Prior to Nov. 21, 1973, nonrecording gage at bridge 0.4 mi upstream at 178.53 ft; Nov. 22, 1973, to June 24, 1980, at site 0.1 mi upstream at same datum. National Weather Service telemetry at station.

REMARKS.--Records fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of December 1934, September 1945, and August 1955 reached stages of 26, 24, and 24 ft, respectively, at site and datum 0.4 mi upstream, from U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	356	168	657	498	602	350	282	4310	173	71	61	78
2	300	224	2880	460	528	450	253	1110	387	79	56	180
3	316	327	4660	413	445	404	236	723	1260	79	52	90
4	276	289	2340	384	394	732	230	1130	2880	73	49	53
5	215	224	772	363	376	774	223	825	1310	69	54	45
6	177	211	1330	356	402	610	223	567	466	63	58	41
7	162	209	2130	338	403	832	314	453	342	61	58	40
8	1460	321	1460	308	418	467	279	374	298	58	54	38
9	4370	2020	1370	477	798	344	229	330	242	56	48	38
10	4450	2710	829	2040	783	288	205	310	201	57	44	78
11	1130	732	650	1900	566	264	194	283	173	57	43	111
12	521	464	565	853	476	235	207	263	155	54	43	105
13	384	357	522	616	416	205	355	249	172	50	42	76
14	317	305	506	505	1250	289	470	244	269	48	41	56
15	281	275	479	439	3380	547	301	246	282	47	39	66
16	253	248	440	650	4970	476	237	221	227	50	38	188
17	233	233	401	1970	4690	312	213	199	165	88	36	142
18	227	228	391	1020	1200	250	201	187	144	87	35	76
19	395	251	507	584	636	369	187	178	128	67	33	60
20	580	261	737	519	526	1790	181	170	115	55	38	54
21	333	261	605	458	442	1860	180	161	105	53	788	49
22	260	675	452	428	405	816	330	148	97	56	483	45
23	231	925	404	443	362	605	899	144	91	92	143	42
24	216	543	388	447	306	470	1680	137	85	177	83	44
25	211	394	434	492	271	394	1060	133	80	445	62	60
26	193	431	527	1050	254	391	576	176	77	189	53	81
27	185	1090	727	691	254	416	407	205	82	113	48	73
28	187	726	1080	554	266	404	857	161	84	83	45	59
29	184	458	758	1200	---	357	4210	139	79	70	43	56
30	176	379	606	968	---	323	6500	130	73	62	41	53
31	173	---	524	675	---	301	---	126	---	62	50	---
TOTAL	18752	15939	30131	22099	25819	16325	21719	14032	10242	2671	2761	2177
MEAN	605	531	972	713	922	527	724	453	341	86.2	89.1	72.6
MAX	4450	2710	4660	2040	4970	1860	6500	4310	2880	445	788	188
MIN	162	168	388	308	254	205	180	126	73	47	33	38
CFSM	1.42	1.24	2.28	1.67	2.16	1.23	1.70	1.06	.80	.20	.21	.17
IN.	1.63	1.39	2.62	1.93	2.25	1.42	1.89	1.22	.89	.23	.24	.19

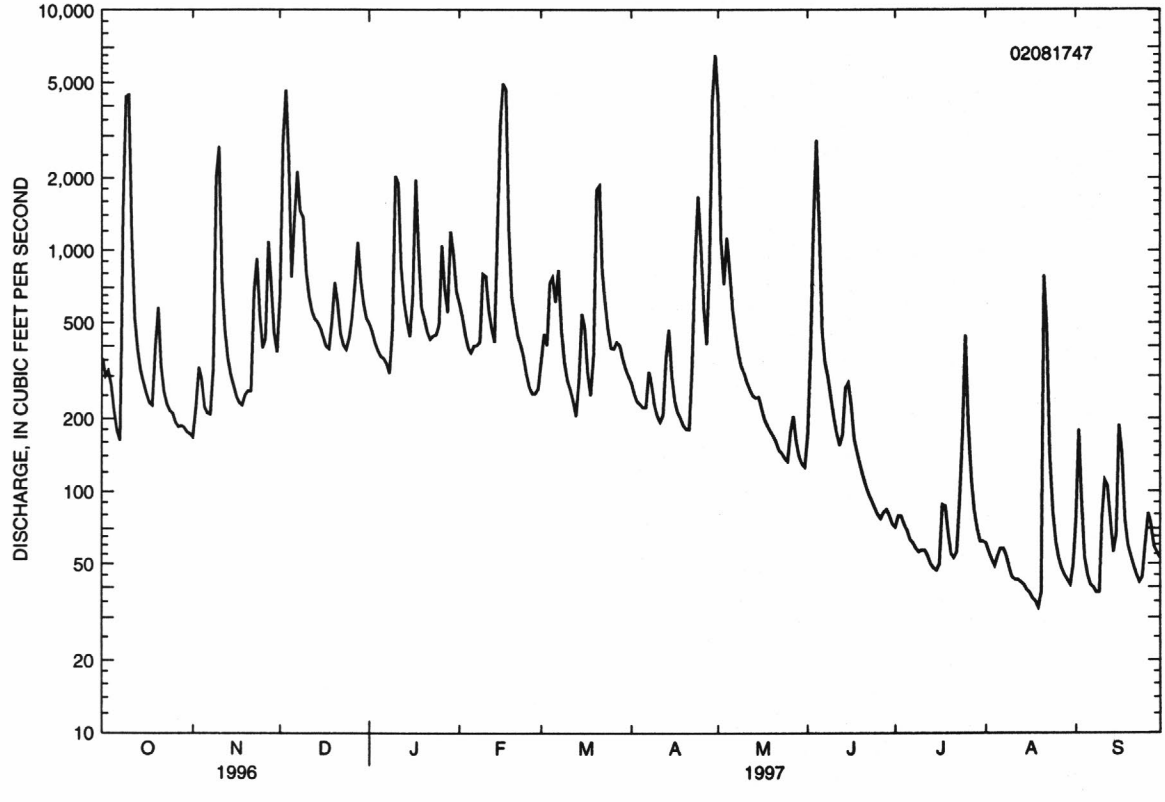
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

MEAN	168	308	415	810	777	962	624	386	261	237	162	222
MAX	605	1192	1108	1845	1616	2178	1557	984	1451	1692	512	2140
(WY)	1997	1986	1984	1978	1983	1993	1993	1989	1982	1975	1986	1996
MIN	28.5	47.2	86.5	78.0	202	214	127	104	35.4	43.3	26.8	19.7
(WY)	1987	1992	1981	1981	1977	1988	1995	1995	1986	1986	1988	1980

PAMLICO RIVER BASIN

02081747 TAR RIVER AT U.S. 401 AT LOUISBURG, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997	
ANNUAL TOTAL	251148		182667			
ANNUAL MEAN	686		500		443	
HIGHEST ANNUAL MEAN					729	1984
LOWEST ANNUAL MEAN					131	1981
HIGHEST DAILY MEAN	18200	Sep 8	6500	Apr 30	18200	Sep 8 1996
LOWEST DAILY MEAN	35	Jul 6	33	Aug 19	8.1	Aug 14 1977
ANNUAL SEVEN-DAY MINIMUM	38	Jul 2	37	Aug 14	9.2	Sep 16 1985
INSTANTANEOUS PEAK FLOW			6800	Apr 30	21100	Sep 7 1996
INSTANTANEOUS PEAK STAGE			20.95	Apr 30	25.34	Sep 7 1996
INSTANTANEOUS LOW FLOW			31	Aug 20	7.3	Aug 14 1977
ANNUAL RUNOFF (CFSM)	1.61		1.17		1.04	
ANNUAL RUNOFF (INCHES)	21.88		15.91		14.11	
10 PERCENT EXCEEDS	1450		1050		1020	
50 PERCENT EXCEEDS	360		276		208	
90 PERCENT EXCEEDS	76		54		42	



PAMLICO RIVER BASIN

02082506 TAR RIVER BELOW TAR RIVER RESERVOIR NEAR ROCKY MOUNT, NC

LOCATION.--Lat 35°53'58", long 77°51'57", Nash County, Hydrologic Unit 03020101, near center of span on downstream side of bridge on Secondary Road 1544, 1.8 mi downstream of Tar River Reservoir, 2.8 mi downstream of Sapony Creek, 2.9 mi upstream from Grape Branch, and 5.0 mi southwest of Rocky Mount.

DRAINAGE AREA.--777 mi^2.

PERIOD OF RECORD.--August 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 85.9 ft above sea level (levels by North Carolina State Highway Commission). National Weather Service telephone telemetry at station.

REMARKS.--Records fair. The city of Rocky Mount diverted an average of 11.6 ft^3/s for municipal water supply, most of which was returned downstream of station as treated effluent. Minimum for period of record also occurred Oct. 29, 30, 1993.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1280	388	944	1050	1230	867	696	5240	374	165	207	137
2	941	451	1790	1040	1090	916	649	6510	401	167	177	131
3	687	556	2980	988	990	1030	597	7160	574	165	158	130
4	600	683	3720	927	891	1050	557	3350	1400	156	142	140
5	536	696	3900	884	823	1300	535	1830	2570	150	129	140
6	464	602	2150	815	785	1600	523	1450	2020	151	128	138
7	414	535	1920	782	780	1420	533	1050	979	148	127	129
8	1520	561	2650	742	859	1550	604	849	712	147	134	128
9	3490	934	2290	929	986	1180	631	749	603	148	134	126
10	4810	2190	2040	1720	1310	971	557	665	515	146	127	139
11	5210	2920	1480	2720	1390	855	495	610	447	152	132	128
12	4220	1840	1170	2890	1110	785	466	583	411	148	146	131
13	1620	1010	1030	1790	941	727	488	419	380	147	140	117
14	968	792	957	1240	1490	810	556	377	346	149	134	152
15	766	689	917	1030	2790	1070	742	477	370	147	136	156
16	676	634	874	1080	4130	1360	656	465	385	147	137	176
17	586	599	839	1470	4660	1290	547	457	433	123	135	161
18	549	568	803	2380	4860	1010	496	439	439	121	140	194
19	741	564	1200	1890	4330	1060	452	410	372	130	142	190
20	925	582	1540	1230	1890	1930	431	404	332	132	146	161
21	1050	609	1630	1030	1340	2880	424	403	291	128	145	131
22	856	755	1410	959	1200	3010	654	366	261	127	139	121
23	679	1120	1090	950	1110	1830	980	345	225	126	243	124
24	566	1460	946	955	1020	1270	1760	336	207	129	311	119
25	505	1120	906	1020	920	1030	2290	325	195	888	257	133
26	472	963	920	1100	847	931	1830	327	186	1680	208	113
27	452	955	1030	1520	845	899	1180	330	192	1080	168	120
28	430	1460	1300	1310	813	897	1070	365	186	610	146	116
29	409	1350	1630	1130	---	903	2160	388	175	377	125	133
30	414	975	1400	1600	---	825	3890	383	169	300	121	130
31	393	---	1170	1610	---	778	---	358	---	249	121	---
TOTAL	37229	28561	48626	40781	45430	38034	27449	37420	16150	8633	4835	4144
MEAN	1201	952	1569	1316	1623	1227	915	1207	538	278	156	138
MAX	5210	2920	3900	2890	4860	3010	3890	7160	2570	1680	311	194
MIN	393	388	803	742	780	727	424	325	169	121	121	113

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1997, BY WATER YEAR (WY)

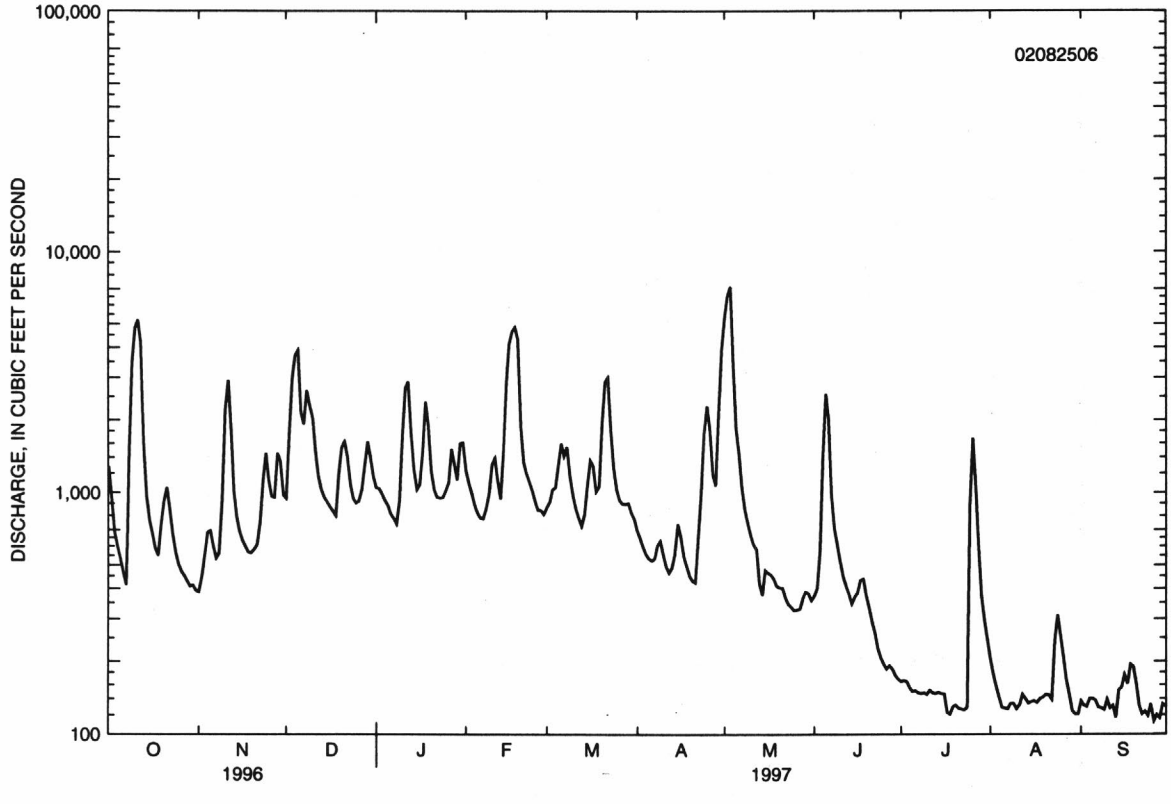
MEAN	335	565	768	1367	1392	1730	1139	746	555	469	362	349
MAX	1201	1876	2406	2794	2803	3438	2864	2123	2064	2321	1045	3258
(WY)	1997	1973	1973	1978	1983	1989	1987	1989	1982	1975	1973	1996
MIN	60.2	66.2	109	186	456	358	284	192	101	67.9	77.9	75.4
(WY)	1994	1981	1992	1981	1991	1981	1981	1995	1991	1986	1988	1993

PAMLICO RIVER BASIN

02082506 TAR RIVER BELOW TAR RIVER RESERVOIR NEAR ROCKY MOUNT, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1972 - 1997	
ANNUAL TOTAL	437466		337292			
ANNUAL MEAN	1195		924		813	
HIGHEST ANNUAL MEAN					1471	1973
LOWEST ANNUAL MEAN					211	1981
HIGHEST DAILY MEAN	13400	Sep 11	7160	May 3	13400	Sep 11 1996
LOWEST DAILY MEAN	105	Jul 8	113	Sep 26	29	Oct 28 1993
ANNUAL SEVEN-DAY MINIMUM	122	Jul 6	121	Sep 22	36	Oct 27 1993
INSTANTANEOUS PEAK FLOW			7380	May 3	13700	Sep 11 1996
INSTANTANEOUS PEAK STAGE			16.29	May 3	22.99	Sep 11 1996
INSTANTANEOUS LOW FLOW			105	Sep 26	28*	Oct 28 1993
10 PERCENT EXCEEDS	2190		1860		1930	
50 PERCENT EXCEEDS	792		676		383	
90 PERCENT EXCEEDS	211		134		96	

* See REMARKS.



PAMLICO RIVER BASIN

02082585 TAR RIVER AT NC 97 AT ROCKY MOUNT, NC

LOCATION.--Lat 35°57'15", long 77°47'15", Edgecombe County, Hydrologic Unit 03020101, on left bank 20 ft downstream of bridge on State Highway 97, 0.5 mi upstream from Cowlick Branch, and 1.0 mi north-northeast of Rocky Mount.

DRAINAGE AREA.--925 mi^2.

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

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

GAGE.--Water-stage recorder. Datum of gage is 53.88 ft above sea level. City of Rocky Mount telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Prior to October 1996, some regulation at low flow caused by mill above station. The city of Rocky Mount diverted an average of 23.0 ft^3/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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1270	450	1030	1120	1290	896	745	5860	356	171	215	116
2	1000	489	1670	1140	1140	928	635	6700	484	168	204	107
3	757	638	2880	1100	1060	1030	638	7360	616	153	94	109
4	683	780	3820	1040	964	1050	612	5140	1150	147	97	103
5	492	788	4130	996	903	1200	550	1930	2230	146	120	104
6	567	672	2510	923	850	1600	556	1530	2040	142	117	103
7	420	603	1840	873	849	1400	599	1110	1030	143	105	101
8	2080	623	2640	828	960	1500	624	907	775	140	111	98
9	4030	886	2330	1100	1110	1190	690	827	618	131	109	112
10	5700	1880	2060	1830	1330	991	635	668	522	122	107	136
11	6190	2780	1530	2780	1450	898	555	690	507	125	105	177
12	5280	1980	1220	3180	1180	771	527	580	436	124	104	154
13	2110	1080	1090	1960	1030	723	512	582	388	124	106	152
14	1080	884	1020	1330	1700	878	558	349	344	126	105	177
15	852	701	977	1110	3020	1150	774	513	394	128	103	195
16	739	679	936	1220	4630	1370	707	513	400	128	102	231
17	649	594	907	1500	5280	1300	556	507	419	128	99	172
18	624	663	884	2300	5300	1040	559	407	445	117	96	128
19	866	628	1400	2010	4920	1200	517	486	404	116	102	165
20	997	617	1720	1310	2220	2100	389	394	355	118	175	190
21	1120	655	1850	1100	1360	3110	524	450	323	119	375	142
22	972	826	1600	1040	1220	3410	748	377	293	151	251	104
23	760	1090	1220	1050	1150	2010	1030	363	230	292	212	104
24	634	1450	1060	1050	1050	1320	1690	348	230	420	332	110
25	562	1180	1020	1120	952	1070	2250	333	191	762	306	129
26	550	1060	1020	1160	880	993	1940	348	192	1760	204	136
27	515	1050	1110	1480	883	949	1250	361	194	1560	155	104
28	493	1390	1290	1380	855	932	1160	375	186	840	119	128
29	475	1380	1610	1190	---	946	2130	407	185	465	101	138
30	462	1050	1450	1500	---	872	4160	415	182	351	98	136
31	455	---	1230	1630	---	829	---	377	---	253	98	---
TOTAL	43384	29546	51054	43350	49536	39656	28820	41207	16119	9670	4627	4061
MEAN	1399	985	1647	1398	1769	1279	961	1329	537	312	149	135
MAX	6190	2780	4130	3180	5300	3410	4160	7360	2230	1760	375	231
MIN	420	450	884	828	849	723	389	333	182	116	94	98

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1997, BY WATER YEAR (WY)

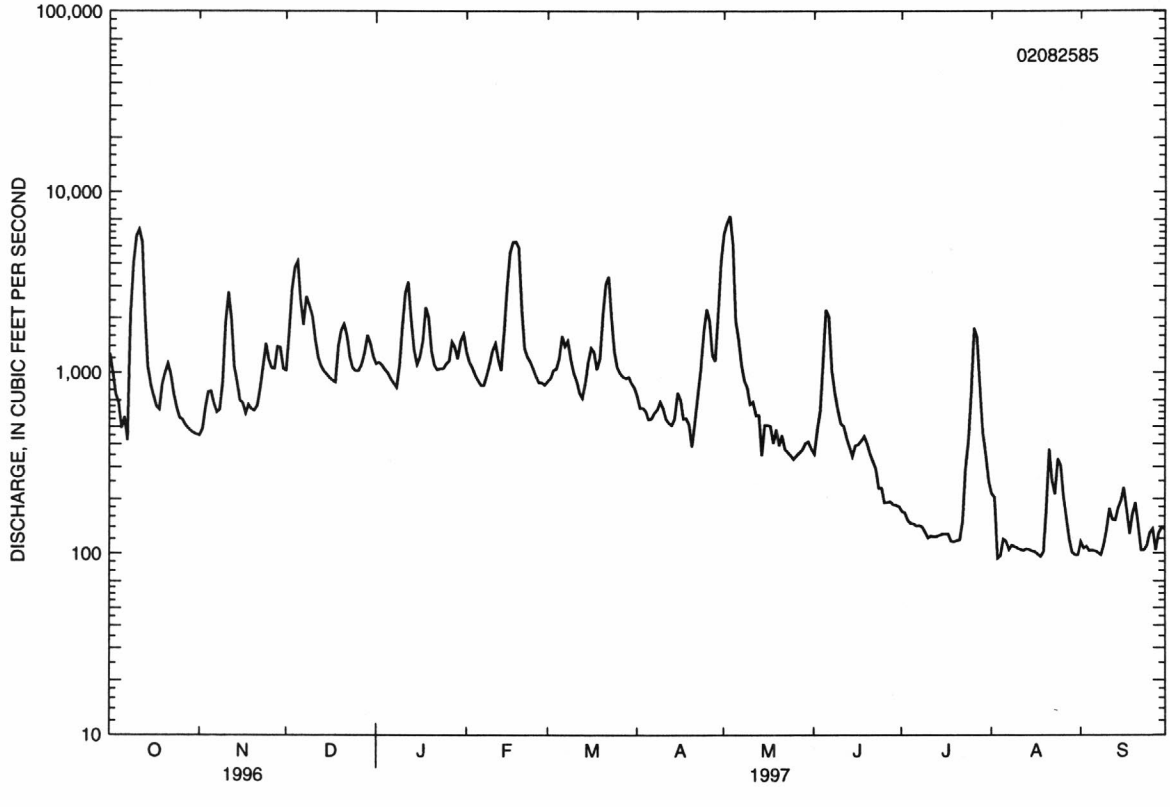
MEAN	382	622	814	1555	1569	2081	1361	905	662	398	399	369
MAX	1418	1905	1720	3230	3280	4301	3447	2725	2238	1316	977	3878
(WY)	1996	1980	1984	1978	1983	1989	1987	1989	1982	1984	1989	1996
MIN	70.4	74.5	125	254	546	477	332	210	128	54.1	79.7	70.6
(WY)	1981	1981	1992	1981	1977	1981	1995	1995	1986	1986	1987	1993

PAMLICO RIVER BASIN

02082585 TAR RIVER AT NC 97 AT ROCKY MOUNT, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1977 - 1997	
ANNUAL TOTAL	497394		361030			
ANNUAL MEAN	1359		989		944	
HIGHEST ANNUAL MEAN					1500	1984
LOWEST ANNUAL MEAN					262	1981
HIGHEST DAILY MEAN	15000	Sep 12	7360	May 3	15000	Sep 12 1996
LOWEST DAILY MEAN	109	Jul 20	94	Aug 3	6.6	Oct 3 1983
ANNUAL SEVEN-DAY MINIMUM	133	Jul 1	102	Aug 13	31	Oct 18 1993
INSTANTANEOUS PEAK FLOW			7590	May 3	15100	Sep 12 1996
INSTANTANEOUS PEAK STAGE			18.27	May 3	25.88	Sep 12 1996
INSTANTANEOUS LOW FLOW			52	Aug 3	5.7*	Sep 23 1988
10 PERCENT EXCEEDS	2630		2010		2210	
50 PERCENT EXCEEDS	865		739		446	
90 PERCENT EXCEEDS	221		119		96	

* See REMARKS.



PAMLICO RIVER BASIN

02082770 SWIFT CREEK AT HILLIARDSTON, NC

LOCATION.--Lat 36°06'42", long 77°55'16", Nash County, Hydrologic Unit 03020101, near left bank at downstream side of bridge on Secondary Road 1310, 0.7 mi northeast of Hilliardston, and 2.8 mi downstream of Gideon Swamp.

DRAINAGE AREA.--166 mi^2.

PERIOD OF RECORD.--July 1963 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 130.42 ft above sea level. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1924 reached a stage of 14.5 ft, from information by North Carolina State Highway Commission, discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	339	110	214	215	209	166	143	1360	102	51	41	21
2	214	134	544	208	189	166	135	1490	201	51	37	35
3	161	189	566	194	173	190	137	569	425	53	33	99
4	151	173	558	179	162	225	131	307	501	52	29	53
5	129	158	437	170	158	208	128	246	577	57	25	32
6	117	139	319	165	158	235	129	217	680	52	24	23
7	114	132	334	156	155	205	144	179	322	47	28	19
8	668	134	390	147	180	183	165	159	196	47	36	16
9	1300	350	364	266	257	166	154	147	162	45	34	15
10	1150	426	298	510	244	155	136	139	139	48	30	15
11	1010	348	247	429	224	150	124	133	123	41	27	90
12	651	230	211	356	185	143	123	127	112	38	31	63
13	268	173	199	249	167	137	134	125	103	35	36	62
14	193	153	202	203	422	152	145	123	102	32	39	50
15	163	145	197	182	739	258	143	121	105	30	28	40
16	145	139	182	262	775	292	132	117	106	28	22	41
17	134	133	170	357	780	230	123	111	99	27	18	52
18	127	131	166	308	738	175	120	106	96	29	17	168
19	223	137	331	242	440	276	119	101	91	41	15	96
20	271	144	381	195	286	469	116	97	92	54	16	51
21	192	145	286	195	244	400	115	94	84	45	41	39
22	168	252	229	183	230	361	174	91	77	41	56	33
23	140	285	195	201	216	253	284	88	71	78	117	28
24	129	258	184	194	192	202	342	86	66	510	83	27
25	123	208	200	208	175	179	293	88	65	1090	43	30
26	119	193	195	240	164	172	224	91	62	181	30	40
27	115	231	265	210	161	183	174	97	61	95	24	46
28	113	215	358	208	164	178	212	100	60	69	20	50
29	115	191	319	270	---	171	1140	97	58	54	18	47
30	115	165	257	254	---	159	1060	90	54	46	17	42
31	112	---	221	244	---	150	---	87	---	43	16	---
TOTAL	8969	5821	9019	7400	8187	6589	6699	6983	4992	3110	1031	1423
MEAN	289	194	291	239	292	213	223	225	166	100	33.3	47.4
MAX	1300	426	566	510	780	469	1140	1490	680	1090	117	168
MIN	112	110	166	147	155	137	115	86	54	27	15	15
CFSM	1.74	1.17	1.75	1.44	1.76	1.28	1.35	1.36	1.00	.60	.20	.29
IN.	2.01	1.30	2.02	1.66	1.83	1.48	1.50	1.56	1.12	.70	.23	.32

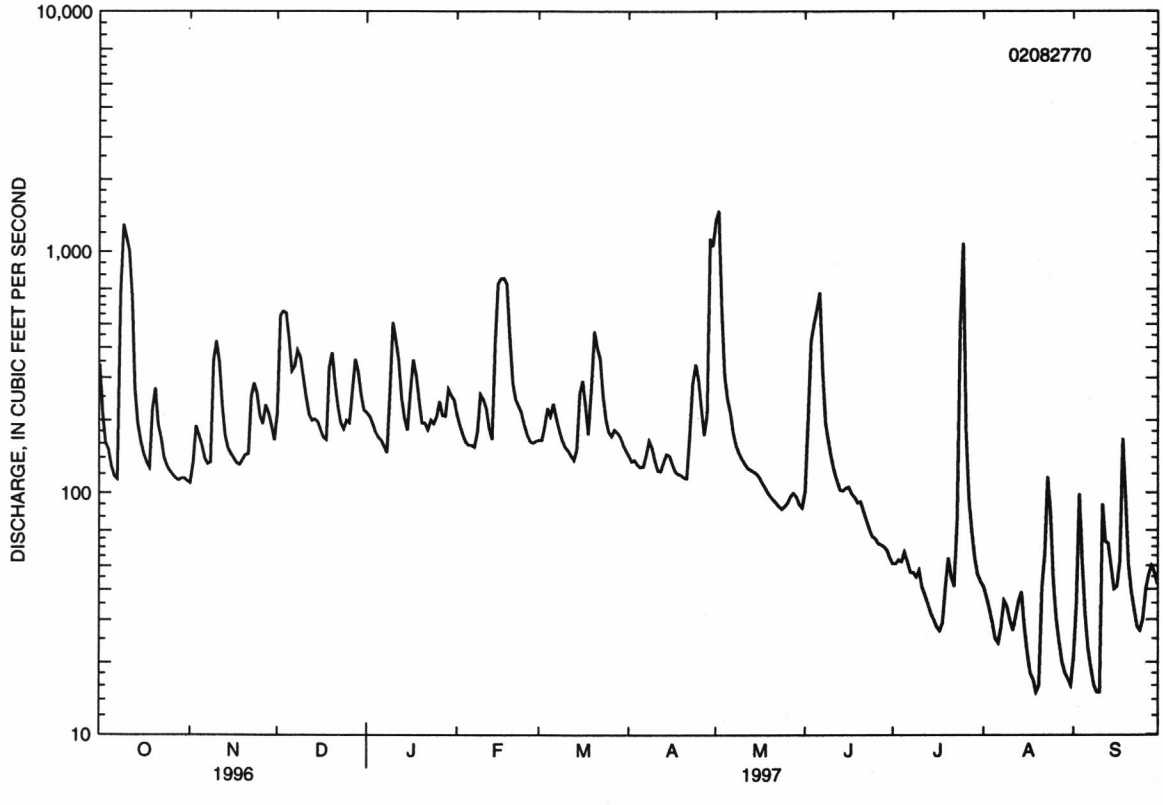
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1997, BY WATER YEAR (WY)

MEAN	87.7	119	152	238	279	300	223	154	130	97.4	84.9	73.0
MAX	420	436	382	500	516	711	774	466	468	470	326	544
(WY)	1972	1986	1973	1987	1983	1989	1987	1984	1979	1975	1986	1996
MIN	9.65	27.8	37.3	59.5	92.6	77.6	72.9	47.5	26.4	12.3	10.2	4.90
(WY)	1971	1982	1966	1981	1968	1988	1981	1995	1981	1981	1993	1968

PAMLICO RIVER BASIN

02082770 SWIFT CREEK AT HILLIARDSTON, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1963 - 1997	
ANNUAL TOTAL	90611		70223			
ANNUAL MEAN	248		192		160	
HIGHEST ANNUAL MEAN					290	1984
LOWEST ANNUAL MEAN					51.0	1981
HIGHEST DAILY MEAN	2300	Sep 9	1490	May 2	4790	May 31 1984
LOWEST DAILY MEAN	29	Jul 25	15	Aug 19	.60	Sep 25 1968
ANNUAL SEVEN-DAY MINIMUM	46	Jul 21	21	Aug 26	1.1	Sep 21 1968
INSTANTANEOUS PEAK FLOW			1720	May 2	6030	Jun 5 1979
INSTANTANEOUS PEAK STAGE			11.37	May 2	14.27	Jun 5 1979
INSTANTANEOUS LOW FLOW			12	Aug 20	.60	Sep 25 1968
ANNUAL RUNOFF (CFSM)	1.49		1.16		.96	
ANNUAL RUNOFF (INCHES)	20.31		15.74		13.11	
10 PERCENT EXCEEDS	449		357		346	
50 PERCENT EXCEEDS	180		150		93	
90 PERCENT EXCEEDS	71		34		24	



PAMLICO RIVER BASIN

02082950 LITTLE FISHING CREEK NEAR WHITE OAK, NC

LOCATION.--Lat 36°11'08", long 77°52'34", Halifax County, Hydrologic Unit 03020102, on right bank 8 ft downstream of bridge on Secondary Road 1338, 1.1 mi west of White Oak, 1.8 mi upstream from Powells Creek, 4.3 mi upstream from mouth, and 12 mi west of Enfield.

DRAINAGE AREA.--177 mi^2.

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WSP 1723: 1960(M). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 116.44 ft above sea level. Feb. 14, 1962, to Apr. 23, 1979, auxiliary nonrecording gage 3.6 mi downstream. Satellite telemetry at station.

REMARKS.-- Records good except for estimated daily discharges, which are fair. Maximum discharge for period of record, from rating curve extended above 6,900 ft^3/s on basis of slope-conveyance study of peak flow. Maximum gage height for period of record, from floodmarks. Minimum discharge for current water year also occurred Aug. 31.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1959 reached a stage of 19.3 ft, from floodmarks; discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	91	246	275	223	191	e143	2330	52	21	26	43
2	80	128	695	246	169	186	127	510	427	21	23	50
3	77	241	957	221	127	210	117	291	600	23	20	52
4	64	182	610	204	105	301	112	307	703	23	18	26
5	47	133	299	189	95	252	110	237	644	21	30	17
6	39	125	358	181	98	246	108	179	209	18	30	13
7	37	144	480	164	98	274	158	153	129	16	23	12
8	947	138	432	148	134	208	186	131	116	15	18	10
9	2250	493	394	280	496	178	136	119	95	15	15	9.6
10	2420	635	296	665	406	163	112	112	77	14	14	11
11	930	384	238	554	218	158	100	103	67	13	13	24
12	280	219	212	312	148	147	101	96	61	13	12	39
13	188	168	198	235	112	134	117	92	58	12	12	32
14	148	147	203	200	734	153	127	93	60	11	11	21
15	127	135	191	182	1950	373	110	87	72	11	11	18
16	111	124	171	299	2670	385	99	81	70	10	10	30
17	101	119	165	e519	1750	221	95	74	58	10	9.5	33
18	99	119	171	370	507	180	93	69	52	12	9.2	23
19	313	138	379	217	310	254	90	65	50	16	8.9	18
20	395	155	517	233	260	613	85	60	50	18	12	15
21	251	145	360	213	224	646	82	56	41	16	26	14
22	164	366	250	211	223	350	132	52	36	20	34	12
23	e132	466	218	248	217	248	296	48	33	158	24	11
24	e119	312	210	243	184	200	361	46	30	448	16	11
25	109	217	251	247	174	176	276	45	27	602	13	15
26	101	233	252	325	172	184	184	49	25	300	11	25
27	97	331	474	209	176	239	142	61	27	116	9.9	26
28	96	268	667	181	188	205	228	59	26	52	9.2	22
29	96	200	429	457	---	177	1720	53	24	34	8.8	25
30	94	173	312	378	---	162	2620	48	22	28	8.2	28
31	93	---	271	253	---	150	---	45	---	28	18	---
TOTAL	10140	6729	10906	8659	12168	7564	8367	5751	3941	2115	503.7	685.6
MEAN	327	224	352	279	435	244	279	186	131	68.2	16.2	22.9
MAX	2420	635	957	665	2670	646	2620	2330	703	602	34	52
MIN	37	91	165	148	95	134	82	45	22	10	8.2	9.6
CFSM	1.85	1.27	1.99	1.58	2.46	1.38	1.58	1.05	.74	.39	.09	.13
IN.	2.13	1.41	2.29	1.82	2.56	1.59	1.76	1.21	.83	.44	.11	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1997, BY WATER YEAR (WY)

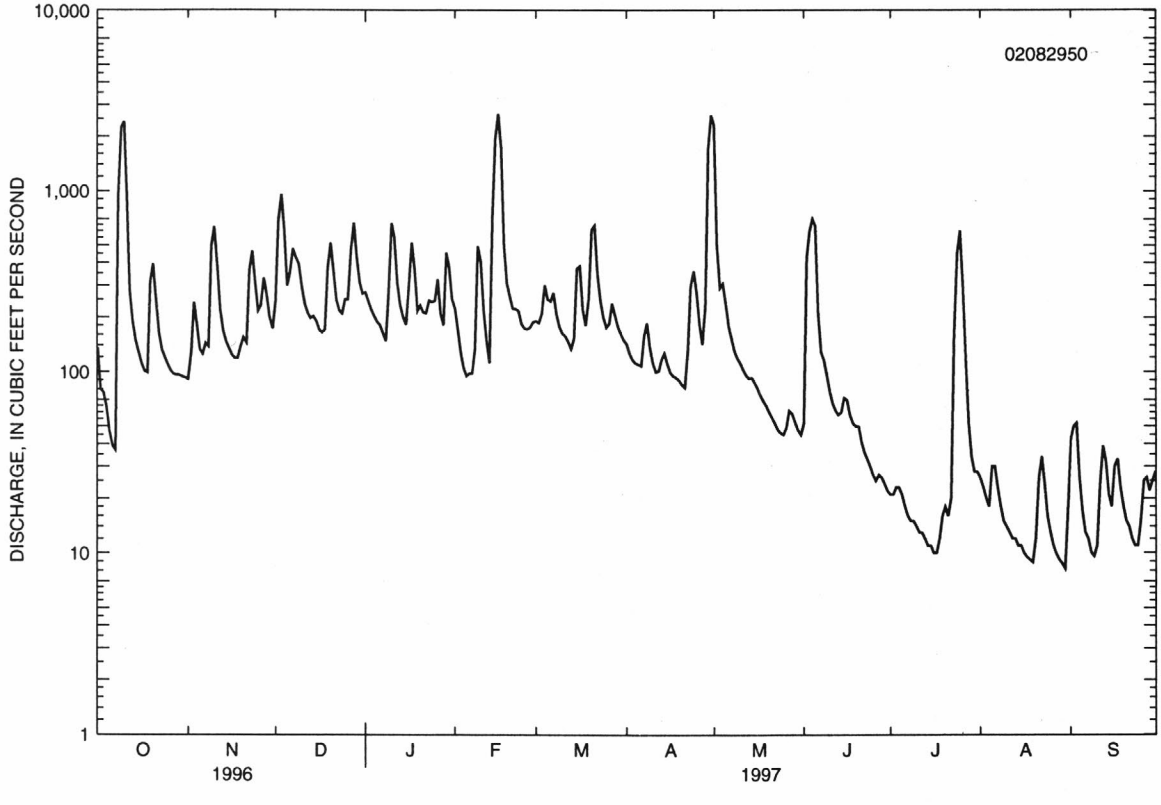
MEAN	104	124	157	253	331	334	230	141	102	87.3	77.9	55.6
MAX	982	860	482	570	742	650	720	550	300	602	330	374
(WY)	1973	1986	1973	1962	1984	1993	1987	1984	1965	1975	1967	1996
MIN	3.78	12.9	24.9	37.6	83.4	83.0	56.8	35.7	15.1	9.58	4.21	2.34
(WY)	1971	1982	1995	1981	1991	1981	1967	1995	1986	1981	1993	1980

PAMLICO RIVER BASIN

02082950 LITTLE FISHING CREEK NEAR WHITE OAK, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1960 - 1997	
ANNUAL TOTAL	87048		77529.3			
ANNUAL MEAN	238		212		166	
HIGHEST ANNUAL MEAN					327	1973
LOWEST ANNUAL MEAN					47.2	1981
HIGHEST DAILY MEAN	2420	Oct 10	2670	Feb 16	15000	Oct 7 1972
LOWEST DAILY MEAN	27	Jul 6	8.2	Aug 30	.78	Sep 4 1980
ANNUAL SEVEN-DAY MINIMUM	30	Jul 2	10	Aug 13	1.1	Sep 26 1968
INSTANTANEOUS PEAK FLOW			2890	Apr 30	18000*	Oct 7 1972
INSTANTANEOUS PEAK STAGE			15.43	Apr 30	24.80*	Oct 7 1972
INSTANTANEOUS LOW FLOW			7.9*	Aug 30	.72	Sep 5 1980
ANNUAL RUNOFF (CFSM)	1.34		1.20		.94	
ANNUAL RUNOFF (INCHES)	18.29		16.29		12.71	
10 PERCENT EXCEEDS	479		430		356	
50 PERCENT EXCEEDS	149		129		79	
90 PERCENT EXCEEDS	44		15		16	

e Estimated.
* See REMARKS.



PAMLICO RIVER BASIN

02083000 FISHING CREEK NEAR ENFIELD, NC

LOCATION.--Lat 36°09'03", long 77°41'35", Edgecombe County, Hydrologic Unit 03020102, on right bank 15 ft downstream of bridge on U.S. Highway 301, 2,000 ft downstream of Seaboard Coast Line Railroad bridge, 2 mi southwest of Enfield, 4.8 mi downstream of Rocky Creek, and 40 mi upstream from mouth.

DRAINAGE AREA.--526 mi^2.

PERIOD OF RECORD.--October 1923 to current year. Figures of daily discharge below 250 ft^3/s, Oct 1, 1923, to July 3, 1924; below 350 ft^3/s, May 30, 1925, to May 31, 1926; below 150 ft^3/s, June 1 to Nov. 16, 1926; and below 100 ft^3/s, Nov. 17, 1926, to Sept. 30, 1928; published in WSP 622, 642, and 662 are unreliable and should not be used. Gage-height records collected at site 2,000 ft upstream at different datum July 1, 1910, to Apr. 30, 1914, and at present site and datum since May 1, 1914, are contained in reports of National Weather Service, NOAA, U.S. Department of Commerce.

REVISED RECORDS.--WSP 872: 1935(M). WSP 1333: 1928(M), 1932-33, 1935. WDR NC-81-1: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 74.26 ft above sea level. Prior to Oct. 28, 1932, nonrecording gage and Oct. 29, 1932, to Sept. 30, 1992, at same site at datum 76.26 ft. National Weather Service telephone telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Slight diurnal fluctuation and some regulation at low flow caused by upstream mills. Maximum discharge and gage-height for the current water year may have been higher during period of no gage-height record, Oct. 1-11. Minimum discharge for the current water year also occurred Aug. 21.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Apr. 19, 1910, reached a stage of 20.1 ft, at datum 76.26 ft (from floodmarks of Seaboard Coast Line Railroad Co.) at site 2,000 ft upstream. Flood of July 24, 1919, reached a stage of 19.6 ft at datum 76.26 ft; discharge, 20,300 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e350	292	529	669	654	513	416	4130	182	101	108	56
2	e300	327	1110	668	620	516	394	4510	565	100	102	121
3	e250	489	1720	619	562	530	365	3430	1330	97	94	316
4	e220	567	2050	580	519	643	348	1440	1620	112	86	287
5	e210	473	1490	551	498	692	341	806	2080	148	80	126
6	e180	400	983	525	496	637	340	617	2370	123	103	80
7	e160	388	1010	500	504	657	393	518	1690	100	139	63
8	e2500	400	1140	465	521	611	502	452	703	89	153	55
9	e3500	639	1060	548	772	532	460	409	451	83	133	51
10	e4000	1180	885	1350	925	484	373	383	367	79	111	51
11	e4050	1220	709	1560	738	458	332	360	311	78	92	52
12	3100	831	616	1140	619	438	315	340	271	74	76	206
13	1270	561	573	761	555	411	328	325	247	70	60	284
14	553	457	553	610	893	425	363	315	237	69	43	180
15	433	416	543	550	1950	686	363	311	248	68	63	121
16	379	392	514	612	2610	1020	324	295	285	67	55	102
17	345	373	488	1030	2840	779	300	274	276	68	50	179
18	327	363	484	1090	2450	567	290	257	241	67	55	187
19	602	377	724	742	1510	602	282	241	215	64	63	157
20	975	415	1230	557	859	1210	270	228	217	73	62	110
21	847	434	1100	587	695	1520	259	213	201	98	41	86
22	572	598	766	565	644	1270	319	200	173	121	89	74
23	443	949	624	595	617	830	554	185	156	118	192	66
24	380	906	578	636	568	618	829	176	138	350	158	61
25	351	663	594	618	521	528	821	174	128	1760	101	63
26	331	609	634	699	495	495	622	179	122	924	73	73
27	315	730	719	679	487	538	477	190	120	588	61	116
28	308	751	1250	594	499	566	473	217	118	283	52	124
29	302	626	1290	729	---	515	1840	213	113	171	50	113
30	301	529	896	853	---	474	3410	194	109	134	47	115
31	297	---	715	724	---	442	---	179	---	120	47	---
TOTAL	28151	17355	27577	22406	25621	20207	16703	21761	15284	6397	2639	3675
MEAN	908	579	890	723	915	652	557	702	509	206	85.1	123
MAX	4050	1220	2050	1560	2840	1520	3410	4510	2370	1760	192	316
MIN	160	292	484	465	487	411	259	174	109	64	41	51
CFSM	1.73	1.10	1.69	1.37	1.74	1.24	1.06	1.33	.97	.39	.16	.23
IN.	1.99	1.23	1.95	1.58	1.81	1.43	1.18	1.54	1.08	.45	.19	.26

PAMLICO RIVER BASIN

02083000 FISHING CREEK NEAR ENFIELD, NC--Continued

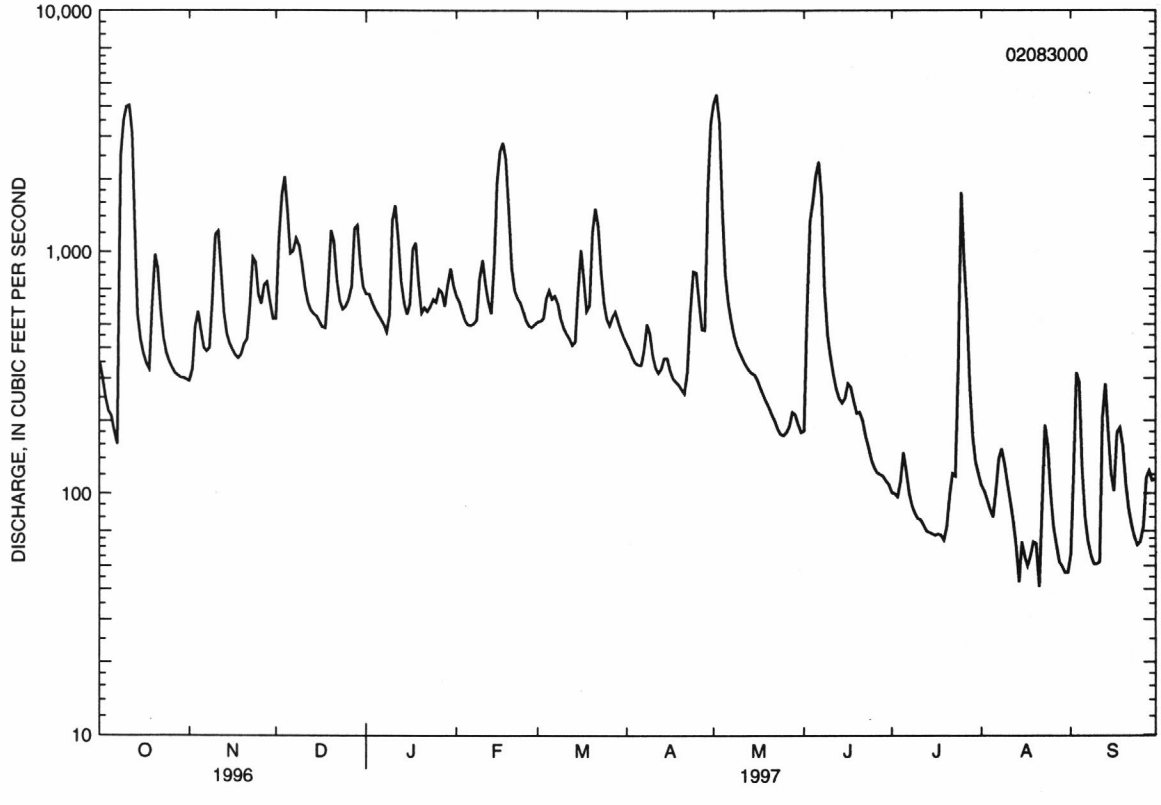
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	265	334	483	716	868	895	696	438	320	301	325	256
MAX	2035	1948	1391	2303	2145	2158	2049	2174	1255	1483	1828	2080
(WY)	1930	1986	1935	1936	1960	1989	1987	1958	1938	1975	1940	1928
MIN	14.0	26.0	46.0	60.4	198	248	170	128	70.6	42.8	26.8	14.2
(WY)	1934	1934	1934	1934	1934	1981	1967	1995	1986	1981	1993	1980

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1927 - 1997	
ANNUAL TOTAL	229925		207776			
ANNUAL MEAN	628		569		490	
HIGHEST ANNUAL MEAN					871	1984
LOWEST ANNUAL MEAN					148	1981
HIGHEST DAILY MEAN	4050	Oct 11	4510	May 2	12100	Aug 18 1940
LOWEST DAILY MEAN	68	Jul 8	41	Aug 21	6.9	Oct 5 1968
ANNUAL SEVEN-DAY MINIMUM	81	Jul 3	55	Aug 26	8.1	Sep 30 1968
INSTANTANEOUS PEAK FLOW			16.64*	May 2	12600	Dec 2 1934
INSTANTANEOUS PEAK STAGE			4610*	May 2	17.72	Aug 18 1940
INSTANTANEOUS LOW FLOW			38*	Aug 14	NOT DETERMINED	
ANNUAL RUNOFF (CFSM)	1.19		1.08		.93	
ANNUAL RUNOFF (INCHES)	16.26		14.69		12.65	
10 PERCENT EXCEEDS	1210		1160		1090	
50 PERCENT EXCEEDS	450		416		271	
90 PERCENT EXCEEDS	133		77		69	

e Estimated.

* See REMARKS.



PAMLICO RIVER BASIN

02083500 TAR RIVER AT TARBORO, NC

LOCATION.--Lat 35°53'38", long 77°32'00",. Edgecombe County, Hydrologic Unit 03020103, near right bank on downstream end of pier of bridge on U.S. Highway 64 in Tarboro, 6.5 mi downstream of Fishing Creek, and 49.2 mi upstream from Pamlico River at Washington.

DRAINAGE AREA.--2,183 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1896 to December 1900, October 1931 to current year. Gage-height records at various datums collected at same site since 1905 are contained in reports of National Weather Service, NOAA, U.S. Department of Commerce.

REVISED RECORDS.--WSP 1273: 1899-1900, 1933. WSP 1503: 1932. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 10.37 ft above sea level. July 1896 to December 1900, nonrecording gage at Seaboard Coast Line Railroad bridge 600 ft downstream at different datum; Oct. 1 to Dec. 8, 1931, nonrecording gage at site 100 ft upstream at present datum. National Weather Service telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Some diurnal fluctuation at low flow caused by mills upstream from station. Town of Tarboro diverted 4.8 ft^3/s for municipal water supply. Minimum discharge for period of record also occurred Oct. 22, 1933, and Oct. 6, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 27, 1919, reached a stage of 34.0 ft, present datum, from flood marks; discharge, 52,800 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1570	1180	2700	3660	3520	2340	2010	6650	711	347	774	227
2	2300	1190	2930	3430	3140	2340	1830	8000	1140	351	616	227
3	2060	1340	3790	3370	2890	2370	1660	9700	1620	337	512	249
4	1620	1530	4830	3200	2670	2510	1550	10900	2620	317	392	267
5	1490	1790	5620	2960	2450	2600	1460	12200	3140	306	322	389
6	1360	1840	6280	2760	2280	2950	1350	10900	3990	355	330	378
7	1320	1680	6480	2550	2150	3410	1330	8160	4170	356	322	310
8	2580	1600	5970	2370	2170	3290	1370	5330	3560	339	309	275
9	5910	1800	5910	2360	2510	3270	1440	2930	3330	316	321	251
10	7540	2120	5720	3550	2830	2880	1570	2180	2580	298	323	272
11	8240	3430	5230	4490	3250	2520	1450	1760	1750	300	308	341
12	9260	4240	4430	5300	3410	2270	1300	1590	1290	282	291	345
13	10500	4050	3600	5900	3090	2010	1260	1400	1040	270	274	291
14	10700	2990	3120	5700	3120	1940	1200	1310	901	256	260	357
15	8490	2380	2820	4300	4810	2360	1210	1060	789	247	242	471
16	6320	2000	2600	3560	6170	2790	1410	1090	759	244	219	532
17	3700	1810	2450	3580	7070	3170	1340	1070	772	251	215	486
18	2390	1640	2320	3900	8040	3260	1150	1010	806	259	215	391
19	2350	1620	2570	4510	8830	2990	1090	908	802	303	207	370
20	2750	1570	4090	4440	9310	3960	1030	886	732	295	276	386
21	2970	1550	4620	3570	8910	4890	904	817	645	260	634	404
22	3100	1710	4880	3030	6730	5690	1120	801	614	246	616	374
23	2920	2010	4810	2860	4820	6240	1520	735	559	348	439	313
24	2630	2500	4250	2780	3740	5900	2090	690	488	639	362	292
25	2260	3060	3520	2810	3040	4260	3030	652	445	1150	502	280
26	1920	2890	3070	2930	2680	3320	3730	628	409	2390	545	281
27	1700	2710	2920	2970	2460	2810	3510	635	397	3240	421	311
28	1520	2740	2950	3250	2400	2520	2870	617	390	2890	351	301
29	1390	3080	3280	3170	---	2450	3500	647	361	2180	303	326
30	1300	3070	3820	2980	---	2350	5300	688	350	1600	255	330
31	1230	---	3910	3360	---	2170	---	696	---	1050	251	---
TOTAL	115390	67120	125490	109600	118490	97830	55584	96640	41160	22022	11407	10027
MEAN	3722	2237	4048	3535	4232	3156	1853	3117	1372	710	368	334
MAX	10700	4240	6480	5900	9310	6240	5300	12200	4170	3240	774	532
MIN	1230	1180	2320	2360	2150	1940	904	617	350	244	207	227
CFSM	1.71	1.02	1.85	1.62	1.94	1.45	.85	1.43	.63	.33	.17	.15
IN.	1.97	1.14	2.14	1.87	2.02	1.67	.95	1.65	.70	.38	.19	.17

PAMLICO RIVER BASIN

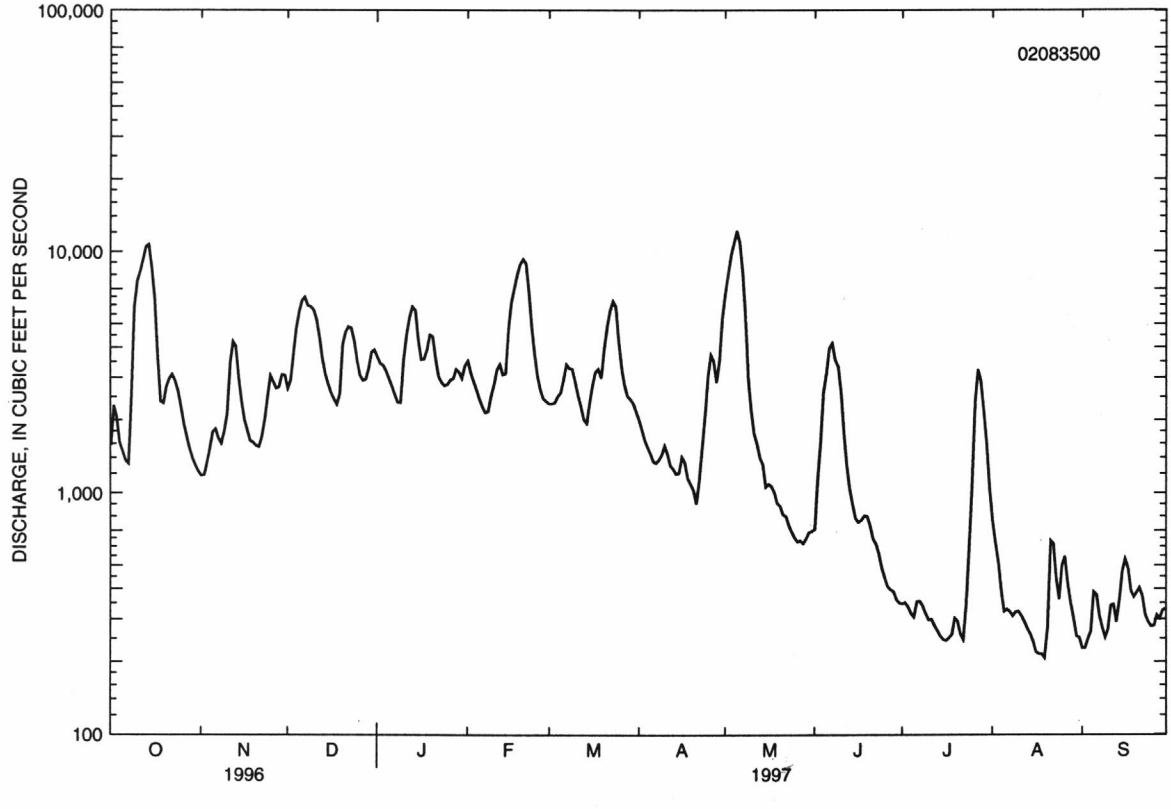
02083500 TAR RIVER AT TARBORO, NC--Continuted

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1896 - 1997@, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1057	1280	2036	3312	4255	4410	3231	1877	1351	1319	1427	1230
MAX	6591	5049	6195	10020	12920	11050	8553	8411	4873	6291	8260	7577
(WY)	1960	1948	1949	1936	1899	1989	1987	1958	1979	1975	1940	1945
MIN	56.7	115	191	253	497	1116	688	451	243	192	180	63.8
(WY)	1934	1934	1934	1934	1934	1981	1995	1995	1986	1986	1993	1968

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1896 - 1997@	
ANNUAL TOTAL	1113121		870760			
ANNUAL MEAN	3041		2386		2231	
HIGHEST ANNUAL MEAN					4057	1960
LOWEST ANNUAL MEAN					594	1981
HIGHEST DAILY MEAN	21400	Sep 15	12200	May 5	36100	Aug 20 1940
LOWEST DAILY MEAN	245	Jul 8	207	Aug 19	36	Oct 17 1933
ANNUAL SEVEN-DAY MINIMUM	279	Jul 3	233	Aug 13	40	Sep 26 1932
INSTANTANEOUS PEAK FLOW			12500	May 5	37200	Aug 20 1940
INSTANTANEOUS PEAK STAGE			21.20	May 5	31.77	Aug 20 1940
INSTANTANEOUS LOW FLOW			200	Aug 20	36*	Oct 17 1933
ANNUAL RUNOFF (CFSM)	1.39		1.09		1.02	
ANNUAL RUNOFF (INCHES)	18.97		14.84		13.89	
10 PERCENT EXCEEDS	6480		5260		5600	
50 PERCENT EXCEEDS	2280		2010		1220	
90 PERCENT EXCEEDS	594		303		286	

* See REMARKS.
@ See PERIOD OF RECORD.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1945, 1954, 1958 to February 1997.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1964 to September 1967, July 1973 to September 1986.

WATER TEMPERATURE: October 1944 to September 1945, October 1953 to September 1954, October 1961 to September 1967, July 1973 to September 1986.

INSTRUMENTATION.--Water-quality monitor from October 1981 to September 1986.

REMARKS.--Station operated as part of NAWQA Program from March 1993 to February 1997. Station also operated as part of NASQAN network from October 1974 to September 1994. Daily records of specific conductance for water years 1954, 1959-64 are available in the files of the district office in Raleigh. Miscellaneous chemical data published for water years 1944, 1947, 1955-61.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 300 microsiemens, Aug. 12, 1986; minimum daily, 34 microsiemens, Aug. 22, 1967.

WATER TEMPERATURE: Maximum, 33.0°C, July 19, 20, 1986; minimum daily, 0.0°C, several days in 1963 and 1966, Jan. 18, 19, 1977, Jan. 18, 1982.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV 1996											
12...	1100	4250	90.0	6.80	12.0	782	10.2	92	22	5.3	2.2
FEB 1997											
19...	1300	8870	65.0	6.30	9.0	772	10.5	90	17	4.1	1.6

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
NOV 1996										
12...	6.7	35	.6	3.6	30	25	4.4	6.8	<.10	14
FEB 1997										
19...	4.4	33	.5	2.3	15.0	12.0	6.0	5.7	<.10	7.1

PAMLICO RIVER BASIN

02083500 TAR RIVER AT TARBORO, NC--Continued

WATER-QUALITY RECORDS

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)
NOV 1996										
12...	76	<.010	.210	.020	.48	.38	.50	.40	.71	.61
FEB 1997										
19...	52	.020	.310	<.015	--	--	.50	.40	.81	.71

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 1996										
12...	.080	.040	.040	1300	24	7.2	.70	24	275	93
FEB 1997										
19...	.060	.020	<.010	620	22	7.8	1.4	19	455	91

PAMLICO RIVER BASIN

02083800 CONETOE CREEK NEAR BETHEL, NC

LOCATION.--Lat 35°46'33", long 77°27'45", Pitt County, Hydrologic Unit 03020103, on right bank 5 ft downstream of bridge on Secondary Road 1409, 5.5 mi downstream of Crisp Creek, and 5.5 mi west of Bethel.

DRAINAGE AREA.--78.1 mi^2.

PERIOD OF RECORD.--December 1956 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 30 ft above sea level, from topographic map. Telephone telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Minimum discharge for period of record also occurred Aug. 29 and Sept. 3, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1955 reached a stage of 16.7 ft, from information by local resident; discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	35	42	80	58	66	74	177	13	8.5	4.5	7.1
2	25	40	134	137	52	66	61	158	125	17	5.0	7.3
3	23	65	119	150	48	65	53	149	58	11	5.3	8.9
4	23	56	92	121	46	64	48	195	75	7.9	6.4	12
5	19	51	76	102	45	59	44	125	60	7.0	12	7.7
6	18	47	92	93	44	67	40	91	45	16	7.8	6.7
7	18	44	121	78	41	66	41	74	38	13	5.3	7.3
8	318	53	227	67	50	58	38	62	34	8.6	4.4	6.9
9	702	51	187	115	117	53	35	55	29	7.8	4.7	7.0
10	715	53	136	319	98	50	31	50	26	6.6	4.2	23
11	447	46	108	230	83	48	28	44	22	7.1	3.7	17
12	237	40	95	167	72	44	27	40	19	6.6	3.2	6.8
13	178	37	84	128	64	40	31	37	18	5.5	3.3	4.0
14	136	36	79	106	162	83	30	34	18	4.7	3.0	5.1
15	107	34	71	93	364	270	26	31	17	4.5	2.9	5.0
16	86	32	65	121	362	193	26	28	15	4.4	2.8	9.7
17	74	31	63	166	240	136	23	25	14	11	3.4	11
18	67	31	60	120	187	109	22	24	14	7.5	3.6	11
19	195	31	157	92	154	112	20	22	13	4.9	4.2	12
20	199	35	311	78	129	212	19	25	11	4.2	13	e11
21	137	33	217	75	109	176	18	28	10	3.8	212	e11
22	102	56	166	70	117	135	90	20	8.8	3.4	43	e10
23	89	65	136	72	107	102	131	17	9.1	3.8	16	e9.5
24	75	59	118	68	89	80	152	15	9.4	5.5	10	e9.0
25	63	52	109	69	80	68	121	15	8.3	36	7.1	e8.5
26	55	51	95	79	73	69	87	20	7.0	11	6.4	8.1
27	49	49	91	70	70	75	69	43	8.9	6.2	5.6	7.7
28	48	42	91	67	66	66	125	22	10	5.1	5.3	8.7
29	45	38	84	68	---	108	235	18	8.8	4.5	5.3	8.7
30	41	36	79	64	---	121	249	16	7.8	4.5	5.3	8.5
31	38	---	75	61	---	95	---	15	---	4.5	5.9	---
TOTAL	4354	1329	3580	3326	3127	2956	1994	1675	752.1	252.1	424.6	276.2
MEAN	140	44.3	115	107	112	95.4	66.5	54.0	25.1	8.13	13.7	9.21
MAX	715	65	311	319	364	270	249	195	125	36	212	23
MIN	18	31	42	61	41	40	18	15	7.0	3.4	2.8	4.0
CFSM	1.80	.57	1.48	1.37	1.43	1.22	.85	.69	.32	.10	.18	.12
IN.	2.07	.63	1.71	1.58	1.49	1.41	.95	.80	.36	.12	.20	.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1997, BY WATER YEAR (WY)

MEAN	52.1	36.9	61.4	118	150	154	93.9	60.6	42.6	37.9	67.3	38.6
MAX	462	181	218	296	327	282	282	251	274	210	452	329
(WY)	1972	1978	1958	1978	1960	1983	1959	1978	1979	1962	1967	1960
MIN	2.82	3.14	3.77	9.96	22.5	17.5	13.2	9.91	3.80	3.16	1.32	2.67
(WY)	1979	1987	1969	1981	1981	1981	1981	1981	1994	1993	1993	1980

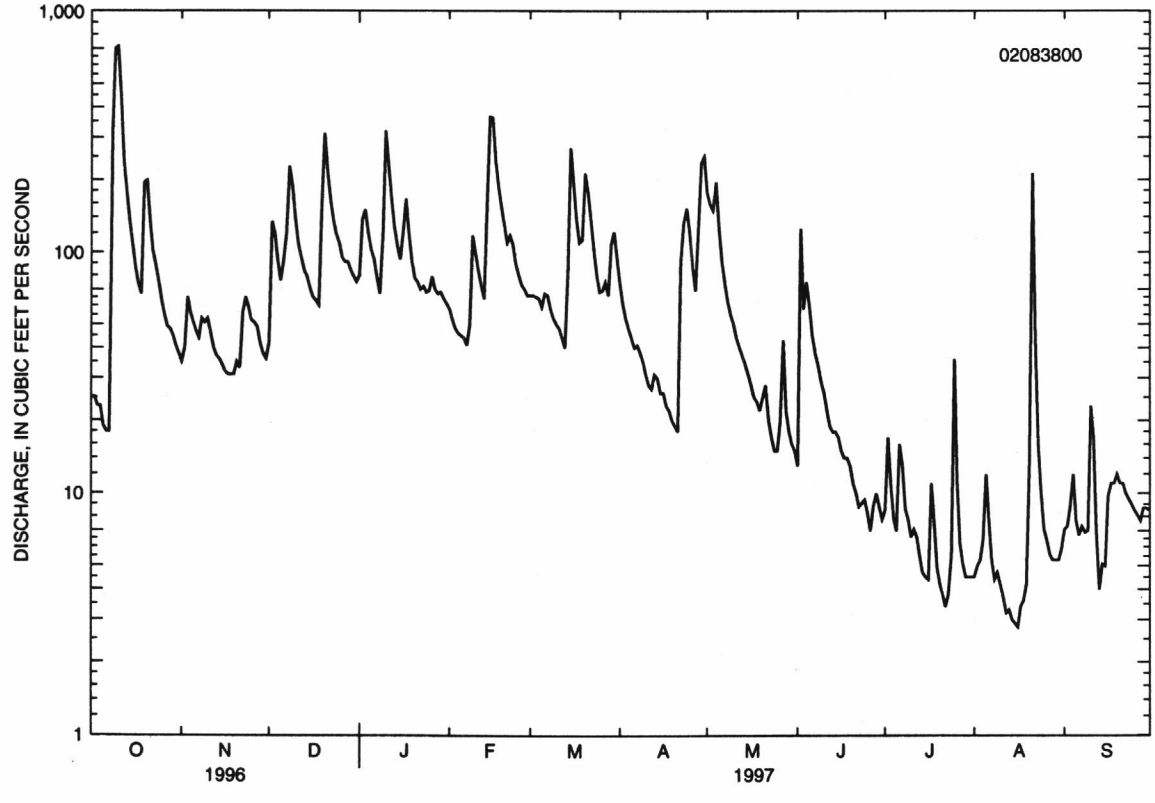
PAMLICO RIVER BASIN

02083800 CONETOE CREEK NEAR BETHEL, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1957 - 1997	
ANNUAL TOTAL	29109.2		24046.0			
ANNUAL MEAN	79.5		65.9		77.1	
HIGHEST ANNUAL MEAN					148	1960
LOWEST ANNUAL MEAN					12.0	1981
HIGHEST DAILY MEAN	715	Oct 10	715	Oct 10	2480	Aug 23 1967
LOWEST DAILY MEAN	4.9	Aug 25	2.8	Aug 16	.74	Aug 25 1993
ANNUAL SEVEN-DAY MINIMUM	6.4	Aug 21	3.2	Aug 12	.79	Aug 21 1993
INSTANTANEOUS PEAK FLOW			728	Oct 10	2580	Aug 23 1967
INSTANTANEOUS PEAK STAGE			11.61	Oct 10	15.74	Aug 23 1967
INSTANTANEOUS LOW FLOW			2.5	Aug 16	.40*	Aug 28 1980
ANNUAL RUNOFF (CFSM)	1.02		.84		.99	
ANNUAL RUNOFF (INCHES)	13.87		11.45		13.42	
10 PERCENT EXCEEDS	180		149		180	
50 PERCENT EXCEEDS	51		44		33	
90 PERCENT EXCEEDS	12		5.6		5.2	

e Estimated.

* See REMARKS.



PAMLICO RIVER BASIN

02083833 PETE MITCHELL SWAMP AT SR1409 NEAR PENNY HILL, NC

LOCATION.--Lat 35°45'59", long 77°29'36", Pitt County, Hydrologic Unit 03020103, on left bank 5 ft downstream of bridge on Secondary Road 1409, 1.7 mi northeast of Penny Hill.

DRAINAGE AREA.--11.0 mi^2.

PERIOD OF RECORD.--March 1993 to November 1996.

REMARKS.--Station operated as part of NAWQA Program.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV 1996											
15...	1100	13	214	5.9	8.5	786	10.3	86	68	19	5.0

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
NOV 1996										
15...	4.9	13	.3	4.8	8	7	43	17	.10	11

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)
NOV 1996										
15...	131	<.010	4.40	.030	.27	.17	.30	.20	4.7	4.6

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 1996										
15...	<.010	<.010	<.010	64	40	4.1	.30	4	.14	82

PAMLICO RIVER BASIN

02084000 TAR RIVER AT GREENVILLE, NC.

LOCATION.--Lat 35°37'00", long 77°22''30", Pitt County, Hydrologic Unit 03020103, on right bank 200 ft downstream of State Highway 11, 800 ft downstream from railroad bridge, and 21 mi upstream from Pamlico River at Washington.

DRAINAGE AREA.--2,620 mi^2.

PERIOD OF RECORD.--May 1997 to September 1997. Gage height records collected at site 800 ft upstream during the period 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 1985 to 1990 are available in files of U.S. Geological Survey.

GAGE.--Water-stage recorder and acoustic velocity meter. Datum of gage is 2.36 ft below sea level. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 22, 1940 reached a stage of 22.07 ft at site 200 ft upstream at present datum; discharge 36,500 ft^3/s. Maximum observed stage during period 1905-39 (National Weather Service Records) 24.5 ft July 28, 1919.

DISCHARGE, CUBIC FEET PER SECOND, FOR PERIOD MAY 1997 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								5290	858	e490	1090	e290
2								6240	1100	e600	881	253
3								7110	1700	e530	735	e350
4								8450	2290	e500	631	e400
5								10500	2860	e500	e480	e430
6								12300	3350	e540	e490	e500
7								11800	3810	e560	380	470
8								8930	3590	e545	374	e420
9								5820	3210	e540	411	e350
10								3400	2930	e520	389	e360
11								2280	2230	e510	e400	438
12								1890	1640	e520	e375	e500
13								1720	1350	e480	e360	e560
14								1580	1170	e470	e350	e520
15								1470	939	e460	e320	513
16								1310	896	e430	e300	627
17								1280	920	e440	e290	716
18								1240	901	e480	e280	914
19								1220	963	e500	213	780
20								1110	835	e500	244	671
21								1060	824	382	1280	524
22								1040	774	e340	1660	473
23								964	e690	316	1130	483
24								898	e630	529	629	e430
25								904	613	818	541	e400
26								865	572	1350	650	e380
27								752	499	2360	628	361
28								775	495	2910	512	e420
29								787	474	2500	e490	475
30								827	421	1980	e390	525
31								862	---	1510	281	---
TOTAL								104674	43534	25110	17184	14533
MEAN								3377	1451	810	554	484
MAX								12300	3810	2910	1660	914
MIN								752	421	316	213	253

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD MAY 1997 TO SEPTEMBER 1997

MEAN								3377	1451	810	554	484
MAX								3377	1451	810	554	484
(WY)								1997	1997	1997	1997	1997
MIN								3377	1451	810	554	484
(WY)								1997	1997	1997	1997	1997

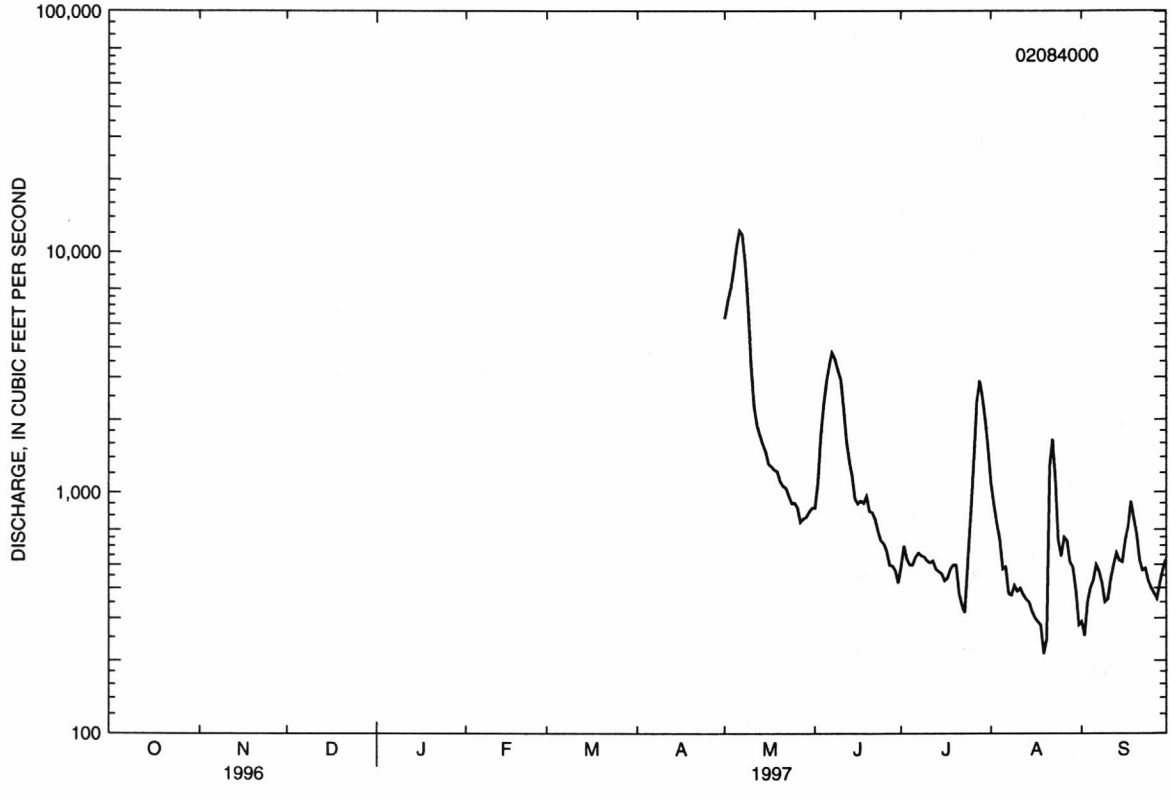
NEUSE RIVER BASIN

02084000 TAR RIVER AT GREENVILLE, NC--Continued

SUMMARY STATISTICS FOR PERIOD MAY 1997 TO SEPTEMBER 1997

INSTANTANEOUS PEAK FLOW	13900	May 6
INSTANTANEOUS PEAK STAGE	14.05	May 7
INSTANTANEOUS LOW FLOW	NOT DETERMINED	

e Estimated.



PAMLICO RIVER BASIN

02084160 CHICOD CREEK AT SECONDARY ROAD 1760 NEAR SIMPSON, NC

LOCATION.--Lat 35°33'47", long 77°13'43", Pitt County, Hydrologic Unit 03020103, on left bank at downstream side of bridge on Secondary Road 1760, 0.6 mi upstream from Juniper Branch, and 2.8 mi east-southeast of Simpson.

DRAINAGE AREA.--45 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to March 1987. May 1992 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No flow occurs at times during most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	27	38	56	47	43	27	84	6.1	3.2	5.7	e4.5
2	18	36	59	108	46	41	24	58	6.5	4.4	4.4	e5.0
3	17	57	59	118	44	39	21	45	8.8	6.0	3.7	e6.0
4	16	55	51	97	40	34	19	47	11	7.1	3.0	e8.0
5	14	52	47	80	39	30	18	34	10	7.2	3.1	e5.5
6	12	47	60	70	37	31	17	24	9.3	8.1	3.2	e4.5
7	11	41	86	61	36	29	17	19	9.1	6.3	3.0	e5.0
8	495	37	373	54	39	27	17	15	9.1	5.2	2.9	e4.5
9	1150	38	198	69	63	26	15	17	8.9	4.4	2.7	e4.5
10	482	39	118	240	61	23	12	27	8.1	8.0	2.6	e10
11	263	39	87	164	56	22	11	24	7.4	9.1	2.8	e9.0
12	157	37	72	110	53	21	13	21	6.5	7.0	2.6	e5.0
13	104	34	64	85	48	19	16	18	5.6	5.3	2.4	e3.0
14	77	32	59	72	68	65	15	20	5.3	3.8	2.1	e3.5
15	61	30	52	63	232	540	13	20	6.8	2.6	1.9	e3.5
16	50	29	49	97	255	234	12	20	5.7	2.0	1.7	e6.5
17	43	28	47	208	146	117	11	15	4.5	4.5	1.5	e7.5
18	39	27	46	132	99	80	9.7	11	3.6	3.1	1.6	e7.5
19	48	29	78	99	78	67	8.9	8.5	3.1	2.2	3.6	e8.0
20	55	31	218	84	65	85	8.4	7.2	2.8	34	e7.0	e7.5
21	46	30	132	68	56	82	12	6.4	2.1	17	e50	e7.5
22	42	48	94	60	61	66	37	4.7	1.5	8.0	e11	e7.0
23	37	58	79	57	67	52	41	3.5	3.8	17	e6.0	e6.5
24	34	53	71	54	60	42	42	3.2	4.3	30	e5.0	e6.0
25	31	46	64	52	51	35	34	3.0	3.9	17	e4.0	e5.5
26	30	44	58	52	45	40	27	6.3	3.4	10	e3.5	e5.5
27	29	43	65	48	42	51	21	22	4.0	7.0	e3.0	e5.0
28	28	40	74	46	43	45	36	13	4.2	5.7	e2.8	e6.0
29	28	37	67	45	---	42	124	9.4	3.6	4.8	e2.7	e6.0
30	27	35	62	45	---	37	185	8.0	3.4	5.2	e2.7	e5.5
31	28	---	59	47	---	32	---	6.6	---	6.9	e3.0	---
TOTAL	3487	1179	2686	2641	1977	2097	864.0	620.8	172.4	262.1	155.2	179.0
MEAN	112	39.3	86.6	85.2	70.6	67.6	28.8	20.0	5.75	8.45	5.01	5.97
MAX	1150	58	373	240	255	540	185	84	11	34	50	10
MIN	11	27	38	45	36	19	8.4	3.0	1.5	2.0	1.5	3.0
CFSM	2.50	.87	1.93	1.89	1.57	1.50	.64	.45	.13	.19	.11	.13
IN.	2.88	.97	2.22	2.18	1.63	1.73	.71	.51	.14	.22	.13	.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1997@, BY WATER YEAR (WY)

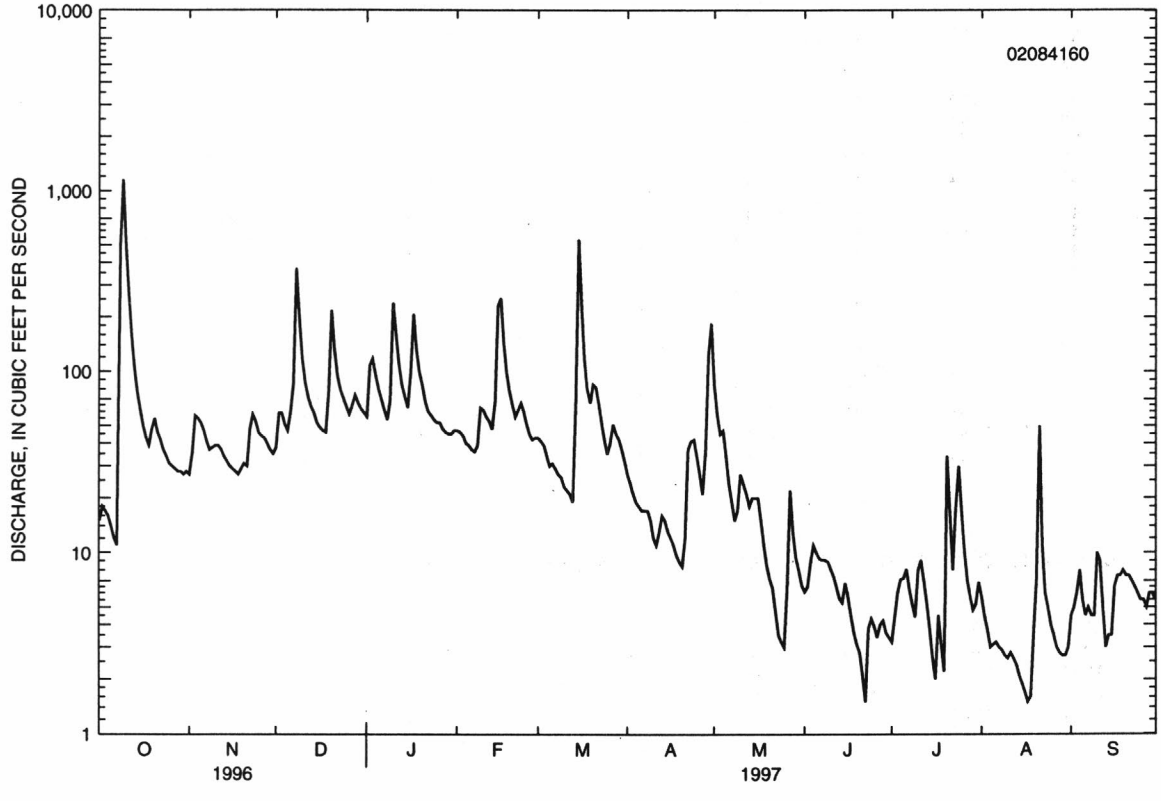
MEAN	22.9	37.2	50.4	101	86.3	101	50.5	33.8	37.4	21.5	34.3	45.0
MAX	112	219	94.2	244	188	201	144	139	192	120	238	412
(WY)	1997	1978	1978	1978	1995	1980	1978	1978	1995	1996	1992	1996
MIN	.27	1.23	4.57	15.2	19.7	18.0	4.49	.65	.001	1.06	0	.22
(WY)	1977	1982	1982	1986	1977	1981	1981	1985	1985	1994	1976	1995

PAMLICO RIVER BASIN

02084160 CHICOD CREEK AT SECONDARY ROAD 1760 NEAR SIMPSON, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1976 - 1997@	
ANNUAL TOTAL	34673.6		16320.5			
ANNUAL MEAN	94.7		44.7		50.6	
HIGHEST ANNUAL MEAN					90.5	1978
LOWEST ANNUAL MEAN					22.1	1986
HIGHEST DAILY MEAN	1850	Sep 13	1150	Oct 9	2150	Nov 7 1977
LOWEST DAILY MEAN	1.6	May 13	1.5	Jun 22	0	Jul 19 1976
ANNUAL SEVEN-DAY MINIMUM	2.8	May 9	2.0	Aug 12	0	Jul 19 1976
INSTANTANEOUS PEAK FLOW			1550	Oct 8	2660	Sep 14 1984
INSTANTANEOUS PEAK STAGE			10.95	Oct 8	12.48	Sep 14 1984
INSTANTANEOUS LOW FLOW			1.2	Aug 18	0*	Jul 19 1976
ANNUAL RUNOFF (CFSM)	2.11		.99		1.12	
ANNUAL RUNOFF (INCHES)	28.66		13.49		15.26	
10 PERCENT EXCEEDS	216		84		122	
50 PERCENT EXCEEDS	39		27		13	
90 PERCENT EXCEEDS	7.3		3.5		.45	

e Estimated.
* See Remarks.
@ See PERIOD OF RECORD.



02084160 CHICOD CREEK AT SECONDARY ROAD 1760 NEAR SIMPSON, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1975 to March 1987, May 1992 to February 1997.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1975 to March 1987, May 1992 to July 1993.

pH: May 1992 to July 1993.

WATER TEMPERATURE: November 1975 to March 1987, May 1992 to July 1993.

DISSOLVED OXYGEN: May 1992 to July 1993.

SUSPENDED SEDIMENT DISCHARGE: November 1975 to March 1987.

INSTRUMENTATION.--Water-quality monitor and sediment-pumping sampler November 1975 to March 1987. Water-quality monitor May 1992 to July 1993.

REMARKS.--Station operated as part of NAWQA Program from May 1992 to February 1997. Station operated to define the effects of channelization on stream quantity and quality in the Chicod Creek basin from November 1975 to March 1987. Water-quality monitor records for May 1992 to July 1993 are available in the Raleigh District office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: (November 1975 to March 1987) Maximum recorded, >508 microsiemens July 6, Aug. 14, 1985; minimum, 30 microsiemens May 5, 1978.

WATER TEMPERATURE: (November 1975 to March 1987) Maximum, 32.0°C June 15, 16, 1981; minimum, 0.0°C Dec. 20, 1975, Jan 10, 11, 18-25, 1976, Jan. 5, 6, 9, 11, 1981, Jan. 20, 1983, Jan. 22, 1984, Jan. 21, 22, 23, 24, 27, 1985, Jan. 29, 1986.

SEDIMENT CONCENTRATION: (November 1975 to March 1987) Maximum daily mean, 662 mg/L May 5, 1978; minimum daily mean, 0 mg/L during periods of no flow.

SEDIMENT LOAD: (November 1975 to March 1987) Maximum daily, 3,650 tons May 5, 1978; minimum daily, 0.0 tons during periods of no flow.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV 1996											
15...	0830	31	149	7.2	6.0	786	6.60	51	40	12	2.4
FEB 1997											
19...	1000	78	104	6.40	9.5	775	11.1	95	28	8.2	1.9

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
NOV 1996										
15...	7.2	25	.5	5.4	33	27	11	16	.10	4.9
FEB 1997										
19...	5.3	26	.4	3.0	12.0	10.0	11	10	.10	4.8

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)
NOV 1996 15...	99	.030	.700	.490	.51	.41	1.0	.90	1.7	1.6
FEB 1997 19...	74	.030	1.30	<.015	--	--	.40	.40	1.7	1.7

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 1996 15...	.160	.140	.140	580	17	9.2	.40	2	.17	100
FEB 1997 19...	.090	.050	.040	340	11	7.5	.70	9	1.9	75

PAMLICO RIVER BASIN

02084557 VAN SWAMP NEAR HOKE, NC

LOCATION.--Lat 35°43'49", long 76°44'49", Washington County, Hydrologic Unit 03020104, on left bank at upstream side of culvert on State Highway 32, and 4.8 mi east of Hoke.

DRAINAGE AREA.--23 mi^2.

PERIOD OF RECORD.--May 1977 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. No flow occurs periodically.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	27	22	31	29	36	33	39	3.5	0	0	0
2	38	28	23	38	27	35	29	41	3.3	0	0	0
3	34	44	23	42	26	33	27	40	3.1	0	0	0
4	31	44	22	43	24	31	25	45	3.0	0	0	0
5	27	40	21	43	23	29	23	43	2.9	0	0	0
6	24	36	23	40	22	28	21	38	2.7	0	0	0
7	22	33	34	37	21	28	20	32	2.4	0	0	0
8	137	30	76	34	21	26	19	27	2.2	0	0	0
9	248	36	87	35	27	24	17	24	1.8	0	0	0
10	240	38	88	56	28	23	16	22	1.4	.06	0	0
11	235	35	83	62	28	21	16	19	1.2	.13	0	0
12	227	31	78	60	28	20	15	17	.99	.02	0	0
13	218	28	71	55	27	19	16	16	.79	0	0	0
14	205	26	62	50	36	20	16	15	.69	0	0	0
15	191	24	56	46	71	29	14	14	.80	0	0	0
16	179	23	50	51	89	30	15	13	.68	0	0	0
17	167	21	45	66	92	28	14	11	.52	0	0	0
18	154	20	41	67	88	26	13	10	.40	0	0	0
19	159	20	40	62	82	27	12	8.9	.34	0	0	0
20	156	20	46	56	75	40	11	8.0	.27	0	0	0
21	143	20	47	51	67	43	10	9.2	.21	0	0	0
22	129	28	45	47	63	40	14	8.4	.18	0	0	0
23	112	35	43	44	58	36	20	7.2	.16	.03	0	0
24	95	34	41	41	53	32	23	6.3	.13	.08	0	0
25	78	32	39	40	47	29	22	5.7	.09	.02	0	0
26	63	30	36	39	43	35	20	5.5	.07	0	0	0
27	53	28	37	37	39	48	18	5.5	.08	0	0	0
28	45	26	39	35	37	47	19	5.0	.05	0	0	.23
29	39	24	38	33	---	44	28	4.5	0	0	0	1.1
30	34	22	36	32	---	40	41	4.3	0	0	0	.45
31	30	---	33	30	---	37	---	4.1	---	0	0	---
TOTAL	3555	883	1425	1403	1271	984	587	548.6	33.95	0.34	0	1.78
MEAN	115	29.4	46.0	45.3	45.4	31.7	19.6	17.7	1.13	.011	0	.059
MAX	248	44	88	67	92	48	41	45	3.5	.13	0	1.1
MIN	22	20	21	30	21	19	10	4.1	0	0	0	0
CFSM	4.99	1.28	2.00	1.97	1.97	1.38	.85	.77	.05	0	0	0
IN.	5.75	1.43	2.30	2.27	2.06	1.59	.95	.89	.05	0	0	0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1997, BY WATER YEAR (WY)

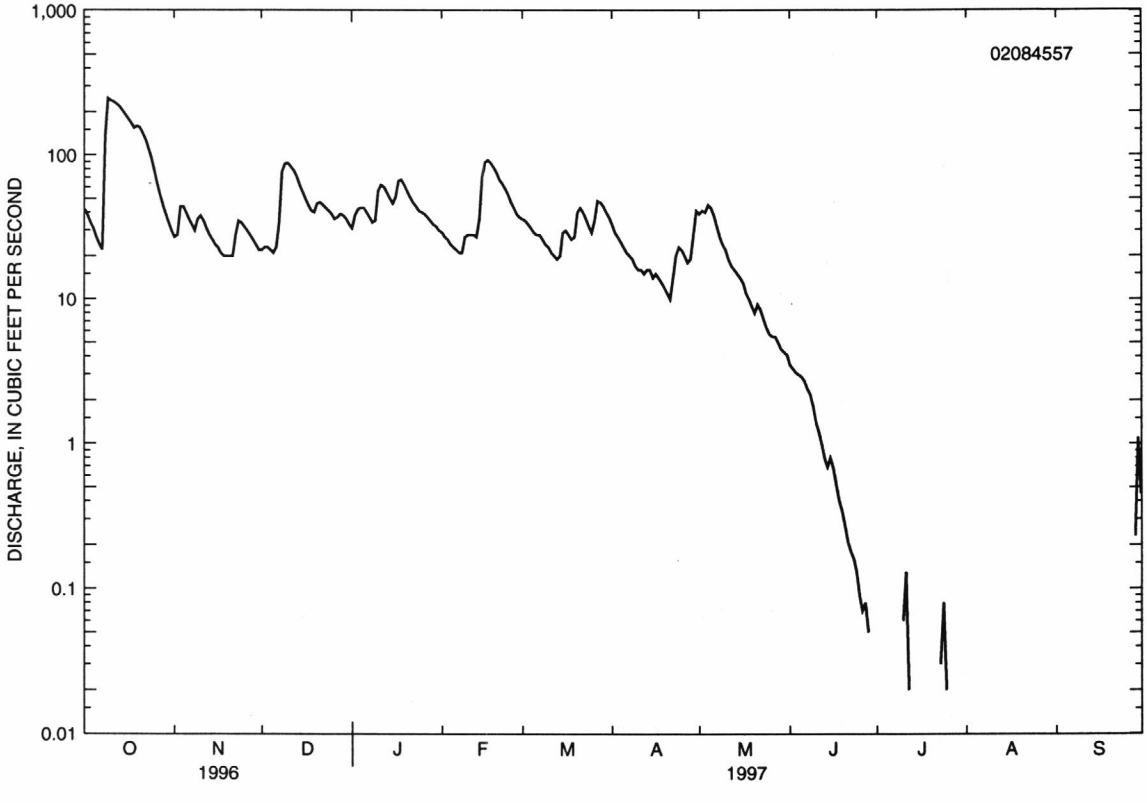
MEAN	14.0	15.5	17.3	44.5	46.0	61.2	42.7	26.4	9.21	6.29	12.3	12.7
MAX	115	121	56.6	124	110	142	101	122	29.8	55.2	64.8	92.5
(WY)	1997	1978	1990	1978	1983	1983	1983	1978	1995	1989	1986	1996
MIN	.018	.052	.033	.72	10.2	8.78	4.68	.58	.29	.011	0	.034
(WY)	1979	1979	1989	1989	1989	1992	1985	1985	1985	1997	1997	1995

PAMLICO RIVER BASIN

02084557 VAN SWAMP NEAR HOKE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1977 - 1997	
ANNUAL TOTAL	14620.62		10692.67			
ANNUAL MEAN	39.9		29.3		25.9	
HIGHEST ANNUAL MEAN					51.7	1978
LOWEST ANNUAL MEAN					7.76	1981
HIGHEST DAILY MEAN	248	Oct 9	248	Oct 9	385	Nov 7 1977
LOWEST DAILY MEAN	.07	Jul 8	0	Jun 29	0	Aug 21 1983
ANNUAL SEVEN-DAY MINIMUM	.15	Jul 5	0	Jun 29	0	Sep 12 1985
INSTANTANEOUS PEAK FLOW			253	Oct 8	409	Nov 6 1977
INSTANTANEOUS PEAK STAGE			5.98	Oct 8	5.98	Oct 8 1996
INSTANTANEOUS LOW FLOW			0*	Jun 29	0*	Oct 1 1978
ANNUAL RUNOFF (CFSM)	1.74		1.27		1.13	
ANNUAL RUNOFF (INCHES)	23.65		17.29		15.29	
10 PERCENT EXCEEDS	88		62		73	
50 PERCENT EXCEEDS	30		22		7.9	
90 PERCENT EXCEEDS	.82		0		.13	

* See REMARKS.



NEUSE RIVER BASIN

02084909 SEVENMILE CREEK NEAR EFLAND, NC

LOCATION.--Lat 36°03'56", long 79°08'39", Orange County, Hydrologic Unit 03020201, at culvert on I-85, 1 mi upstream from mouth, and 1.5 mi southeast of Efland.

DRAINAGE AREA.--14.1 mi^2.

PERIOD OF RECORD.--July 1981 to July 1982. June 1987 to current year.

REVISED RECORDS.--WRD NC-96-1: 1988-95(M).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 560 ft above sea level, from topographic map.

REMARKS.--Records poor. Maximum discharge for period of record from rating curve extended above 5,500 ft^3/s, on the basis of computation of peak flow through culvert; maximum gage height 15.47 ft, from floodmark. No flow occurs periodically most years. Minimum discharge for the current water year also occurred on Sept 8, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	15	68	1.4	15	27	8.2	30	7.5	2.0	.84	.37
2	23	17	39	1.3	13	23	7.3	20	11	4.7	.66	.51
3	11	7.6	11	1.2	11	24	6.5	57	7.7	2.6	.58	.43
4	7.7	5.1	6.5	1.1	10	29	6.1	56	12	1.7	.60	.34
5	4.9	4.5	9.8	1.2	10	22	5.7	22	6.3	1.4	1.9	.22
6	4.2	4.7	40	1.3	9.8	39	5.6	17	5.1	1.1	2.2	.18
7	3.7	4.6	14	.93	8.4	23	6.1	14	6.7	1.1	.70	.19
8	72	9.0	18	.73	12	20	5.1	12	5.5	.82	.58	.17
9	24	14	7.6	66	13	18	4.8	12	4.4	.73	.47	.21
10	13	6.1	5.4	39	9.9	18	4.5	11	4.0	.59	.36	6.4
11	9.5	4.7	4.4	11	9.5	17	4.4	10	3.6	.53	e.31	21
12	7.4	3.9	3.6	6.2	8.2	16	12	8.9	3.4	.52	e.35	3.5
13	6.8	3.6	2.6	4.9	7.8	15	15	8.3	40	.42	e.33	1.6
14	5.9	3.4	2.0	4.5	114	41	8.1	8.0	18	.40	e.32	.83
15	5.4	3.4	1.5	4.3	225	28	6.1	7.6	10	.34	e.29	.62
16	4.8	3.6	1.4	57	75	19	5.4	7.0	6.6	2.1	e.29	.55
17	4.5	3.9	1.5	18	40	17	5.0	6.5	5.1	4.5	e.24	.50
18	9.4	4.4	1.6	13	30	16	4.8	6.3	4.4	1.5	e.22	.46
19	19	6.2	4.3	11	27	73	4.3	5.9	4.0	.70	e.23	.46
20	7.7	5.9	3.0	11	25	57	4.4	5.6	3.3	.49	e8.0	.45
21	5.6	10	1.9	12	24	27	4.7	5.2	2.8	.42	e11	.59
22	4.3	22	1.7	13	23	21	23	4.9	2.7	1.4	e2.3	1.4
23	4.0	14	1.6	13	20	18	93	4.6	2.5	11	e1.2	1.8
24	4.2	12	2.0	12	19	15	39	4.3	2.1	5.8	e.81	2.4
25	3.8	10	4.2	25	19	14	19	4.3	1.8	4.1	e.63	3.7
26	2.8	23	2.4	17	18	16	15	4.4	1.8	2.4	e.54	2.6
27	3.1	16	4.8	14	20	14	14	4.2	4.2	1.7	e.47	2.1
28	6.1	11	3.3	30	25	12	349	3.9	3.0	1.4	e.39	1.7
29	9.7	9.7	2.6	24	---	11	284	3.4	2.2	1.0	.37	1.8
30	12	10	1.6	16	---	9.7	68	3.3	1.6	.99	.35	1.9
31	14	---	1.7	17	---	9.3	---	3.3	---	1.1	.34	---
TOTAL	322.3	268.3	273.0	448.06	841.6	709.0	1038.1	370.9	193.3	59.55	37.87	58.98
MEAN	10.4	8.94	8.81	14.5	30.1	22.9	34.6	12.0	6.44	1.92	1.22	1.97
MAX	72	23	68	66	225	73	349	57	40	11	11	21
MIN	2.8	3.4	1.4	.73	7.8	9.3	4.3	3.3	1.6	.34	.22	.17
CFSM	.74	.63	.62	1.03	2.13	1.62	2.45	.85	.46	.14	.09	.14
IN.	.85	.71	.72	1.18	2.22	1.87	2.74	.98	.51	.16	.10	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1997, BY WATER YEAR (WY)

MEAN	7.86	9.80	10.1	25.4	22.9	30.5	18.9	11.5	9.15	4.11	3.78	8.88
MAX	24.9	28.9	17.6	58.2	46.5	60.1	36.3	36.3	30.6	14.4	8.27	54.4
(WY)	1996	1996	1991	1991	1989	1993	1993	1989	1995	1989	1989	1996
MIN	.17	1.74	2.90	7.63	9.22	4.39	.99	1.26	.53	.21	.93	.027
(WY)	1995	1992	1992	1989	1991	1988	1995	1995	1994	1988	1990	1990

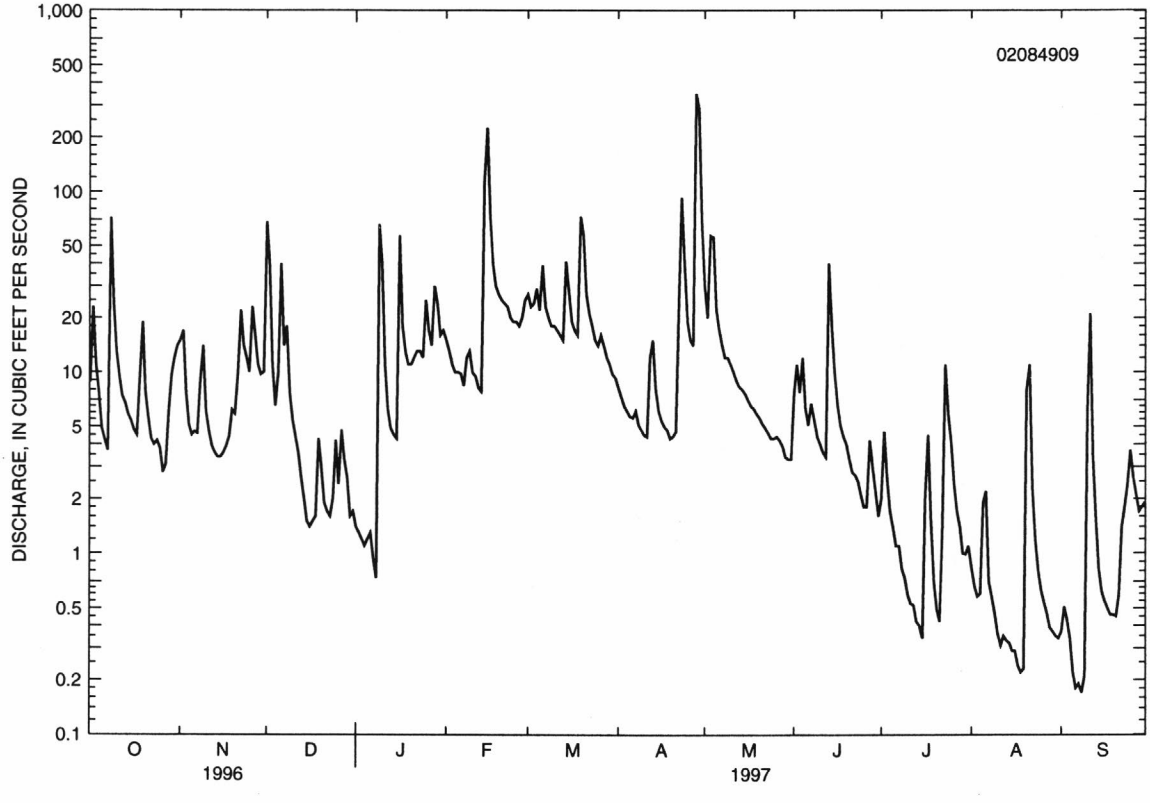
NEUSE RIVER BASIN

02084909 SEVENMILE CREEK NEAR EFLAND, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1988 - 1997	
ANNUAL TOTAL	6295.62		4620.96			
ANNUAL MEAN	17.2		12.7		13.5	
HIGHEST ANNUAL MEAN					20.7	1996
LOWEST ANNUAL MEAN					5.92	1988
HIGHEST DAILY MEAN	1080	Sep 6	349	Apr 28	1080	Sep 6 1996
LOWEST DAILY MEAN	.31	Jul 24	.17	Sep 8	0	Aug 3 1988
ANNUAL SEVEN-DAY MINIMUM	.69	Jul 19	.25	Sep 3	0	Aug 13 1988
INSTANTANEOUS PEAK FLOW			840	Apr 28	3440*	Sep 6 1996
INSTANTANEOUS PEAK STAGE			9.94	Apr 28	15.47*	Sep 6 1996
INSTANTANEOUS LOW FLOW			.14*	Sep 6	0*	Aug 6 1987
ANNUAL RUNOFF (CFSM)	1.22		.90		.96	
ANNUAL RUNOFF (INCHES)	16.61		12.19		13.03	
10 PERCENT EXCEEDS	32		24		25	
50 PERCENT EXCEEDS	9.4		5.4		5.3	
90 PERCENT EXCEEDS	1.3		.54		.35	

e Estimated.

* See REMARKS.



NEUSE RIVER BASIN

02085000 ENO RIVER AT HILLSBOROUGH, NC

LOCATION.--Lat 36°04'18", long 79°05'49", Orange County, Hydrologic Unit 03020201, on left bank 900 ft downstream of bridge on State Highway 86 at Hillsborough, and 2 mi downstream of Sevenmile Creek.

DRAINAGE AREA.--66.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to September 1971, October 1985 to current year.

REVISED RECORD.--WDR NC-96-1: 1945(M).

GAGE.--Water-stage recorder. Datum of gage is 487.44 ft above sea level. Telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Diversions upstream from station of 1.3 ft^3/s by Orange-Alamance Water System, Inc. and 0.4 ft^3/s by town of Hillsborough for municipal supply, part of which is returned downstream of station as treated effluent. Maximum gage height for period of record, 21.13 ft, from high-water mark in gage shelter.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	18	367	47	75	111	42	165	38	9.1	3.5	2.6
2	110	50	384	43	65	90	37	102	58	15	3.3	2.3
3	55	42	133	41	56	111	36	178	49	11	2.7	1.5
4	34	28	82	41	52	229	35	180	53	8.6	2.5	1.5
5	24	23	83	42	53	114	35	95	33	7.5	9.0	1.4
6	22	25	277	45	54	151	34	76	28	6.7	8.1	1.7
7	20	23	146	40	48	99	38	62	32	4.9	3.8	1.4
8	332	43	177	35	65	77	34	53	27	4.0	2.1	1.0
9	175	97	104	318	86	67	30	50	22	3.3	2.6	3.6
10	79	54	74	335	66	61	30	48	20	3.9	3.8	48
11	50	37	62	151	60	57	28	44	17	3.8	2.4	87
12	37	29	54	93	53	50	52	39	16	3.4	2.3	15
13	32	25	53	71	54	48	85	39	109	3.1	1.5	7.1
14	27	23	53	60	485	126	50	36	66	2.2	2.1	3.9
15	24	22	47	54	1220	127	37	34	42	1.9	2.2	2.6
16	22	22	42	282	354	78	33	30	26	5.6	2.4	2.1
17	20	22	41	163	157	62	32	28	20	14	2.2	1.9
18	26	23	43	89	106	56	31	27	18	7.1	2.1	1.8
19	119	28	67	66	89	199	27	24	16	5.1	1.4	1.7
20	56	27	64	58	77	266	26	24	14	3.8	29	1.8
21	36	29	50	55	70	122	27	23	13	3.3	38	1.5
22	28	69	44	52	69	89	106	21	11	4.9	7.0	1.2
23	24	45	42	55	61	70	375	19	9.7	28	5.6	.84
24	22	35	46	50	54	60	222	19	8.6	11	4.2	5.7
25	21	30	65	102	51	56	100	19	7.3	8.0	3.1	13
26	20	101	55	86	50	65	68	21	7.5	5.8	1.9	9.5
27	20	99	74	62	58	66	61	20	12	4.3	2.7	7.3
28	20	57	70	119	88	54	1660	18	10	3.0	2.0	7.4
29	20	43	60	139	---	54	2220	17	8.3	2.6	1.8	6.3
30	19	41	52	89	---	52	418	17	7.0	3.0	1.8	4.3
31	19	---	49	87	---	49	---	17	---	3.0	1.7	---
TOTAL	1538	1210	2960	2970	3776	2916	6009	1545	798.4	200.9	158.8	246.94
MEAN	49.6	40.3	95.5	95.8	135	94.1	200	49.8	26.6	6.48	5.12	8.23
MAX	332	101	384	335	1220	266	2220	180	109	28	38	87
MIN	19	18	41	35	48	48	26	17	7.0	1.9	1.4	.84
CFSM	.75	.61	1.45	1.45	2.04	1.43	3.03	.76	.40	.10	.08	.12
IN.	.87	.68	1.67	1.67	2.13	1.64	3.39	.87	.45	.11	.09	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1997@, BY WATER YEAR (WY)

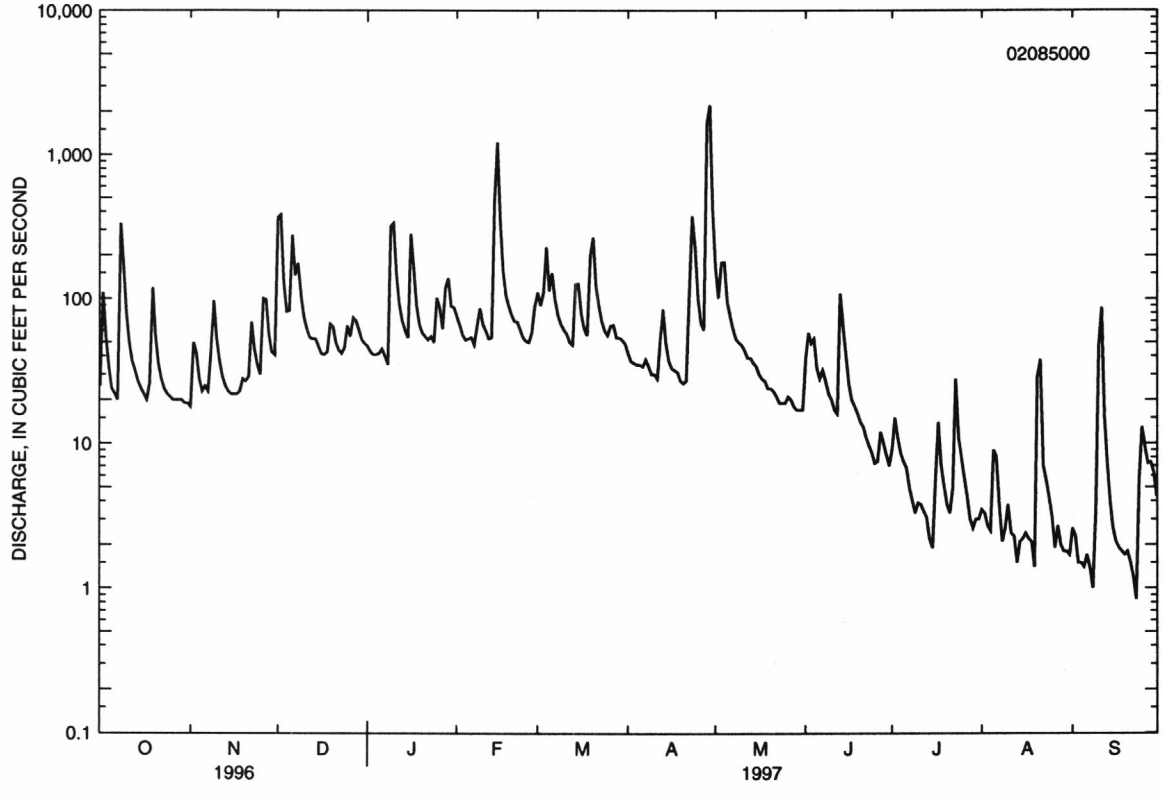
MEAN	29.6	45.4	56.6	89.5	111	117	93.6	52.0	38.9	38.7	33.8	35.1
MAX	181	213	166	326	273	329	264	165	210	359	256	342
(WY)	1930	1986	1946	1936	1960	1993	1936	1931	1995	1938	1939	1945
MIN	.63	.82	3.64	5.16	21.8	29.9	14.8	9.67	1.75	1.28	.85	.28
(WY)	1987	1942	1942	1942	1931	1988	1995	1986	1986	1986	1987	1954

NEUSE RIVER BASIN

02085000 ENO RIVER AT HILLSBOROUGH, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1928 - 1997@	
ANNUAL TOTAL	30322.5		24329.04			
ANNUAL MEAN	82.8		66.7		61.5	
HIGHEST ANNUAL MEAN					108	1960
LOWEST ANNUAL MEAN					26.3	1988
HIGHEST DAILY MEAN	4600	Sep 6	2220	Apr 29	4600	Sep 6 1996
LOWEST DAILY MEAN	2.7	Jul 8	.84	Sep 23	.02	Jul 10 1986
ANNUAL SEVEN-DAY MINIMUM	4.3	Jul 18	1.5	Sep 17	.10	Oct 6 1954
INSTANTANEOUS PEAK FLOW			3980	Apr 29	10800	Sep 6 1996
INSTANTANEOUS PEAK STAGE			15.83	Apr 29	21.13*	Sep 6 1996
INSTANTANEOUS LOW FLOW			.57	Sep 8	.01	Jul 10 1986
ANNUAL RUNOFF (CFSM)	1.26		1.01		.93	
ANNUAL RUNOFF (INCHES)	17.09		13.71		12.65	
10 PERCENT EXCEEDS	159		112		117	
50 PERCENT EXCEEDS	46		36		27	
90 PERCENT EXCEEDS	8.1		2.6		4.3	

* See REMARKS.
@ See PERIOD OF RECORD.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1990 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT										
24...	1030	22	85.0	6.90	13.5	54	755	9.00	87	29
DEC										
06...	1015	315	74.0	6.70	6.5	190	753	12.1	99	23
JAN										
23...	1100	57	86.0	6.88	5.5	53	753	13.6	109	25
MAR										
11...	1000	57	78.0	6.90	12.5	60	752	10.0	95	25
MAY										
21...	1030	25	90.0	6.95	20.0	35	755	7.57	84	29
SEP										
09...	1015	.98	145	6.85	21.5	34	745	4.20	49	43

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	ANC UNFLTRD CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT										
24...	6.8	2.8	4.7	25	.4	1.9	20	16	5.0	12
DEC										
06...	5.1	2.5	3.9	25	.4	1.9	21.0	17.0	5.3	4.9
JAN										
23...	5.8	2.5	6.9	36	.6	1.3	32.0	27.0	5.0	5.5
MAR										
11...	5.9	2.5	4.8	28	.4	1.2	29.0	24.0	4.6	5.1
MAY										
21...	6.8	3.0	5.3	27	.4	1	34.0	28.0	3.5	5.0
SEP										
09...	11	4.0	8.8	30	.6	1.9	40	33	11	11

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT										
24...	<.10	12	64	.013	.210	.002	.30	.30	.51	.020
DEC										
06...	<.10	11	54	.002	.300	.008	.29	.30	.60	.040
JAN										
23...	<.10	14	64	<.001	.440	<.002	--	.20	.64	<.010
MAR										
11...	<.10	13	58	.005	.330	.019	.28	.30	.63	<.010
MAY										
21...	<.1	13	64	.001	.30	.004	.20	.2	.51	.01
SEP										
09...	.2	9.9	87	.002	.20	.045	.22	.3	.46	.02

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
OCT										
24...	<.001	110	<1	<1	2	1	2	830	<1	60
DEC										
06...	<.001	--	--	--	--	--	--	--	--	--
JAN										
23...	.006	--	--	--	--	--	--	--	--	--
MAR										
11...	.002	290	<1	<1	<1	<1	1	1200	<1	110
MAY										
21...	.002	--	--	--	--	--	--	--	--	--
SEP										
09...	.002	--	--	--	--	--	--	--	--	--

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
OCT										
24...	<.10	<1	1	<1	<1	<10	5.7	4	.24	--
DEC										
06...	--	--	--	--	--	--	7.5	49	42	--
JAN										
23...	--	--	--	--	--	--	3.7	10	1.5	--
MAR										
11...	<.10	<1	<1	<1	<1	<10	4.7	--	--	700
MAY										
21...	--	--	--	--	--	--	4	6	.41	--
SEP										
09...	--	--	--	--	--	--	4.5	--	--	7

NEUSE RIVER BASIN

02085070 ENO RIVER NEAR DURHAM, NC

LOCATION.--Lat 36°04'20", long 78°54'30", Durham County, Hydrologic Unit 03020201, on right bank 275 ft downstream of bridge on U.S. Highway 501, 0.2 mi downstream of Crooked Creek, and 5 mi north of Durham.

DRAINAGE AREA.--141 mi^2

PERIOD OF RECORD.--Occasional low-flow measurements, water year 1955. August 1963 to current year.

REVISED RECORDS.--WDR NC-72-1: 1968-71(M), 1971(P).

GAGE.--Water-stage recorder. Datum of gage is 270 ft above sea level, from topographic map. Prior to Nov. 19, 1966, at site 275 ft upstream, at datum 272.35 ft. Nov. 20, 1966, to Sept. 30, 1967, water-stage recorder at present site, at datum 270.94 ft. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Some regulation during periods of low flow caused by mill 600 ft upstream. Maximum gage height for period of record, 23.58 ft, from floodmark. Minimum discharge for period of record also occurred on Aug. 15, 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	39	639	97	e165	e215	e94	449	96	e22	e4.9	3.5
2	92	62	871	91	e158	e180	86	243	285	28	e4.4	3.1
3	107	84	333	88	e147	e220	82	357	180	33	e3.7	3.0
4	70	59	179	86	139	e520	81	487	e161	27	e3.5	5.5
5	54	50	178	85	138	e230	75	236	95	23	e38	3.6
6	47	49	664	88	139	293	e71	169	72	20	e33	3.8
7	45	49	e360	83	132	218	e86	140	76	18	22	2.3
8	616	148	e440	76	160	158	e80	121	69	17	13	2.6
9	521	e240	e275	e500	217	135	73	114	e59	15	10	3.4
10	185	e135	e185	e790	157	123	69	109	51	e13	7.8	31
11	106	e79	e140	380	125	118	68	100	46	e11	10	306
12	80	e66	115	208	114	109	e160	94	44	12	12	73
13	68	e58	108	149	e113	102	e315	90	210	e11	8.8	34
14	61	52	104	127	913	143	e120	89	119	e9.0	7.9	22
15	56	e51	95	114	1780	293	e90	82	96	e8.4	6.7	14
16	53	e49	88	e600	867	161	e77	77	65	e20	6.2	10
17	50	47	86	434	413	e125	75	73	51	e56	7.1	9.0
18	104	e46	89	203	258	e115	73	70	45	e34	6.8	7.8
19	141	54	124	143	201	371	e69	69	42	e24	e5.8	7.0
20	e105	56	132	125	171	688	e67	65	38	e16	23	6.4
21	e72	63	103	118	151	312	e65	61	34	e12	65	6.2
22	e59	118	90	111	146	200	e260	59	32	e16	39	5.9
23	e51	100	85	112	131	154	686	56	29	e89	18	5.9
24	e48	75	89	109	118	130	551	54	26	e72	10	12
25	46	65	114	239	112	118	e239	62	24	e34	9.0	17
26	43	93	111	230	e108	123	148	59	23	17	e7.2	e27
27	42	162	139	145	e125	134	137	57	34	7.9	e11	e22
28	42	100	144	202	e200	116	1860	e54	31	3.9	e7.5	e21
29	41	78	121	355	---	110	2830	e50	28	e3.4	e5.9	e19
30	41	74	116	201	---	106	907	49	23	e3.9	4.8	16
31	40	---	104	190	---	102	---	50	---	e4.3	3.9	---
TOTAL	3147	2401	6421	6479	7598	6122	9594	3845	2184	680.8	415.9	703.0
MEAN	102	80.0	207	209	271	197	320	124	72.8	22.0	13.4	23.4
MAX	616	240	871	790	1780	688	2830	487	285	89	65	306
MIN	40	39	85	76	108	102	65	49	23	3.4	3.5	2.3
CFSM	.72	.57	1.47	1.48	1.92	1.40	2.27	.88	.52	.16	.10	.17
IN.	.83	.63	1.69	1.71	2.00	1.62	2.53	1.01	.58	.18	.11	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1997, BY WATER YEAR (WY)

MEAN	60.1	79.1	112	201	245	274	181	128	91.7	71.6	53.8	58.7
MAX	456	462	406	491	551	685	424	429	411	452	282	526
(WY)	1972	1986	1973	1978	1979	1993	1983	1978	1982	1975	1985	1996
MIN	4.77	11.0	19.4	21.4	64.7	67.4	34.9	26.1	6.86	6.35	3.34	.84
(WY)	1964	1970	1995	1981	1968	1988	1995	1986	1986	1977	1977	1968

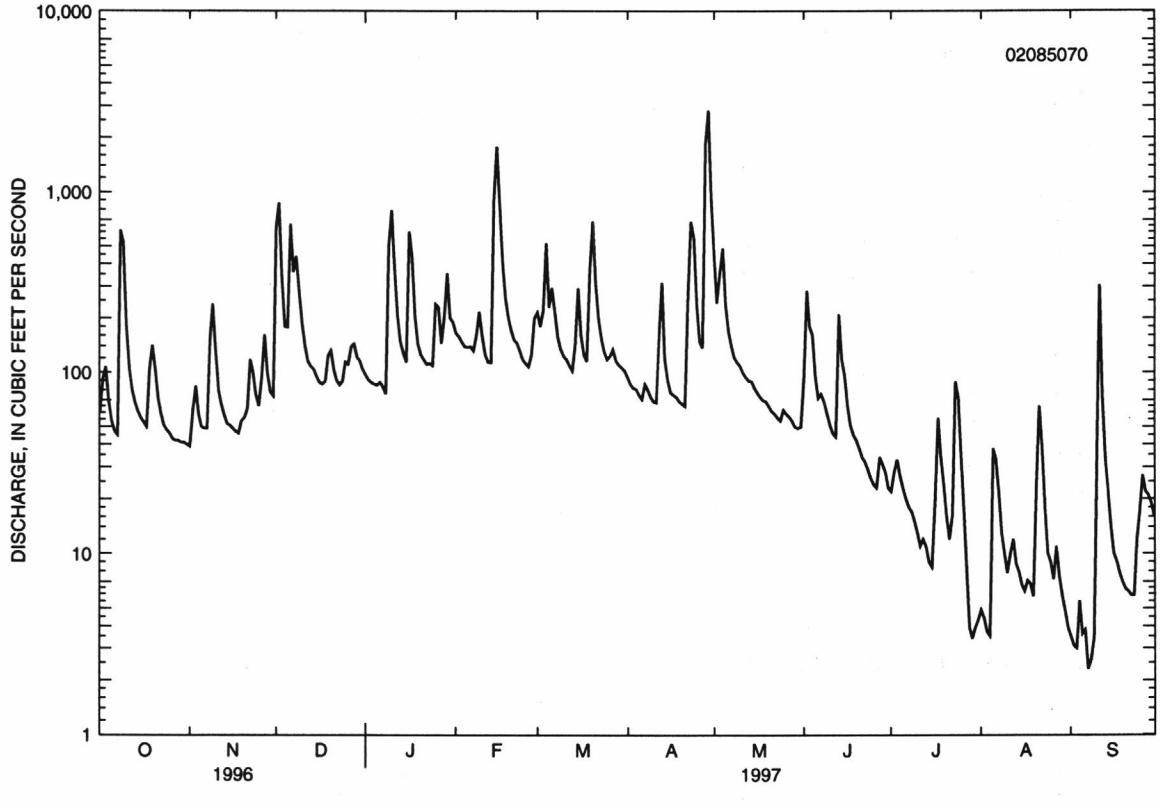
NEUSE RIVER BASIN

02085070 ENO RIVER NEAR DURHAM, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1963 - 1997	
ANNUAL TOTAL	61760.4		49590.7			
ANNUAL MEAN	169		136		129	
HIGHEST ANNUAL MEAN					244	1973
LOWEST ANNUAL MEAN					60.4	1977
HIGHEST DAILY MEAN	9900	Sep 6	2830	Apr 29	9900	Sep 6 1996
LOWEST DAILY MEAN	8.4	Jul 24	2.3	Sep 7	.08	Aug 14 1977
ANNUAL SEVEN-DAY MINIMUM	12	Jul 18	3.4	Sep 2	.20	Aug 8 1977
INSTANTANEOUS PEAK FLOW			3630	Apr 29	14700	Sep 6 1996
INSTANTANEOUS PEAK STAGE			10.68	Apr 29	23.58*	Sep 6 1996
INSTANTANEOUS LOW FLOW			NOT DETERMINED		.06*	Aug 14 1977
ANNUAL RUNOFF (CFSM)	1.20		.96		.92	
ANNUAL RUNOFF (INCHES)	16.29		13.08		12.45	
10 PERCENT EXCEEDS	332		266		267	
50 PERCENT EXCEEDS	86		80		53	
90 PERCENT EXCEEDS	22		8.2		6.9	

e Estimated.

* See REMARKS.



NEUSE RIVER BASIN

02085079 ENO RIVER NEAR WEAVER, NC

LOCATION.--Lat 36°04'19", long 78°51'47", Durham County, Hydrologic Unit 03020201, at bridge on Secondary Road 1004, 1.3 mi above Little River, and 1.5 mi northeast of Weaver.

DRAINAGE AREA.--148 mi^2.

PERIOD OF RECORD.--Water years 1983 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1982 to September 1985.

WATER TEMPERATURE: October 1982 to September 1985.

INSTRUMENTATION.--Water-quality monitor from October 1982 to September 1985.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. Instantaneous discharge is from gage located at Eno River near Durham (02085070).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 293 microsiemens, July 11, 1984, minimum, 32 microsiemens, Aug. 18, 1984.

WATER TEMPERATURE: Maximum recorded, 30.5°C, Aug. 23, 1983; minimum recorded, 0.0°C, on several days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT											
25...	1330	--	45	149	7.15	14.0	16	766	10.4	101	35
DEC											
09...	1300	E275	--	95.0	6.95	6.0	96	768	11.5	92	27
JAN											
24...	1400	--	105	131	7.15	6.0	45	770	13.1	104	30
MAR											
13...	1300	--	102	148	7.15	13.5	49	774	10.2	96	30
MAY											
22...	1315	--	59	195	7.20	20.0	25	765	7.82	86	33
SEP											
05...	1300	--	3.7	317	7.19	21.5	35	761	6.73	76	36

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	ANC UNFLTRD CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT										
25...	8.5	3.2	14	43	1	5.0	33	27	22	13
DEC										
09...	6.2	2.8	6.9	34	.6	1.7	21.0	17.0	11	6.1
JAN										
24...	7.2	2.8	15	51	1	1.6	35.0	29.0	20	8.0
MAR										
13...	7.3	2.8	16	52	1	1.5	35.0	29.0	25	7.2
MAY										
22...	7.9	3.3	22	57	2	1.8	43.0	35.0	37	8.2
SEP										
05...	7.9	3.9	47	71	3	4.2	54	44	71	11

NEUSE RIVER BASIN

02085079 ENO RIVER NEAR WEAVER, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS TOTAL (MG/L AS P) (00665)
OCT										
25...	<.1	14	108	<.001	.120	<.002	--	.30	.42	.010
DEC										
09...	<.10	12	62	.008	.310	.011	.39	.40	.71	.030
JAN										
24...	<.10	12	92	.005	.540	<.002	--	<.20	--	<.010
MAR										
13...	<.10	8.6	90	.002	.170	<.002	--	.30	.47	.010
MAY										
22...	<.1	5.4	118	.002	.14	.011	.26	.3	.40	.02
SEP										
05...	.2	6.2	193	<.0010	.13	.021	.42	.4	.57	.03

DATE	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)
OCT										
25...	<.001	130	<1	<1	<1.0	<1	2	650	<1	60
DEC										
09...	<.001	--	--	--	--	--	--	--	--	--
JAN										
24...	.006	--	--	--	--	--	--	--	--	--
MAR										
13...	.003	310	<1	<1	<1	<1	1	920	<1	70
MAY										
22...	.004	--	--	--	--	--	--	--	--	--
SEP										
05...	.010	--	--	--	--	--	--	--	--	--

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
OCT										
25...	<.1	<1.0	<1	<1	<1	<10	4.8	5	.61	--
DEC										
09...	--	--	--	--	--	--	6.5	11	--	--
JAN										
24...	--	--	--	--	--	--	4.8	--	--	17
MAR										
13...	<.10	<1	<1	<1	<1	<10	4.6	--	--	16
MAY										
22...	--	--	--	--	--	--	4.7	12	1.9	--
SEP										
05...	--	--	--	--	--	--	3.8	--	--	100

NEUSE RIVER BASIN

0208521324 LITTLE RIVER AT SECONDARY ROAD 1461 NEAR ORANGE FACTORY, NC

LOCATION.--Lat 36°08'30", long 78°55'10", Durham County, Hydrologic Unit 03020201, at Secondary Road 1461, and 1.8 mi northwest of Orange Factory.

DRAINAGE AREA.--78.2 mi^2.

PERIOD OF RECORD.--October 1987 to current year. Prior to October 1987, equivalent records published as "Little River near Orange Factory, NC" (02085220), September 1961 to September 1987.

GAGE.--Water-stage recorder. Datum of gage is 380 ft above sea level, from topographic map. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum discharge for period of record from extension of rating curve above 2,300 ft^3/s, based on contracted-opening measurement of peak flow; maximum gage height, 13.26 ft, from high-water mark in gage shelter. Minimum discharge for period of record, no flow, also occurred Aug. 19-29, 1988. Minimum discharge for the current water year also occurred Sept. 7, 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e45	22	668	53	97	134	53	e270	34	13	e2.9	1.3
2	e55	43	711	50	80	110	49	e160	143	14	e3.1	1.3
3	e85	71	253	48	e71	95	46	e205	74	15	e3.0	1.4
4	e57	43	148	45	e64	292	45	e280	238	14	e2.9	1.1
5	e40	32	150	45	e60	130	44	e150	71	e13	e2.8	1.0
6	e35	30	596	48	e58	194	43	e120	44	11	e2.7	.74
7	e33	30	309	44	e56	124	45	e100	43	e10	e2.6	.64
8	e300	93	414	e40	e100	90	42	e84	37	9.3	e2.7	.68
9	e240	182	208	e340	e180	78	39	e71	32	8.7	e2.6	3.6
10	140	89	130	372	e100	72	37	e62	28	8.2	e2.2	19
11	89	60	107	162	e80	68	35	e54	25	7.8	e2.1	125
12	68	46	e89	101	e73	62	55	e48	24	7.4	e1.9	32
13	55	38	e76	77	e69	57	93	e44	31	7.3	e2.0	16
14	49	35	e78	65	e500	94	61	e40	105	6.8	e2.2	9.8
15	43	32	e69	59	e1050	150	51	e38	65	e6.3	e3.5	7.0
16	37	29	e56	300	e400	83	44	e36	37	e6.5	e2.4	5.1
17	33	28	e53	202	e200	67	40	e34	28	e9.0	e2.7	4.4
18	36	28	e55	104	e140	62	37	e33	24	7.1	e2.6	3.7
19	181	28	e63	78	e110	187	35	e31	22	6.7	e3.0	3.5
20	101	30	e80	70	e96	e330	35	e30	20	6.1	e5.5	3.2
21	60	34	e61	e68	e88	139	e34	29	18	6.6	e19	2.9
22	45	105	e53	66	e80	101	115	27	17	e13	8.3	e2.6
23	38	85	e48	70	e70	81	361	25	15	e18	5.8	2.4
24	32	58	e50	65	e64	70	244	25	14	e14	4.7	2.9
25	31	46	e64	129	e61	64	113	24	14	e6.6	3.8	4.8
26	28	e80	e59	123	e59	70	75	25	e13	e4.9	3.2	7.0
27	28	e150	94	81	e66	75	65	24	e17	e3.9	2.7	6.7
28	26	92	92	137	76	64	1310	23	e15	e3.6	2.3	5.5
29	26	69	69	203	---	62	e1580	21	e14	e3.2	1.9	5.0
30	25	60	61	111	---	61	e400	20	e13	e3.4	1.8	4.3
31	24	---	57	106	---	58	---	20	---	e3.5	1.6	---
TOTAL	2085	1768	5021	3462	4148	3324	5226	2153	1275	267.9	110.5	284.56
MEAN	67.3	58.9	162	112	148	107	174	69.5	42.5	8.64	3.56	9.49
MAX	300	182	711	372	1050	330	1580	280	238	18	19	125
MIN	24	22	48	40	56	57	34	20	13	3.2	1.6	.64
CFSM	.86	.75	2.07	1.43	1.89	1.37	2.23	.89	.54	.11	.05	.12
IN.	.99	.84	2.39	1.65	1.97	1.58	2.49	1.02	.61	.13	.05	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1997, BY WATER YEAR (WY)

MEAN	38.0	46.3	66.3	134	124	176	109	62.8	44.9	34.6	26.9	40.4
MAX	97.7	120	162	251	256	456	236	165	194	104	114	329
(WY)	1996	1996	1997	1991	1989	1993	1993	1990	1995	1989	1989	1996
MIN	.14	4.26	8.10	29.0	50.7	30.9	17.1	12.2	5.53	1.59	2.98	1.27
(WY)	1994	1992	1995	1989	1991	1988	1995	1995	1994	1988	1991	1990

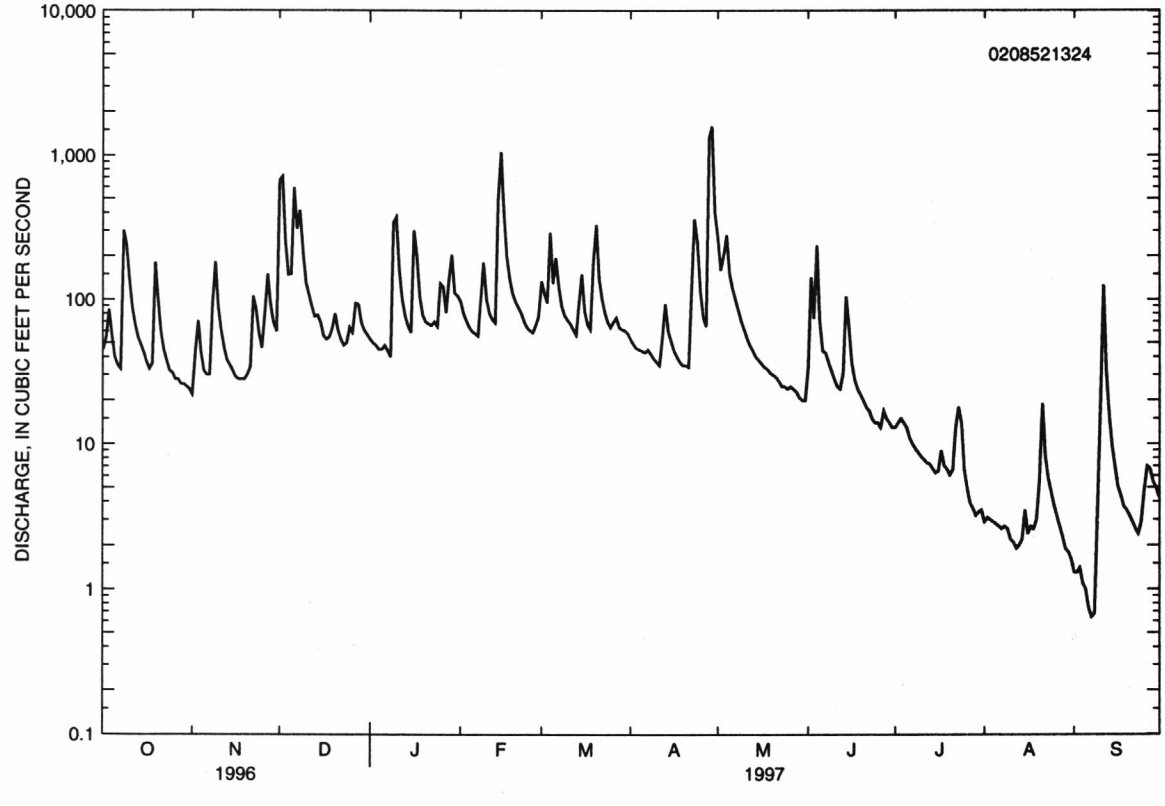
NEUSE RIVER BASIN

0208521324 LITTLE RIVER AT SECONDARY ROAD 1461 NEAR ORANGE FACTORY, NC

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1987 - 1997	
ANNUAL TOTAL	41348.2		29124.96			
ANNUAL MEAN	113		79.8		75.1	
HIGHEST ANNUAL MEAN					112	1996
LOWEST ANNUAL MEAN					30.8	1988
HIGHEST DAILY MEAN	6500	Sep 6	1580	Apr 29	6500	Sep 6 1996
LOWEST DAILY MEAN	2.7	Jul 23	.64	Sep 7	0	Aug 19 1988
ANNUAL SEVEN-DAY MINIMUM	3.8	Jul 17	.98	Sep 2	0	Aug 19 1988
INSTANTANEOUS PEAK FLOW			1990	Apr 29	11600*	Sep 6 1996
INSTANTANEOUS PEAK STAGE			6.07	Apr 29	13.26*	Sep 6 1996
INSTANTANEOUS LOW FLOW			.56*	Sep 6	0*	Aug 18 1988
ANNUAL RUNOFF (CFSM)	1.44		1.02		.96	
ANNUAL RUNOFF (INCHES)	19.67		13.85		13.04	
10 PERCENT EXCEEDS	223		154		160	
50 PERCENT EXCEEDS	55		45		27	
90 PERCENT EXCEEDS	10		3.2		2.0	

e Estimated.

* See REMARKS.



NEUSE RIVER BASIN

0208524090 MOUNTAIN CREEK AT SECONDARY ROAD 1617 NEAR BAHAMA, NC

LOCATION.--Lat 36°08"58", long 78°53'49", Durham County, Hydrologic Unit 03020201, on right bank at bridge on Secondary Road 1617 and 1.6 mi southwest of Bahama.

DRAINAGE AREA.--8.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1994 to current year.

GAGE.--Water-stage recorder. Datum of gage is 370 ft above sea level, from topographic map.

REMARKS.--Records good except thoses for estimated daily discharges, which are fair. Maximum gage height for period of record from floodmarks. Maximum gage height for period of record occurred Sept. 6, 1996, discharge not determined. Minimum discharge for current water year also occurred Sept. 8, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.0	2.5	69	5.4	9.2	11	4.7	13	4.5	.41	e.60	.09
2	e8.0	9.5	35	5.1	7.6	9.8	3.9	9.4	30	.80	e.40	.11
3	e6.0	5.2	13	4.9	6.6	16	3.8	26	13	.55	e.30	.11
4	e4.5	3.4	9.0	4.8	6.1	19	3.5	15	48	.41	e.20	.10
5	e4.0	2.8	19	4.6	6.8	11	4.1	8.8	9.3	.34	e.40	.09
6	e3.0	3.1	43	4.6	6.5	18	4.2	6.8	5.5	.31	e.25	.09
7	e2.0	3.0	25	4.2	5.4	11	3.6	5.7	5.3	.25	e.20	.08
8	54	26	25	3.9	10	8.3	3.2	4.7	4.0	.22	e.20	.08
9	18	16	13	49	11	7.2	2.8	3.9	4.8	.18	.18	.10
10	9.2	7.6	9.4	26	8.3	6.6	2.6	4.2	6.8	.18	.16	.97
11	6.1	5.1	7.7	13	7.6	6.1	2.6	4.0	1.7	.18	.17	5.8
12	5.0	3.9	6.7	9.6	6.4	5.4	8.5	3.5	2.0	.15	.16	.88
13	4.4	3.3	6.8	7.7	7.1	4.9	9.8	3.4	3.4	.14	.21	.37
14	3.8	2.9	6.0	6.5	75	9.4	5.1	3.2	16	.13	.19	.25
15	3.6	2.7	5.1	6.0	102	9.4	3.8	2.9	6.4	.23	.19	.23
16	3.5	2.4	4.6	41	29	6.1	3.8	2.8	3.1	.23	.23	.25
17	3.5	2.4	4.7	15	16	5.1	3.0	2.2	2.2	.59	.13	.22
18	6.4	2.6	5.1	9.2	12	7.4	3.2	2.2	1.6	.62	.11	.20
19	7.7	3.2	10	7.1	11	29	3.0	2.4	1.3	.24	.11	.19
20	4.2	2.9	7.3	7.1	10	24	2.9	2.5	1.1	.20	1.3	.15
21	3.3	4.9	4.8	6.7	9.0	12	3.2	2.3	.90	e.17	2.0	.14
22	3.1	11	4.4	6.5	8.3	9.3	14	1.8	.73	e1.5	.38	.12
23	5.5	5.5	4.5	6.6	7.0	7.0	39	1.6	.60	e4.0	.20	.12
24	3.7	4.1	5.2	6.0	6.0	5.8	20	1.5	.55	e8.0	.15	.27
25	2.8	3.5	7.4	19	5.4	5.2	10	1.5	.48	e2.0	.11	.52
26	2.6	8.3	5.8	11	5.4	7.0	7.1	1.6	.48	e1.0	.11	.30
27	2.5	6.8	13	8.1	6.5	6.0	7.3	1.5	.95	e.80	.10	.21
28	2.6	4.3	9.3	20	8.7	5.3	94	1.3	.77	e.50	.10	.22
29	2.6	3.6	7.7	16	---	5.2	115	1.0	.48	e1.0	.10	.27
30	2.5	4.5	6.4	11	---	4.7	23	1.2	.40	e2.0	.09	.17
31	2.6	---	5.9	11	---	4.9	---	1.2	---	e1.5	.09	---
TOTAL	192.7	167.0	398.8	356.6	409.9	297.1	414.7	143.1	176.34	28.83	9.12	12.70
MEAN	6.22	5.57	12.9	11.5	14.6	9.58	13.8	4.62	5.88	.93	.29	.42
MAX	54	26	69	49	102	29	115	26	48	8.0	2.0	5.8
MIN	2.0	2.4	4.4	3.9	5.4	4.7	2.6	1.0	.40	.13	.09	.08
CFSM	.78	.70	1.61	1.44	1.84	1.20	1.74	.58	.74	.12	.04	.05
IN.	.90	.78	1.86	1.67	1.91	1.39	1.94	.67	.82	.13	.04	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

MEAN	3.55	5.11	6.09	10.5	11.9	11.1	8.48	5.24	13.1	3.15	1.71	24.9
MAX	6.22	9.41	12.9	14.4	14.6	12.7	13.8	9.34	29.7	7.40	4.33	74.0
(WY)	1997	1996	1997	1996	1997	1996	1997	1996	1995	1995	1996	1996
MIN	.60	.36	.50	5.61	10.3	9.58	1.50	1.76	3.67	.93	.29	.18
(WY)	1995	1995	1995	1995	1996	1997	1995	1995	1996	1997	1997	1995

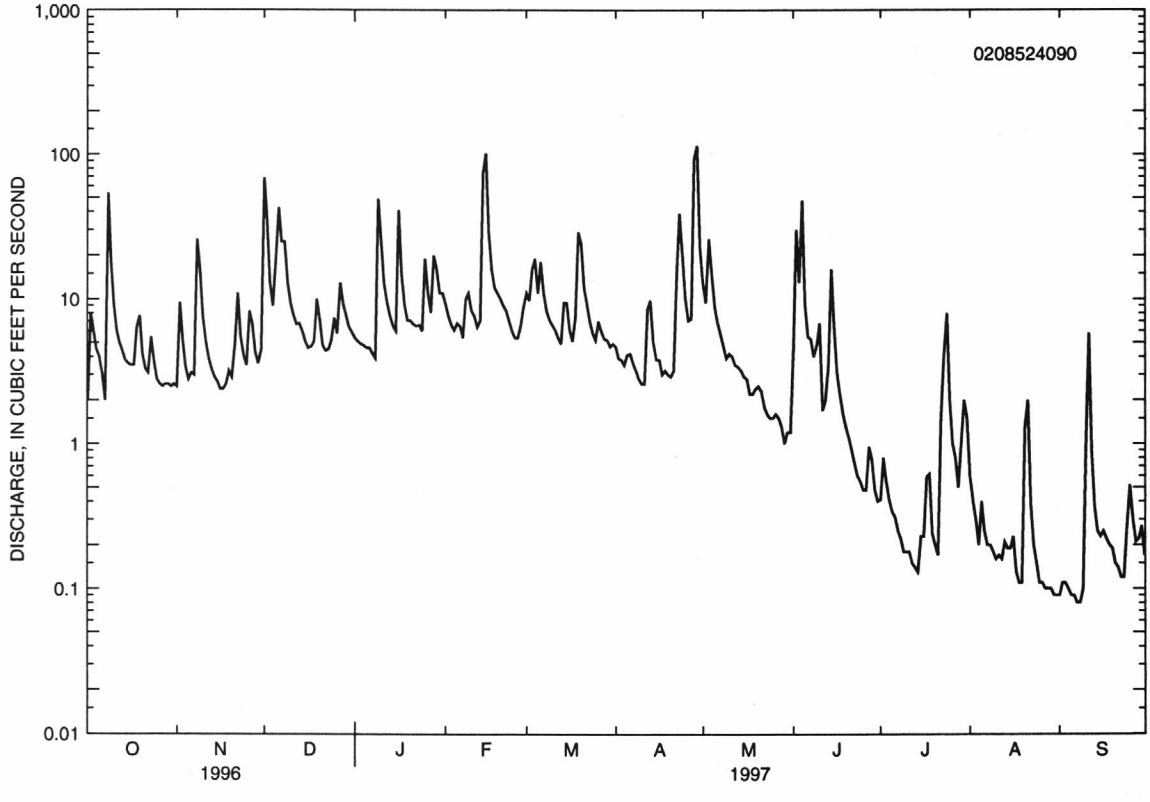
NEUSE RIVER BASIN

0208524090 MOUNTAIN CREEK AT SECONDARY ROAD 1617 NEAR BAHAMA, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1995 - 1997		
ANNUAL TOTAL	4987.85		2606.89				
ANNUAL MEAN	13.6		7.14		8.65		
HIGHEST ANNUAL MEAN					13.1		1996
LOWEST ANNUAL MEAN					5.74		1995
HIGHEST DAILY MEAN	e1000	Sep 6	115	Apr 29	e1000	Sep 6	1996
LOWEST DAILY MEAN	.28	Jul 22	.08	Sep 7	.02	Oct 3	1994
ANNUAL SEVEN-DAY MINIMUM	.53	Jul 18	.09	Sep 3	.02	Oct 1	1994
INSTANTANEOUS PEAK FLOW			243	Apr 29	NOT DETERMINED*		
INSTANTANEOUS PEAK STAGE			6.33	Apr 29	12.56*	Sep 6	1996
INSTANTANEOUS LOW FLOW			.07*	Sep 7	.01	Oct 7	1994
ANNUAL RUNOFF (CFSM)	1.71		.90		1.09		
ANNUAL RUNOFF (INCHES)	23.29		12.17		14.76		
10 PERCENT EXCEEDS	19		14		14		
50 PERCENT EXCEEDS	5.4		4.1		3.0		
90 PERCENT EXCEEDS	1.4		.19		.20		

e Estimated.

* See REMARKS.



0208524090 MOUNTAIN CREEK AT SECONDARY ROAD 1617 NEAR BAHAMA, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988-91, 1994 to current year.

REMARKS.--Station operated to define the impacts of various land-use development on surface-water quality in the Upper Neuse River basin.

COOPERATION.--For the period February 1988 through June 1989 the inorganic chemical data and trace metal data were analyzed by the city of Durham's Brown Water Treatment Plant Laboratory.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	ANC UNFLTRD CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
OCT												
08...	1200	110	92.0	6.82	16.0	737	8.80	92	--	--	.010	.390
NOV												
25...	1115	3.5	109.0	6.89	8.5	756	11.4	98	30	25	.010	.330
DEC												
16...	1300	4.6	95.0	6.70	7.0	756	10.4	86	31	25	.020	.540
JAN												
13...	1245	7.5	89.0	6.30	3.0	762	12.8	95	25	20	.010	.460
16...	1030	72	100	6.70	--	--	--	--	--	--	.010	.380
MAR												
10...	1315	6.6	94.0	6.50	16.0	755	10.4	106	30	25	<.010	.480
APR												
15...	1350	3.7	102	6.91	15.0	761	10.0	99	--	--	<.010	.280
28...	1000	101	71.0	6.15	13.5	748	9.40	92	21	17	<.01	.26
JUN												
11...	1110	1.2	92.0	6.80	19.0	756	8.30	90	--	--	<.01	.39
JUL												
15...	1200	.15	120	7.38	25.0	753	8.30	102	--	--	<.01	.27
AUG												
18...	1200	.11	128	7.34	26.5	750	7.00	89	--	--	<.01	.27
SEP												
16...	1255	.30	114	7.48	21.0	755	7.90	90	43	35	<.01	.10

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)
OCT												
08...	.280	1.0	.52	1.3	.80	1.7	1.2	.320	.130	.120	1300	<1
NOV												
25...	<.015	--	--	<.20	<.20	--	--	<.010	<.010	.010	--	--
DEC												
16...	.040	.16	--	.20	<.20	.74	--	.020	<.010	<.010	--	--
JAN												
13...	.040	.26	--	.30	<.20	.76	--	<.010	<.010	<.010	150	<1
16...	.070	.93	.33	1.0	.40	1.4	.78	.240	.010	.020	1400	<1
MAR												
10...	<.015	--	--	.30	.20	.78	.68	.010	<.010	<.010	--	--
APR												
15...	.020	.28	.18	.30	.20	.58	.48	<.010	<.010	<.010	--	--
28...	.04	.65	.46	.7	.5	.95	.75	.10	.02	.01	--	--
JUN												
11...	<.02	--	--	.3	.2	.73	.63	<.01	<.01	<.01	--	--
JUL												
15...	<.02	--	--	<.2	<.2	--	--	<.01	<.01	<.01	--	--
AUG												
18...	<.02	--	--	.3	.2	.56	.52	.02	<.01	<.01	--	--
SEP												
16...	<.02	--	--	.3	<.2	.39	--	.03	<.01	.01	--	--

0208524090 MOUNTAIN CREEK AT SECONDARY ROAD 1617 NEAR BAHAMA, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)
OCT												
08...	<1	1	3	1	3800	5	1400	<.10	<1	<1	<1	<1
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	<1	<1	<1	1	1000	<1	180	<.10	<1	<1	<1	<1
16...	<1	<1	2	3	2600	5	440	<.10	<1	<1	<1	<1
MAR												
10...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
15...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	PERTHANE TOTAL (UG/L) (39034)	ENDOSULFAN, I TOTAL (UG/L) (39388)	ALDRIN, TOTAL (UG/L) (39330)	CHLORDANE, TECHNICAL TOTAL (UG/L) (39350)	P,P'-DDD UNFILT RECOVER (UG/L) (39360)	P,P'-DDE, TOTAL (UG/L) (39365)	P,P'-DDT UNFILT RECOVER (UG/L) (39370)	DIELDRIN TOTAL (UG/L) (39380)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	HEPTACHLOR, TOTAL (UG/L) (39410)	HEPTACHLOR EPOXIDE TOTAL (UG/L) (39420)
OCT												
08...	10	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	<10	--	--	--	--	--	--	--	--	--	--	--
16...	<10	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	--	<.1	<.01	<.01	<.1	<.01	<.01	<.01	<.01	<.01	<.01	<.01
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	<.1	<.01	<.01	<.1	<.01	<.01	<.01	<.01	<.01	<.01	<.01
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
15...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

0208524090 MOUNTAIN CREEK AT SECONDARY ROAD 1617 NEAR BAHAMA, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	LINDANE TOTAL (UG/L) (39340)	TOX-APHENE, TOTAL (UG/L) (39400)	DI-AZINON, TOTAL (UG/L) (39570)	ETHION, TOTAL (UG/L) (39398)	MALA-THION, TOTAL (UG/L) (39530)	METHYL PARA-THION, TOTAL (UG/L) (39600)	PARA-THION, TOTAL (UG/L) (39540)	TOTAL TRI-THION (UG/L) (39786)	PCB, TOTAL (UG/L) (39516)	PCNS UNFILT RECOVER (UG/L) (39250)	METH-OXY-CHLOR, TOTAL (UG/L) (39480)	MIREX, TOTAL (UG/L) (39755)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.01	<1	<.01	<.01	<.01	<.01	<.01	<.01	<.1	<.1	<.01	<.01
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.01	<1	<.01	<.01	<.01	<.01	<.01	<.01	<.1	<.1	<.01	<.01
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
15...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	DISUL-FOTON UNFILT RECOVER (UG/L) (39011)	PHORATE TOTAL (UG/L) (39023)	CHLOR-PYRIFOS TOTAL RECOVER (UG/L) (38932)	DEF TOTAL (UG/L) (39040)	FONOFOS (DY-FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	--	--	<.01	<.01	<.010	<.002	.005	<.0020	<.0020	<.0040	<.0040	<.0020
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.01	<.01	<.01	<.01	<.010	<.002	.0730	<.002	<.002	<.004	<.004	<.002
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
15...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	P,P' DDE DISSOLV (UG/L) (34653)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.0060	<.002	<.001	<.0030	<.017	<.0020	<.0040	<.0030	<.0030	<.0020	<.004	<.0020
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.006	<.002	<.001	<.003	<.017	<.002	<.004	<.003	<.003	<.002	<.004	<.002
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
15...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	MALA-THION, DIS-SOLVED (UG/L) (39532)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA-THION, DIS-SOLVED (UG/L) (39542)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.005	<.002	<.004	<.0040	<.0030	<.004	<.0060	<.0040	<.0040	<.0050	<.0020	<.0030
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.005	.0140	<.004	<.004	<.003	<.004	<.006	<.004	<.004	<.005	<.002	<.003
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
15...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

0208524090 MOUNTAIN CREEK AT SECONDARY ROAD 1617 NEAR BAHAMA, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.018	<.0070	<.0040	<.013	<.0050	<.0020	<.010	<.013	<.0010	<.0020	E.0068	<.0010
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	E.0050	<.007	<.004	<.013	.0200	<.002	<.010	<.013	<.001	<.002	E.0100	<.001
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
15...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	2,4,5-T DIS-SOLVED (UG/L) (39742)	2,4-D, DIS-SOLVED (UG/L) (39732)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	ACIFL-UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALDI-CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALDI-CARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICA-RB SUL-FOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	BENTA-ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.0030	<.0030	<.0070	<.0020	<.035	<.035	<.035	<.035	<.016	<.016	<.021	<.014
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.003	<.003	<.007	<.002	<.035	.37	<.035	<.035	<.016	<.016	<.021	<.014
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
15...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BRO-MACIL, WATER, DISS, REC (UG/L) (04029)	BRO-MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	CAR-BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CARBO-FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	3HYDRXY CARBO-FURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	CHLOR-AMBEN, WATER, FLTRD, GF 0.7U REC (UG/L) (49307)	CHLORO-THALO-NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	CLOPYR-ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	DACTHAL MONO-ACID, WAT,FLT GF 0.7U REC (UG/L) (49304)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLO-BENIL, WATER, FLTRD, GF 0.7U REC (UG/L) (49303)	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.035	<.035	<.0080	<.028	<.014	<.011	<.035	<.050	<.017	<.035	<.020	<.032
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.035	<.035	<.008	<.028	<.014	<.011	<.035	<.05	<.017	<.035	<.02	<.032
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
15...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	DNOC WAT,FLT GF 0.7U REC (UG/L) (49299)	ESFEN-VAL-ERATE, WAT,FLT GF 0.7U REC (UG/L) (49298)	FEN-URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUO-METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	METHIO-CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	METH-OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	1-NAPH THOL, WATER, FLTRD, GF 0.7U REC (UG/L) (49295)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.035	<.020	<.035	<.019	<.013	<.035	<.018	<.050	<.035	<.026	<.017	<.0070
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.035	<.02	<.035	<.019	<.013	<.035	<.018	<.05	<.035	<.026	<.017	<.007
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
15...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

0208524090 MOUNTAIN CREEK AT SECONDARY ROAD 1617 NEAR BAHAMA, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NEBURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	NORFLURAZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	ORYZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)	PICLORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	PROPHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)	PROPOXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	SILVEX, DISSOLVED (UG/L) (39762)	TRICLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT											
08...	--	--	--	--	--	--	--	--	--	221	63
NOV											
25...	--	--	--	--	--	--	--	--	--	13	.12
DEC											
16...	--	--	--	--	--	--	--	--	--	10	.12
JAN											
13...	--	--	--	--	--	--	--	--	--	10	.20
16...	--	--	--	--	--	--	--	--	--	140	27
MAR											
10...	<.015	<.024	<.019	<.018	<.050	<.035	<.035	<.021	<.050	10	.18
APR											
15...	--	--	--	--	--	--	--	--	--	12	.12
28...	<.015	<.024	<.019	<.018	<.05	<.035	<.035	<.021	<.05	91	25
JUN											
11...	--	--	--	--	--	--	--	--	--	13	.04
JUL											
15...	--	--	--	--	--	--	--	--	--	6	.00
AUG											
18...	--	--	--	--	--	--	--	--	--	2	.00
SEP											
16...	--	--	--	--	--	--	--	--	--	3	.00

NEUSE RIVER BASIN

0208524845 LITTLE RIVER RESERVOIR AT DAM NEAR BAHAMA, NC

LOCATION.--Lat 36°06'53", long 78°52'10", Durham County, Hydrologic Unit 03020201, at dam 7.5 mi below State Highway 501, and 4.0 mi south of Bahama.

DRAINAGE AREA.--97.7 mi^2.

PERIOD OF RECORD.--Water years 1989 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. Samples for nutrient and chlorophyll *a* and *b* analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	BAROMETRIC PRESSURE (MM OF HG) (00025)	TRANSPARENCY (SECCHI DISK) (M) (00078)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
OCT										
31...	1115	1.00	57.0	6.77	18.5	52	761	.750	8.10	86
APR										
23...	1215	1.00	72.0	7.13	15.0	30	750	1.20	9.95	100
JUN										
27...	1030	1.00	68.0	7.23	26.0	30	751	1.10	8.01	101
SEP										
19...	1000	1.00	76.5	7.00	26.5	22	753	.950	8.66	109

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	ANC UNFLTRD CARBONATE IT-FLD (MG/L - CAC03) (99430)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
OCT										
31...	18	4.5	1.7	2.6	21	.3	2.6	18.0	15.0	3.6
APR										
23...	22	5.3	2.2	4.4	28	.4	1.4	26	21	4.8
JUN										
27...	21	5.1	2.1	4.0	27	.4	1.6	24	20	3.5
SEP										
19...	26	6.2	2.5	4.4	25	.4	1.7	--	--	2.4

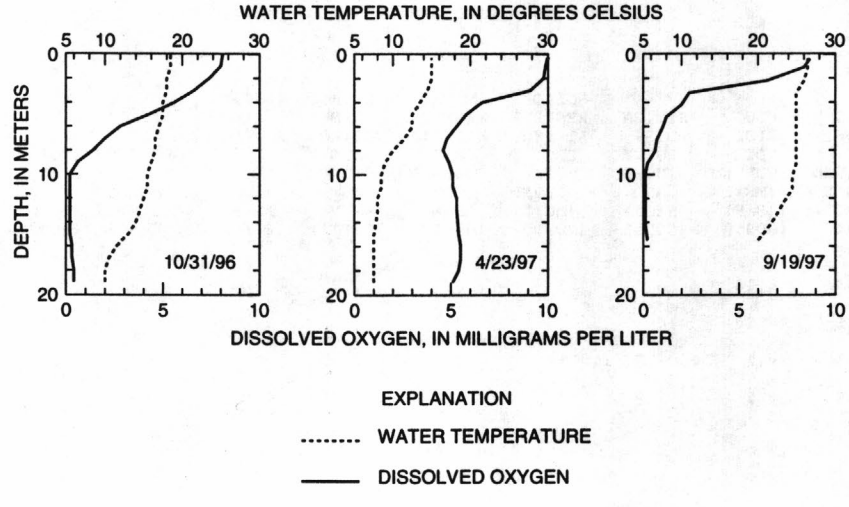
DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT										
31...	3.3	<.10	8.1	56	.008	.047	.048	.45	.50	.55
APR										
23...	5.5	<.1	10	54	.005	.16	<.002	--	.5	.67
JUN										
27...	4.3	<.1	8.7	58	.009	.10	.024	.43	.5	.55
SEP										
19...	4.6	<.1	7.9	53	.001	<.00500	<.002	--	.5	--

0208524845 LITTLE RIVER RESERVOIR AT DAM NEAR BAHAMA, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70954)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT										
31...	.010	.002	3.50	.400	60	<1	<1	<1	<1	1
APR										
23...	<.01	.003	14	<.1	60	<1	<1	<1.0	<1	<1
JUN										
27...	.07	.002	2.9	<.1	--	--	--	--	--	--
SEP										
19...	.02	.001	11	<.1	--	--	--	--	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT										
31...	310	<1	40	<.10	<1	<1	<1	<1	<10	9.2
APR										
23...	330	<1	30	<.1	<1.0	1	<1	<1	<10	5.8
JUN										
27...	--	--	--	--	--	--	--	--	--	7.2
SEP										
19...	--	--	--	--	--	--	--	--	--	5.5



NEUSE RIVER BASIN

0208524950 LITTLE RIVER TRIBUTARY AT FAIRNTOSH, NC

LOCATION.--Lat 36°06'56", long 78°51'30", Durham County, Hydrologic Unit 03020201, 0.2 mi above mouth and 0.8 mi northeast of Fairntosh.

DRAINAGE AREA.--0.86 mi^2.

PERIOD OF RECORD.--Water years 1994 to current year.

REMARKS.--Station operated to define the impacts of various land-use development on surface-water quality in the Upper Neuse River basin.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	ANC UNFLTRD CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
OCT												
08...	1040	26	117	6.72	17.0	739	8.90	95	--	--	.020	.410
NOV												
25...	1450	.42	161	6.74	12.5	756	8.70	82	57	47	.020	<.050
DEC												
16...	1115	.43	137	6.55	7.0	761	10.6	87	55	45	<.010	.060
JAN												
13...	1030	.62	127	6.20	4.0	765	12.2	93	48	39	.010	.100
16...	1110	5.5	82.0	6.70	--	--	--	--	--	--	.010	.200
MAR												
10...	1045	.57	143	6.58	13.0	759	11.2	107	57	46	<.010	<.050
APR												
15...	1040	.47	145	6.66	13.0	760	10.1	96	--	--	<.010	<.050
28...	1045	8.8	80.0	6.22	13.0	751	9.20	89	24	20	.02	.37
JUN												
11...	1140	.15	193	6.77	21.5	758	6.80	78	--	--	<.01	.06
AUG												
18...	0945	.01	265	7.27	25.0	752	5.20	64	--	--	<.01	.17
SEP												
16...	1035	.03	239	7.28	20.0	757	6.60	73	107	88	<.01	.09

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)
OCT												
08...	.360	1.0	.54	1.4	.90	1.8	1.3	.870	.720	.760	1900	2
NOV												
25...	.060	--	.14	<.20	.20	--	--	<.010	<.010	.010	--	--
DEC												
16...	.040	.16	--	.20	<.20	.26	--	<.010	<.010	<.010	--	--
JAN												
13...	.030	--	--	<.20	<.20	--	--	<.010	<.010	<.010	90	<1
16...	<.015	--	--	.70	.40	.90	.60	.180	.080	.080	840	<1
MAR												
10...	<.015	--	--	<.20	<.20	--	--	<.010	<.010	<.010	--	--
APR												
15...	.040	.16	--	.20	<.20	--	--	.020	<.010	<.010	--	--
28...	.02	.78	.60	.8	.6	1.2	.98	.12	.06	.07	--	--
JUN												
11...	.07	.41	.35	.5	.4	.53	.48	.01	<.01	<.01	--	--
AUG												
18...	.04	.42	.32	.5	.4	.63	.52	.05	<.01	<.01	--	--
SEP												
16...	.06	.26	--	.3	<.2	.41	--	.02	<.01	<.01	--	--

0208524950 LITTLE RIVER TRIBUTARY AT FAIRNTOSH, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)
OCT												
08...	<1	1	1	4	1900	2	160	<.10	<1	1	<1	<1
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	<1	<1	<1	1	630	<1	260	<.10	<1	<1	<1	<1
16...	<1	<1	1	3	1000	1	150	<.10	<1	<1	<1	<1
MAR												
10...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	PER-THANE TOTAL (UG/L) (39034)	ENDO-SULFAN, I TOTAL (UG/L) (39388)	ALDRIN, TOTAL (UG/L) (39330)	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)	P,P'-DDD UNFILT RECOVER (UG/L) (39360)	P,P'-DDE, TOTAL (UG/L) (39365)	P,P'-DDT UNFILT RECOVER (UG/L) (39370)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)
OCT												
08...	10	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	<10	--	--	--	--	--	--	--	--	--	--	--
16...	<10	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	--	<.1	<.01	<.01	<.1	<.01	<.01	<.01	<.01	<.01	<.01	<.01
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	<.1	<.01	<.01	<.1	<.01	<.01	<.01	<.01	<.01	<.01	<.01
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	LINDANE TOTAL (UG/L) (39340)	TOX-APHENE, TOTAL (UG/L) (39400)	DI-AZINON, TOTAL (UG/L) (39570)	ETHION, TOTAL (UG/L) (39398)	MALA-THION, TOTAL (UG/L) (39530)	METHYL PARA-THION, TOTAL (UG/L) (39600)	PARA-THION, TOTAL (UG/L) (39540)	TOTAL TRI-THION (UG/L) (39786)	PCB, TOTAL (UG/L) (39516)	PCNS UNFILT RECOVER (UG/L) (39250)	METH-OXY-CHLOR, TOTAL (UG/L) (39480)	MIREX, TOTAL (UG/L) (39755)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.01	<1	<.01	<.01	<.01	<.01	<.01	<.01	<.1	<.1	<.01	<.01
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.01	<1	<.01	<.01	<.01	<.01	<.01	<.01	<.1	<.1	<.01	<.01
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	DISUL-FOTON UNFILT RECOVER (UG/L) (39011)	PHORATE TOTAL (UG/L) (39023)	CHLOR-PYRIFOS TOTAL RECOVER (UG/L) (38932)	DEF TOTAL (UG/L) (39040)	FONOFOS (DY-FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	--	--	<.01	<.01	<.010	<.002	.007	E.0035	<.0020	<.0040	<.0040	<.0020
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.01	<.01	<.01	<.01	<.010	<.002	.0080	.0140	<.002	<.004	<.004	<.002
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

0208524950 LITTLE RIVER TRIBUTARY AT FAIRNTOSH, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	P,P' DDE DISSOLV (UG/L) (34653)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.0060	<.002	<.001	<.0030	<.017	<.0020	<.0040	<.0030	<.0030	<.0020	<.004	<.0020
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.006	<.002	<.001	<.003	<.017	<.002	<.004	<.003	<.003	<.002	<.004	<.002
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	MALA-THION, DIS-SOLVED (UG/L) (39532)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA-THION, DIS-SOLVED (UG/L) (39542)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.005	<.002	<.004	<.0040	<.0030	<.004	<.0060	<.0040	.212	<.0050	<.0020	<.0030
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.005	<.002	<.004	<.004	<.003	<.004	<.006	<.004	.341	<.005	<.002	.303
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.018	<.0070	<.0040	<.013	.845	<.0020	<.010	<.013	<.0010	.0065	E.0027	<.0010
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.018	<.007	<.004	<.013	.279	<.002	<.010	<.013	<.001	.0110	E.0060	<.001
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	2,4,5-T DIS-SOLVED (UG/L) (39742)	2,4-D, DIS-SOLVED (UG/L) (39732)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	ACIFL-UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALDI-CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALDI-CARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICA-RB SUL-FOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	BENTA-ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.0030	<.0030	<.0070	<.0020	<.035	<.035	<.035	<.035	<.016	<.016	<.021	<.014
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	E.0280	<.003	<.007	<.002	<.035	<.035	<.035	<.035	<.016	<.016	<.021	<.014
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

0208524950 LITTLE RIVER TRIBUTARY AT FAIRNTOSH, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BROMACIL, WATER, DISS, REC (UG/L) (04029)	BROMOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	CARBARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CARBOFURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	3HYDRXY CARBOFURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	CHLORAMBEN, WATER, FLTRD, GF 0.7U REC (UG/L) (49307)	CHLOROTHALONIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	CLOPYRALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	DACTHAL MONOACID, WAT,FLT GF 0.7U REC (UG/L) (49304)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLOBENIL, WATER, FLTRD, GF 0.7U REC (UG/L) (49303)	DICHLORPROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.035	<.035	<.0080	<.028	<.014	<.011	<.035	<.050	<.017	<.035	<.020	<.032
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.035	<.035	E.02	<.028	<.014	<.011	<.035	<.05	<.017	<.035	<.02	<.032
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	DNOC WAT,FLT GF 0.7U REC (UG/L) (49299)	ESFENVALERATE, WAT,FLT GF 0.7U REC (UG/L) (49298)	FENURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUOMETURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	METHIOCARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	METHOMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	1-NAPHTHOL, WATER, FLTRD, GF 0.7U REC (UG/L) (49295)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.035	<.020	<.035	<.019	<.013	<.035	<.018	<.050	<.035	<.026	<.017	<.0070
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.035	<.02	<.035	<.019	<.013	<.035	<.018	<.05	<.035	<.026	<.017	<.007
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
18...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

NEUSE RIVER BASIN

0208524950 LITTLE RIVER TRIBUTARY AT FAIRNTOSH, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NEBURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	NORFLURAZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	ORYZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)	PICLORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	PROPHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)	PROPOXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	SILVEX, DISSOLVED (UG/L) (39762)	TRICLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT											
08...	--	--	--	--	--	--	--	--	--	148	10
NOV											
25...	--	--	--	--	--	--	--	--	--	18	.02
DEC											
16...	--	--	--	--	--	--	--	--	--	10	.01
JAN											
13...	--	--	--	--	--	--	--	--	--	8	.01
16...	--	--	--	--	--	--	--	--	--	51	.76
MAR											
10...	<.015	<.024	<.019	<.018	<.050	<.035	<.035	<.021	<.050	12	.02
APR											
15...	--	--	--	--	--	--	--	--	--	13	.02
28...	<.015	<.024	<.019	<.018	<.05	<.035	<.035	<.021	<.05	41	.97
JUN											
11...	--	--	--	--	--	--	--	--	--	5	.00
AUG											
18...	--	--	--	--	--	--	--	--	--	21	.00
SEP											
16...	--	--	--	--	--	--	--	--	--	8	.00

NEUSE RIVER BASIN

0208524975 LITTLE RIVER BELOW LITTLE RIVER TRIBUTARY AT FAIRNTOSH, NC

LOCATION.--Lat 36°06'46", long 78°51'35", Durham County, Hydrologic Unit 030200201, 125 ft downstream of the mouth of Little River tributary and 0.5 mi downstream of Little River Dam.

DRAINAGE AREA.--98.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 270 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by releases from the Little River Reservoir. Maximum discharge for period of record from extension of rating curve based on contracted-opening measurement of peak flow. Maximum gage height for period of record from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	45	601	56	90	127	27	196	9.1	4.4	3.0	2.9
2	26	12	1150	56	80	101	27	93	32	4.3	2.9	3.0
3	4.0	10	280	48	77	104	25	122	57	4.0	3.0	3.0
4	4.6	9.8	86	47	32	331	26	193	224	3.9	3.2	3.2
5	5.2	9.6	90	52	39	220	25	89	89	4.0	3.7	3.3
6	6.0	13	447	46	69	154	23	52	23	3.9	3.5	3.2
7	53	10	281	44	88	163	29	39	23	3.8	3.3	3.4
8	278	54	257	36	9.8	96	21	31	20	3.6	3.3	3.3
9	57	154	171	240	112	68	13	27	18	3.5	3.3	3.6
10	100	85	132	647	55	65	12	26	8.7	3.5	3.2	5.2
11	55	60	47	229	53	62	11	18	9.5	3.6	3.0	4.5
12	32	25	58	163	59	53	34	23	6.9	3.6	3.0	3.0
13	22	22	61	51	53	30	76	20	11	3.4	3.5	2.9
14	19	17	53	69	659	64	39	15	33	3.3	3.7	2.8
15	16	15	59	56	2220	148	31	18	45	3.5	2.9	2.7
16	14	9.1	53	276	929	101	19	16	22	5.5	2.8	2.7
17	12	19	42	331	256	53	20	13	13	5.3	2.8	2.9
18	25	12	51	123	136	60	18	12	8.8	3.2	3.0	3.0
19	91	21	62	86	111	131	13	11	6.1	3.1	3.0	3.1
20	72	20	88	61	91	481	10	12	5.2	3.0	4.7	3.1
21	40	21	67	50	75	219	12	9.9	5.1	3.0	3.2	3.3
22	15	61	57	56	66	130	45	10	5.3	7.4	2.7	3.0
23	26	70	38	63	67	86	373	10	5.1	5.5	2.8	2.9
24	17	33	46	51	54	66	363	9.1	5.0	5.4	2.9	3.7
25	5.4	33	64	115	42	57	171	9.3	5.0	3.3	2.9	3.2
26	4.8	71	72	137	126	61	35	9.4	5.1	3.1	2.8	2.3
27	8.1	143	107	102	12	59	59	9.7	5.7	3.1	2.7	2.2
28	17	79	110	105	52	58	1820	9.8	4.7	3.2	2.7	2.3
29	6.9	46	87	238	---	47	2510	9.8	4.4	3.3	2.9	2.3
30	13	41	70	140	---	51	732	9.9	4.5	3.4	2.6	2.2
31	53	---	64	111	---	46	---	10	---	8.0	2.7	---
TOTAL	1116.0	1220.5	4851	3885	5712.8	3492	6619	1132.9	714.2	125.1	95.7	92.2
MEAN	36.0	40.7	156	125	204	113	221	36.5	23.8	4.04	3.09	3.07
MAX	278	154	1150	647	2220	481	2510	196	224	8.0	4.7	5.2
MIN	4.0	9.1	38	36	9.8	30	10	9.1	4.4	3.0	2.6	2.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1997, BY WATER YEAR (WY)

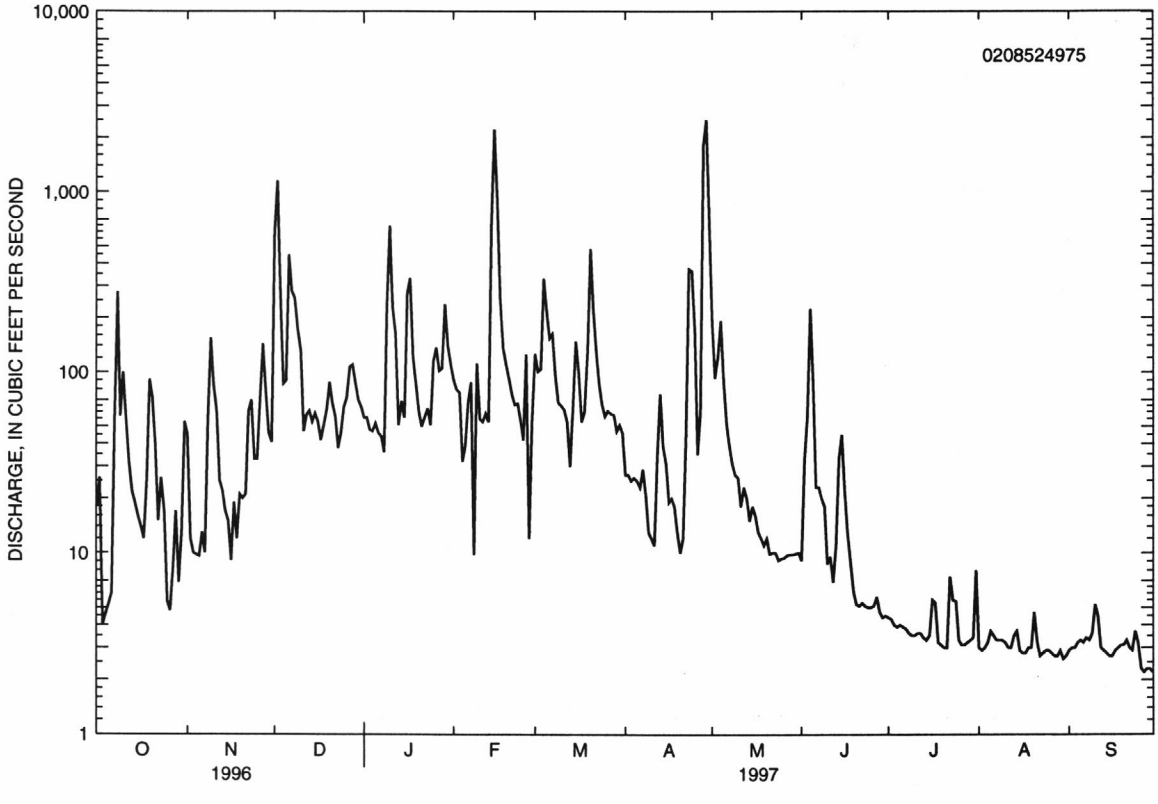
MEAN	36.0	95.0	159	101	161	138	153	62.5	21.1	4.46	16.2	270
MAX	36.0	149	161	125	204	163	221	88.4	23.8	4.88	29.4	538
(WY)	1997	1996	1996	1997	1997	1996	1997	1996	1997	1996	1996	1996
MIN	36.0	40.7	156	77.6	120	113	85.3	36.5	18.4	4.04	3.09	3.07
(WY)	1997	1997	1997	1996	1996	1997	1996	1997	1996	1997	1997	1997

NEUSE RIVER BASIN

0208524975 LITTLE RIVER BELOW LITTLE RIVER TRIBUTARY AT FAIRNTOSH, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1996 - 1997	
ANNUAL TOTAL	41194.7		29056.4			
ANNUAL MEAN	113		79.6		79.6	
HIGHEST ANNUAL MEAN					79.6	1997
LOWEST ANNUAL MEAN					79.6	1997
HIGHEST DAILY MEAN	10300	Sep 6	2510	Apr 29	10300	Sep 6 1996
LOWEST DAILY MEAN	1.9	Jul 14	2.2	Sep 27	1.7	Nov 23 1995
ANNUAL SEVEN-DAY MINIMUM	2.2	Jul 11	2.6	Sep 24	2.2	Jul 11 1996
INSTANTANEOUS PEAK FLOW			2940	Apr 28	16600*	Sep 6 1996
INSTANTANEOUS PEAK STAGE			11.46	Apr 29	17.27*	Sep 6 1996
INSTANTANEOUS LOW FLOW			2.0	Sep 27	1.4	Oct 24 1995
10 PERCENT EXCEEDS	179		145		181	
50 PERCENT EXCEEDS	43		23		38	
90 PERCENT EXCEEDS	2.8		3.0		2.9	

* See REMARKS.



NEUSE RIVER BASIN

0208524975 LITTLE RIVER BELOW LITTLE RIVER TRIBUTARY AT FAIRNTOSH, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1995 to current year.

REMARKS.--Station operated to define the impacts of various land-use development on surface-water quality in the Upper Neuse River basin.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	ANC UNFLTRD CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
OCT												
08...	1300	89	62.0	6.83	19.0	738	8.70	97	--	--	<.010	.050
NOV												
25...	1330	34	75.0	6.86	12.0	756	10.2	95	26	21	.020	.150
DEC												
16...	1000	56	73.0	6.62	9.0	761	10.4	90	24	20	<.010	.320
JAN												
13...	1500	56	75.0	6.50	8.0	762	12.0	101	26	21	<.010	.280
FEB												
26...	1230	945	77.0	6.22	8.0	--	--	--	--	--	<.010	.450
MAR												
10...	1120	67	73.0	6.53	13.0	759	10.0	95	25	21	<.010	.320
APR												
15...	1200	30	75.0	6.95	17.0	760	10.4	108	--	--	--	--
28...	1330	2710	75.0	6.49	14.5	750	10.2	102	25	20	<.01	.27
JUN												
11...	1315	11	75.0	7.04	21.0	757	7.40	84	--	--	<.01	.14
JUL												
15...	0945	3.3	79.0	6.95	27.0	756	6.00	76	--	--	<.01	.10
AUG												
18...	1030	3.0	85.0	7.03	28.5	752	5.70	75	--	--	<.01	.08
SEP												
16...	1140	2.8	91.0	6.90	25.0	757	5.60	68	40	33	<.01	.10

WATER-QUALITY RECORDS

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN DISSOLVED (MG/L AS N) (00602)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT												
08...	.140	.46	.26	.60	.40	.65	.45	.110	.070	.070	41	9.9
NOV												
25...	.140	.26	.36	.40	.50	.55	.65	<.010	<.010	<.010	11	1.0
DEC												
16...	.040	.46	.26	.50	.30	.82	.62	.020	<.010	<.010	9	1.4
JAN												
13...	.030	.37	.17	.40	.20	.68	.48	<.010	<.010	<.010	4	.60
FEB												
26...	<.015	--	--	.50	.30	.95	.75	.040	.020	<.010	25	64
MAR												
10...	<.015	--	--	.40	.20	.72	.52	<.010	<.010	<.010	7	1.3
APR												
15...	--	--	--	--	--	--	--	--	--	--	6	.49
28...	<.02	--	--	.4	.3	.63	.58	.05	.01	<.01	20	146
JUN												
11...	<.02	--	--	.6	.4	.70	.50	.04	<.01	<.01	12	.36
JUL												
15...	.02	.26	--	.3	<.2	.38	--	<.01	<.01	<.01	9	.08
AUG												
18...	.02	.41	.47	.4	.5	.51	.57	.02	<.01	<.01	12	.10
SEP												
16...	.06	.29	--	.4	<.2	.45	--	.01	<.01	<.01	10	.08

NEUSE RIVER BASIN

02085500 FLAT RIVER AT BAHAMA, NC

LOCATION.--Lat 36°10'57", long 78°52'44", Durham County, Hydrologic Unit 03020201, on right bank 0.5 mi upstream from Lake Michie, 1.2 mi upstream from bridge on Secondary Road 1616, 1.2 mi north of Bahama, and 1.5 mi upstream from Dial Creek.

DRAINAGE AREA.--149 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1925 to current year.

REVISED RECORDS.--WSP 1333: 1926, 1928(M), 1938, 1946. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 346.85 ft above sea level. Prior to Oct. 22, 1925, nonrecording gage at present site at 346.27 ft. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Prior to December 1962, some diurnal fluctuation and infrequent regulation at low flow caused by small mill 5 mi upstream. Maximum discharge for period of record from rating curve extended above 18,000 ft^3/s, on basis of slope-conveyance measurement of peak flow; maximum gage height, 17.26 ft, from high-water mark inside gage shelter. Minimum discharge for the current water year also occurred Sept. 7, 8, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	49	1010	120	182	355	102	350	44	21	9.1	4.0
2	57	67	1090	109	151	263	92	241	286	22	9.5	4.1
3	92	99	341	102	128	303	85	294	118	24	9.0	3.7
4	62	70	216	96	115	852	83	346	373	23	8.3	3.2
5	47	56	173	94	e110	323	80	191	144	20	8.2	2.7
6	41	54	803	110	e106	497	79	149	83	18	8.0	2.4
7	39	55	363	97	e102	302	82	126	75	17	7.7	2.2
8	343	81	544	83	e185	210	83	108	71	16	8.2	2.5
9	375	271	e290	e580	e400	178	72	101	62	14	7.9	3.1
10	141	129	e216	e787	e226	160	67	97	56	14	6.4	8.8
11	89	84	e176	359	173	149	65	88	52	13	6.1	175
12	68	69	142	226	150	131	82	82	49	13	5.7	79
13	58	60	130	173	132	118	193	78	49	12	5.8	30
14	53	55	141	144	937	160	120	75	120	12	6.4	16
15	48	52	119	128	2630	333	86	76	83	11	7.3	11
16	45	48	103	639	817	176	75	67	57	11	7.4	8.7
17	42	46	100	441	391	136	71	62	49	14	7.8	12
18	44	45	e104	221	271	123	68	e60	44	16	7.6	12
19	179	50	e102	159	221	434	63	57	42	16	8.8	9.0
20	115	55	e99	141	192	928	61	55	39	13	14	7.2
21	69	53	e97	134	171	338	60	52	36	20	138	6.3
22	55	166	e97	123	168	233	291	49	34	23	42	5.5
23	48	126	e94	130	155	182	763	46	30	20	19	5.2
24	43	83	94	120	131	151	696	45	28	27	12	e6.0
25	41	70	132	188	120	133	286	44	26	26	8.5	e9.1
26	45	324	127	221	115	142	175	44	24	22	7.3	e15
27	48	287	195	144	125	197	136	45	27	17	6.3	e14
28	49	138	205	225	206	142	2560	45	28	13	7.2	e11
29	49	100	152	424	---	130	3590	41	26	11	6.3	e10
30	51	88	130	216	---	121	681	40	23	11	4.6	8.9
31	50	---	117	194	---	112	---	39	---	10	4.1	---
TOTAL	2536	2930	7702	6928	8810	8012	10947	3193	2178	520	414.5	487.6
MEAN	81.8	97.7	248	223	315	258	365	103	72.6	16.8	13.4	16.3
MAX	375	324	1090	787	2630	928	3590	350	373	27	138	175
MIN	39	45	94	83	102	112	60	39	23	10	4.1	2.2
CFSM	.55	.66	1.67	1.50	2.11	1.73	2.45	.69	.49	.11	.09	.11
IN.	.63	.73	1.92	1.73	2.20	2.00	2.73	.80	.54	.13	.10	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1997, BY WATER YEAR (WY)

MEAN	66.1	96.7	133	221	271	281	220	114	79.9	87.6	76.9	80.8
MAX	561	489	421	761	669	897	612	573	551	798	431	984
(WY)	1972	1986	1973	1936	1979	1993	1936	1978	1938	1975	1939	1996
MIN	1.24	.71	1.81	4.29	44.4	72.4	31.1	22.2	7.85	4.59	2.93	.71
(WY)	1942	1934	1934	1934	1931	1967	1942	1927	1986	1991	1977	1968

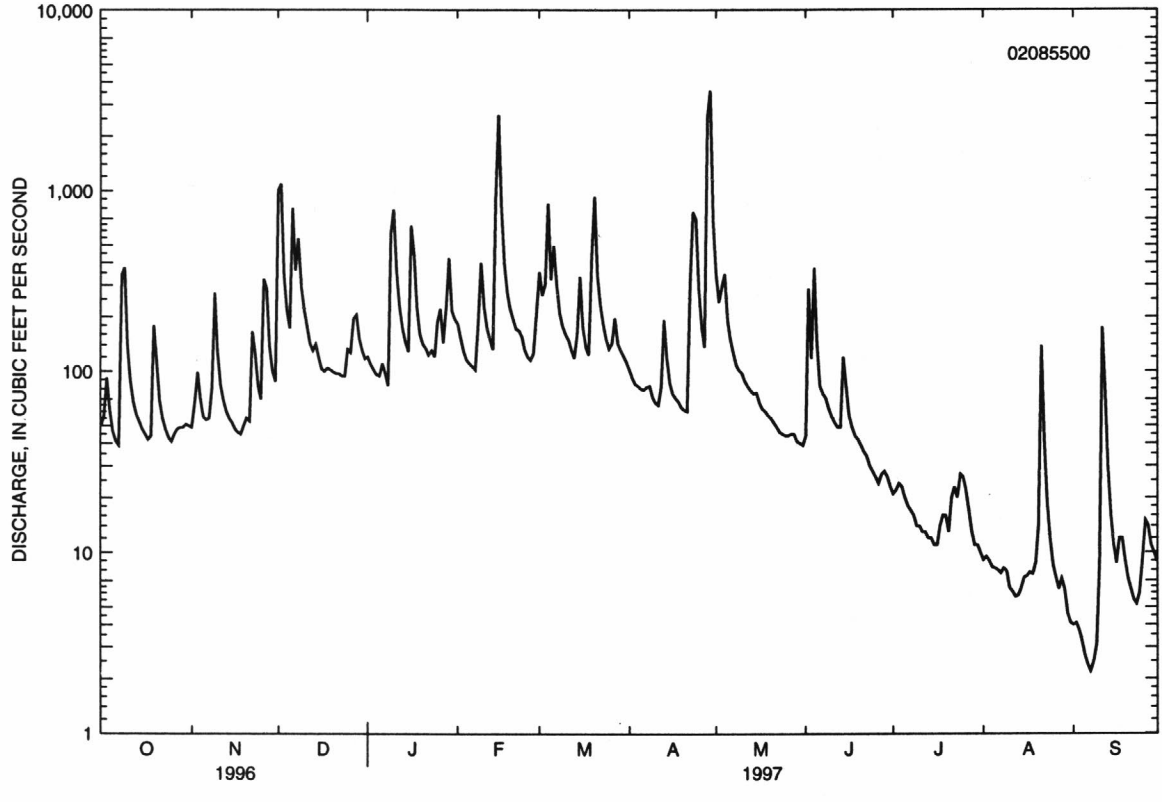
NEUSE RIVER BASIN

02085500 FLAT RIVER AT BAHAMA, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1925 - 1997	
ANNUAL TOTAL	85322.8		54658.1			
ANNUAL MEAN	233		150		143	
HIGHEST ANNUAL MEAN					285	1973
LOWEST ANNUAL MEAN					53.5	1981
HIGHEST DAILY MEAN	21800	Sep 6	3590	Apr 29	e21800	Sep 6 1996
LOWEST DAILY MEAN	9.8	Jul 22	2.2	Sep 7	.27	Sep 24 1968
ANNUAL SEVEN-DAY MINIMUM	12	Jul 2	2.8	Sep 3	.28	Sep 24 1968
INSTANTANEOUS PEAK FLOW			5130	Apr 29	33800*	Sep 6 1996
INSTANTANEOUS PEAK STAGE			7.24	Apr 29	17.26*	Sep 6 1996
INSTANTANEOUS LOW FLOW			2.2*	Sep 6	.23	Sep 26 1968
ANNUAL RUNOFF (CFSM)	1.56		1.01		.96	
ANNUAL RUNOFF (INCHES)	21.30		13.65		13.08	
10 PERCENT EXCEEDS	392		311		280	
50 PERCENT EXCEEDS	94		79		50	
90 PERCENT EXCEEDS	23		8.6		7.1	

e Estimated.

* See REMARKS.



NEUSE RIVER BASIN

02085500 FLAT RIVER AT BAHAMA, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment and to define the impacts of various land-use development on surface-water quality in the Upper Neuse River basin.

COOPERATION.--For the period February 1988 through June 1989 the inorganic-chemical data and trace-metal data were analyzed by the city of Durham's Brown Water Treatment Laboratory.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
OCT											
08...	1315	271	75.0	7.11	15.0	100	743	8.90	91	23	5.5
NOV											
25...	1600	69	106	6.81	8.0	--	752	11.2	96	--	--
DEC											
16...	1330	102	87.0	6.52	7.0	--	755	11.3	94	--	--
JAN											
13...	1315	171	68.0	6.20	3.5	--	760	12.7	96	--	--
16...	1230	667	62.0	6.60	--	--	--	--	--	--	--
FEB											
15...	0900	2950	52.0	--	--	--	--	--	--	--	--
MAR											
10...	1345	159	71.0	6.45	13.5	--	754	10.1	98	--	--
APR											
15...	1415	83	78.0	6.99	15.0	--	760	10.4	103	--	--
28...	1200	4250	47.0	5.71	13.0	--	753	9.80	94	--	--
JUN											
11...	1010	53	79.0	6.75	18.5	--	755	7.80	84	--	--
JUL											
15...	1105	11	93.0	7.15	26.0	--	753	7.20	90	--	--
AUG											
18...	1230	7.5	96.0	6.93	28.0	--	750	5.50	72	--	--
SEP											
16...	1330	8.8	79.0	6.71	22.5	--	754	5.20	61	--	--

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	ANC UNFLTRD CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
OCT											
08...	2.2	4.3	26	.4	2.7	27	22	3.8	5.4	<.10	11
NOV											
25...	--	--	--	--	--	26	22	--	--	--	--
DEC											
16...	--	--	--	--	--	25	20	--	--	--	--
JAN											
13...	--	--	--	--	--	19	16	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
FEB											
15...	--	--	--	--	--	--	--	--	--	--	--
MAR											
10...	--	--	--	--	--	24	19	--	--	--	--
APR											
15...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	10	9.0	--	--	--	--
JUN											
11...	--	--	--	--	--	--	--	--	--	--	--
JUL											
15...	--	--	--	--	--	--	--	--	--	--	--
AUG											
18...	--	--	--	--	--	--	--	--	--	--	--
SEP											
16...	--	--	--	--	--	24	20	--	--	--	--

NEUSE RIVER BASIN

02085500 FLAT RIVER AT BAHAMA, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT											
08...	54	<.010	.230	.020	.48	.18	.50	.20	.73	.43	.110
NOV											
25...	--	.020	.310	.120	.18	.28	.30	.40	.61	.71	.030
DEC											
16...	--	.010	.460	.040	.16	--	.20	<.20	.66	--	.020
JAN											
13...	--	<.010	.360	.020	.28	--	.30	<.20	.66	--	<.010
16...	--	<.010	.240	.040	.36	--	.40	<.20	.64	--	.090
FEB											
15...	--	.010	.270	.020	.38	.28	.40	.30	.67	.57	.040
MAR											
10...	--	<.010	.440	<.015	--	--	.30	.20	.74	.64	.010
APR											
15...	--	<.010	.230	<.015	--	--	.30	.20	.53	.43	.050
28...	--	.02	.42	.13	1.1	.51	1.2	.6	1.7	1.1	.20
JUN											
11...	--	<.01	.42	<.02	--	--	.3	.3	.75	.68	.03
JUL											
15...	--	<.01	.07	<.02	--	--	<.2	<.2	--	--	<.01
AUG											
18...	--	<.01	.05	.02	.28	.20	.3	.2	.35	.27	.02
SEP											
16...	--	<.01	.30	.06	.46	--	.5	<.2	.82	--	.05

DATE	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)
OCT										
08...	.030	.040	530	<1	<1	2	<1	2	1300	2
NOV										
25...	.030	.030	--	--	--	--	--	--	--	--
DEC										
16...	<.010	.020	--	--	--	--	--	--	--	--
JAN										
13...	<.010	<.010	--	--	--	--	--	--	--	--
16...	<.010	<.010	--	--	--	--	--	--	--	--
FEB										
15...	<.010	<.010	--	--	--	--	--	--	--	--
MAR										
10...	<.010	<.010	--	--	--	--	--	--	--	--
APR										
15...	.020	<.010	--	--	--	--	--	--	--	--
28...	.03	.02	--	--	--	--	--	--	--	--
JUN										
11...	<.01	.01	--	--	--	--	--	--	--	--
JUL										
15...	<.01	<.01	--	--	--	--	--	--	--	--
AUG										
18...	<.01	<.01	--	--	--	--	--	--	--	--
SEP										
16...	.02	.01	--	--	--	--	--	--	--	--

02085500 FLAT RIVER AT BAHAMA, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT										
08...	150	<.10	<1	24	<1	<1	<10	8.1	62	45
NOV										
25...	--	--	--	--	--	--	--	--	16	3.0
DEC										
16...	--	--	--	--	--	--	--	--	9	2.5
JAN										
13...	--	--	--	--	--	--	--	--	10	4.6
16...	--	--	--	--	--	--	--	--	85	153
FEB										
15...	--	--	--	--	--	--	--	--	246	1960
MAR										
10...	--	--	--	--	--	--	--	--	15	6.4
APR										
15...	--	--	--	--	--	--	--	--	11	2.5
28...	--	--	--	--	--	--	--	--	219	2510
JUN										
11...	--	--	--	--	--	--	--	--	18	2.6
JUL										
15...	--	--	--	--	--	--	--	--	10	.30
AUG										
18...	--	--	--	--	--	--	--	--	8	.16
SEP										
16...	--	--	--	--	--	--	--	--	32	.76

NEUSE RIVER BASIN

02086490 LAKE MICHIE AT DAM NEAR BAHAMA, NC

LOCATION.--Lat 36°09'02", long 78°49'49", Durham County, Hydrologic Unit 03020201, at dam 3.0 mi southeast of Bahama.

DRAINAGE AREA.--167 mi^2.

PERIOD OF RECORD.--Water years 1989 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. Samples for nutrient and chlorophyll *a* and *b* analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	BAROMETRIC PRESSURE (MM OF HG) (00025)	TRANSPARENCY (SECCHI DISK) (M) (00078)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
OCT										
31...	1015	1.00	59.0	6.54	18.0	53	761	.750	7.46	79
APR										
24...	1000	1.00	68.1	6.82	14.0	30	753	1.25	8.48	83
JUN										
27...	0900	1.00	68.0	7.36	29.5	20	751	1.60	7.25	97
SEP										
18...	1030	1.00	78.0	7.00	25.5	20	750	1.00	7.94	99

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	ANC UNFLTRD CARBONATE IT-FLD (MG/L - CAC03) (99430)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
OCT										
31...	17	4.2	1.7	3.0	24	.3	2.5	20.0	16.0	3.8
APR										
24...	21	4.8	2.2	4.8	32	.5	1.3	26.0	21.0	4.2
JUN										
27...	20	4.7	2.0	4.5	31	.4	1.5	28.0	23.0	3.2
SEP										
18...	22	5.2	2.2	4.8	30	.4	1.7	29.0	24.0	2.9

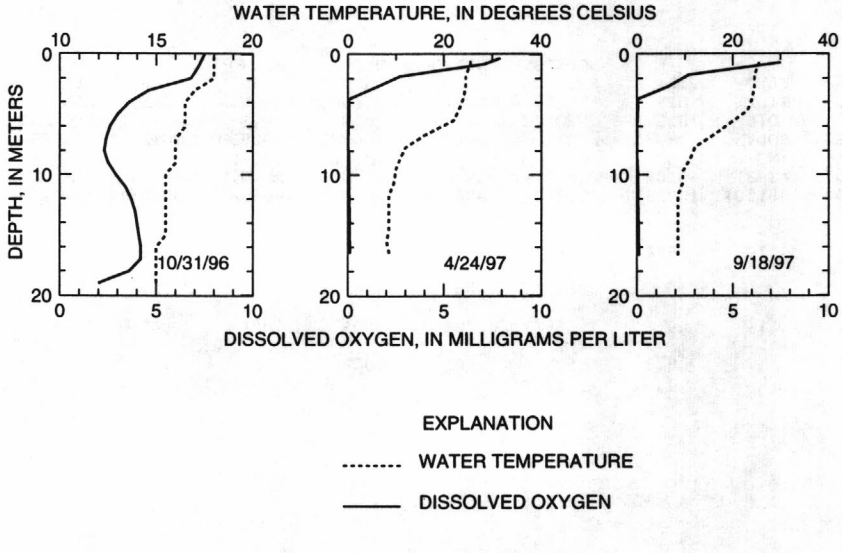
DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT										
31...	3.8	<.10	9.4	56	.011	.058	.040	.46	.50	.56
APR										
24...	5.0	<.1	10	53	.005	.14	.042	.31	.3	.49
JUN										
27...	4.6	<.1	9.4	55	.001	.009	.006	.45	.5	.46
SEP										
18...	5.4	.1	9.8	57	.001	.007	.017	.41	.4	.44

02086490 LAKE MICHIE AT DAM NEAR BAHAMA, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70954)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT										
31...	.010	<.001	2.70	.200	80	<1	<1	<1	<1	2
APR										
24...	.04	.002	2.3	.3	120	<1	<1	<1.0	<1	<1
JUN										
27...	.03	.001	4.2	.1	--	--	--	--	--	--
SEP										
18...	<.01	.001	5.2	<.1	--	--	--	--	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT										
31...	540	1	20	<.10	<1	<1	<1	<1	<10	8.6
APR										
24...	580	<1	40	<.1	<1.0	<1	<1	<1	<10	4.8
JUN										
27...	--	--	--	--	--	--	--	--	--	6.4
SEP										
18...	--	--	--	--	--	--	--	--	--	5.6



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 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 270 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. No flow at times during most years. Maximum discharge for period of record, from rating curve extended above 70 ft^3/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 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	.26	16	.79	1.3	1.2	.68	1.8	.30	.09	.02	0
2	.37	.62	7.6	.77	1.1	1.1	.66	1.2	.38	.11	.02	.02
3	.25	.36	3.1	.70	1.0	1.5	.66	1.9	.43	.08	.02	0
4	.15	.28	1.8	.66	.97	1.6	.62	1.3	.52	.03	.02	0
5	.14	.25	2.9	.72	1.0	1.4	.60	.97	.25	.04	.06	0
6	.12	.28	6.7	.65	.93	1.9	.68	.87	.26	.04	.03	0
7	.07	.27	3.5	.59	.87	1.4	.68	.73	.27	.04	.02	0
8	5.9	3.2	3.6	.57	1.3	1.3	.55	.65	.22	.02	.02	0
9	1.5	2.7	2.1	7.5	1.3	1.1	.51	.60	.20	.02	.02	0
10	.69	1.0	1.4	5.3	1.1	1.1	.45	.55	.18	.03	.02	.05
11	.42	.79	1.1	2.2	1.0	1.0	.47	.51	.17	.03	.01	.10
12	.31	.61	.97	1.4	.95	.89	1.5	.46	.19	.02	.01	.01
13	.32	.54	.93	1.2	.98	.86	1.6	.44	.24	.02	.01	.01
14	.30	.50	.79	1.1	7.7	1.3	.94	.43	.20	.02	.01	.01
15	.25	.42	.67	.97	16	1.3	.76	.40	.17	.01	0	.01
16	.22	.38	.65	4.4	3.4	.98	.68	.37	.15	.12	0	.01
17	.22	.38	.65	2.2	2.0	.91	.65	.37	.14	.22	0	0
18	1.4	.46	.65	1.6	1.7	.89	.60	.36	.13	.11	0	0
19	2.2	.50	1.4	1.4	1.5	3.2	.57	.34	.12	.05	0	0
20	.80	.43	.96	1.2	1.4	2.7	.53	.32	.11	.04	.08	0
21	.53	.74	.73	1.1	1.3	1.7	.54	.29	.11	.04	.04	0
22	.43	2.2	.66	1.1	1.3	1.4	1.6	.25	.09	.15	.01	0
23	.42	.97	.62	1.0	1.1	1.1	5.2	.24	.07	.24	.01	0
24	.40	.73	.74	1.0	1.0	.99	2.4	.24	.07	.60	.01	.03
25	.35	.64	.93	2.8	1.1	.92	1.4	.28	.07	.18	.01	.02
26	.30	1.7	.83	1.7	1.1	1.0	1.0	.30	.08	.11	.01	.01
27	.31	1.1	2.1	1.4	1.1	.89	1.2	.26	.16	.09	0	.01
28	.31	.74	1.3	2.2	1.2	.83	13	.22	.11	.06	0	.01
29	.27	.64	1.0	1.8	---	.79	30	.21	.08	.04	0	.01
30	.27	.75	.87	1.5	---	.72	3.0	.22	.06	.05	0	0
31	.24	---	.87	1.5	---	.76	---	.21	---	.03	0	---
TOTAL	19.66	24.44	68.12	53.02	56.70	38.73	73.73	17.29	5.53	2.73	0.46	0.31
MEAN	.63	.81	2.20	1.71	2.03	1.25	2.46	.56	.18	.088	.015	.010
MAX	5.9	3.2	16	7.5	16	3.2	30	1.9	.52	.60	.08	.10
MIN	.07	.25	.62	.57	.87	.72	.45	.21	.06	.01	0	0
CFSM	.56	.71	1.93	1.50	1.78	1.10	2.16	.49	.16	.08	.01	.01
IN.	.64	.80	2.22	1.73	1.85	1.26	2.41	.56	.18	.09	.02	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1997@, BY WATER YEAR (WY)

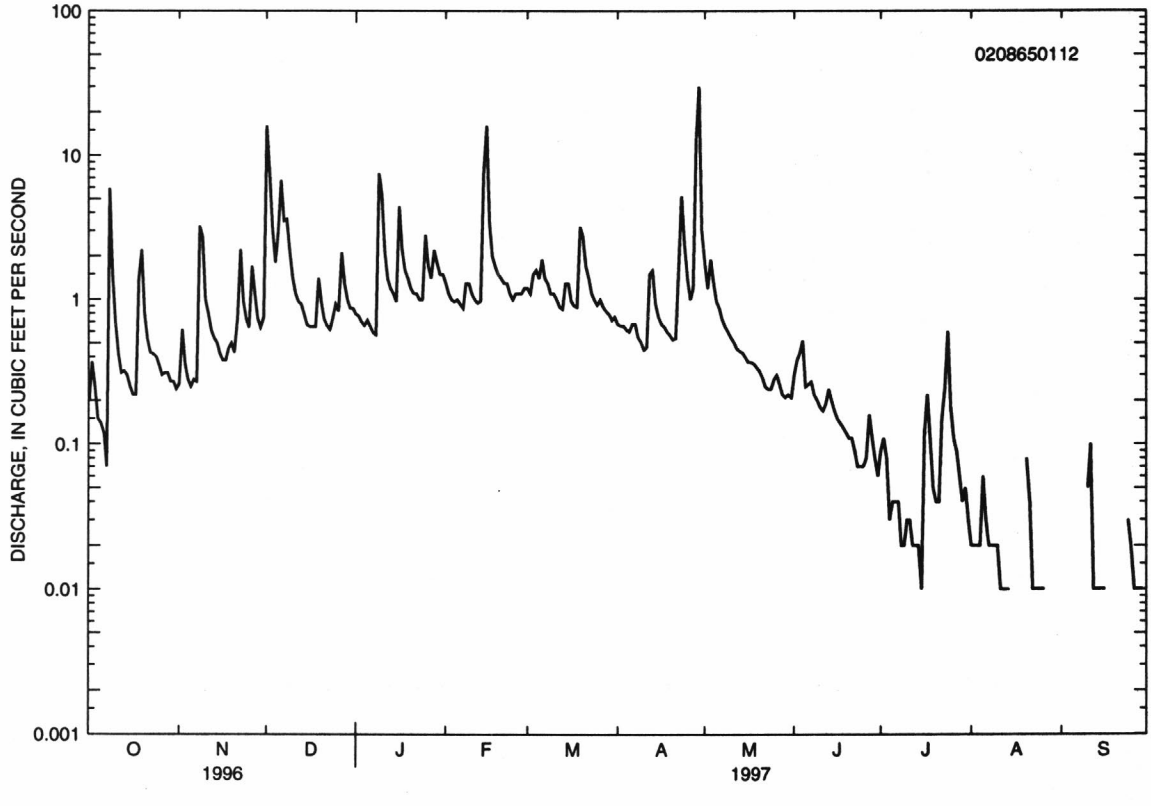
MEAN	.49	.58	1.08	2.00	2.46	1.95	1.47	.97	.84	.37	.13	1.47
MAX	1.46	1.27	3.26	2.92	3.38	4.65	2.46	2.20	4.07	1.26	.50	8.60
(WY)	1990	1996	1990	1996	1990	1989	1997	1989	1995	1989	1989	1996
MIN	.024	.079	.014	.47	1.60	.45	.064	.20	.052	.003	.001	0
(WY)	1989	1995	1989	1989	1996	1988	1995	1995	1988	1988	1988	1990

NEUSE RIVER BASIN

0208650112 FLAT RIVER TRIBUTARY NEAR WILLARDVILLE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1987 - 1997@	
ANNUAL TOTAL	631.39		360.72			
ANNUAL MEAN	1.73		.99		1.23	
HIGHEST ANNUAL MEAN					1.58	1996
LOWEST ANNUAL MEAN					.87	1995
HIGHEST DAILY MEAN	e225	Sep 6	30	Apr 29	e225	Sep 6 1996
LOWEST DAILY MEAN	0	Jul 21	0	Aug 15	0	Jun 22 1988
ANNUAL SEVEN-DAY MINIMUM	.02	Jul 18	0	Sep 3	0	Jul 2 1988
INSTANTANEOUS PEAK FLOW			168	Apr 29	1410*	Sep 6 1996
INSTANTANEOUS PEAK STAGE			5.81	Apr 29	7.77*	Sep 6 1996
INSTANTANEOUS LOW FLOW			0	Jul 13	0	Jun 15 1988
ANNUAL RUNOFF (CFSM)	1.51		.87		1.08	
ANNUAL RUNOFF (INCHES)	20.60		11.77		14.68	
10 PERCENT EXCEEDS	2.6		1.8		2.3	
50 PERCENT EXCEEDS	.54		.53		.27	
90 PERCENT EXCEEDS	.07		.01		0	

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



02086501 12 FLAT RIVER TRIBUTARY NEAR WILLARDVILLE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988-91, 1994 to current year

REMARKS.--Station operated to define the impacts of various land-use development on surface-water quality in the Upper Neuse River basin.

COOPERATION.--For the period February 1988 through June 1989 the inorganic chemical data and trace metal data were analyzed by the city of Durham's Brown Water Treatment Plant Laboratory.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	ANC UNFLTRD CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
OCT												
08...	0930	7.4	61.0	6.77	15.5	740	9.30	96	--	--	<.010	.120
NOV												
25...	0915	.62	78.0	6.40	8.0	760	11.1	94	26	21	.020	.080
DEC												
16...	0915	.97	68.0	6.44	6.5	762	11.0	89	27	22	.010	.130
JAN												
13...	1000	1.2	62.0	6.30	2.5	766	13.2	96	24	20	<.010	.110
16...	0945	8.1	47.0	6.50	--	--	--	--	--	--	<.010	.100
MAR												
10...	0930	1.1	68.0	6.60	11.5	759	10.1	93	25	21	<.010	.090
APR												
15...	1000	.76	72.0	6.81	10.0	761	10.1	90	--	--	<.010	.090
28...	0840	13	44.0	6.75	13.0	751	10.1	97	13	11	<.01	<.05
JUN												
11...	0920	.19	90.0	6.58	16.0	758	8.30	85	--	--	<.01	.22
SEP												
16...	0945	.02	102	7.27	19.0	757	6.80	74	55	45	<.01	.10

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
OCT												
08...	<.015	.80	<.20	.92	--	.150	<.010	<.010	7600	<1	<1	3
NOV												
25...	.020	<.20	<.20	--	--	<.010	<.010	.020	--	--	--	--
DEC												
16...	.020	<.20	<.20	--	--	<.010	<.010	<.010	--	--	--	--
JAN												
13...	<.015	<.20	<.20	--	--	<.010	<.010	<.010	130	<1	<1	<1
16...	<.015	.50	.20	.60	.30	.050	<.010	<.010	690	<1	<1	<1
MAR												
10...	<.015	<.20	<.20	--	--	<.010	<.010	<.010	--	--	--	--
APR												
15...	<.015	<.20	<.20	--	--	.010	<.010	<.010	--	--	--	--
28...	<.02	.4	.3	--	--	.04	<.01	<.01	--	--	--	--
JUN												
11...	<.02	.2	<.2	.43	--	.01	<.01	<.01	--	--	--	--
SEP												
16...	.02	<.2	<.2	--	--	<.01	<.01	<.01	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	PER-THANE TOTAL (UG/L) (39034)
OCT												
08...	5	3	6100	5	540	<.10	<1	3	<1	<1	10	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	<1	<1	320	<1	20	<.10	<1	<1	<1	<1	<10	--
16...	1	2	990	1	60	<.10	<1	1	<1	<1	<10	--
MAR												
10...	--	--	--	--	--	--	--	--	--	--	--	<.1
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	<.1
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	ENDO-SULFAN, I TOTAL (UG/L) (39388)	ALDRIN, TOTAL (UG/L) (39330)	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)	P,P'-DDD UNFILT RECOVER (UG/L) (39360)	P,P'-DDE, TOTAL (UG/L) (39365)	P,P'-DDT UNFILT RECOVER (UG/L) (39370)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	TOX-APHENE, TOTAL (UG/L) (39400)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.01	<.01	<.1	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<1
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.01	<.01	<.1	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<1
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

0208650112 FLAT RIVER TRIBUTARY NEAR WILLARDVILLE, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	DI-AZINON, TOTAL (UG/L) (39570)	ETHION, TOTAL (UG/L) (39398)	MALA-THION, TOTAL (UG/L) (39530)	METHYL PARA-THION, TOTAL (UG/L) (39600)	PARA-THION, TOTAL (UG/L) (39540)	TOTAL TRI-THION (UG/L) (39786)	PCB, TOTAL (UG/L) (39516)	PCNS UNFILT RECOVER (UG/L) (39250)	METH-OXY-CHLOR, TOTAL (UG/L) (39480)	MIREX, TOTAL (UG/L) (39755)	DISUL-FOTON UNFILT RECOVER (UG/L) (39011)	PHORATE TOTAL (UG/L) (39023)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.01	<.01	<.01	<.01	<.01	<.01	<.1	<.1	<.01	<.01	--	--
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.01	<.01	<.01	<.01	<.01	<.01	<.1	<.1	<.01	<.01	<.01	<.01
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	CHLOR-PYRIFOS TOTAL RECOVER (UG/L) (38932)	DEF TOTAL (UG/L) (39040)	FONOFOS (DY-FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P,P' DDE DISSOLV (UG/L) (34653)	DI-AZINON, DIS-SOLVED (UG/L) (39572)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.01	<.01	<.010	<.002	E.003	<.0020	<.0020	<.0040	<.0040	<.0020	<.0060	<.002
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.01	<.01	<.010	<.002	<.001	<.002	<.002	<.004	<.004	<.002	<.006	<.002
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.001	<.0030	<.017	<.0020	<.0040	<.0030	<.0030	<.0020	<.004	<.0020	<.005	<.002
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.001	<.003	<.017	<.002	<.004	<.003	<.003	<.002	<.004	<.002	<.005	<.002
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA-THION, DIS-SOLVED (UG/L) (39542)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.004	<.0040	<.0030	<.004	<.0060	<.0040	<.0040	<.0050	<.0020	<.0030	<.018	<.0070
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.004	<.004	<.003	<.004	<.006	<.004	<.004	<.005	<.002	<.003	<.018	<.007
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

02086501 12 FLAT RIVER TRIBUTARY NEAR WILLARDVILLE, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.0040	<.013	<.0050	<.0020	<.010	<.013	<.0010	<.0020	E.0032	<.0010	<.0030	<.0030
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.004	<.013	<.005	<.002	<.010	<.013	<.001	<.002	<.002	<.001	<.003	<.003
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	2,4,5-T DIS-SOLVED (UG/L) (39742)	2,4-D, DIS-SOLVED (UG/L) (39732)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	ACIFL-UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALDI-CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALDI-CARB SULFONE WAT, FLT GF 0.7U REC (UG/L) (49313)	ALDICA-RB SUL-FOXIDE, WAT, FLT GF 0.7U REC (UG/L) (49314)	BENTA-ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BRO-MACIL, WATER, DISS, REC (UG/L) (04029)	BRO-MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
25...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
10...	<.0070	<.0020	<.035	<.035	<.035	<.035	<.016	<.016	<.021	<.014	<.035	<.035
APR												
15...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.007	<.002	<.035	<.035	<.035	<.035	<.016	<.016	<.021	<.014	<.035	<.035
JUN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
16...	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	CAR-BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CARBO-FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	3HYDRXY CARBO-FURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	CHLOR-AMBEN, WATER, FLTRD, GF 0.7U REC (UG/L) (49307)	CHLORO-THALO-NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	CLOPYR-ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	DACTHAL MONO-ACID, WAT,FLT GF 0.7U REC (UG/L) (49304)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLO-BENIL, WATER, FLTRD, GF 0.7U REC (UG/L) (49303)	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)
OCT											
08...	--	--	--	--	--	--	--	--	--	--	--
NOV											
25...	--	--	--	--	--	--	--	--	--	--	--
DEC											
16...	--	--	--	--	--	--	--	--	--	--	--
JAN											
13...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
MAR											
10...	<.0080	<.028	<.014	<.011	<.035	<.050	<.017	<.035	<.020	<.032	<.035
APR											
15...	--	--	--	--	--	--	--	--	--	--	--
28...	<.008	<.028	<.014	<.011	<.035	<.05	<.017	<.035	<.02	<.032	<.035
JUN											
11...	--	--	--	--	--	--	--	--	--	--	--
SEP											
16...	--	--	--	--	--	--	--	--	--	--	--

DATE	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	DNOC WAT,FLT GF 0.7U REC (UG/L) (49299)	ESFEN-VAL-ERATE, WAT,FLT GF 0.7U REC (UG/L) (49298)	FEN-URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUO-METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	METHIO-CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	METH-OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	1-NAPH THOL, WATER, FLTRD, GF 0.7U REC (UG/L) (49295)
OCT											
08...	--	--	--	--	--	--	--	--	--	--	--
NOV											
25...	--	--	--	--	--	--	--	--	--	--	--
DEC											
16...	--	--	--	--	--	--	--	--	--	--	--
JAN											
13...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
MAR											
10...	<.020	<.035	<.019	<.013	<.035	<.018	<.050	<.035	<.026	<.017	<.0070
APR											
15...	--	--	--	--	--	--	--	--	--	--	--
28...	<.02	<.035	<.019	<.013	<.035	<.018	<.05	<.035	<.026	<.017	<.007
JUN											
11...	--	--	--	--	--	--	--	--	--	--	--
SEP											
16...	--	--	--	--	--	--	--	--	--	--	--

02086501 12 FLAT RIVER TRIBUTARY NEAR WILLARDVILLE, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NEBURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	NORFLURAZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	ORYZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)	PICLORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	PROPHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)	PROPOXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	SILVEX, DISSOLVED (UG/L) (39762)	TRICLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT											
08...	--	--	--	--	--	--	--	--	--	371	7.4
NOV											
25...	--	--	--	--	--	--	--	--	--	9	.02
DEC											
16...	--	--	--	--	--	--	--	--	--	6	.02
JAN											
13...	--	--	--	--	--	--	--	--	--	32	.10
16...	--	--	--	--	--	--	--	--	--	67	1.5
MAR											
10...	<.015	<.024	<.019	<.018	<.050	<.035	<.035	<.021	<.050	12	.04
APR											
15...	--	--	--	--	--	--	--	--	--	6	.01
28...	<.015	<.024	<.019	<.018	<.05	<.035	<.035	<.021	<.05	47	1.6
JUN											
11...	--	--	--	--	--	--	--	--	--	17	.01
SEP											
16...	--	--	--	--	--	--	--	--	--	1	.00

NEUSE RIVER BASIN

02087183 NEUSE RIVER NEAR FALLS, NC

LOCATION.--Lat 35°56'25", long 78°34'56", Wake County, Hydrologic Unit 03020201, on right bank 300 ft downstream of Falls Lake Dam, and 0.3 mi northwest of Falls.

DRAINAGE AREA.--771 mi^2.

PERIOD OF RECORD.--July 1970 to current year.

REVISED RECORDS.--WDR NC-91-1: Drainage area. WRD NC 96-1: 1991-95 (M).

GAGE.--Water-stage recorder. Datum of gage is 194.69 ft above sea level. Prior to Oct. 1, 1990, water-stage recorder at site 0.4 mi downstream at 182.62 ft. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated by Falls Lake (station 02087182). June 5, 1980, to May 6, 1981, flows affected by incidental storage in Falls Lake, under construction; May 6, 1981, to Jan. 13, 1983, gates closed and Falls Lake partially filled to provide storage for City of Raleigh water supply; Jan. 13, 1983, gates closed and normal pool elevation, 250.1 ft, reached Dec. 7, 1983. The City of Raleigh diverted an average of 74.8 ft^3/s, 1.2 mi upstream from station for municipal water supply, most of which was returned downstream as treated effluent. Prior to regulation, maximum discharge: 13,600 ft^3/s, July 17, 1975; gage height: 25.21 ft; minimum discharge: 4.6 ft^3/s, Sept. 24, 1980; gage height: 2.13 ft, at site then in use. Maximum gage-height and discharge for period of record may have been higher during period of estimated record, Aug. 27-Sept. 30, 1996. Minimum discharge for period of record not determined due to intermittent gate closure at dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1945 reached a stage of 216.1 ft above sea level; discharge, 23,300 ft^3/s at bridge 0.4 mi upstream, from information provided by the U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2840	189	486	341	1340	176	588	2980	e130	e130	e130	e130
2	2270	189	1360	1020	1340	176	e450	3070	e130	e130	e130	e130
3	864	189	2580	1340	1350	176	e176	2450	e130	e130	e130	e130
4	475	190	3010	840	1350	176	e176	2580	e350	e130	e130	e130
5	357	191	2540	840	1350	802	e176	2980	806	e130	e130	e130
6	357	189	831	604	759	1260	e176	3150	1000	e130	e130	e130
7	286	189	521	332	427	1530	e176	3130	999	e130	e130	e130
8	186	189	521	333	427	2050	e176	3170	e500	e130	e130	e130
9	186	189	287	337	422	2030	e176	2870	e186	e130	e130	e130
10	1330	191	185	1540	420	1110	e176	2630	e186	e130	e130	e130
11	2270	195	185	2700	880	337	176	2690	e186	e130	e130	e130
12	2270	498	578	2670	1280	339	176	1500	e186	e130	e130	e130
13	2270	648	2240	2630	919	339	176	640	e186	e130	e130	e130
14	2270	640	2010	1610	443	233	176	445	e186	e130	e130	e130
15	2270	684	2030	848	176	176	176	333	e186	e130	e130	e130
16	1790	1260	2280	850	176	176	176	333	e186	e130	e130	e130
17	1050	1010	2550	1420	1310	678	174	230	e186	e130	e130	e130
18	1040	257	2650	1760	2750	1720	175	177	e186	e130	e130	e130
19	1030	177	2240	1760	2810	843	175	179	e186	e130	e130	e130
20	1030	176	1690	1760	2530	758	173	181	e186	e130	e130	e130
21	1020	176	1010	983	2550	2380	170	183	e186	e130	e130	e130
22	691	404	663	421	2980	3120	170	185	e186	e130	e130	e130
23	338	622	446	425	2930	2940	172	159	e150	e130	e130	e130
24	235	622	350	427	2850	1330	1350	e130	e130	e130	e130	e130
25	214	622	348	427	3280	253	1970	e130	e130	e130	e130	e130
26	187	740	350	426	2650	256	1750	e130	e130	e130	e130	e130
27	189	1410	346	420	2200	406	1770	e130	e130	e130	e130	e130
28	188	1410	344	420	1470	587	817	e130	e130	e750	e130	e130
29	189	1410	344	426	---	588	984	e130	e130	816	e130	e130
30	188	1320	344	745	---	587	2350	e130	e130	489	e130	e130
31	189	---	344	1340	---	587	---	e130	---	242	e130	---
TOTAL	30069	16176	35663	31995	43369	28119	15702	37285	7709	5807	4030	3900
MEAN	970	539	1150	1032	1549	907	523	1203	257	187	130	130
MAX	2840	1410	3010	2700	3280	3120	2350	3170	1000	816	130	130
MIN	186	176	185	332	176	176	170	130	130	130	130	130
†	-315	+6	+87	+25	-121	+41	+1083	-989	+47	+17	-235	-140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997, BY WATER YEAR (WY)

MEAN	313	365	581	907	1193	1697	1107	591	325	341	277	428
MAX	970	1535	1818	2014	2531	3992	2586	1821	735	1501	1099	3953
(WY)	1997	1996	1986	1984	1985	1989	1984	1989	1984	1995	1989	1996
MIN	72.6	65.2	63.3	102	287	233	118	110	126	61.7	61.0	67.8
(WY)	1984	1984	1992	1994	1991	1988	1995	1995	1987	1983	1983	1985

NEUSE RIVER BASIN

02087183 NEUSE RIVER NEAR FALLS, NC--Continued

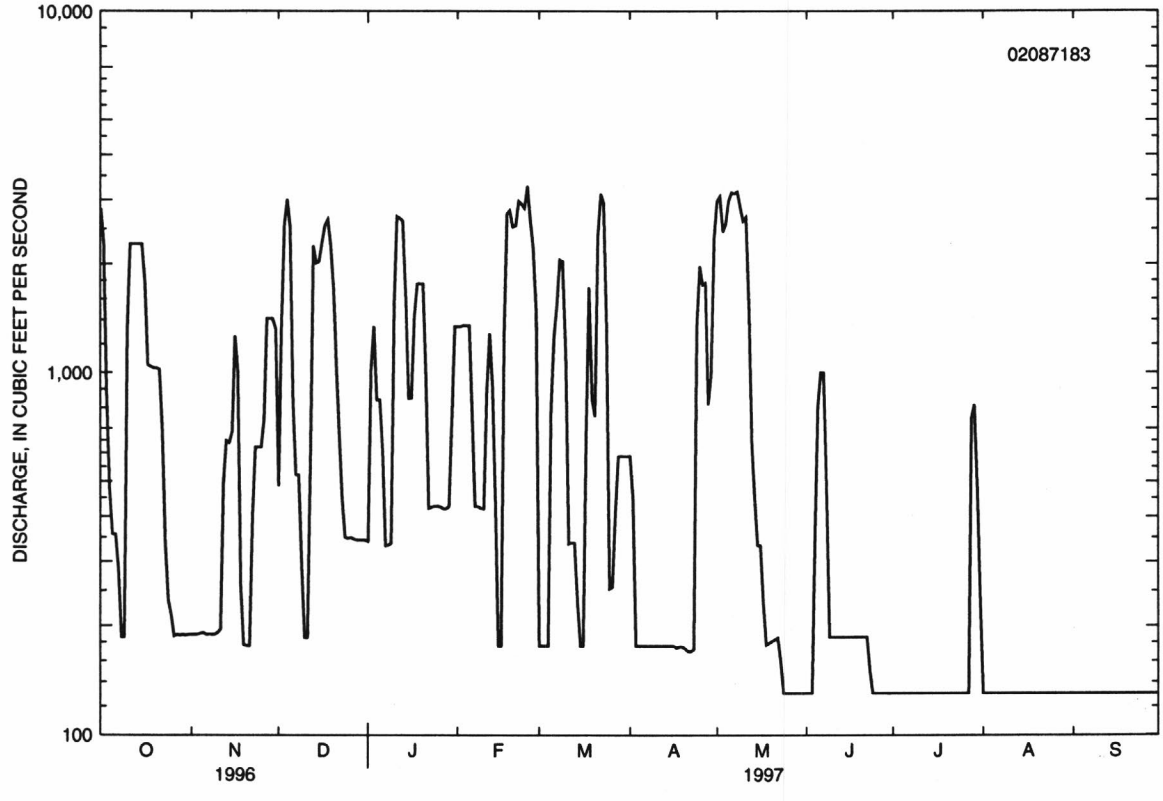
SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1983 - 1997	
ANNUAL TOTAL	389207		259824			
ANNUAL MEAN	1063		712	‡749	675	(UNADJUSTED)
HIGHEST ANNUAL MEAN					1161	1984
LOWEST ANNUAL MEAN					205	1988
HIGHEST DAILY MEAN	7420	Sep 16	3280	Feb 25	7420	Sep 16 1996
LOWEST DAILY MEAN	66	Jul 19	130	May 24	55	Jan 10 1995
ANNUAL SEVEN-DAY MINIMUM	67	Jul 15	130	May 24	56	Jan 10 1995
INSTANTANEOUS PEAK FLOW			3380	Feb 24	7650*	Sep 16 1996
INSTANTANEOUS PEAK STAGE			3.76	Feb 24	8.05*	Sep 16 1996
INSTANTANEOUS LOW FLOW			NOT DETERMINED		NOT DETERMINED*	
10 PERCENT EXCEEDS	2660		2270		2300	
50 PERCENT EXCEEDS	560		233		183	
90 PERCENT EXCEEDS	121		130		80	

e Estimated.

* Regulated period only (1983-1997). See REMARKS.

† Change in contents, equivalent in cubic feet per second, in Falls Reservoir provided by U.S. Army Corps of Engineers.

‡ Adjusted for change in contents.



NEUSE RIVER BASIN

02087275 CRABTREE CREEK AT HIGHWAY 70 AT RALEIGH, NC

LOCATION.--Lat 35°50'15", long 78°40'26", Wake County, Hydrologic Unit 030200201, on left bank on upstream side of bridge on U.S. Highway 70, 0.6 mi upstream from Mine Creek, 4.4 mi northwest of Raleigh.

DRAINAGE AREA.--97.6 mi^2.

PERIOD OF RECORD.--June 1997 to September 1997. Gage-height records collected at site 1988-1997.

GAGE.--Water-stage recorder. Datum of gage is 203.72 ft above sea level. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1973, reached a stage of about 27.69 ft, discharge, about 11,700 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, FOR PERIOD JUNE 1997 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									e80	e26	88	14
2									e140	e32	72	23
3									e250	e28	55	12
4									e200	e27	45	17
5									e120	e30	41	18
6									e95	e27	41	14
7									e80	e26	37	13
8									e60	e25	33	11
9									e50	e27	27	13
10									e45	e30	22	21
11									e40	e32	22	58
12									e38	33	16	37
13									e45	31	15	25
14									e50	24	14	19
15									e45	19	13	17
16									e40	39	12	16
17									e35	122	11	15
18									e60	45	11	14
19									40	29	10	12
20									33	23	11	11
21									27	28	13	9.3
22									24	30	10	8.0
23									24	e55	9.1	7.5
24									20	2190	9.3	51
25									20	986	9.2	76
26									23	477	9.1	46
27									39	234	8.7	31
28									25	148	8.4	31
29									21	115	8.4	33
30									e20	106	8.4	26
31									---	98	46	---
TOTAL									1789	5142	735.6	698.8
MEAN									59.6	166	23.7	23.3
MAX									250	2190	88	76
MIN									20	19	8.4	7.5
CFSM									.61	1.70	.24	.24
IN.									.68	1.96	.28	.27

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD JUNE 1997 TO SEPTEMBER 1997

MEAN									59.6	166	23.7	23.3
MAX									59.6	166	23.7	23.3
(WY)									1997	1997	1997	1997
MIN									59.6	166	23.7	23.3
(WY)									1997	1997	1997	1997

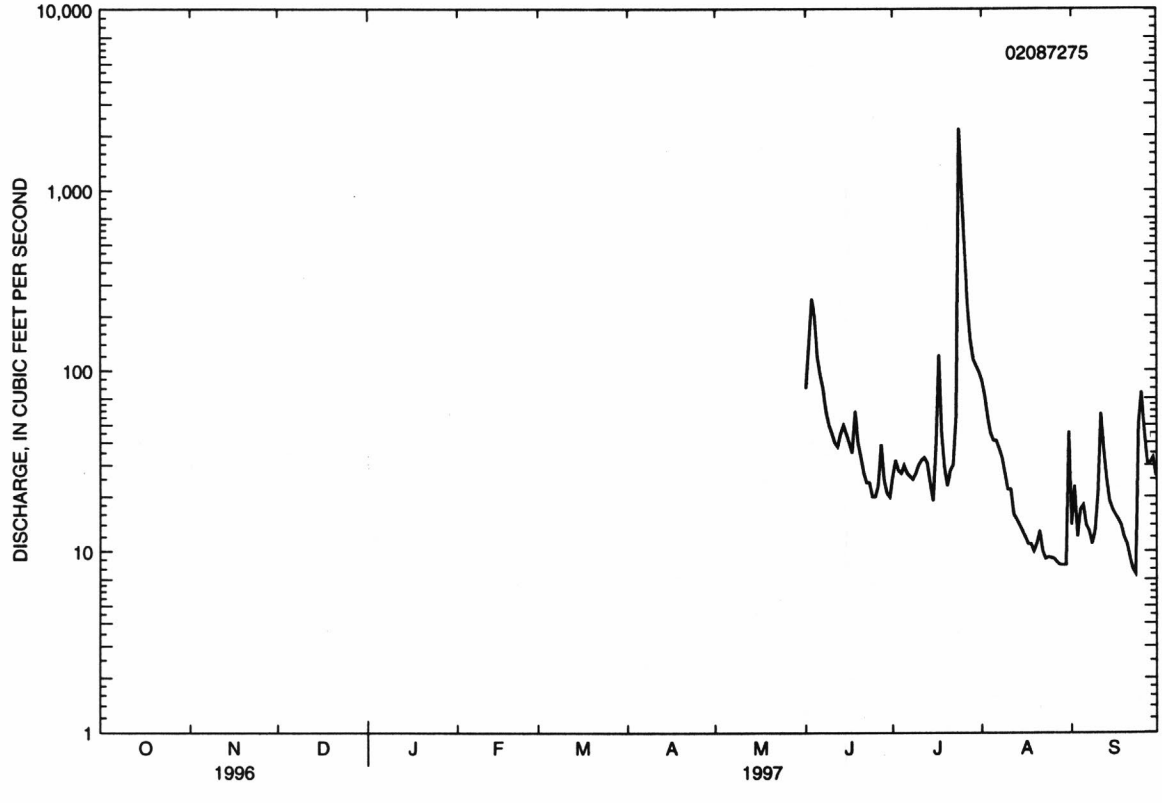
NEUSE RIVER BASIN

02087324 CRABTREE CREEK AT US 1 AT RALEIGH, NC--Continued

SUMMARY STATSTICS FOR PERIOD JUNE 1997 TO SEPTEMBER 1997

INSTANTANEOUS PEAK FLOW	4030	Jul 24
INSTANTANEOUS PEAK STAGE	16.79	Jul 24
INSTANTANEOUS LOW FLOW	4.8	Sep 22

e Estimated.



NEUSE RIVER BASIN

02087324 CRABTREE CREEK AT US 1 AT RALEIGH, NC

LOCATION.--Lat 35°48'40", long 78°36'43", Wake County, Hydrologic Unit 03020201, on downstream side of bridge on U.S. Highway 1, 2.7 mi northeast of Raleigh, and 7.2 mi upstream from mouth.

DRAINAGE AREA.--121 mi^2.

PERIOD OF RECORD.--July 1990 to current year.

GAGE.--Water-stage recorder. Datum of gage is 183.27 ft above sea level. Satellite telemetry at station.

REMARKS.--Records poor. Maximum gage height for period of record from high-water mark in gage well. Minimum discharge for period of record also occurred Oct. 8, 9, 1994.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1973, reached a stage of about 17.98 ft, discharge, about 13,500 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	260	46	401	95	157	105	69	535	e120	35	114	46
2	189	159	612	91	142	87	61	532	e282	39	99	44
3	124	103	415	84	131	86	59	401	1010	34	81	34
4	86	72	263	79	121	88	57	296	433	33	70	34
5	65	81	205	74	121	83	56	213	223	39	65	36
6	54	78	318	71	114	104	71	157	140	34	64	33
7	49	72	273	64	106	83	74	107	135	32	61	30
8	1910	219	293	61	151	72	60	84	97	32	56	28
9	1720	510	235	498	142	65	54	82	78	33	51	30
10	799	333	174	653	130	60	51	71	66	35	47	64
11	415	206	134	445	120	57	48	61	57	37	44	102
12	238	136	109	284	111	54	95	57	53	37	41	59
13	154	103	96	204	127	52	88	57	70	37	39	43
14	114	107	83	163	678	171	69	54	68	33	37	37
15	92	84	74	148	1190	198	58	48	61	31	36	33
16	79	72	69	355	675	150	52	44	55	e29	35	32
17	69	68	66	327	414	112	48	41	e50	e55	34	31
18	71	65	67	246	274	91	45	40	e91	e42	33	30
19	171	71	164	193	218	527	44	44	56	37	32	28
20	111	63	122	167	187	655	42	44	47	33	42	27
21	87	100	101	152	173	389	47	44	42	37	38	27
22	78	195	87	143	184	252	303	43	36	95	31	24
23	70	165	78	143	153	165	615	40	35	109	27	24
24	67	136	79	135	129	119	427	38	34	2130	28	108
25	57	114	91	202	117	98	252	61	33	1500	28	117
26	53	172	87	183	108	118	166	160	33	620	31	66
27	50	139	178	154	99	102	136	112	65	317	29	50
28	48	112	183	184	92	85	546	78	41	194	29	47
29	46	92	155	203	---	86	1550	61	36	150	31	50
30	45	91	127	184	---	75	781	53	33	143	27	43
31	48	---	107	175	---	74	---	48	---	129	160	---
TOTAL	7419	3964	5446	6160	6364	4463	6024	3706	3580	6141	1540	1357
MEAN	239	132	176	199	227	144	201	120	119	198	49.7	45.2
MAX	1910	510	612	653	1190	655	1550	535	1010	2130	160	117
MIN	45	46	66	61	92	52	42	38	33	29	27	24
CFSM	1.95	1.07	1.43	1.62	1.85	1.17	1.63	.97	.97	1.61	.40	.37
IN.	2.24	1.20	1.65	1.86	1.92	1.35	1.82	1.12	1.08	1.86	.47	.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1997, BY WATER YEAR (WY)

MEAN	138	114	107	233	172	224	138	84.1	130	95.8	76.0	162
MAX	370	255	176	325	305	454	355	122	257	198	163	995
(WY)	1996	1993	1997	1993	1995	1993	1993	1996	1990	1997	1992	1996
MIN	30.8	23.2	45.2	173	59.5	140	57.4	45.6	29.1	30.7	31.7	14.2
(WY)	1992	1992	1995	1994	1991	1992	1995	1995	1993	1993	1993	1990

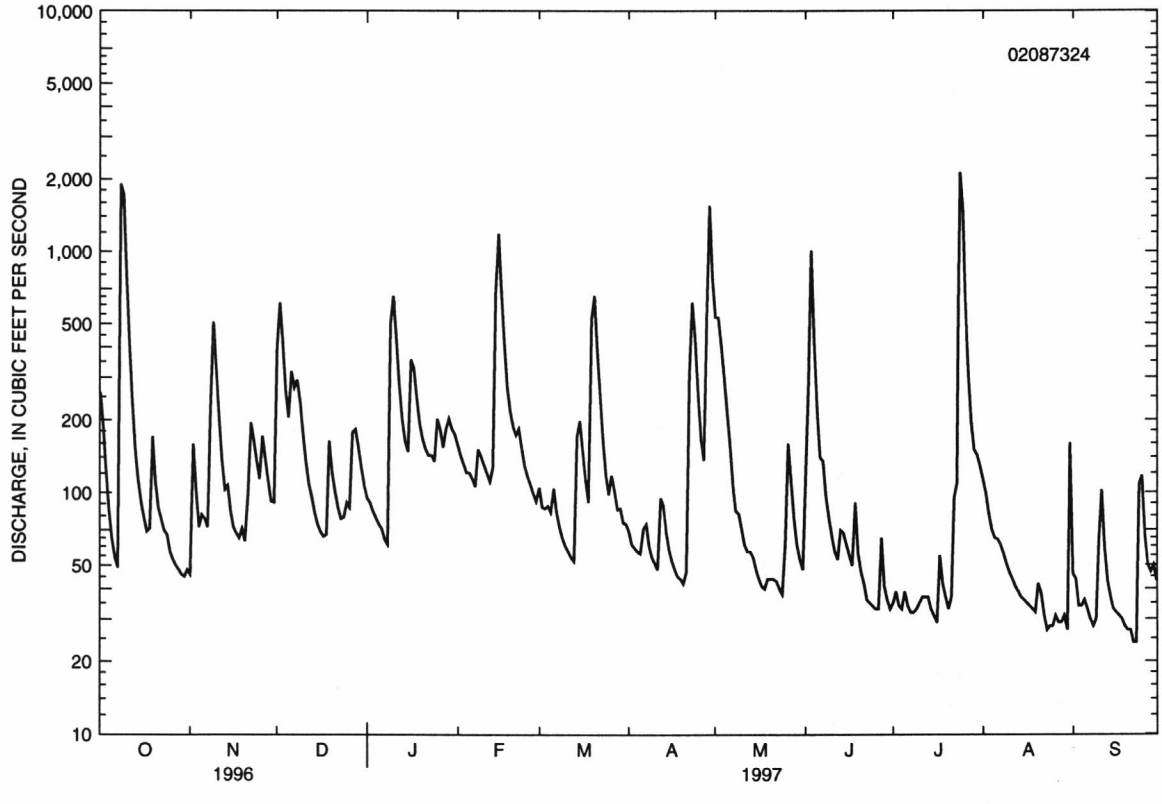
NEUSE RIVER BASIN

02087324 CRABTREE CREEK AT US 1 AT RALEIGH, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1990 - 1997	
ANNUAL TOTAL	82102.1		56164			
ANNUAL MEAN	224		154		141	
HIGHEST ANNUAL MEAN					242	1996
LOWEST ANNUAL MEAN					97.7	1991
HIGHEST DAILY MEAN	7730	Sep 6	2130	Jul 24	7730	Sep 6 1996
LOWEST DAILY MEAN	5.4	Jul 7	24	Sep 22	1.9	Oct 8 1994
ANNUAL SEVEN-DAY MINIMUM	8.6	Jul 1	27	Sep 17	2.3	Oct 2 1994
INSTANTANEOUS PEAK FLOW			3500	Jul 24	12700	Sep 6 1996
INSTANTANEOUS PEAK STAGE			13.14	Jul 24	18.23*	Sep 6 1996
INSTANTANEOUS LOW FLOW			22	Sep 22	1.9*	Oct 7 1994
ANNUAL RUNOFF (CFSM)	1.82		1.25		1.14	
ANNUAL RUNOFF (INCHES)	24.83		16.99		15.53	
10 PERCENT EXCEEDS	401		309		294	
50 PERCENT EXCEEDS	109		83		70	
90 PERCENT EXCEEDS	43		34		17	

e Estimated.

* See REMARKS.



NEUSE RIVER BASIN

0208732534 PIGEON HOUSE CREEK AT CAMERON VILLAGE AT RALEIGH, NC

LOCATION.--Lat 35°47'14", long 78°39'17", Wake County, Hydrologic Unit 03020201, on right bank, downstream of Cameron Village in Wells Park, on the upstream side of Forest Drive.

DRAINAGE AREA.--0.27 mi^2.

PERIOD OF RECORD.--October 1996 to current year. Fragmentary records, July 1987 to September 1996, are available in the U.S.G.S. District Office, Raleigh, NC.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 320 ft above sea level from topographic map. Satellite telemetry at station.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.12	.20	3.0	.28	.16	e.19	e.12	.43	1.0	.36	.06	e.10
2	e.12	1.7	.20	.09	.16	e.17	.12	.10	3.4	.07	.05	e.07
3	e.12	.07	.10	.09	.16	e.36	.12	2.2	1.8	.07	.05	e.06
4	e.12	.08	.10	.09	.22	e.20	.12	.10	.31	.06	.06	e.06
5	e.12	.10	.92	.09	.35	e.50	.12	.09	.12	.06	.11	e.05
6	e.12	.08	.12	.09	.13	e.37	.87	.09	1.1	.07	e.04	e.05
7	e.13	.09	.60	.09	.12	e.18	.12	.09	.22	.07	.04	e.06
8	e.36	4.0	.11	.29	1.5	e.16	.12	e.09	.11	.06	.04	e.05
9	e.11	.10	.10	3.0	.16	e.15	.12	e.08	.08	.07	.04	.06
10	e.12	.09	.10	.11	.22	e.16	.12	e.09	.05	.07	.05	.86
11	e.12	.09	.10	.20	.14	e.16	.12	e.08	.05	.07	.05	.47
12	e.12	.09	.10	.09	.16	e.15	1.4	e.08	.05	.08	.05	.12
13	e.12	.09	.17	.09	1.9	e.17	.12	e.68	.19	.37	.04	.12
14	e.12	.10	.10	.09	3.1	e5.0	.15	e.12	.05	.06	.04	.12
15	e.12	.11	.10	.09	2.0	e.20	.12	e.12	.05	.06	.05	.12
16	e.11	.15	.10	2.6	.24	e.18	.12	e.12	.05	.71	.04	.12
17	e.11	.18	.12	.11	.19	e.16	.13	.12	2.9	.07	.05	.12
18	.85	.51	.44	.10	.16	e.17	.16	.12	.18	.05	.14	.11
19	.09	.10	1.4	.10	.16	e10	.12	.12	.10	.04	.04	.11
20	.09	.09	.10	.10	.16	e.25	.12	.19	.09	.05	.95	.10
21	.09	1.5	.10	.09	.54	e.20	1.4	.11	.09	.05	.05	.10
22	.10	.13	.09	.14	.20	e.18	3.7	.15	.09	e4.5	.04	.10
23	.11	.10	.09	.10	.16	e.16	1.5	.15	.09	e.29	.04	.10
24	.12	.10	.47	.20	e.17	e.16	.25	.15	.08	e10	.05	2.5
25	.12	.39	.09	1.3	e.16	e.15	.14	.76	.08	e.08	.04	.36
26	.13	.93	.60	.14	e.15	e1.1	.12	e11	.66	.06	.04	.12
27	.15	.09	.28	.14	e.18	e.18	2.1	e.45	.20	.05	.05	.12
28	.17	.10	.09	.85	e.52	e.17	2.3	e.29	.07	.06	.05	.31
29	.15	.10	.09	.15	---	e.16	2.8	.12	.07	.06	.04	.11
30	.17	.59	.09	.28	---	e.14	.11	.12	.06	.38	.05	.10
31	.18	---	.12	.18	---	e.13	---	.12	---	.06	15	---
TOTAL	4.78	12.05	10.19	11.36	13.47	21.61	18.93	18.53	13.39	18.11	17.44	6.85
MEAN	.15	.40	.33	.37	.48	.70	.63	.60	.45	.58	.56	.23
MAX	.85	4.0	3.0	3.0	3.1	10	3.7	11	3.4	10	15	2.5
MIN	.09	.07	.09	.09	.12	.13	.11	.08	.05	.04	.04	.05
CFSM	.57	1.49	1.22	1.36	1.78	2.58	2.34	2.21	1.65	2.16	2.08	.85
IN.	.66	1.66	1.40	1.57	1.86	2.98	2.61	2.55	1.84	2.50	2.40	.94

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

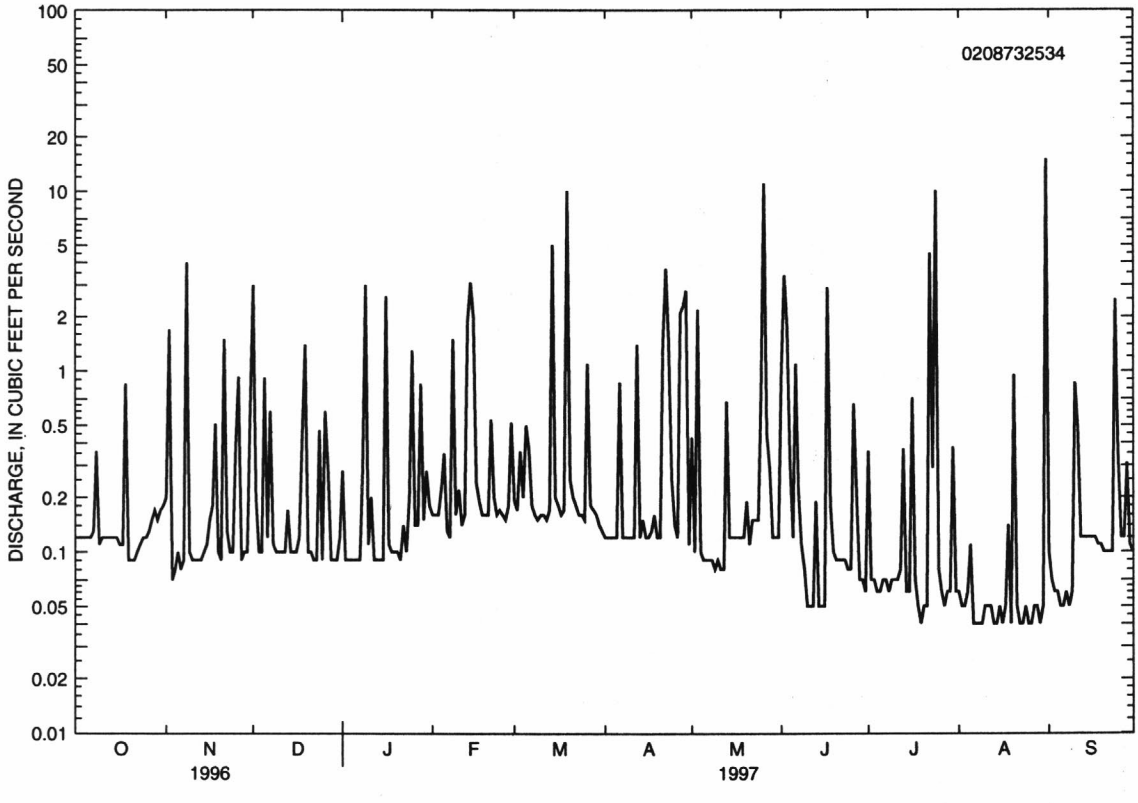
MEAN	.15	.40	.33	.37	.48	.70	.63	.60	.45	.58	.56	.23
MAX	.15	.40	.33	.37	.48	.70	.63	.60	.45	.58	.56	.23
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997
MIN	.15	.40	.33	.37	.48	.70	.63	.60	.45	.58	.56	.23
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997

0208732534 PIGEON HOUSE CREEK AT CAMERON VILLAGE AT RALEIGH, NC--Continued

SUMMARY STATISTICS FOR 1997 WATER YEAR

ANNUAL TOTAL	166.71	
ANNUAL MEAN	.46	
HIGHEST DAILY MEAN	15	Aug 31
LOWEST DAILY MEAN	.04	Jul 19
ANNUAL SEVEN-DAY MINIMUM	.04	Aug 6
INSTANTANEOUS PEAK FLOW	467	Jul 22
INSTANTANEOUS PEAK STAGE	6.87	Jul 22
INSTANTANEOUS LOW	NOT DETERMINED	
10 PERCENT EXCEEDS	.89	
50 PERCENT EXCEEDS	.12	
90 PERCENT EXCEEDS	.05	

e Estimated.



NEUSE RIVER BASIN

0208732885 MARSH CREEK NEAR NEW HOPE, NC

LOCATION.--Lat 35°48'59", long 78°35'37", Wake County, Hydrologic Unit 03020201, on right upstream wingwall, 0.2 mi downstream of U.S. Highway 401, and 2.9 mi southwest of New Hope.

DRAINAGE AREA.--6.84 mi^2.

PERIOD OF RECORD.--January 1984 to current year.

GAGE.--Water-stage recorder. Datum of gage is 198 ft above sea level, from topographic map. Satellite telemetry and rain gage at station.

REMARKS.-- Records fair except those for estimated daily discharges, which are poor. Maximum discharge for period of record and current water year from rating curve extension above 1,300 ft^3/s, on basis of indirect measurement of peak flow. Minimum discharge for period of record also occurred Sept. 4, 1993. Minimum discharge for current water year not determined due to bridge maintenance at gage site.

REVISIONS.--The maximum discharge for the 1995 water year has been revised to 3,230 ft^3/s; gage height, 12.84 ft, superseding figures published in the report for the 1995 water year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	2.9	106	3.6	e6.4	5.0	4.1	e9.9	e6.0	3.1	3.0	6.1
2	4.7	34	15	3.7	e5.9	4.0	3.7	e8.5	e27	e2.8	2.3	3.8
3	1.7	6.1	9.8	3.2	e5.4	5.1	3.6	e7.5	16	e2.7	2.0	2.4
4	2.3	3.9	9.1	3.0	e5.0	3.9	3.8	e6.4	19	e2.6	1.7	1.7
5	2.3	3.4	12	2.9	e5.0	5.2	3.7	e5.7	5.5	e2.4	e1.9	1.4
6	2.4	3.3	16	2.7	e4.7	11	9.7	4.9	9.9	e2.3	e1.6	1.3
7	2.6	3.2	8.2	2.5	e4.4	4.5	7.4	4.2	8.1	e2.1	1.5	1.3
8	263	90	3.4	2.5	e6.2	3.5	4.3	3.8	4.3	1.9	1.5	1.3
9	15	13	1.1	66	e5.8	3.2	3.6	6.2	3.3	1.6	1.5	3.6
10	7.9	4.4	2.5	11	e5.4	3.2	3.2	4.2	e.90	1.5	1.7	9.5
11	5.7	2.9	2.7	6.7	e4.9	3.2	3.1	3.4	2.7	1.6	1.8	19
12	4.6	2.2	2.2	4.2	e4.6	3.6	20	3.2	3.0	1.4	1.6	4.6
13	4.2	2.2	2.4	3.3	e5.2	3.0	7.6	3.6	5.8	1.2	1.5	2.8
14	4.0	2.1	1.9	3.1	e30	48	4.3	3.6	3.3	e1.1	1.5	2.0
15	3.7	1.9	1.6	3.1	76	11	3.4	3.3	2.8	e1.1	1.4	1.5
16	3.6	1.9	1.6	42	12	6.1	3.3	2.9	2.5	e1.0	1.3	1.3
17	3.5	2.0	2.0	7.6	6.8	4.6	3.1	2.9	e23	e2.0	1.2	1.2
18	8.2	3.8	3.2	4.6	5.1	4.9	2.9	2.8	28	e3.2	1.1	1.1
19	8.5	5.3	30	3.5	4.6	90	2.9	2.6	e5.1	2.3	1.1	1.0
20	4.2	3.0	6.2	3.6	4.2	16	2.8	2.8	3.8	3.5	8.4	.98
21	3.6	36	3.7	3.4	6.1	8.0	3.2	2.5	e3.2	6.5	e6.1	.87
22	3.2	32	2.9	3.4	7.8	5.9	55	2.3	e2.8	42	e3.5	.87
23	3.1	6.7	2.6	4.7	4.3	4.7	57	2.4	e2.4	e45	e2.6	.92
24	2.9	4.6	4.0	e5.7	3.7	4.4	9.7	2.4	e2.1	e600	e1.8	e33
25	2.9	7.2	6.1	e8.2	3.5	4.2	5.4	8.2	e2.0	14	e1.4	e17
26	2.8	50	5.3	e7.5	3.5	12	3.9	14	e1.9	5.8	e1.2	5.2
27	2.9	14	14	e6.5	3.9	5.6	9.2	5.5	15	3.6	e1.1	3.0
28	3.3	7.8	4.5	e7.7	5.3	4.9	55	3.4	e4.0	2.8	1.0	3.5
29	3.0	6.5	3.6	e8.4	---	7.8	104	2.7	e3.1	e2.3	.97	2.6
30	2.7	11	3.3	e7.8	---	4.8	12	2.5	e2.2	e6.7	1.0	1.7
31	2.7	---	3.3	e7.2	---	6.0	---	2.4	---	3.7	51	---
TOTAL	387.1	367.3	290.2	253.3	245.7	307.3	414.9	140.7	218.70	773.8	111.27	136.54
MEAN	12.5	12.2	9.36	8.17	8.77	9.91	13.8	4.54	7.29	25.0	3.59	4.55
MAX	263	90	106	66	76	90	104	14	28	600	51	33
MIN	1.7	1.9	1.1	2.5	3.5	3.0	2.8	2.3	.90	1.0	.97	.87
CFSM	1.83	1.79	1.37	1.19	1.28	1.45	2.02	.66	1.07	3.65	.52	.67
IN.	2.11	2.00	1.58	1.38	1.34	1.67	2.26	.77	1.19	4.21	.61	.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1997, BY WATER YEAR (WY)

MEAN	7.41	7.91	6.56	11.1	11.3	13.2	9.60	9.22	9.07	8.72	9.43	9.12
MAX	23.3	15.7	10.3	20.7	20.7	23.9	19.2	25.9	20.3	25.0	38.0	56.0
(WY)	1996	1996	1990	1987	1989	1993	1989	1984	1989	1997	1986	1996
MIN	1.95	1.72	2.02	3.77	2.77	4.54	2.08	3.64	1.29	2.44	2.07	1.86
(WY)	1987	1992	1995	1986	1991	1986	1985	1985	1993	1987	1993	1990

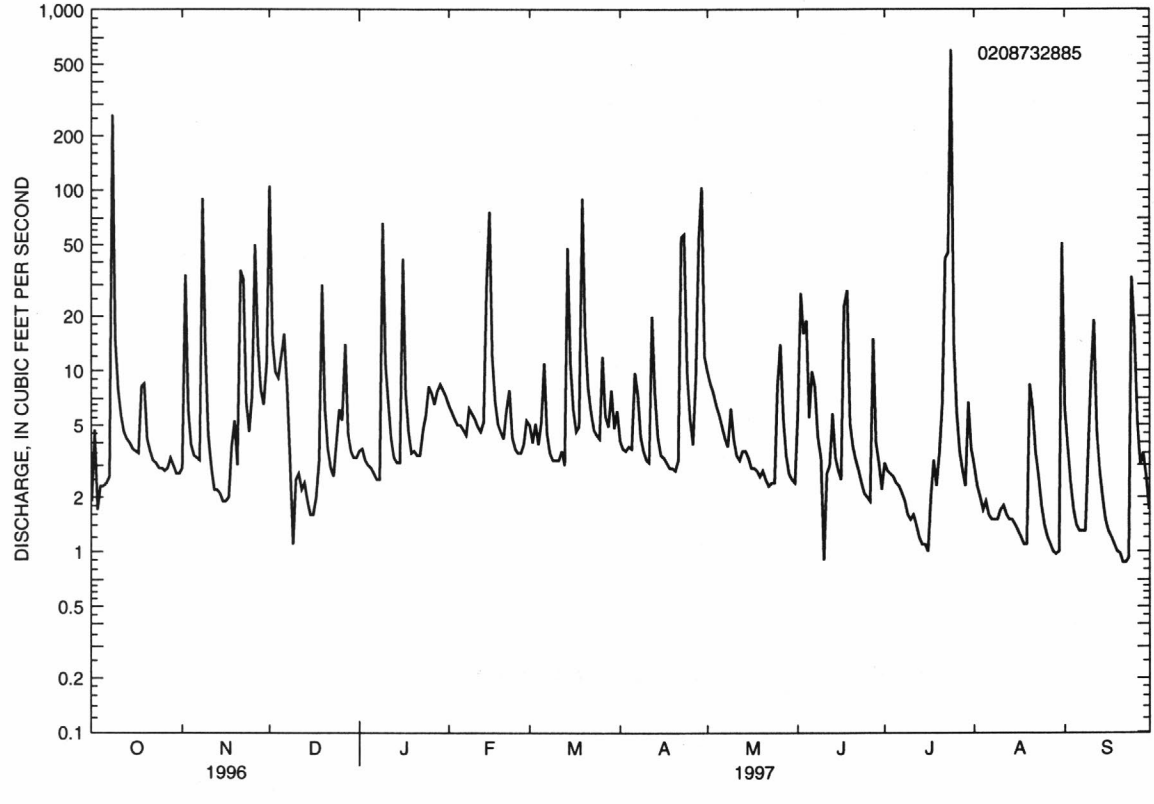
NEUSE RIVER BASIN

0208732885 MARSH CREEK NEAR NEW HOPE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1984 - 1997		
ANNUAL TOTAL	5133.07		3646.81				
ANNUAL MEAN	14.0		9.99		9.39		
HIGHEST ANNUAL MEAN					14.9		1996
LOWEST ANNUAL MEAN					5.87		1988
HIGHEST DAILY MEAN	890	Sep 6	600	Jul 24	890	Sep 6	1996
LOWEST DAILY MEAN	.67	Sep 1	.87	Sep 21	.10	Sep 3	1993
ANNUAL SEVEN-DAY MINIMUM	1.1	Aug 27	.99	Sep 17	.15	Aug 28	1993
INSTANTANEOUS PEAK FLOW			2180*	Jul 24	3900*	Sep 6	1996
INSTANTANEOUS PEAK STAGE			11.24	Jul 24	13.33	Sep 6	1996
INSTANTANEOUS LOW FLOW			NOT DETERMINED*		.07*	Sep 3	1993
ANNUAL RUNOFF (CFSM)	2.05		1.46		1.37		
ANNUAL RUNOFF (INCHES)	27.92		19.83		18.65		
10 PERCENT EXCEEDS	24		14		17		
50 PERCENT EXCEEDS	4.9		3.6		3.4		
90 PERCENT EXCEEDS	1.9		1.5		1.3		

e Estimated.

* See REMARKS.



NEUSE RIVER BASIN

0208735012 ROCKY BRANCH BELOW PULLEN DRIVE AT RALEIGH, NC

LOCATION.--Lat 35°46'48", long 78°39'59", Wake County, Hydrologic Unit 03020201, on right bank, 0.1 mi below Pullen Drive at Pullen Park and 1.5 mi north of Raleigh.

DRAINAGE AREA.--1.17 mi^2.

PERIOD OF RECORD.--October 1996 to current year. Fragmentary records, June 1992 to September 1996, are available in the U.S.G.S. District office, Raleigh, NC.

GAGE.--Water-stage recorder. Datum of gage is 315 ft above sea level from topographic map. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges and discharges above 300 ft^3/s and those below 0.5 ft^3/s, which are poor. Minimum discharge for the current year, due to diversion 75 ft upstream of station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.58	.96	15	1.1	.74	.71	e.52	2.3	3.5	1.4	.53	.15
2	e.56	7.1	1.3	.67	.68	.59	e.50	1.9	13	.37	.53	.32
3	e.54	.45	.58	.59	.70	1.1	e.48	7.6	7.9	.32	.53	.34
4	e.52	.54	.62	.53	.74	.65	e.46	1.1	2.1	.32	.53	.32
5	e.50	e.50	3.9	.62	1.3	1.6	e.44	.82	.73	.32	.64	.29
6	e.48	e.40	.89	.66	.68	1.7	e.60	.66	3.3	.32	.49	.28
7	e.46	.41	2.6	.69	.68	.53	e2.0	.66	1.5	.32	.43	.35
8	e20	11	.65	.69	6.0	.52	e.60	.66	.38	.31	.42	.37
9	e.60	.61	.53	16	.77	.45	e.56	.66	.05	.32	.42	.37
10	.49	.48	.58	.75	.84	.51	e.54	.66	.14	.32	.48	2.2
11	.46	.54	.66	.75	.76	.53	e.52	.66	e.20	.30	.53	2.4
12	.52	.54	.62	.53	.73	.53	e1.6	.66	e.40	.25	.53	.53
13	.54	.54	.71	.53	7.6	.59	e.60	1.0	e1.0	.19	.47	.46
14	.63	.53	.53	.53	16	8.4	e.56	.57	e.60	.20	.44	.25
15	.63	.53	.64	.56	12	.60	e.52	.64	e.58	.22	.42	.31
16	.63	.54	.77	9.8	.88	.53	e.48	.64	e.56	1.7	.42	.32
17	.53	.59	.88	.67	.76	.53	e.42	.64	e.54	.40	.42	.32
18	3.3	1.5	1.7	.66	.67	.80	e.42	.65	e1.0	.33	.67	.32
19	.51	.67	6.6	.66	.70	19	e.40	.66	e.68	.32	.42	.34
20	.52	.47	.56	.66	.63	1.1	e.40	1.1	e.66	.38	3.7	.33
21	.65	5.9	.54	.68	1.4	.74	e2.0	1.2	e.64	.32	.58	.32
22	.66	.84	.56	.83	.66	.66	e20	.81	e.62	24	.42	.32
23	.71	.49	.57	.67	.56	.64	e5.0	.81	e.60	3.2	.42	.32
24	.68	.53	1.8	.77	.61	.60	e.90	.81	.53	119	.42	12
25	.75	1.4	.66	5.1	.62	.61	.66	2.9	.56	1.1	.42	1.0
26	.75	3.5	2.2	.68	.73	2.4	.74	19	1.3	.88	.42	.49
27	.69	.53	1.9	.71	.79	.55	3.3	1.1	2.4	.81	.42	.42
28	.86	.55	.66	3.5	1.8	e.52	14	.64	.33	.81	.48	.86
29	.54	.61	.61	.70	---	e.50	19	.54	.32	.81	.45	.47
30	.72	2.1	.56	.96	---	e.50	1.2	.54	.32	1.7	.21	.48
31	.81	---	.66	.79	---	e.50	---	.53	---	.64	4.8	---
TOTAL	40.82	45.35	51.04	53.04	61.03	49.19	79.42	53.12	46.44	161.88	22.06	27.25
MEAN	1.32	1.51	1.65	1.71	2.18	1.59	2.65	1.71	1.55	5.22	.71	.91
MAX	20	11	15	16	16	19	20	19	13	119	4.8	12
MIN	.46	.40	.53	.53	.56	.45	.40	.53	.05	.19	.21	.15

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

MEAN	1.32	1.51	1.65	1.71	2.18	1.59	2.65	1.71	1.55	5.22	.71	.91
MAX	1.32	1.51	1.65	1.71	2.18	1.59	2.65	1.71	1.55	5.22	.71	.91
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997
MIN	1.32	1.51	1.65	1.71	2.18	1.59	2.65	1.71	1.55	5.22	.71	.91
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997

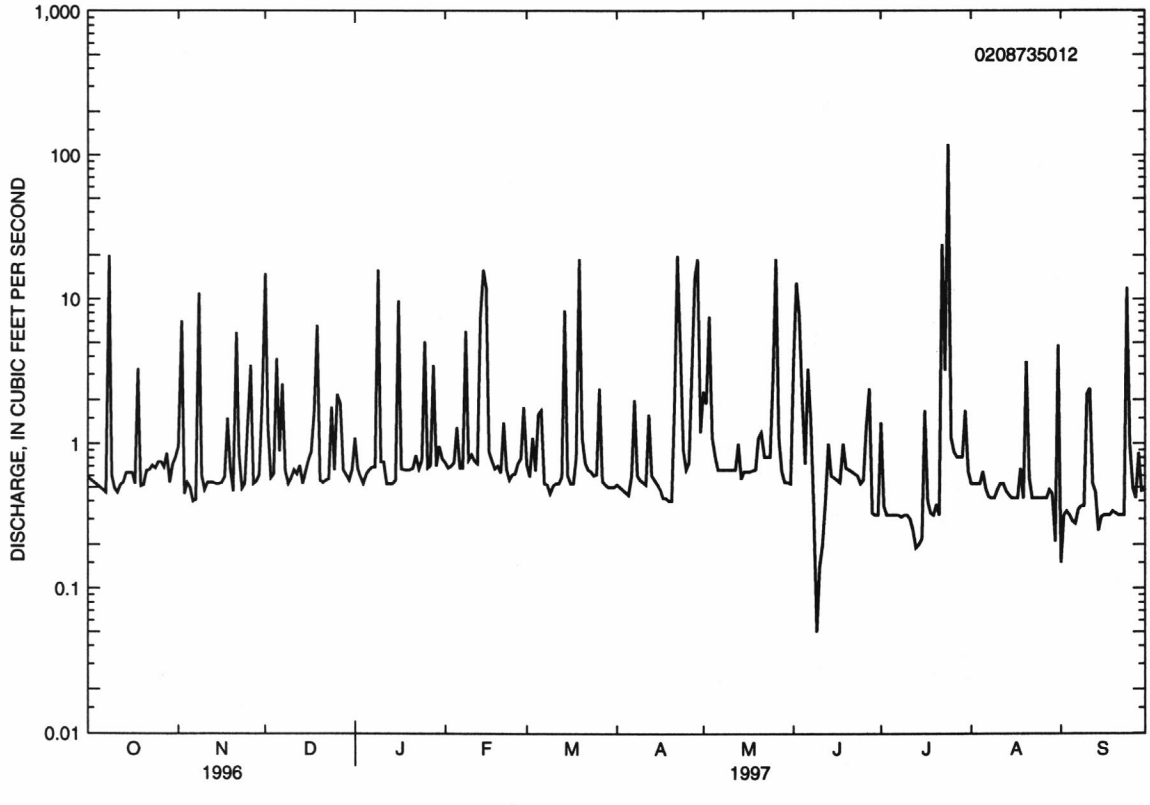
NEUSE RIVER BASIN

0208735012 ROCKY BRANCH BELOW PULLEN DRIVE AT RALEIGH, NC--Continued

SUMMARY STATISTICS	FOR 1997 WATER YEAR	
ANNUAL TOTAL	690.64	
ANNUAL MEAN	1.89	
HIGHEST DAILY MEAN	119	Jul 24
LOWEST DAILY MEAN	.05	Jun 9
ANNUAL SEVEN-DAY MINIMUM	.26	Jul 9
INSTANTANEOUS PEAK FLOW	2590	Jul 24
INSTANTANEOUS PEAK STAGE	9.23	Jul 24
INSTANTANEOUS LOW FLOW	0*	Jun 8
10 PERCENT EXCEEDS	3.0	
50 PERCENT EXCEEDS	.62	
90 PERCENT EXCEEDS	.33	

e Estimated.

* See REMARKS.



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 mi^2.

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

GAGE.--Water-stage recorder. Elevation of gage is 190 ft above sea level, from topographic map. Satellite telemetry and rain gage at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	9.7	119	18	20	36	e16	27	46	11	9.9	14
2	18	59	173	20	18	27	12	22	66	19	8.3	8.2
3	15	27	33	18	17	21	12	52	447	13	7.4	6.9
4	12	17	24	17	16	21	13	27	240	11	6.6	5.8
5	10	14	e20	16	19	18	13	14	37	9.0	6.3	5.2
6	9.1	13	e46	16	18	38	21	11	32	11	7.3	3.8
7	8.5	12	35	15	e16	21	29	9.6	39	9.0	6.0	2.9
8	558	66	40	14	e14	17	17	8.2	25	8.1	5.4	2.5
9	376	129	23	153	e13	15	13	8.7	21	7.9	4.6	4.0
10	39	26	19	124	e23	14	10	13	19	7.5	4.5	8.9
11	23	19	18	33	20	14	11	15	17	6.7	4.5	28
12	19	15	17	23	18	13	49	14	17	6.6	4.5	11
13	16	14	18	19	23	13	49	17	18	6.5	4.2	8.0
14	15	13	17	18	292	106	23	15	17	6.8	3.7	6.5
15	14	12	16	17	324	63	21	14	16	6.1	4.3	5.6
16	13	11	15	97	132	28	17	13	15	8.3	5.9	5.1
17	14	12	16	39	48	22	16	12	14	17	6.6	4.6
18	19	13	17	23	32	e19	14	11	93	9.0	9.9	4.5
19	64	22	85	19	27	170	12	11	24	7.0	11	5.2
20	20	15	33	18	24	197	10	12	18	6.1	12	5.6
21	15	24	22	18	22	48	11	13	15	11	18	5.5
22	14	68	20	18	39	31	276	11	13	9.7	7.1	5.5
23	12	24	19	19	23	24	280	10	12	86	5.8	6.5
24	12	19	18	17	19	20	115	9.4	11	635	5.8	29
25	11	17	28	57	18	18	48	13	10	475	6.5	69
26	11	56	20	28	18	43	31	61	9.8	31	6.5	22
27	11	25	49	21	19	25	31	96	27	18	6.7	13
28	10	19	25	33	23	21	209	23	16	13	7.4	13
29	9.7	16	21	28	---	33	450	17	12	11	7.9	12
30	9.1	19	19	23	---	20	126	14	10	16	5.5	9.1
31	11	---	19	23	---	22	---	13	---	14	38	---
TOTAL	1410.4	805.7	1044	1002	1295	1178	1955	606.9	1356.8	1506.3	248.1	330.9
MEAN	45.5	26.9	33.7	32.3	46.3	38.0	65.2	19.6	45.2	48.6	8.00	11.0
MAX	558	129	173	153	324	197	450	96	447	635	38	69
MIN	8.5	9.7	15	14	13	13	10	8.2	9.8	6.1	3.7	2.5
CFSM	1.55	.91	1.15	1.10	1.57	1.29	2.22	.67	1.54	1.65	.27	.38
IN.	1.78	1.02	1.32	1.27	1.64	1.49	2.47	.77	1.72	1.91	.31	.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1997, BY WATER YEAR (WY)

MEAN	45.5	26.9	33.7	32.3	46.3	38.0	65.2	23.1	34.8	43.8	15.2	101
MAX	45.5	26.9	33.7	32.3	46.3	38.0	65.2	26.7	45.2	48.6	22.4	191
(WY)	1997	1997	1997	1997	1997	1997	1997	1996	1997	1997	1996	1996
MIN	45.5	26.9	33.7	32.3	46.3	38.0	65.2	19.6	24.3	39.1	8.00	11.0
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1996	1996	1997	1997

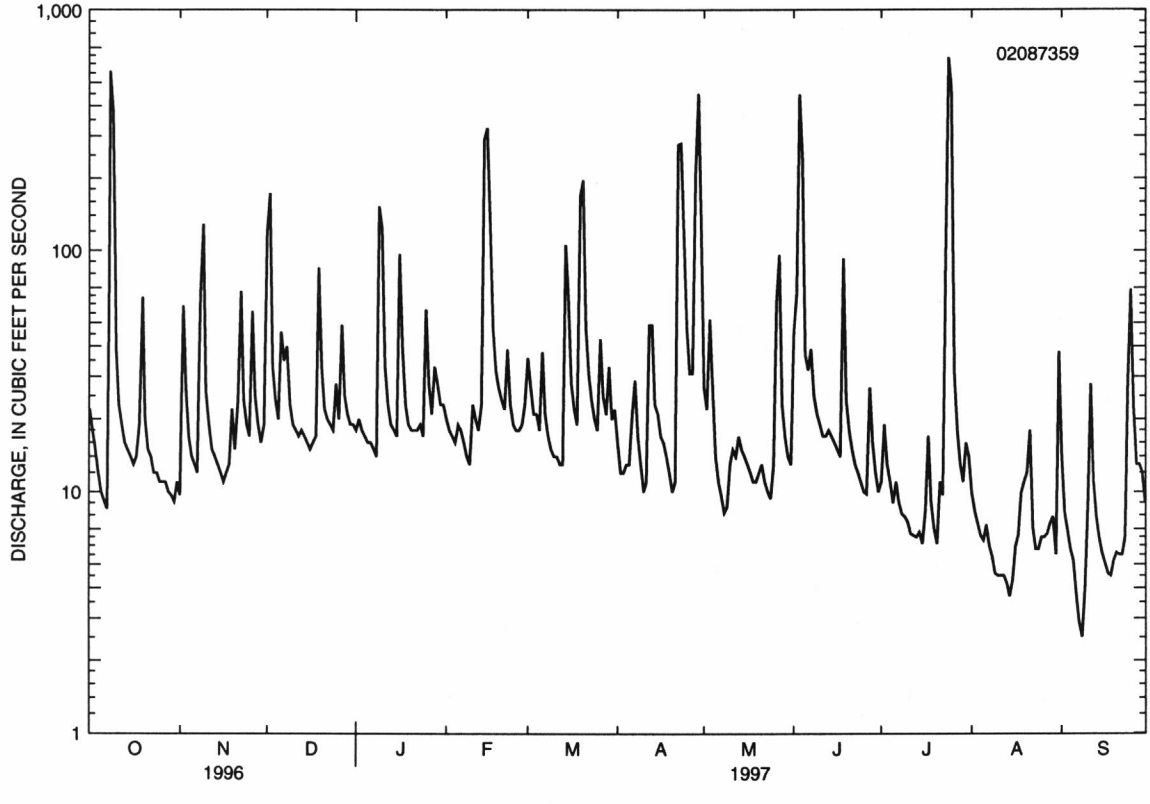
NEUSE RIVER BASIN

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

SUMMARY STATISTICS	FOR 1997 WATER YEAR		WATER YEARS 1996 - 1997		
ANNUAL TOTAL	12739.1				
ANNUAL MEAN	34.9		34.9		
HIGHEST ANNUAL MEAN			34.9		1997
LOWEST ANNUAL MEAN			34.9		1997
HIGHEST DAILY MEAN	635	Jul 24	3600	Sep 6	1996
LOWEST DAILY MEAN	2.5	Sep 8	2.5	Sep 8	1997
ANNUAL SEVEN-DAY MINIMUM	4.3	Aug 9	4.1	Jul 1	1996
INSTANTANEOUS PEAK FLOW	1370	Jul 24	6760*	Sep 6	1996
INSTANTANEOUS PEAK STAGE	10.18	Jul 24	17.03*	Sep 6	1996
INSTANTANEOUS LOW FLOW	2.2	Sep 8	2.2	Sep 8	1997
ANNUAL RUNOFF (CFSM)	1.19		1.19		
ANNUAL RUNOFF (INCHES)	16.12		16.13		
10 PERCENT EXCEEDS	58		66		
50 PERCENT EXCEEDS	17		17		
90 PERCENT EXCEEDS	6.6		6.6		

e Estimated.

* See REMARKS.



02087500 NEUSE RIVER NEAR CLAYTON, NC

LOCATION.--Lat 35°38'50", long 78°24'22", Johnston County, Hydrologic Unit 03020201, on left bank at downstream side of bridge on State Highway 42, 2.3 mi upstream from Mill Creek, and 3 mi east of Clayton.

DRAINAGE AREA.--1,150 mi^2.

PERIOD OF RECORD.--July 1927 to current year.

REVISED RECORDS.--WSP 1032: 1930, 1935(M). WSP 1333: 1935. WSP 1503: 1949. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 128.41 ft above sea level. Prior to Mar. 18, 1942, at site 1,100 ft upstream at same datum. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by Falls Lake (station 02087182), since Dec. 7, 1983. The City of Raleigh diverted an average of 74.8 ft^3/s upstream from station, most of which was returned upstream from station as treated effluent. Prior to regulation, maximum discharge: 22,900 ft^3/s, Sept. 19, 1945; gage height: 22.12 ft; minimum discharge: 44 ft^3/s, Sept. 15, 1932; gage height: 0.28 ft, at site then in use. Minimum discharge for current water year also occurred on Sept. 7, 8.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 23, 1919, reached a stage of 21.15 ft, from floodmark at former site; discharge 21,200 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4000	434	2190	758	1970	1560	e994	4090	380	298	408	472
2	3480	627	2590	765	1930	657	942	4470	705	334	304	279
3	2290	818	3160	1820	1910	608	685	4430	2160	326	275	267
4	1230	556	3490	1570	1880	613	460	3850	e1770	300	273	227
5	713	500	3660	1290	1880	580	418	3610	1380	277	323	220
6	636	502	3240	1280	1840	1660	409	3840	1420	322	311	219
7	626	485	1500	868	956	1840	518	3920	1580	299	296	219
8	3130	641	1480	664	865	2220	467	3830	1420	292	291	219
9	6100	1850	1290	1270	1090	2490	410	3840	719	279	279	219
10	2620	1210	837	2400	902	2450	392	3530	509	288	265	298
11	3220	844	689	3160	859	1110	403	3270	470	288	271	488
12	3440	682	641	3490	1620	657	491	3220	451	279	267	433
13	3240	987	1470	3360	1790	661	756	1610	459	278	263	312
14	3040	1060	2720	3170	2610	824	596	1080	466	276	260	271
15	2870	1030	2520	1810	3370	1210	502	743	436	264	254	261
16	2750	1240	2510	1820	2760	781	486	641	414	307	247	255
17	1930	1680	2790	2040	1540	e649	475	635	403	446	250	248
18	1500	1180	3010	2450	2860	e1580	459	472	860	383	271	247
19	1990	601	3600	2450	3580	2680	447	452	587	301	262	242
20	1710	522	3090	2400	3520	2760	463	429	431	271	258	237
21	1550	513	2150	2320	3180	2560	450	446	385	274	373	232
22	1460	966	1400	1210	3360	3430	1130	431	365	291	289	223
23	945	1120	1130	937	3570	3800	1950	423	358	858	249	229
24	603	1140	799	889	3490	e2880	1780	381	334	2100	241	260
25	537	1080	811	1090	3420	e1420	2810	358	301	5870	241	824
26	490	1230	749	1130	3730	812	2650	540	292	1840	239	537
27	455	1670	948	963	3140	795	2420	882	411	920	251	342
28	450	1990	963	917	2760	902	3130	540	400	528	248	304
29	449	1940	886	1110	---	1100	3850	442	328	1410	247	322
30	437	1910	832	990	---	1040	4760	414	307	912	250	300
31	435	---	785	1590	---	1000	---	373	---	823	494	---
TOTAL	58326	31008	57930	51981	66382	47329	35703	57192	20501	21934	8750	9206
MEAN	1881	1034	1869	1677	2371	1527	1190	1845	683	708	282	307
MAX	6100	1990	3660	3490	3730	3800	4760	4470	2160	5870	494	824
MIN	435	434	641	664	859	580	392	358	292	264	239	219

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997*, BY WATER YEAR (WY)

MEAN	598	655	922	1433	1774	2367	1631	993	647	632	581	762
MAX	1881	2201	2013	2821	3189	4906	3345	2864	1211	1841	1539	6620
(WY)	1997	1996	1986	1984	1985	1989	1993	1989	1995	1995	1989	1996
MIN	212	215	237	419	520	483	290	309	314	234	204	136
(WY)	1984	1992	1995	1986	1991	1988	1986	1995	1987	1983	1983	1985

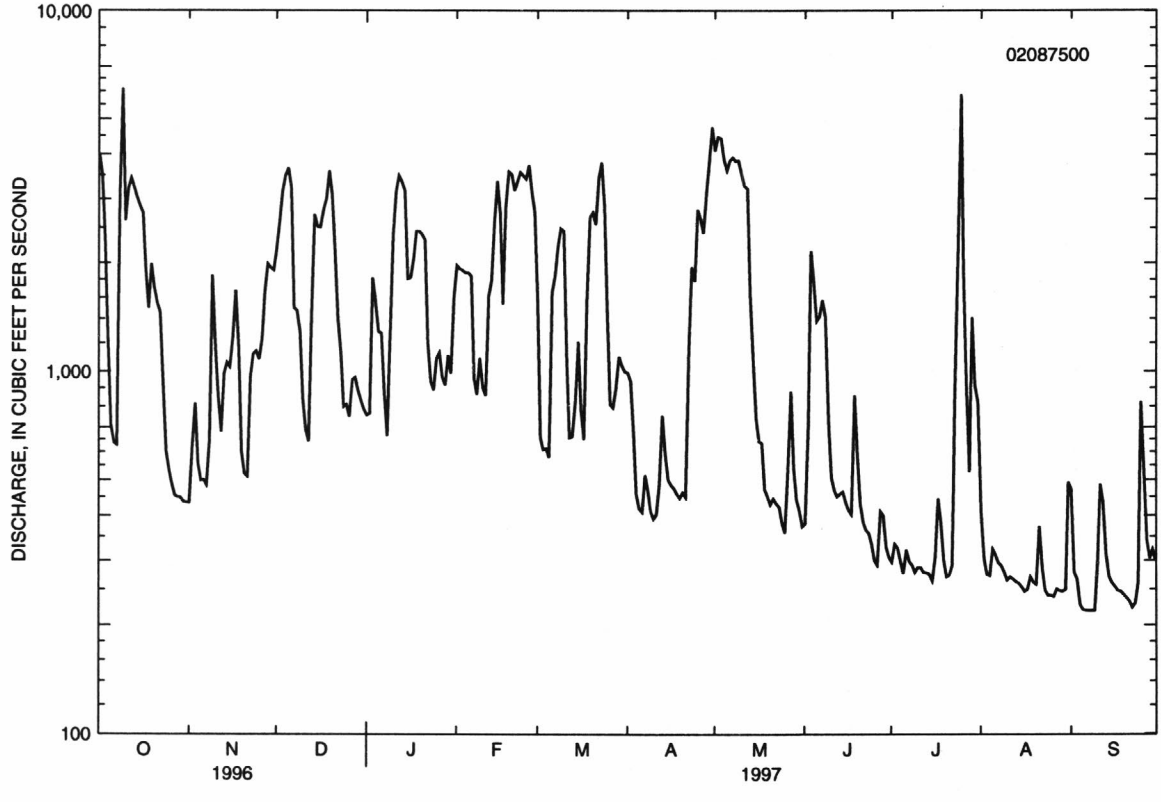
NEUSE RIVER BASIN

02087500 NEUSE RIVER NEAR CLAYTON, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1983 - 1997*	
ANNUAL TOTAL	644116		466242			
ANNUAL MEAN	1760		1277		1080	
HIGHEST ANNUAL MEAN					1760	1996
LOWEST ANNUAL MEAN					458	1988
HIGHEST DAILY MEAN	18900	Sep 7	6100	Oct 9	18900	Sep 7 1996
LOWEST DAILY MEAN	239	Jul 5	219	Sep 6	105	Sep 16 1985
ANNUAL SEVEN-DAY MINIMUM	257	Jun 30	227	Sep 3	117	Sep 12 1985
INSTANTANEOUS PEAK FLOW			6700	Oct 9	19700	Sep 7 1996
INSTANTANEOUS PEAK STAGE			10.52	Oct 9	20.12	Sep 7 1996
INSTANTANEOUS LOW FLOW			200*	Sep 6	78	Sep 18 1985
10 PERCENT EXCEEDS	3540		3220		3190	
50 PERCENT EXCEEDS	961		818		458	
90 PERCENT EXCEEDS	376		271		252	

e Estimated.

* Regulated period only (1983-1997). See REMARKS.



NEUSE RIVER BASIN

0208758850 SWIFT CREEK NEAR MCCULLARS CROSSROADS, NC

LOCATION.--Lat 35°41'33", long 78°41'34", Wake County, Hydrologic Unit 03020201, 0.1 mi downstream of Secondary Road 1375, 0.1 mi downstream of Lake Wheeler, and 2.0 mi north of McCullars Crossroads.

DRAINAGE AREA.--35.8 mi^2.

PERIOD OF RECORD.--December 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 258 ft above sea level, from topographic map. Satellite telemetry at station.

REMARKS.-- Records good except for those for estimated daily discharges, and those below 5.0 ft^3/s, which are poor. Gage rebuilt January 1997 after destruction by Hurricane Fran in September 1996. Records unavailable for period Oct. 1 to Dec. 31. Some regulation by Lake Wheeler (station 02087588). Maximum gage-height for period of record from floodmarks. Minimum discharge for period of record, no flow, also occurred June 28, 29, 1993. Minimum discharge for the current water year also occurred on July 16, Aug. 14, 15, 16, 17, 18, 19, 20, Sept. 15.

DISCHARGE, CUBIC FEET PER SECOND, FOR PERIOD JANUARY 1997 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				e44	30	38	e16	99	e10	3.6	5.6	.10
2				e50	25	36	13	55	e84	9.3	4.5	.05
3				e44	22	29	13	66	974	8.7	3.3	.05
4				e40	20	26	13	79	410	6.3	1.8	.05
5				e36	21	23	13	e39	99	3.4	.98	.05
6				e32	22	36	13	e24	42	2.9	.66	.05
7				e28	20	30	20	18	53	2.3	.22	.05
8				e26	37	24	17	15	35	1.3	.10	.05
9				e60	66	18	14	15	22	.72	.09	.05
10				e200	42	18	11	18	16	.43	.09	.06
11				e220	31	18	11	14	13	.18	.06	.05
12				e100	25	16	18	13	12	.16	.06	.05
13				e80	24	15	50	13	12	.18	.34	.05
14				e60	365	45	27	13	12	.05	.05	.05
15				36	638	100	17	13	11	.05	.05	.05
16				121	335	47	14	8.6	9.5	.05	.05	.05
17				115	117	e28	13	7.1	9.1	.62	.05	.05
18				53	61	e20	12	6.7	13	1.5	.04	.05
19				30	44	145	9.8	7.1	13	1.1	.04	.06
20				25	34	335	9.0	6.1	9.8	.51	.06	.14
21				22	33	121	9.2	5.7	8.5	.42	.07	.17
22				21	50	59	199	4.9	7.3	.92	.06	.18
23				23	39	33	402	3.7	4.7	13	.06	.19
24				21	29	23	226	4.6	3.8	485	.06	.93
25				52	24	20	82	4.7	3.8	516	.05	7.8
26				59	22	31	39	34	3.1	84	.05	8.6
27				35	25	34	27	136	5.2	27	.06	7.3
28				33	26	26	207	43	7.3	14	.05	7.9
29				e45	---	33	704	17	5.5	8.3	.05	8.6
30				e37	---	26	317	12	3.1	6.9	.06	7.4
31				35	---	26	---	9.7	---	7.5	.07	---
TOTAL				1783	2227	1479	2536.0	804.9	1911.7	1206.39	18.78	50.23
MEAN				57.5	79.5	47.7	84.5	26.0	63.7	38.9	.61	1.67
MAX				220	638	335	704	136	974	516	5.6	8.6
MIN				-	21	20	15	9.0	3.7	3.1	.05	.04.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1997, BY WATER YEAR (WY)

MEAN	27.6	29.3	22.6	51.3	53.0	65.5	39.1	26.4	30.4	18.0	17.4	22.4
MAX	106	69.4	50.9	81.4	115	120	90.5	75.7	65.8	51.5	81.4	152
(WY)	1996	1996	1990	1993	1995	1989	1993	1989	1992	1989	1989	1996
MIN	4.38	3.16	7.81	19.7	14.4	15.1	10.7	6.42	3.46	1.16	.61	.11
(WY)	1992	1992	1989	1989	1991	1988	1995	1992	1993	1988	1997	1990

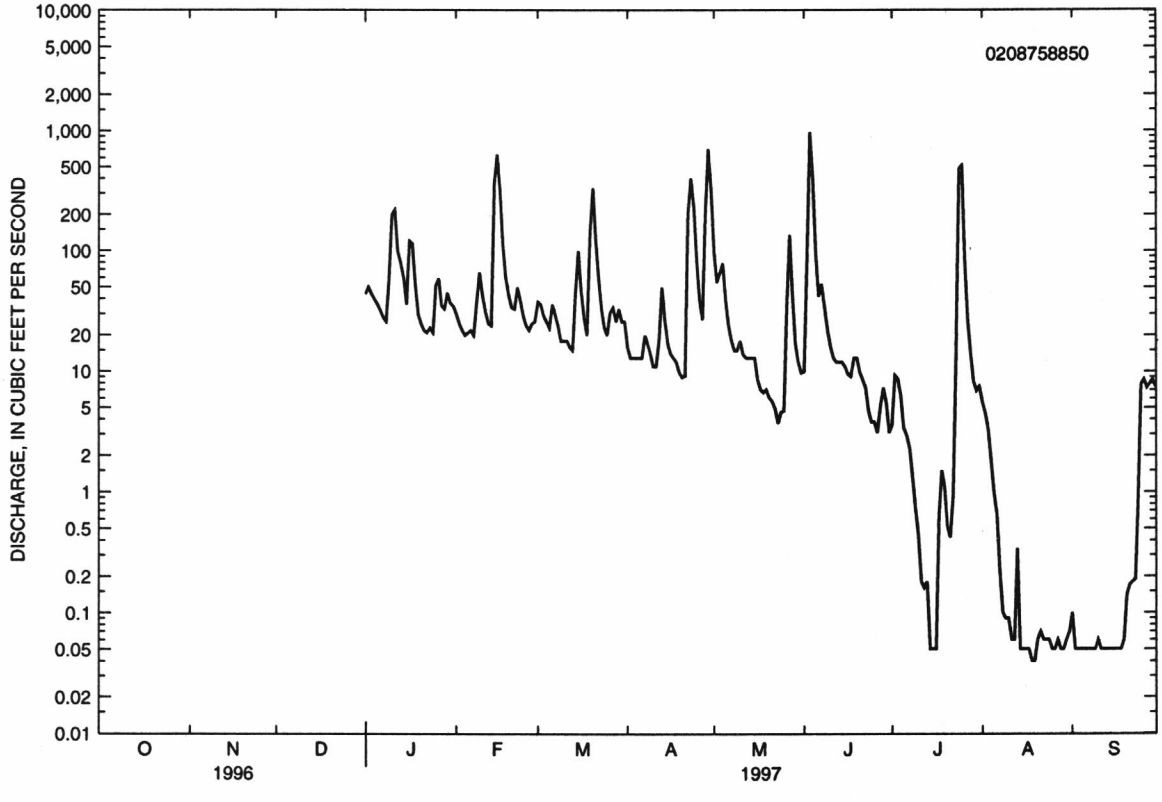
NEUSE RIVER BASIN

0208758850 SWIFT CREEK NEAR MCCULLARS CROSSROADS, NC--Continued

SUMMARY STATISTICS	FOR PERIOD JANUARY 1997 TO SEPTEMBER 1997		WATER YEARS 1988 - 1997	
ANNUAL MEAN			34.0	
HIGHEST ANNUAL MEAN			53.9	1996
LOWEST ANNUAL MEAN			18.4	1992
HIGHEST DAILY MEAN			e2700	Sep 6 1996
LOWEST DAILY MEAN			.01	Jun 28 1993
ANNUAL SEVEN-DAY MINIMUM			.03	Jun 24 1993
INSTANTANEOUS PEAK FLOW	1260	Jun 3	6790	Sep 6 1996
INSTANTANEOUS PEAK STAGE	10.36	Jun 3	14.15*	Sep 6 1996
INSTANTANEOUS LOW FLOW	.04*	Jul 15	0*	Jun 27 1993
10 PERCENT EXCEEDS			73	
50 PERCENT EXCEEDS			14	
90 PERCENT EXCEEDS			.34	

e Estimated.

* See REMARKS.



NEUSE RIVER BASIN

02088000 MIDDLE CREEK NEAR CLAYTON, NC

LOCATION.--Lat 35°34'10", long 78°35'30", Johnston County, Hydrologic Unit 03020201, on left bank 800 ft downstream of bridge on State Highway 50, 0.5 mi upstream from Buffalo Branch, 3.7 mi downstream of Wake-Johnston County line, and 9.5 mi southwest of Clayton.

DRAINAGE AREA.--83.5 mi^2.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for Oct. 1939, published in WSP 1303.

REVISED RECORDS.--WSP 952: 1940(M), 1941. WSP 1233: 1943(M), 1945, 1949. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 184.53 ft above sea level. Nov. 1-20, 1939, nonrecording gage at same site and datum. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Maximum discharge for period of record from rating curve extended above 10,000 ft^3/s, by logarithmic plotting; maximum gage height for period of record, 14.88 ft, from high-water mark in gage well. Minimum discharge for period of record, no flow, also occurred Oct. 12-13, 1954, and July 13-28, 1986.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	50	191	102	111	136	73	735	30	18	42	6.6
2	53	80	460	108	99	141	64	255	90	22	33	5.8
3	52	189	554	102	90	110	61	176	208	28	27	6.8
4	48	112	274	95	83	e104	58	205	371	23	23	5.9
5	40	70	144	91	80	e93	56	140	383	18	20	5.3
6	36	62	180	87	82	e113	55	97	104	26	18	6.1
7	35	61	204	78	78	111	60	81	98	18	17	5.5
8	398	100	221	72	89	86	58	72	98	16	16	5.5
9	942	304	e220	191	176	77	51	66	73	14	15	6.4
10	910	309	e195	508	136	73	46	66	61	12	14	6.3
11	356	120	e140	585	103	73	45	62	53	12	14	13
12	120	86	e110	247	91	69	50	56	47	11	15	16
13	90	71	e103	137	85	65	107	53	53	9.7	13	15
14	77	67	101	113	315	101	83	53	48	10	12	11
15	70	65	93	104	716	295	59	49	43	8.8	12	11
16	64	61	85	174	886	163	50	43	38	8.5	11	10
17	60	60	83	329	666	97	47	39	35	11	10	10
18	63	61	89	225	265	82	45	38	55	21	9.8	10
19	222	75	226	124	167	94	42	35	52	16	9.3	9.8
20	357	84	334	105	144	277	41	35	38	14	9.7	11
21	171	74	193	104	130	310	40	41	30	24	9.9	10
22	86	209	123	100	147	140	68	35	27	15	13	8.1
23	70	281	107	107	148	108	267	30	24	24	11	7.8
24	65	150	106	101	116	88	380	27	21	407	9.5	12
25	61	104	109	161	101	76	256	28	18	756	8.8	55
26	56	123	109	238	95	93	97	34	17	639	8.4	56
27	53	215	130	142	96	136	73	53	18	105	7.9	29
28	56	134	171	112	101	99	196	52	23	54	7.5	18
29	55	96	131	111	---	114	521	39	24	43	7.7	15
30	57	85	109	107	---	127	896	32	20	37	6.3	14
31	52	---	101	114	---	88	---	30	---	46	6.2	---
TOTAL	4833	3558	5396	4974	5396	3739	3945	2757	2200	2467.0	437.0	401.9
MEAN	156	119	174	160	193	121	132	88.9	73.3	79.6	14.1	13.4
MAX	942	309	554	585	886	310	896	735	383	756	42	56
MIN	35	50	83	72	78	65	40	27	17	8.5	6.2	5.3
CFSM	1.87	1.42	2.08	1.92	2.31	1.44	1.57	1.07	.88	.95	.17	.16
IN.	2.15	1.59	2.40	2.22	2.40	1.67	1.76	1.23	.98	1.10	.19	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

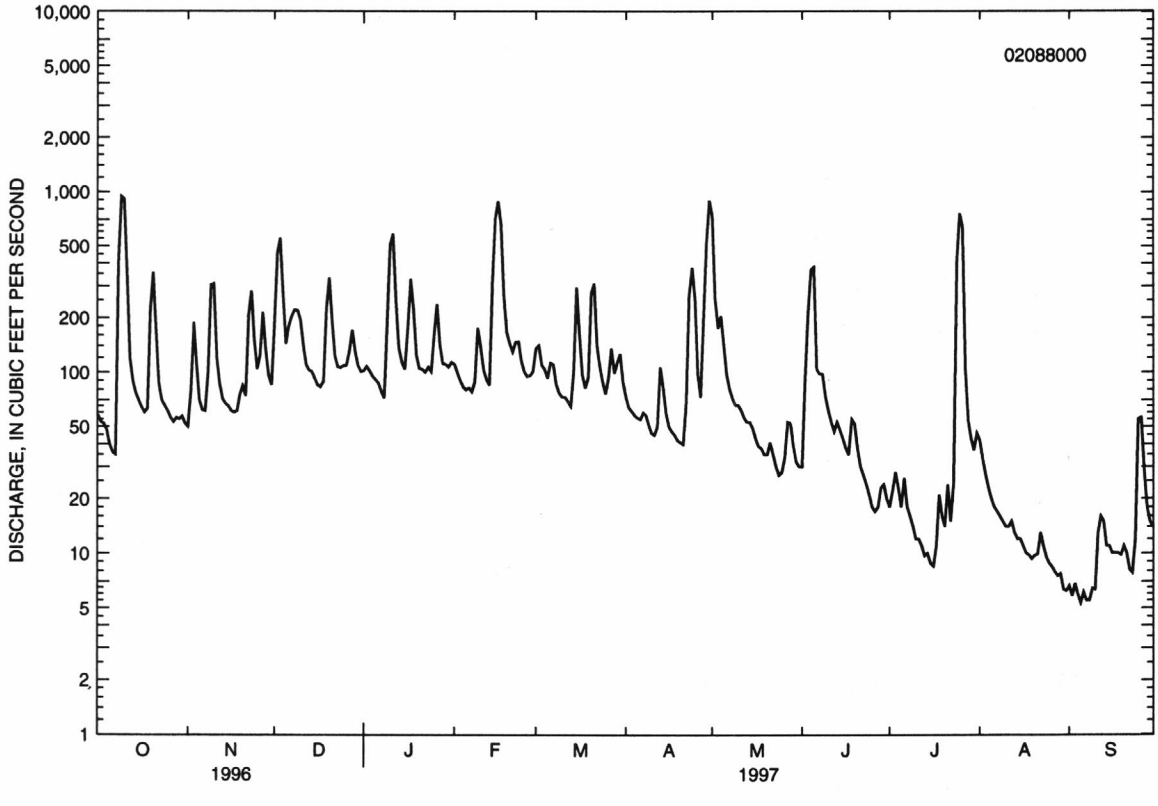
MEAN	51.2	66.1	86.2	134	164	167	116	72.6	53.8	55.6	56.6	52.9
MAX	275	230	254	356	450	352	319	330	203	472	340	461
(WY)	1960	1996	1973	1954	1973	1989	1959	1958	1992	1965	1949	1996
MIN	.77	4.67	19.7	31.6	46.2	45.1	16.1	11.4	2.15	.23	1.75	.50
(WY)	1987	1974	1952	1942	1941	1981	1986	1981	1986	1986	1983	1954

NEUSE RIVER BASIN

02088000 MIDDLE CREEK NEAR CLAYTON, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1940 - 1997	
ANNUAL TOTAL	54440		40103.9			
ANNUAL MEAN	149		110		89.3	
HIGHEST ANNUAL MEAN					161	1965
LOWEST ANNUAL MEAN					30.0	1981
HIGHEST DAILY MEAN	6260	Sep 6	942	Oct 9	6260	Sep 6 1996
LOWEST DAILY MEAN	12	Jul 7	5.3	Sep 5	0*	Oct 11 1954
ANNUAL SEVEN-DAY MINIMUM	15	Jul 5	5.8	Sep 2	0*	Jul 13 1986
INSTANTANEOUS PEAK FLOW			1070	Oct 9	11900*	Sep 6 1996
INSTANTANEOUS PEAK STAGE			7.87	Oct 9	14.88*	Sep 6 1996
INSTANTANEOUS LOW FLOW			4.2	Sep 7	0*	Oct 11 1954
ANNUAL RUNOFF (CFSM)	1.78		1.32		1.07	
ANNUAL RUNOFF (INCHES)	24.25		17.87		14.53	
10 PERCENT EXCEEDS	271		242		198	
50 PERCENT EXCEEDS	89		70		45	
90 PERCENT EXCEEDS	29		11		7.3	

e Estimated.
* See REMARKS.



NEUSE RIVER BASIN

02088500 LITTLE RIVER NEAR PRINCETON, NC

LOCATION.--Lat 35°30'40", long 78°09'38", Johnston County, Hydrologic Unit 03020201, on left bank 600 ft downstream of bridge on Secondary Road 2320, 0.8 mi upstream from Little Creek, and 3 mi north of Princeton.

DRAINAGE AREA.--232 mi^2.

PERIOD OF RECORD.--February 1930 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORD.--WSP 1233: 1935(M). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 107.75 ft above sea level. Prior to Nov. 17, 1934, nonrecording gage at same site and datum. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair and those for Oct. 1-9, which are poor. Slight fluctuation and occasional regulation for short periods is caused by mills upstream from station. Minimum discharge for period of record occurred frequently in June 1986 due to regulation from unknown source. Minimum discharge for current water year also occurred on Sept. 8, 9, 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	140	279	303	279	321	e227	785	68	39	89	6.9
2	104	156	432	333	266	340	192	807	64	39	66	7.1
3	112	223	604	351	253	322	166	807	72	37	49	6.1
4	114	253	690	334	236	287	149	805	71	31	38	10
5	111	244	695	305	221	257	135	657	76	30	31	6.0
6	106	228	712	282	212	258	128	453	93	31	25	4.2
7	99	217	699	260	202	278	122	330	102	29	23	3.4
8	483	209	684	238	204	263	123	258	117	25	20	3.8
9	1190	239	655	281	250	232	116	200	114	23	17	3.3
10	1380	276	589	571	287	220	111	173	99	21	16	5.3
11	1320	319	492	770	278	206	115	145	84	19	16	21
12	1250	370	414	735	264	187	115	127	73	17	13	8.7
13	1230	416	360	644	248	170	118	116	63	16	12	12
14	1090	390	326	556	e335	177	130	104	58	14	11	23
15	748	315	305	447	626	322	129	95	53	13	10	.18
16	429	250	281	387	886	445	124	89	49	12	8.9	16
17	282	210	263	441	979	e368	118	81	45	13	7.8	11
18	227	189	254	487	984	285	112	75	49	34	7.1	9.2
19	251	188	351	435	955	268	105	69	134	25	7.1	8.4
20	303	194	584	381	847	309	96	68	123	21	6.1	7.4
21	319	197	733	350	630	381	91	61	103	26	8.0	8.1
22	312	249	694	318	459	418	101	60	86	26	8.0	5.9
23	309	312	591	301	393	453	192	55	76	23	10	4.9
24	298	323	491	312	342	453	331	54	59	33	12	8.0
25	260	301	413	334	302	356	405	54	46	131	10	28
26	221	291	356	379	272	275	407	61	38	252	8.8	17
27	190	296	325	393	254	258	372	100	35	238	9.9	16
28	170	305	314	367	262	248	349	123	32	258	9.3	22
29	158	288	312	335	---	249	496	125	32	279	7.2	21
30	150	266	311	305	---	293	748	101	37	225	6.1	17
31	146	---	306	290	---	271	---	79	---	126	5.1	---
TOTAL	13468	7854	14515	12225	11726	9170	6123	7117	2151	2106	567.4	338.7
MEAN	434	262	468	394	419	296	204	230	71.7	67.9	18.3	11.3
MAX	1380	416	733	770	984	453	748	807	134	279	89	28
MIN	99	140	254	238	202	170	91	54	32	12	5.1	3.3
CFSM	1.87	1.13	2.02	1.70	1.81	1.28	.88	.99	.31	.29	.08	.05
IN.	2.16	1.26	2.33	1.96	1.88	1.47	.98	1.14	.34	.34	.09	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1997, BY WATER YEAR (WY)

MEAN	139	149	233	385	471	477	327	192	154	182	183	144
MAX	1202	645	717	999	1285	1204	969	835	698	826	783	1538
(WY)	1965	1948	1937	1954	1948	1989	1959	1989	1995	1959	1931	1996
MIN	6.00	13.0	16.0	24.1	49.6	120	53.3	17.3	14.1	16.9	4.10	2.84
(WY)	1934	1934	1934	1934	1934	1981	1986	1986	1986	1994	1993	1980

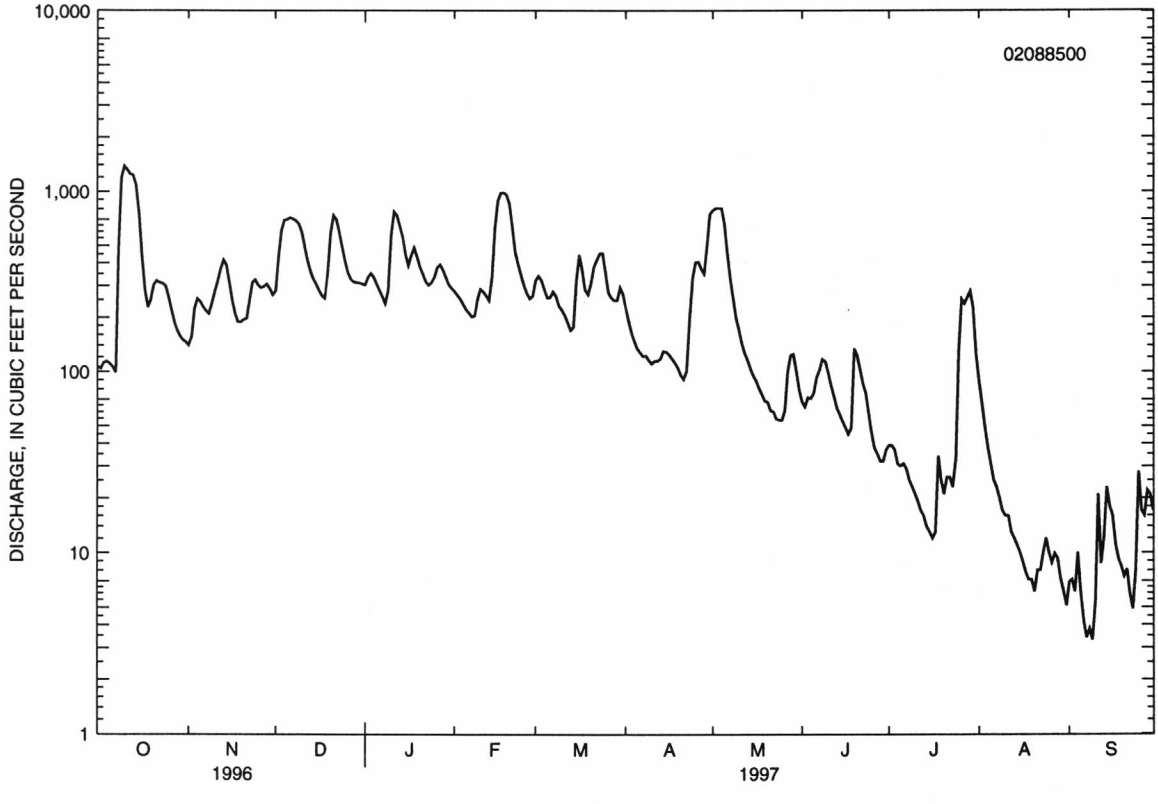
NEUSE RIVER BASIN

02088500 LITTLE RIVER NEAR PRINCETON, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1930 - 1997	
ANNUAL TOTAL	152914.2		87361.1			
ANNUAL MEAN	418		239		254	
HIGHEST ANNUAL MEAN					511	1960
LOWEST ANNUAL MEAN					91.8	1951
HIGHEST DAILY MEAN	5390	Sep 9	1380	Oct 10	6790	Oct 6 1964
LOWEST DAILY MEAN	1.7	Jul 8	3.3	Sep 9	.08	Jun 16 1986
ANNUAL SEVEN-DAY MINIMUM	7.6	Jul 2	5.1	Sep 4	.36	Aug 29 1993
INSTANTANEOUS PEAK FLOW			1400	Oct 10	7150	Oct 6 1964
INSTANTANEOUS PEAK STAGE			11.06	Oct 10	13.94	Oct 6 1964
INSTANTANEOUS LOW FLOW			3.3*	Sep 7	.08*	Jun 1 1986
ANNUAL RUNOFF (CFSM)	1.80		1.03		1.09	
ANNUAL RUNOFF (INCHES)	24.52		14.01		14.87	
10 PERCENT EXCEEDS	749		562		628	
50 PERCENT EXCEEDS	265		200		118	
90 PERCENT EXCEEDS	74		12		21	

e Estimated.

* See REMARKS.



NEUSE RIVER BASIN

02089000 NEUSE RIVER NEAR GOLDSBORO, NC

LOCATION.--Lat 35°20'14", long 77°59'51", Wayne County, Hydrologic Unit 03020202, on left bank at downstream side of bridge on Secondary Road 1915, 0.2 mi upstream from Stony Creek, 1.5 mi downstream of Seaboard Coast Line Railroad bridge, 3.2 mi south of Wayne County courthouse in Goldsboro, 4.3 mi downstream of Little River, and 135 mi upstream from mouth.

DRAINAGE AREA.--2,399 mi^2.

PERIOD OF RECORD.--February 1930 to current year.

REVISED RECORDS.--WSP 1333: 1931, 1935. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 42.95 ft above sea level. Prior to July 24, 1931, nonrecording gage at railroad bridge 1.5 mi upstream at 44.95 ft. July 24, 1931, to Aug. 31, 1948, water-stage recorder at site 2.3 mi upstream at 44.66 ft. National Weather Service telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Falls Lake (station 02087182). Prior to regulation, maximum discharge: 30,700 ft^3/s, Sept. 27, 1945; gage height: 26.72 ft at site and datum then in use; minimum discharge: 76 ft^3/s, Sept. 26, 1968. Minimum discharge during regulation also occurred Oct. 3, 1985.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of June 1866 and July 1919, reached stages of about 29 and 28 ft, respectively, at site 2.3 mi upstream at present datum, from flood profiles of U.S. Army Corps of Engineers. Flood of Oct. 5, 1929, reached a stage of 27.3 ft at railroad bridge at present datum; discharge, 38,600 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	CT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7760	1670	3670	2800	3060	5300	2880	4870	1230	579	2140	401
2	7680	1800	4070	2880	3370	5260	2620	5360	1060	539	1620	564
3	7680	2020	4370	2920	3560	5060	2410	5880	1010	531	1170	687
4	7660	2380	4800	3100	3550	3660	2160	6350	1630	562	936	533
5	7500	2580	5150	3570	3490	3090	1820	6720	2500	584	813	474
6	6950	2450	5520	3510	3390	2820	1550	7000	2760	581	766	407
7	4440	2280	5870	3210	3310	2870	1450	7140	2770	566	732	388
8	5820	2200	6230	2980	3140	3400	1390	6980	2850	557	663	355
9	7250	2180	6420	2810	2660	3550	1420	6550	2670	528	625	345
10	7870	2830	6340	3510	2680	3660	1330	6010	2180	505	605	370
11	8540	3370	5440	4420	2810	3750	1240	5500	1530	574	653	513
12	9210	3330	4230	4930	2740	3680	1200	5130	1200	521	659	492
13	9750	3020	3600	5330	2770	2610	1270	4830	1070	469	588	617
14	9980	2790	3150	5600	3340	2500	1420	4520	987	457	565	627
15	9850	2790	3520	5750	4470	3210	1570	3520	974	444	517	521
16	9420	2710	3950	5990	5060	3740	1500	2210	893	464	480	451
17	8790	2530	4100	6140	5660	3910	1370	1630	829	726	454	429
18	7930	2660	4150	5850	6230	3680	1280	1380	796	600	478	405
19	7100	2850	4440	5410	6630	3370	1260	1260	876	678	471	410
20	5550	2460	4930	5120	6710	3760	1180	1060	1220	617	443	393
21	4960	2080	5240	4940	6600	4170	1140	994	1100	531	806	373
22	4410	2220	5620	4760	6550	4430	1210	943	885	479	517	349
23	4100	2460	6000	4500	6490	4610	1370	906	779	430	539	345
24	3780	2910	6060	3610	6290	4710	2420	884	711	671	516	400
25	3200	3120	4960	3260	5990	4850	3070	852	671	1380	455	1280
26	2650	3160	3740	3150	5690	5210	3400	897	601	2610	443	1230
27	2330	3070	3350	3380	5490	5330	3710	1040	547	3290	417	1390
28	2090	3120	3060	3430	5340	3790	4100	1380	528	3740	416	1390
29	1920	3350	3040	3310	---	3220	4330	1570	610	3890	401	1290
30	1800	3530	3000	3180	---	3060	4540	1490	638	3440	401	1170
31	1740	---	2900	3110	---	3050	---	1400	---	2860	401	---
TOTAL	189710	79920	140920	126460	127070	119310	61610	106256	38105	34403	20690	18599
MEAN	6120	2664	4546	4079	4538	3849	2054	3428	1270	1110	667	620
MAX	9980	3530	6420	6140	6710	5330	4540	7140	2850	3890	2140	1390
MIN	1740	1670	2900	2800	2660	2500	1140	852	528	430	401	345

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997*, BY WATER YEAR (WY)

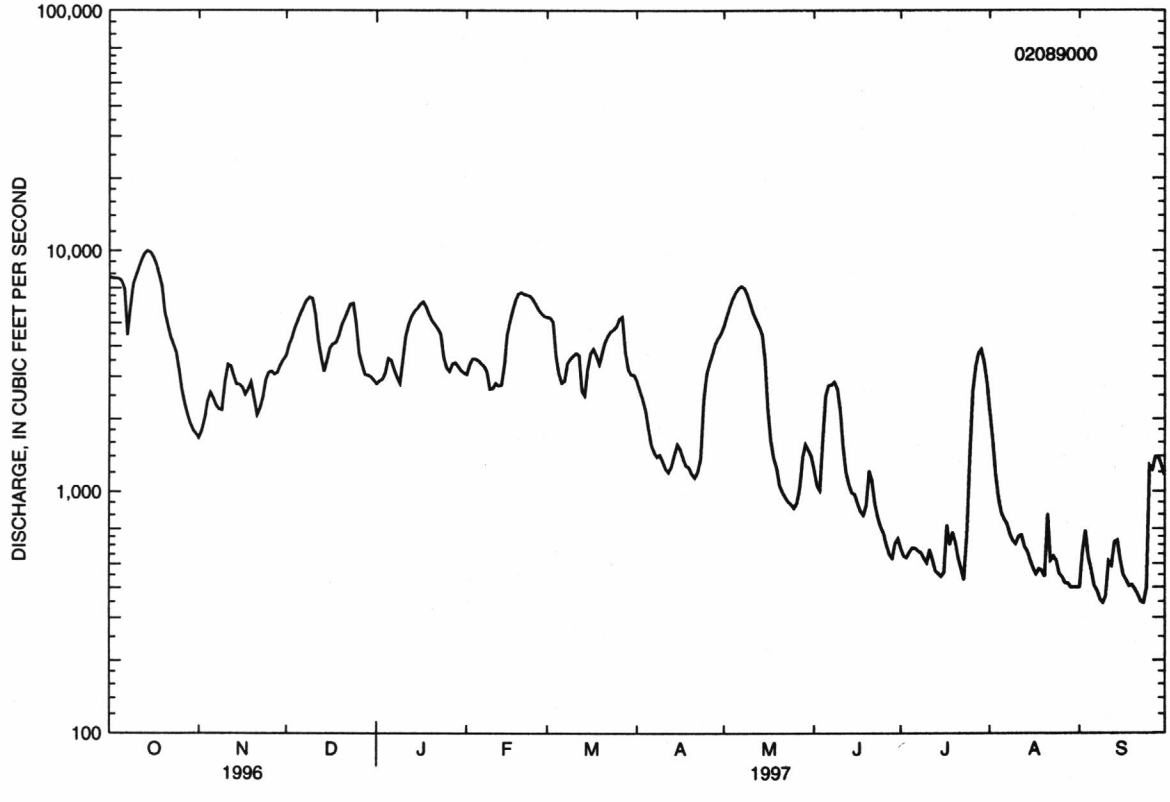
MEAN	1510	1449	2132	3304	3906	5279	3840	2180	1606	1502	1422	1672
MAX	6120	5287	4546	6644	7006	10290	7850	7276	5530	4668	3601	12780
(WY)	1997	1996	1997	1993	1983	1989	1989	1989	1995	1989	1989	1996
MIN	310	326	622	884	1518	1575	631	433	342	394	264	247
(WY)	1984	1988	1988	1986	1986	1988	1986	1986	1986	1987	1983	1985

NEUSE RIVER BASIN

02089000 NEUSE RIVER NEAR GOLDSBORO, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1983 - 1997*	
ANNUAL TOTAL	1461892		1063053			
ANNUAL MEAN	3994		2912		2597	
HIGHEST ANNUAL MEAN					3869	1996
LOWEST ANNUAL MEAN					1042	1988
HIGHEST DAILY MEAN	28800	Sep 12	9980	Oct 14	28800	Sep 12 1996
LOWEST DAILY MEAN	397	Jul 9	345	Sep 9	162	Sep 10 1983
ANNUAL SEVEN-DAY MINIMUM	527	Jul 3	382	Sep 18	172	Sep 15 1985
INSTANTANEOUS PEAK FLOW			10000	Oct 14	29300	Sep 12 1996
INSTANTANEOUS PEAK STAGE			18.69	Oct 14	26.21	Sep 12 1996
INSTANTANEOUS LOW FLOW			325	Sep 24	157*	Sep 19 1985
10 PERCENT EXCEEDS	7550		6000		6600	
50 PERCENT EXCEEDS	2860		2770		1310	
90 PERCENT EXCEEDS	1030		510		384	

* Regulated period only (1983-1997). See REMARKS.



NEUSE RIVER BASIN

0208925200 BEAR CREEK AT MAYS STORE, NC

LOCATION.--Lat 35°16'28", long 77°47'40", Lenoir County, Hydrologic Unit 03020202, at downstream side of bridge on Secondary Road 1326, 0.7 mi west of Mays Store, and 1.0 mi downstream of Secondary Road 1002.

DRAINAGE AREA.--57.7 mi^2.

ERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 50 ft above sea level, from topographic map.

REMARKS.--Records fair except those for discharges greater than 450 ft^3/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	52	71	75	76	95	67	67	20	13	12	22
2	69	82	193	120	74	90	62	55	20	13	11	20
3	67	106	151	119	70	84	65	48	19	13	10	18
4	62	88	120	106	66	77	57	49	21	12	9.5	17
5	58	77	105	95	67	72	54	42	20	12	9.3	16
6	54	71	108	87	65	79	52	38	19	18	16	15
7	52	66	107	80	62	74	54	35	21	15	13	14
8	429	65	119	74	69	67	50	32	20	14	11	13
9	1340	76	114	106	87	63	47	33	19	13	11	13
10	1130	68	101	231	80	61	45	33	19	14	10	15
11	449	62	94	179	76	59	44	30	18	14	10	19
12	288	59	88	137	71	61	45	28	17	13	9.7	20
13	252	57	83	115	67	61	49	28	17	12	9.4	25
14	232	56	79	101	103	103	46	28	17	12	9.1	23
15	217	55	73	92	226	243	44	26	17	11	9.1	21
16	201	52	70	145	244	185	42	24	17	11	9.4	23
17	177	52	71	192	181	130	41	23	16	27	9.3	21
18	134	51	72	139	139	107	40	23	16	14	8.4	18
19	144	57	111	113	120	99	39	22	15	11	9.7	19
20	130	57	170	101	105	122	38	21	15	10	10	21
21	113	57	135	93	94	114	38	21	14	10	61	23
22	103	92	113	87	106	100	53	20	14	9.0	36	24
23	94	85	102	86	100	86	67	20	15	9.1	24	24
24	84	75	95	81	88	76	71	19	14	12	18	26
25	71	69	91	86	82	69	61	19	15	13	15	127
26	65	68	84	88	77	107	54	26	14	12	13	93
27	61	64	87	82	76	136	50	28	15	11	13	54
28	60	59	88	80	78	112	78	24	14	10	12	46
29	58	57	84	79	---	97	101	22	13	9.5	12	47
30	56	55	81	77	---	83	83	21	13	11	13	36
31	55	---	77	78	---	75	---	20	---	14	15	---
TOTAL	6377	1990	3137	3324	2749	2987	1637	925	504	392.6	438.9	873
MEAN	206	66.3	101	107	98.2	96.4	54.6	29.8	16.8	12.7	14.2	29.1
MAX	1340	106	193	231	244	243	101	67	21	27	61	127
MIN	52	51	70	74	62	59	38	19	13	9.0	8.4	13
CFSM	3.57	1.15	1.75	1.86	1.70	1.67	.95	.52	.29	.22	.25	.50
IN.	4.11	1.28	2.02	2.14	1.77	1.93	1.06	.60	.32	.25	.28	.56

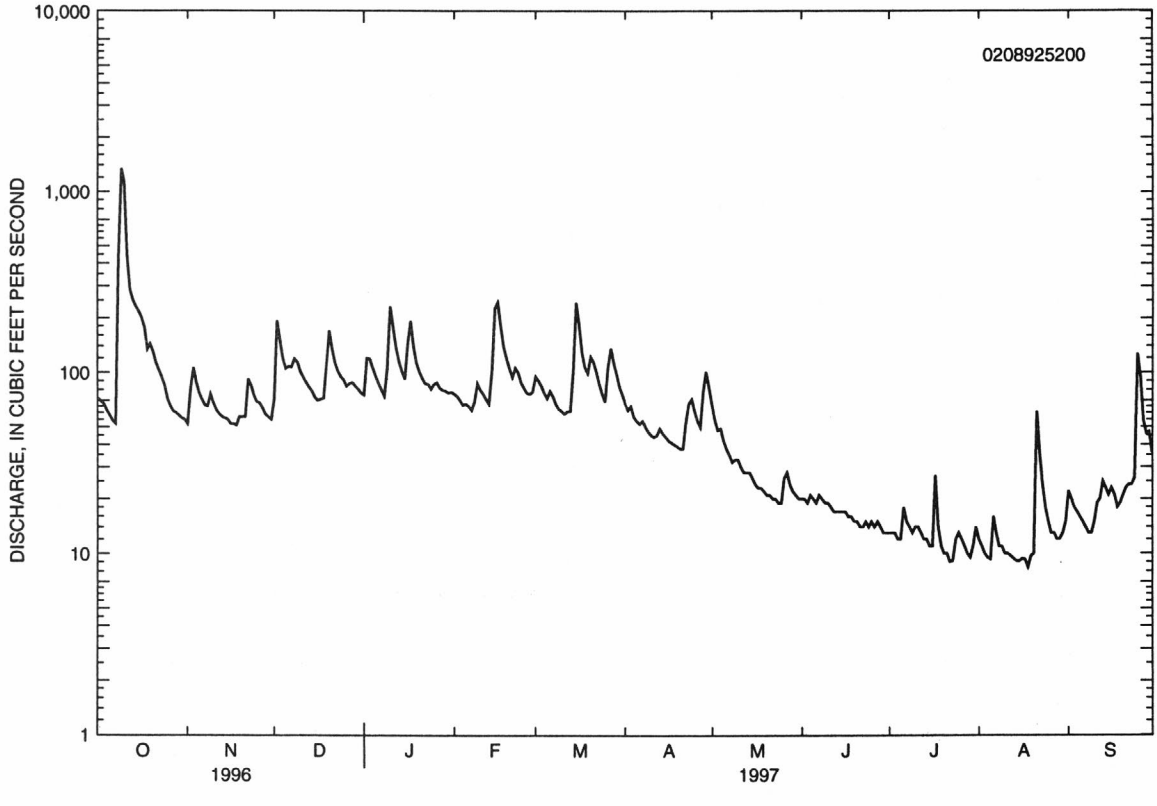
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1997, BY WATER YEAR (WY)

MEAN	55.1	47.5	56.5	89.7	68.5	97.3	65.1	57.6	56.1	47.3	65.6	58.4
MAX	206	119	133	266	98.2	153	150	216	201	98.5	231	253
(WY)	1997	1993	1993	1993	1997	1993	1989	1989	1995	1989	1992	1996
MIN	17.2	15.8	21.5	29.0	45.0	35.3	26.5	19.8	13.2	12.5	12.8	17.6
(WY)	1995	1995	1995	1995	1988	1988	1995	1994	1994	1993	1993	1994

NEUSE RIVER BASIN

0208925200 BEAR CREEK AT MAYS STORE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1988 - 1997	
ANNUAL TOTAL	33061		25334.5			
ANNUAL MEAN	90.3		69.4		63.8	
HIGHEST ANNUAL MEAN					85.3	1993
LOWEST ANNUAL MEAN					31.7	1988
HIGHEST DAILY MEAN	1340	Oct 9	1340	Oct 9	1340	Oct 9 1996
LOWEST DAILY MEAN	16	May 23	8.4	Aug 18	8.4	Aug 18 1997
ANNUAL SEVEN-DAY MINIMUM	16	May 21	9.2	Aug 12	9.2	Aug 12 1997
INSTANTANEOUS PEAK FLOW			1550	Oct 9	1550	Oct 9 1996
INSTANTANEOUS PEAK STAGE			9.50	Oct 9	9.50	Oct 9 1996
INSTANTANEOUS LOW FLOW			7.7	Aug 18	7.7	Aug 18 1997
ANNUAL RUNOFF (CFSM)	1.57		1.20		1.11	
ANNUAL RUNOFF (INCHES)	21.31		16.33		15.02	
10 PERCENT EXCEEDS	177		119		127	
50 PERCENT EXCEEDS	57		57		38	
90 PERCENT EXCEEDS	22		12		16	



NEUSE RIVER BASIN

02089500 NEUSE RIVER AT KINSTON, NC

LOCATION.--Lat 35°15'29", long 77°35'09", Lenoir County, Hydrologic Unit 03020202, on left bank at Kinston, 600 ft downstream of bridge on State Highway 11, and 90 mi upstream from mouth.

DRAINAGE AREA.--2,692 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 10.90 ft above sea level. Prior to Nov. 25, 1934, nonrecording gage at highway bridge 1 mi downstream at 10.10 ft. National Weather Service telephone telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by Falls Lake (station 02087182). Prior to regulation, maximum discharge: 26,000 ft^3/s, Oct. 13, 1964; gage height: 22.86 ft, at site and datum then in use; minimum discharge: 124 ft^3/s, Sept. 26, 1932, at site then in use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1919 reached a stage of 25.0 ft, at present site and datum; discharge, about 39,000 ft^3/s, from information provided by North Carolina State Highway Commission. Flood in October 1924 reached a stage of 24.7 ft, at present site and datum; discharge, 36,000 ft^3/s, from information provided by North Carolina State Highway Commission. Flood of Sept. 25-26, 1928, reached a stage of 24.2 ft, at present site and datum; discharge, 34,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9750	2080	3610	3320	3490	6220	3670	e4490	1420	731	3160	437
2	9110	2270	3880	3240	3390	6100	3350	e4060	1300	824	2320	506
3	e8650	2590	4180	3240	3420	5970	3050	e4240	1170	708	1670	512
4	e8260	2710	4460	3270	3590	5810	2760	e4520	1100	633	1270	647
5	e8050	2760	4720	3330	3720	5530	2490	e4900	1390	615	1020	595
6	e7930	2900	5040	3550	3750	4600	2170	e5200	2150	628	971	526
7	e7830	2900	5390	3760	3700	3960	1870	e5480	2480	631	839	475
8	e8250	2790	5850	3700	3640	3390	1710	e5760	2620	617	773	438
9	e9010	2730	6170	3560	3590	3370	1600	e5960	2700	613	712	412
10	e9150	2640	6410	3510	3340	3580	1560	e6000	2660	598	667	398
11	e9180	2740	6570	3720	3070	3720	1510	e5870	2340	589	641	430
12	e9180	3160	6610	4090	3030	3820	1420	e5600	1780	611	644	532
13	e9280	3460	6360	4530	3010	3880	1400	e5260	1350	604	657	525
14	e9520	3450	5640	4980	3090	3760	1420	e4980	1160	560	623	565
15	e9800	3230	4690	5360	3580	3450	1480	e4740	1080	545	591	618
16	e10100	3080	4070	5760	4160	3600	1610	e4520	1050	541	561	571
17	e10200	2990	4000	6090	4780	3890	1600	e3930	987	550	527	514
18	10200	2860	4170	6340	5340	4130	1500	e2700	924	710	499	479
19	9950	2850	4470	6440	5800	4240	1400	e1880	889	705	484	450
20	9460	2980	4730	6340	6230	4160	1350	e1450	889	760	528	437
21	8780	2910	5030	6100	6600	4090	1300	e1270	1070	763	527	426
22	7880	2750	5300	5800	6890	4240	1290	1160	1100	677	736	412
23	6860	2700	5540	5540	6980	4460	1410	1080	974	658	648	392
24	6000	2760	5800	5320	6950	4680	1560	1030	868	604	560	394
25	5290	2990	6070	5040	6880	4840	2190	998	799	656	548	463
26	4660	3230	6190	4510	6740	5100	2680	996	756	1050	506	1070
27	3930	3360	5890	3950	6550	5360	3090	1090	709	1880	475	1190
28	3200	3370	5090	3700	6340	5620	3570	1150	665	2470	452	1300
29	2700	3330	4270	3700	---	5640	4000	1280	635	2950	439	1300
30	2390	3400	3730	3690	---	5050	4360	1490	642	3310	426	1240
31	2200	---	3470	3600	---	4210	---	1490	---	3450	418	---
TOTAL	236750	87970	157400	139080	131650	140470	64370	104574	39657	31241	24892	18254
MEAN	7637	2932	5077	4486	4702	4531	2146	3373	1322	1008	803	608
MAX	10200	3460	6610	6440	6980	6220	4360	6000	2700	3450	3160	1300
MIN	2200	2080	3470	3240	3010	3370	1290	996	635	541	418	392

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997*, BY WATER YEAR (WY)

MEAN	1444	1600	2455	3587	4254	5892	4463	2414	1892	1708	1712	1906
MAX	7637	5643	5097	7560	7673	10720	9582	8773	6062	5223	4068	13110
(WY)	1997	1996	1990	1993	1983	1989	1989	1989	1995	1989	1989	1996
MIN	366	430	760	1181	1768	1673	878	563	460	468	314	357
(WY)	1984	1988	1988	1986	1986	1988	1986	1986	1986	1987	1983	1985

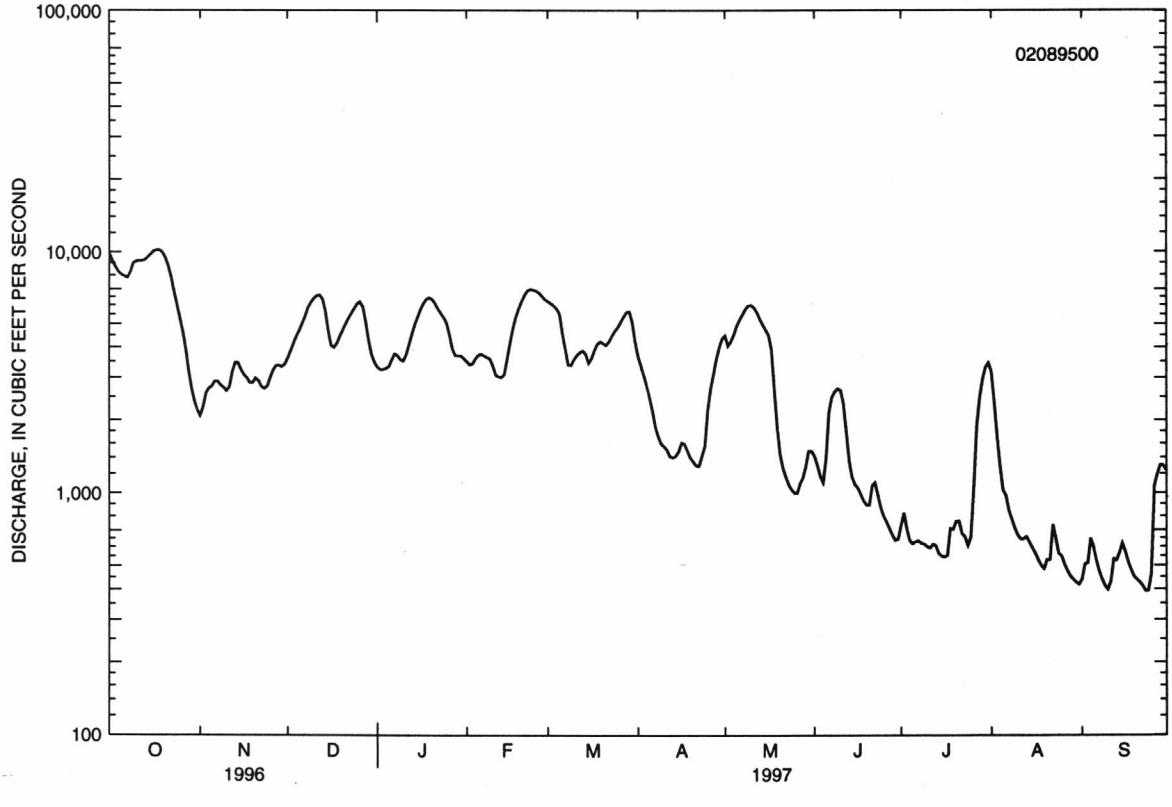
NEUSE RIVER BASIN

02089500 NEUSE RIVER AT KINSTON, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1983 - 1997*	
ANNUAL TOTAL	1599195		1176308			
ANNUAL MEAN	4369		3223		2692	
HIGHEST ANNUAL MEAN					4216	1989
LOWEST ANNUAL MEAN					1204	1988
HIGHEST DAILY MEAN	26900	Sep 17	10200	Oct 17	26900	Sep 17 1996
LOWEST DAILY MEAN	650	Jul 10	392	Sep 23	200	Sep 20 1985
ANNUAL SEVEN-DAY MINIMUM	718	Jul 5	425	Sep 19	214	Sep 16 1985
INSTANTANEOUS PEAK FLOW			10300	Oct 17	27100	Sep 17 1996
INSTANTANEOUS PEAK STAGE			16.73	Oct 17	23.26	Sep 17 1996
INSTANTANEOUS LOW FLOW			381	Sep 24	196	Sep 20 1985
10 PERCENT EXCEEDS	8380		6340		7170	
50 PERCENT EXCEEDS	3210		3070		1600	
90 PERCENT EXCEEDS	1270		560		482	

e Estimated.

* Regulated period only (1983-1997). See REMARKS.



02089500 NEUSE RIVER AT KINSTON, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950, 1955-56, 1959-67, 1973 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1973 to September 1986.

WATER TEMPERATURE: October 1949 to September 1950, January 1955 to September 1956, July 1973 to September 1986.

INSTRUMENTATION.--Water-quality monitor from October 1981 to September 1986.

REMARKS.--Station operated as part of NAWQA Program from March 1993 to present. Station also operated as part of NASQAN network from October 1974 to September 1994. Daily records of specific conductance for January 1955 to September 1956 are available in the files of the district office in Raleigh.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 242 microsiemens, Sept. 21, 1983; minimum daily, 43 microsiemens, Mar. 28, 1975.

WATER TEMPERATURE: Maximum recorded, 36.0°C, July 13, 14, 19, 20, 1986; minimum daily, 0.0°C, Feb. 7, 1978, Jan. 13, 1981.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV 1996											
14...	1100	3470	94.0	7.80	10.5	779	10.2	89	21	5.1	2.0
APR 1997											
08...	1045	1710	108	6.40	19.5	771	9.40	101	25	5.9	2.4
MAY											
20...	1045	1450	114	8.20	23.5	762	10.6	124	27	6.6	2.6
JUN											
13...	0930	1360	102	6.80	22.5	758	8.00	93	24	5.9	2.4
JUL											
10...	0945	599	160	7.5	29.0	762	7.3	95	29	6.6	3.0
24...	1000	602	161	7.31	28.5	762	6.33	82	27	6.0	3.0
AUG											
13...	0945	660	144	7.76	27.5	765	7.34	93	25	5.5	2.8
28...	1015	454	166	7.21	25.0	759	8.57	104	26	5.4	3.0
SEP											
10...	0730	394	153	6.82	25.0	760	7.57	92	28	6.5	2.9

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
NOV 1996											
14...	6.5	35	.6	4.0	17	14	7.0	9.7	<.10	7.6	76
APR 1997											
08...	7.9	38	.7	2.8	24	20	9.2	10	.1	7.9	79
MAY											
20...	9.1	39	.8	2.7	30.0	24.0	9.1	9.9	.1	6.7	80
JUN											
13...	8.9	41	.8	2.6	26.0	21.0	8.8	8.7	.1	8.4	74
JUL											
10...	16	50	1	4.3	32	26	14	15	.3	7.7	106
24...	16	51	1	4.8	23.9	19.6	14	16	.2	7.6	104
AUG											
13...	14	50	1	3.9	29.8	24	14	13	.2	9.5	101
28...	18	55	2	4.7	33	27	15	16	.2	5.3	107
SEP											
10...	14	47	1	4.8	33.2	27.2	15	13	.2	6.5	100

NEUSE RIVER BASIN

02089500 NEUSE RIVER AT KINSTON, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
NOV 1996											
14...	.010	.840	.050	.45	.45	.50	.50	1.3	1.3	.090	.070
APR 1997											
08...	<.010	.660	<.015	--	--	.60	.30	1.3	.96	.090	.020
MAY											
20...	<.01	.42	<.02	--	--	.9	<.2	1.3	--	.07	<.01
JUN											
13...	<.01	.57	<.02	--	--	.4	.3	1.0	.88	.07	.03
JUL											
10...	<.01	1.1	<.02	--	--	.3	.3	1.5	1.4	.06	.04
24...	.02	1.3	.10	.57	.32	.7	.4	2.0	1.7	.11	.06
AUG											
13...	.01	1.2	.02	.46	.32	.5	.3	1.7	1.5	.08	.04
28...	.01	1.1	.03	.27	.17	.3	.2	1.4	1.3	.06	.06
SEP											
10...	<.01	.99	.03	.25	.33	.3	.4	1.3	1.3	.05	.04

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)
NOV 1996											
14...	.050	1000	34	7.8	1.1	--	--	--	--	--	--
APR 1997											
08...	.020	960	36	6.5	1.9	.0120	.0200	<.002	<.002	<.004	<.004
MAY											
20...	.01	730	15	5.6	2.2	E.0039	.0496	E.0037	<.002	<.004	<.004
JUN											
13...	.03	580	20	5.5	.2	E.0038	.0664	<.002	<.002	<.004	<.004
JUL											
10...	.04	320	24	4.7	.4	.0062	.0490	<.002	<.002	<.004	<.004
24...	.06	530	58	5.6	.6	.0174	.0537	<.002	<.002	.0043	.0502
AUG											
13...	.05	690	29	5.9	.5	<.002	.0398	<.002	<.002	<.004	.0067
28...	.06	520	39	4.8	.4	<.002	.0531	<.002	<.002	<.004	<.004
SEP											
10...	.05	380	34	4.4	<.2	<.002	.0468	<.002	<.002	<.004	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P,P' DDE DISSOLV (UG/L) (34653)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)
NOV 1996											
14...	--	--	--	--	--	--	--	--	--	--	--
APR 1997											
08...	<.002	<.006	<.002	<.001	<.003	<.017	<.002	<.004	<.003	<.003	<.002
MAY											
20...	<.002	<.006	E.0037	<.001	<.003	<.017	<.002	<.004	<.003	<.003	<.002
JUN											
13...	<.002	<.006	.0096	<.001	<.003	<.017	<.002	<.004	<.003	<.003	<.002
JUL											
10...	<.002	<.006	<.002	<.001	<.003	<.017	<.002	<.004	<.003	<.003	<.002
24...	<.002	<.006	.0078	<.001	<.003	<.017	<.002	<.004	.0078	<.003	<.002
AUG											
13...	<.002	<.006	<.002	<.001	<.003	<.017	<.002	<.004	<.003	<.003	<.002
28...	<.002	<.006	<.002	<.001	<.003	<.017	<.002	<.004	<.003	<.003	<.002
SEP											
10...	<.002	<.006	<.002	<.001	<.003	<.017	<.002	<.004	<.003	<.003	<.002

DATE	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA-THION, DIS-SOLVED (UG/L) (39542)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
NOV 1996											
14...	--	--	--	--	--	--	--	--	--	--	--
APR 1997											
08...	<.004	<.002	<.005	.0130	<.004	<.004	<.003	<.004	<.006	<.004	<.004
MAY											
20...	<.004	<.002	<.005	.0522	<.004	<.004	<.003	<.004	<.006	<.004	<.004
JUN											
13...	<.004	<.002	<.005	.0400	<.004	<.004	<.003	<.004	<.006	<.004	<.004
JUL											
10...	<.004	<.002	<.005	.0417	<.004	<.004	<.003	<.004	<.006	<.004	<.004
24...	<.004	<.002	.0337	.0911	<.004	<.004	<.003	<.004	<.006	<.004	<.004
AUG											
13...	<.004	<.002	<.005	.0164	<.004	<.004	<.003	<.004	<.006	<.004	<.004
28...	<.004	<.002	<.005	.0156	<.004	<.004	<.003	<.004	<.006	<.004	<.004
SEP											
10...	<.004	<.002	.0406	.0496	<.004	<.004	<.003	<.004	<.006	<.004	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)
NOV 1996											
14...	--	--	--	--	--	--	--	--	--	--	--
APR 1997											
08...	<.005	<.002	<.003	E.0110	<.007	<.004	<.013	.0370	<.002	<.010	<.013
MAY											
20...	<.005	<.002	<.003	.0436	<.007	<.004	<.013	.0510	<.002	E.0080	<.013
JUN											
13...	<.005	<.002	<.003	.0517	<.007	<.004	<.013	.0662	<.002	.0126	<.013
JUL											
10...	<.005	<.002	<.003	.0341	<.007	<.004	<.013	.0498	<.002	<.010	<.013
24...	<.005	<.002	<.003	.0382	<.007	<.004	<.013	.0447	<.002	<.010	<.013
AUG											
13...	<.005	<.002	<.003	.0226	<.007	<.004	<.013	.0522	<.002	<.010	<.013
28...	<.005	<.002	<.003	.0384	<.007	<.004	<.013	.0496	<.002	<.010	<.013
SEP											
10...	<.005	<.002	<.003	.0251	<.007	<.004	<.013	.0372	<.002	<.010	<.013

DATE	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 1996											
14...	--	--	--	--	--	--	--	--	24	225	87
APR 1997											
08...	<.001	<.002	E.0040	<.001	<.003	<.003	<.007	<.002	15	69	95
MAY											
20...	<.001	E.0037	E.0064	<.001	<.007	<.010	<.007	<.002	23	90	75
JUN											
13...	<.001	<.002	E.0045	<.001	<.007	<.003	<.007	<.002	16	59	96
JUL											
10...	<.001	<.002	E.0065	<.001	<.003	<.003	<.007	<.002	2	3.2	45
24...	<.001	<.002	E.0064	<.001	E.0190	<.003	<.007	<.002	9	15	30
AUG											
13...	<.001	<.002	E.0055	<.001	E.0039	<.003	<.007	<.002	12	21	88
28...	<.001	<.002	E.0077	<.001	E.401	<.003	<.007	<.002	4	4.9	81
SEP											
10...	<.001	<.002	E.0042	<.001	E.0130	<.003	<.007	<.002	8	8.5	79

NEUSE RIVER BASIN

02090380 CONTENTNEA CREEK NEAR LUCAMA, NC

LOCATION.--Lat 35°41'29", long 78°06'38", Wilson County, Hydrologic Unit 03020203, on right bank 250 ft upstream from bridge on State Highway 581, 1.0 mi downstream of Buckhorn Reservoir, 1.0 mi upstream from Buckhorn Branch, and 6.5 mi northwest of Lucama.

DRAINAGE AREA.--161 mi^2.

PERIOD OF RECORD.--September 1964 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 117.43 ft above sea level (levels by U.S. Army Corps of Engineers). Satellite telemetry at station.

REMARKS.-- Records good except those for estimated daily discharges, which are fair. Since September 1976, some regulation at low flow by Buckhorn Reservoir (station 02090370) 1 mi upstream. Minimum discharge for period of record also occurred Sept. 10-14, 1976, due to regulation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e57	53	176	e200	146	191	113	625	35	18	27	13
2	45	90	442	e195	133	195	90	596	43	19	22	13
3	41	130	633	191	121	176	89	439	64	21	19	13
4	30	158	683	189	111	145	83	401	64	21	16	13
5	26	140	569	169	107	133	77	355	58	18	17	13
6	27	114	412	135	97	157	76	255	65	19	16	12
7	28	97	397	113	93	158	82	163	71	17	15	12
8	451	100	443	131	109	168	74	116	67	16	14	12
9	1040	124	432	248	144	133	72	101	58	16	14	12
10	1330	195	359	550	183	117	61	96	49	16	13	12
11	1270	262	279	669	170	106	58	75	41	16	13	12
12	839	212	213	601	139	95	62	72	33	16	13	12
13	409	147	186	438	119	91	78	68	30	15	13	12
14	205	113	173	257	251	126	69	62	26	15	13	11
15	132	95	160	184	645	274	70	62	25	15	13	11
16	106	85	146	224	876	326	67	52	22	16	13	12
17	93	81	137	341	862	254	66	44	22	16	14	11
18	93	77	135	382	668	179	69	43	86	16	e13	11
19	173	77	324	282	469	167	41	41	103	16	13	10
20	182	79	625	197	329	293	40	37	86	16	13	10
21	208	97	682	160	260	448	42	36	66	16	13	11
22	179	159	588	152	239	485	90	34	48	16	13	10
23	135	206	411	169	209	356	258	31	e38	16	13	9.8
24	110	217	286	183	183	226	429	31	27	40	13	10
25	92	176	240	206	141	158	433	31	23	238	13	9.8
26	82	180	217	241	131	151	325	50	21	304	13	9.7
27	73	200	215	268	161	155	199	69	20	167	13	9.4
28	64	239	222	223	180	169	197	64	19	91	13	9.4
29	57	195	233	176	---	181	394	52	19	55	13	9.4
30	63	150	214	171	---	153	545	44	17	42	13	9.3
31	59	---	e205	161	---	169	---	37	---	38	13	---
TOTAL	7699	4248	10437	7806	7276	6135	4349	4182	1346	1361	447	334.8
MEAN	248	142	337	252	260	198	145	135	44.9	43.9	14.4	11.2
MAX	1330	262	683	669	876	485	545	625	103	304	27	13
MIN	26	53	135	113	93	91	40	31	17	15	13	9.3
CFSM	1.54	.88	2.09	1.56	1.61	1.23	.90	.84	.28	.27	.09	.07
IN.	1.78	.98	2.41	1.80	1.68	1.42	1.00	.97	.31	.31	.10	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

MEAN	74.1	90.8	140	258	304	335	203	127	97.1	90.2	99.8	59.3
MAX	644	305	404	690	533	803	701	537	359	624	512	562
(WY)	1965	1996	1973	1987	1983	1989	1987	1989	1965	1984	1986	1996
MIN	2.05	2.76	21.2	39.4	87.5	67.7	24.7	8.08	10.4	3.96	3.18	2.52
(WY)	1981	1974	1966	1981	1986	1981	1986	1981	1970	1981	1980	1968

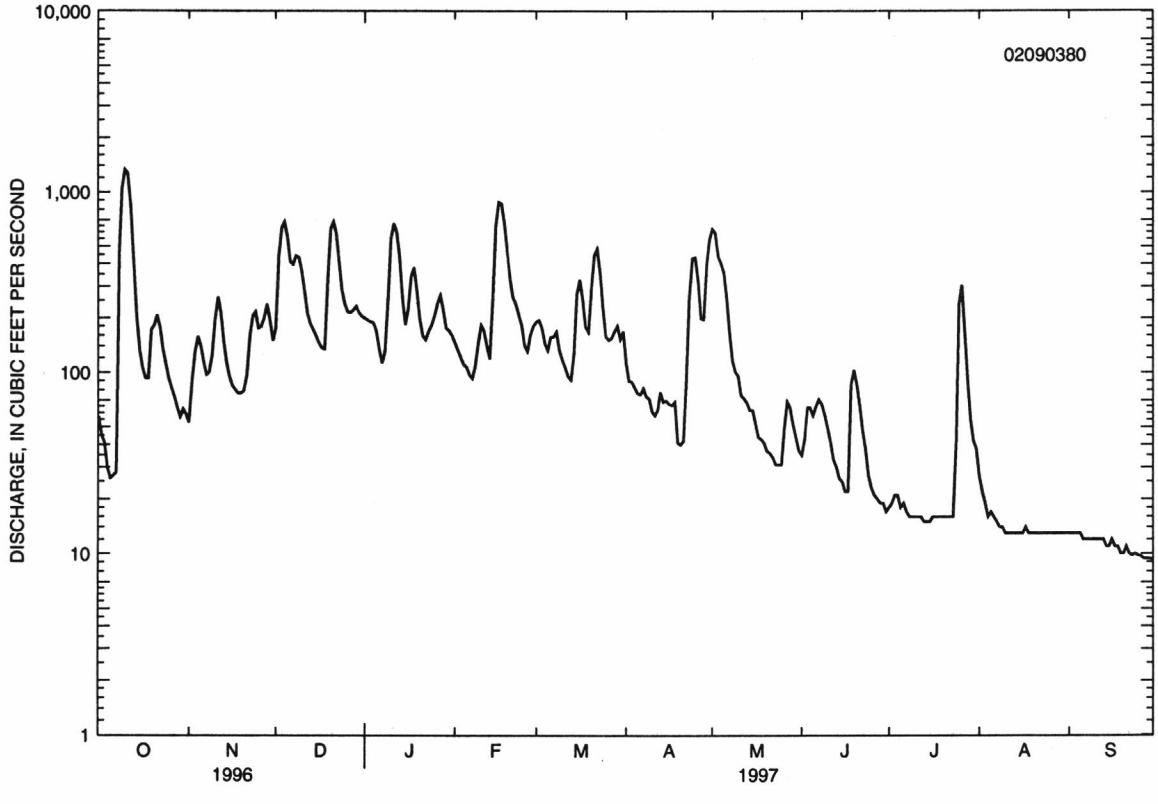
NEUSE RIVER BASIN

02090380 CONTENTNEA CREEK NEAR LUCAMA, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997		
ANNUAL TOTAL	84443		55620.8				
ANNUAL MEAN	231		152		154		
HIGHEST ANNUAL MEAN					278		1984
LOWEST ANNUAL MEAN					35.5		1981
HIGHEST DAILY MEAN	3100	Sep 7	1330	Oct 10	5500	Oct 6	1964
LOWEST DAILY MEAN	12	Jun 29	9.3	Sep 30	.04	Sep 9	1976
ANNUAL SEVEN-DAY MINIMUM	12	Jul 5	9.6	Sep 24	.04	Sep 8	1976
INSTANTANEOUS PEAK FLOW			1410	Oct 10	5860	Oct 6	1964
INSTANTANEOUS PEAK STAGE			10.91	Oct 10	16.28	Oct 6	1964
INSTANTANEOUS LOW FLOW			9.0	Sep 30	.04*	Sep 9	1976
ANNUAL RUNOFF (CFSM)	1.43		.95		.96		
ANNUAL RUNOFF (INCHES)	19.51		12.85		13.03		
10 PERCENT EXCEEDS	521		395		388		
50 PERCENT EXCEEDS	151		93		70		
90 PERCENT EXCEEDS	22		13		11		

e Estimated.

* See REMARKS.



NEUSE RIVER BASIN

0209096970 MOCCASIN RUN NEAR PATETOWN, NC

LOCATION.--Lat 35°28'46", long 77°54'37", Wayne County, Hydrologic Unit 03020203, on left bank at downstream side of bridge on State Highway 111, and 1.5 mi northeast of Patetown.

DRAINAGE AREA.--1.89 mi^2.

PERIOD OF RECORD.--April 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 90 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Minimum discharge for period of record and current water year also occurred Sept. 9, 10, 1997.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.5	1.8	16	5.6	2.7	3.4	3.1	2.9	.81	.22	.54	.24
2	e2.4	9.7	15	8.7	2.4	2.8	2.6	2.6	.98	.25	.39	.26
3	e2.3	5.3	6.3	4.8	2.3	3.1	2.4	4.0	1.1	.24	.29	.27
4	e2.2	3.3	4.6	3.8	2.2	2.8	2.3	3.3	1.0	.23	.29	.33
5	e2.1	2.7	4.4	3.6	2.1	2.7	2.0	2.4	.62	.25	1.3	.21
6	e2.0	2.5	7.7	3.1	1.9	4.6	2.0	1.9	1.0	.26	2.9	.23
7	e1.9	2.4	7.6	2.8	1.8	3.1	2.0	1.5	.56	.27	.75	.16
8	e80	8.2	8.5	2.5	4.0	2.4	1.8	1.2	.46	.28	.50	.12
9	e50	7.3	5.5	21	3.1	2.2	1.8	2.5	.42	.42	.40	.11
10	e30	4.4	4.3	13	2.4	2.1	1.6	1.8	.42	8.9	.88	1.5
11	e20	3.3	3.9	6.1	2.3	3.8	1.7	1.5	.33	3.3	1.3	3.1
12	e16	2.7	3.5	4.5	2.0	7.1	2.3	1.4	.54	.70	.58	1.4
13	e14	2.5	3.2	3.8	2.1	2.2	2.7	1.3	.20	.43	.48	.81
14	e10	2.3	2.9	3.5	8.8	28	1.9	1.2	.44	.36	.50	.86
15	e8.0	2.2	2.7	3.5	30	23	1.7	1.3	.45	.32	.43	.74
16	e6.0	2.0	2.5	10	10	7.8	1.6	.95	.43	.44	.39	.67
17	e5.0	2.0	2.5	6.1	6.2	5.2	1.7	.56	.42	.45	.33	.73
18	e20	2.4	2.4	4.1	4.6	4.2	1.8	.96	.36	.38	.31	.63
19	e16	3.5	21	3.4	4.1	8.0	1.5	.68	.38	.33	.25	.68
20	e12	2.6	10	3.4	3.7	10	1.3	.77	.38	.36	.88	.72
21	e9.0	4.5	5.9	3.2	3.7	6.4	1.2	.98	.35	.43	4.9	.70
22	e7.0	8.0	4.9	3.0	4.9	4.9	2.2	.85	.43	.38	.89	.57
23	e5.0	3.9	4.4	3.1	3.4	3.9	4.4	.89	.40	.50	.51	.57
24	e4.0	3.0	4.1	3.0	3.0	3.4	3.0	.55	.33	1.2	.42	2.9
25	e3.0	2.7	4.3	6.5	2.8	3.0	2.0	.79	.29	1.0	.33	8.6
26	e2.8	3.2	3.6	3.8	2.8	13	1.5	1.8	.28	.62	.28	1.8
27	e2.6	2.7	3.6	3.0	2.8	7.5	1.6	1.9	.37	.52	.28	.91
28	e2.4	2.2	3.3	3.5	2.7	5.0	7.6	1.2	.33	.48	.26	1.4
29	e2.2	2.2	3.2	3.4	---	4.6	7.3	.93	.22	.39	.23	1.2
30	e2.0	3.0	3.0	3.1	---	3.6	4.3	.86	.25	.66	.23	.66
31	1.8	---	2.9	3.1	---	3.3	---	.78	---	.91	.21	---
TOTAL	344.2	108.5	177.7	156.0	124.8	187.1	74.9	46.25	14.55	25.48	22.23	33.08
MEAN	11.1	3.62	5.73	5.03	4.46	6.04	2.50	1.49	.49	.82	.72	1.10
MAX	80	9.7	21	21	30	28	7.6	4.0	1.1	8.9	4.9	8.6
MIN	1.8	1.8	2.4	2.5	1.8	2.1	1.2	.55	.20	.22	.21	.11
CFSM	5.87	1.91	3.03	2.66	2.36	3.19	1.32	.79	.26	.43	.38	.58
IN.	6.77	2.14	3.50	3.07	2.46	3.68	1.47	.91	.29	.50	.44	.65

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1997, BY WATER YEAR (WY)

MEAN	2.45	2.50	2.95	4.04	3.53	5.30	3.24	2.28	2.18	2.09	2.92	2.57
MAX	11.1	5.70	6.62	10.0	6.71	9.45	11.2	7.12	10.2	7.57	8.22	14.7
(WY)	1997	1993	1993	1993	1995	1989	1989	1989	1995	1989	1992	1996
MIN	.47	.63	.69	1.38	1.42	2.29	1.28	.76	.28	.24	.38	.26
(WY)	1995	1995	1995	1991	1991	1992	1995	1994	1994	1994	1993	1990

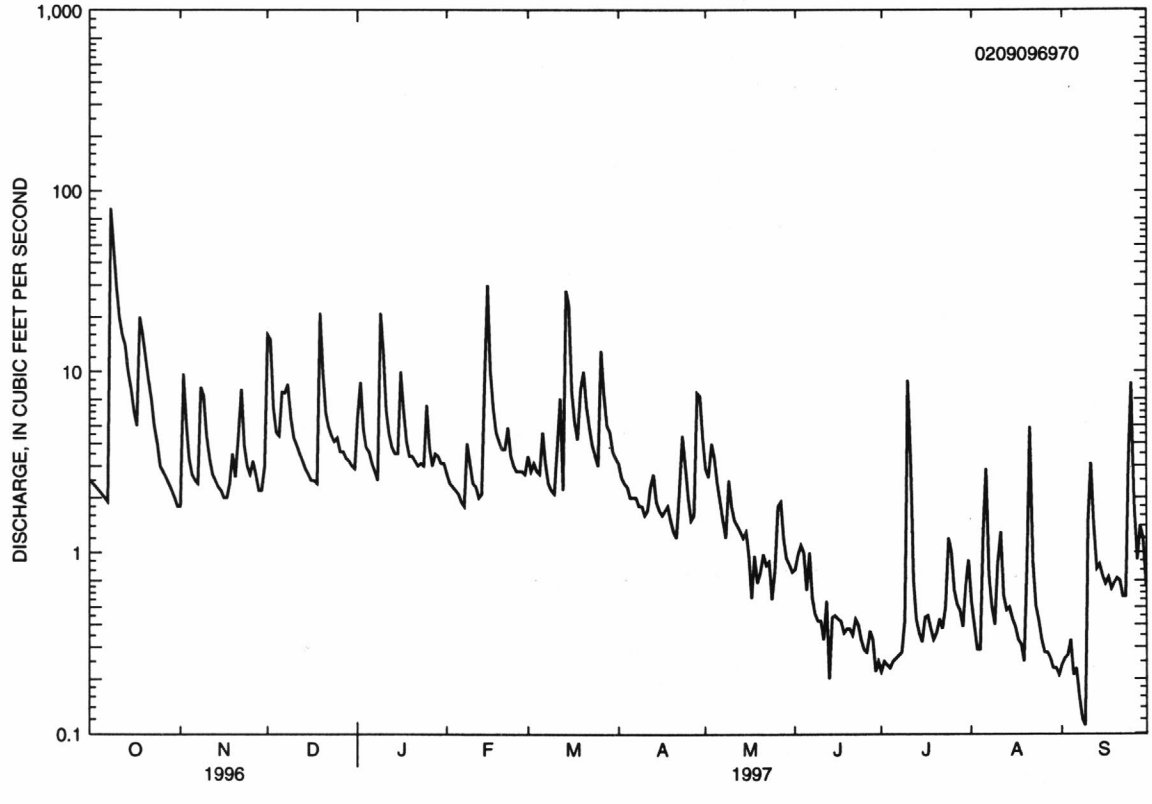
NEUSE RIVER BASIN

0209096970 MOCCASIN RUN NEAR PATETOWN, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1988 - 1997	
ANNUAL TOTAL	1821.40		1314.79			
ANNUAL MEAN	4.98		3.60		3.10	
HIGHEST ANNUAL MEAN					4.69	1989
LOWEST ANNUAL MEAN					1.86	1994
HIGHEST DAILY MEAN	122	Sep 6	80	Oct 8	122	Sep 6 1996
LOWEST DAILY MEAN	.42	May 24	.11	Sep 9	.10	Jun 14 1994
ANNUAL SEVEN-DAY MINIMUM	.56	Jun 13	.20	Sep 3	.10	Jun 14 1994
INSTANTANEOUS PEAK FLOW			NOT DETERMINED		202	Sep 6 1996
INSTANTANEOUS PEAK STAGE			NOT DETERMINED		5.38	Sep 6 1996
INSTANTANEOUS LOW FLOW			.09*	Sep 8	.09*	Sep 8 1997
ANNUAL RUNOFF (CFSM)	2.63		1.91		1.64	
ANNUAL RUNOFF (INCHES)	35.85		25.88		22.27	
10 PERCENT EXCEEDS	11		7.6		5.9	
50 PERCENT EXCEEDS	2.3		2.3		1.4	
90 PERCENT EXCEEDS	.73		.33		.30	

e Estimated.

* See REMARKS.



NEUSE RIVER BASIN

02091000 NAHUNTA SWAMP NEAR SHINE, NC

LOCATION.--Lat 35°29'20", long 77°48'22", Greene County, Hydrologic Unit 03020203, on right bank 10 ft downstream of bridge on Secondary Road 1058, 2 mi upstream from Appletree Swamp, 3.5 mi north of Shine, and 8 mi northwest of Snow Hill.

DRAINAGE AREA.--80.4 mi^2.

PERIOD OF RECORD.--April 1954 to current year. Monthly discharges only for some periods, published in WSP 1723.

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

GAGE.--Water-stage recorder. Datum of gage is 50.74 ft above sea level. Prior to Apr. 1, 1955, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records fair. Minimum discharge for period of record also occurred Oct. 8, 1954. Minimum discharge for the current water year also occurred July 9, 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	55	122	101	93	103	77	125	15	3.4	13	2.0
2	71	109	306	198	88	101	67	114	15	3.5	9.5	2.0
3	68	142	234	160	82	98	61	105	14	4.1	7.5	2.5
4	62	103	180	134	78	92	58	116	18	3.4	6.0	3.0
5	58	84	147	121	76	84	57	86	18	2.6	5.6	2.4
6	53	77	160	109	74	99	51	67	16	2.0	25	2.2
7	51	73	179	97	71	99	51	56	21	1.9	17	2.3
8	483	78	223	90	83	84	49	46	21	1.4	9.9	2.4
9	967	121	199	176	110	74	44	54	18	1.1	7.4	2.6
10	841	97	165	355	95	69	40	56	15	47	6.8	2.7
11	665	82	141	264	88	66	39	49	13	118	22	31
12	505	73	125	191	81	66	40	42	10	27	15	16
13	329	67	117	145	75	58	56	37	9.9	11	9.8	9.9
14	171	64	114	122	140	144	51	36	9.2	6.7	6.9	7.6
15	127	62	105	110	319	396	43	31	14	5.4	5.5	6.7
16	109	59	98	188	333	255	39	27	13	19	4.5	5.6
17	97	57	97	211	252	150	37	24	11	87	3.9	5.4
18	89	57	94	152	179	115	36	22	9.4	16	3.7	4.8
19	291	74	196	122	139	119	34	20	8.0	11	5.2	4.5
20	237	75	300	109	121	187	32	18	7.2	7.1	4.6	4.4
21	138	70	235	105	113	162	32	20	6.4	6.4	93	4.0
22	107	146	184	98	139	134	61	18	5.9	6.5	25	3.8
23	93	121	150	99	122	108	100	16	5.2	7.0	11	4.5
24	88	100	131	97	106	86	97	15	4.4	12	8.5	6.2
25	74	84	127	119	98	75	75	14	3.9	18	6.0	91
26	68	80	116	126	91	156	59	18	3.7	14	5.1	67
27	66	82	115	105	90	163	49	32	3.7	14	4.1	37
28	63	74	112	99	88	116	116	28	5.1	36	3.3	35
29	62	68	106	107	---	104	164	21	4.5	11	2.9	37
30	59	66	100	97	---	91	154	17	3.7	11	3.4	24
31	57	---	97	97	---	82	---	15	---	21	2.5	---
TOTAL	6223	2500	4775	4304	3424	3736	1869	1345	322.2	535.5	353.6	429.5
MEAN	201	83.3	154	139	122	121	62.3	43.4	10.7	17.3	11.4	14.3
MAX	967	146	306	355	333	396	164	125	21	118	93	91
MIN	51	55	94	90	71	58	32	14	3.7	1.1	2.5	2.0
CFSM	2.50	1.04	1.92	1.73	1.52	1.50	.77	.54	.13	.21	.14	.18
IN.	2.88	1.16	2.21	1.99	1.58	1.73	.86	.62	.15	.25	.16	.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1997, BY WATER YEAR (WY)

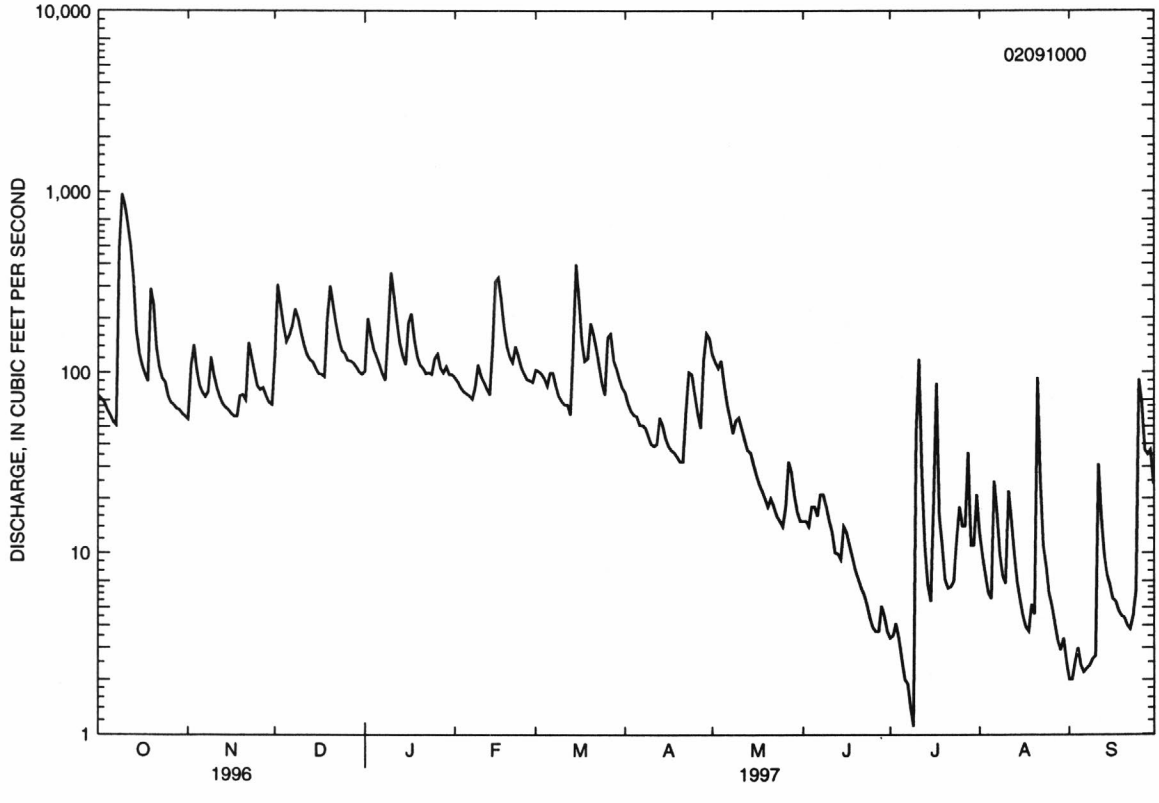
MEAN	50.9	56.2	70.8	117	140	145	102	59.8	53.4	60.8	71.0	61.8
MAX	473	253	184	261	307	311	253	277	243	395	360	396
(WY)	1965	1978	1958	1993	1983	1983	1974	1989	1995	1965	1974	1955
MIN	2.26	11.2	19.7	31.1	34.6	33.7	19.1	10.8	5.35	3.10	4.71	2.58
(WY)	1955	1987	1995	1955	1988	1986	1986	1986	1986	1987	1954	1954

NEUSE RIVER BASIN

02091000 NAHUNTA SWAMP NEAR SHINE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1954 - 1997	
ANNUAL TOTAL	43688.9		29816.8			
ANNUAL MEAN	119		81.7		83.2	
HIGHEST ANNUAL MEAN					150	1965
LOWEST ANNUAL MEAN					22.9	1986
HIGHEST DAILY MEAN	1200	Sep 6	967	Oct 9	4560	Oct 6 1964
LOWEST DAILY MEAN	7.7	May 25	1.1	Jul 9	1.0	Oct 7 1954
ANNUAL SEVEN-DAY MINIMUM	9.7	May 21	2.3	Sep 1	1.3	Oct 4 1954
INSTANTANEOUS PEAK FLOW			1000	Oct 9	5470	Oct 6 1964
INSTANTANEOUS PEAK STAGE			10.74	Oct 9	14.14	Oct 6 1964
INSTANTANEOUS LOW FLOW			1.1*	Jul 8	1.0*	Oct 7 1954
ANNUAL RUNOFF (CFSM)	1.48		1.02		1.03	
ANNUAL RUNOFF (INCHES)	20.21		13.80		14.06	
10 PERCENT EXCEEDS	274		162		174	
50 PERCENT EXCEEDS	73		66		43	
90 PERCENT EXCEEDS	21		4.5		9.9	

* See REMARKS.



NEUSE RIVER BASIN

02091500 CONTENTNEA CREEK AT HOOKERTON, NC

LOCATION.--Lat 35°25'44", long 77°34'59", Greene County, Hydrologic Unit 03020203, on left bank at bridge on State Highway 123 at Hookerton, and 2.2 mi upstream from Wheat Swamp Creek.

DRAINAGE AREA.--733 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1928 to current year.

REVISED RECORDS.--WSP 1333: 1903-35. WSP 1383: Drainage area. WSP 1503: 1951. WSP 1723: 1932. WDR NC-90-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 14.85 ft above sea level (U.S. Army Corps of Engineers bench mark). Prior to Nov. 26, 1934, nonrecording gage at site 1,400 ft upstream and Nov. 27, 1934, to Sept. 30, 1987, water-stage recorder at site 0.3 mi upstream at present datum. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Buckhorn Reservoir (station 02090370) since September 1976. Minimum discharge for the current water year also occurred Aug. 20.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of September 1928 reached a stage of 23.3 ft, from floodmark; high water of autumn 1924 was about 0.1 ft lower, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	630	548	885	1180	1050	1100	948	1240	203	121	279	63
2	581	551	984	1180	1020	995	889	1320	205	121	e220	81
3	556	632	1090	1220	967	933	832	1470	205	128	e200	74
4	532	708	1200	1230	908	912	759	1700	228	115	e180	74
5	505	755	1300	1230	865	915	673	1870	242	108	135	99
6	478	779	1430	1190	816	935	593	1930	242	109	117	101
7	451	792	1560	1150	768	931	527	1900	245	106	108	93
8	1450	796	1680	1100	734	917	481	1800	243	107	113	77
9	2450	798	1760	1090	742	902	451	1660	238	123	105	63
10	2720	794	1810	1220	760	881	421	1450	236	125	91	55
11	2960	793	1860	1330	788	849	394	1180	224	143	80	55
12	3270	792	1880	1450	822	799	378	871	209	176	73	60
13	3600	788	1870	1550	849	742	376	666	195	174	72	85
14	3710	787	1800	e1700	915	718	374	563	181	129	68	95
15	3540	778	1690	e1800	1100	885	370	476	177	101	64	94
16	3170	758	1560	e1850	1330	1100	363	411	175	87	59	100
17	2800	723	1400	1920	1520	1260	352	359	188	111	54	95
18	2440	676	1250	1870	1700	1340	340	324	197	189	50	82
19	2130	641	1170	1750	1880	1350	327	293	182	183	47	76
20	1830	614	1200	1630	2050	1390	317	269	216	144	46	72
21	1640	606	1260	1540	2180	1410	311	248	250	122	117	72
22	1490	659	1370	1480	2250	1410	323	233	226	109	221	65
23	1350	723	1520	1410	2200	1350	399	231	212	180	228	57
24	1230	775	1690	1310	2050	1300	511	221	200	196	210	54
25	1140	814	1810	1210	1840	1260	596	202	180	152	185	e100
26	1050	857	1840	1110	1630	1300	659	196	158	141	141	e110
27	955	880	1840	1060	1430	1370	726	192	141	188	106	e120
28	848	888	1750	1050	1240	1390	843	199	129	243	84	e150
29	747	886	1620	1040	---	1310	1000	211	121	307	70	e180
30	661	874	1470	1050	---	1160	1150	208	122	332	60	e200
31	595	---	1310	1060	---	1030	---	203	---	318	55	---
TOTAL	51509	22465	46859	41960	36404	34144	16683	24096	5970	4888	3638	2702
MEAN	1662	749	1512	1354	1300	1101	556	777	199	158	117	90.1
MAX	3710	888	1880	1920	2250	1410	1150	1930	250	332	279	200
MIN	451	548	885	1040	734	718	311	192	121	87	46	54
CFSM	2.27	1.02	2.06	1.85	1.77	1.50	.76	1.06	.27	.22	.16	.12
IN.	2.61	1.14	2.38	2.13	1.85	1.73	.85	1.22	.30	.25	.18	.14

NEUSE RIVER BASIN

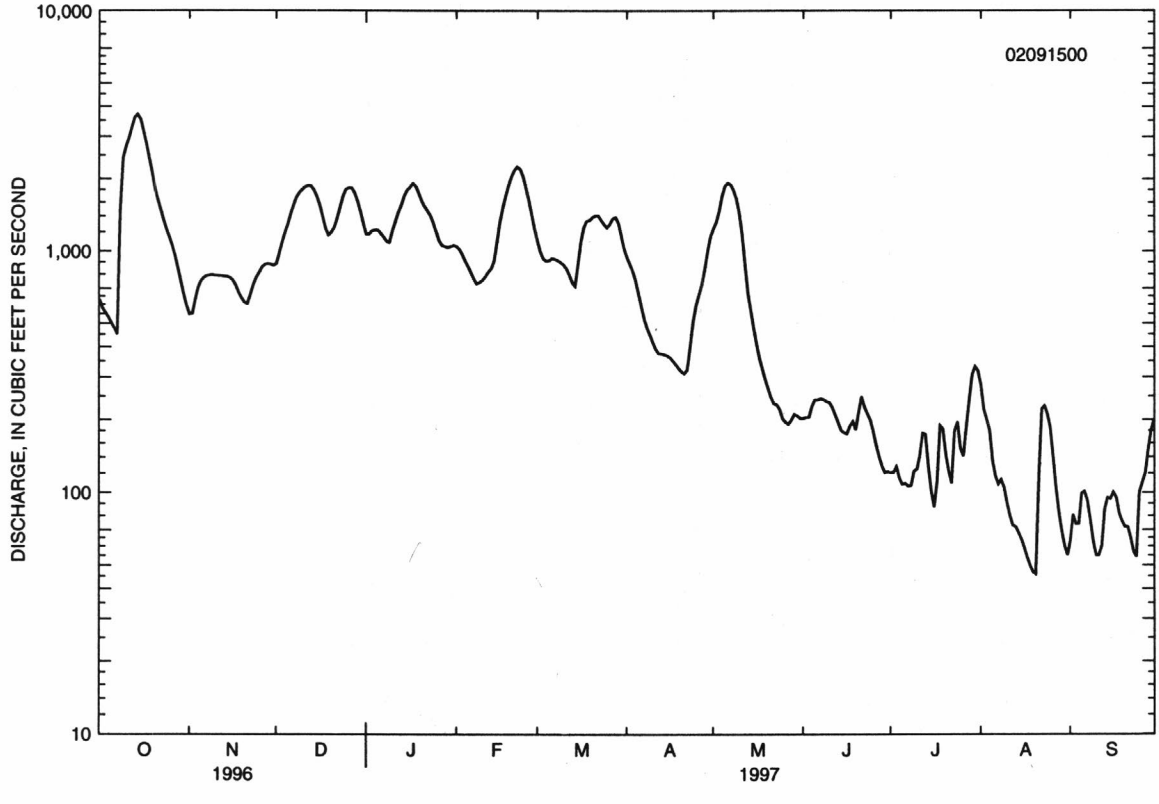
02091500 CONTENTNEA CREEK AT HOOKERTON, NC--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	459	463	685	1103	1356	1450	1028	589	466	566	637	522
MAX	4183	2150	2349	2626	4316	3491	2752	3363	1770	2203	2422	3675
(WY)	1965	1948	1949	1993	1948	1989	1989	1989	1995	1929	1960	1955
MIN	20.3	41.1	64.7	92.5	239	382	202	82.9	38.5	63.3	37.2	24.9
(WY)	1955	1955	1934	1934	1934	1981	1986	1986	1986	1952	1954	1954

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1929 - 1997	
ANNUAL TOTAL	420249		291318			
ANNUAL MEAN	1148		798		764	
HIGHEST ANNUAL MEAN					1422	1960
LOWEST ANNUAL MEAN					242	1951
HIGHEST DAILY MEAN	6320	Sep 18	3710	Oct 14	16000	Oct 7 1964
LOWEST DAILY MEAN	125	Aug 25	46	Aug 20	15	Oct 28 1933
ANNUAL SEVEN-DAY MINIMUM	163	Aug 20	55	Aug 14	16	Oct 8 1954
INSTANTANEOUS PEAK FLOW			3740	Oct 14	17200	Oct 8 1964
INSTANTANEOUS PEAK STAGE			13.76	Oct 14	22.11	Oct 8 1964
INSTANTANEOUS LOW FLOW			46*	Aug 19	15	Oct 28 1933
ANNUAL RUNOFF (CFSM)	1.57		1.09		1.04	
ANNUAL RUNOFF (INCHES)	21.33		14.78		14.16	
10 PERCENT EXCEEDS	2190		1750		1910	
50 PERCENT EXCEEDS	817		723		445	
90 PERCENT EXCEEDS	302		95		86	

e Estimated.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950, 1969-72, 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1979 to September 1984.

WATER TEMPERATURE: October 1949 to September 1950, March 1979 to September 1984.

INSTRUMENTATION.--Water-quality monitor from October 1981 to September 1984.

REMARKS.--Station operated as part of NAWQA Program from March 1993 to present. Station also operated as part of NASQAN network from March 1979 to September 1993. Miscellaneous chemical data published for water years 1945, 1947-49, 1955-67.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 218 microsiemens, Nov. 1, 10, 1983; minimum daily, 41 microsiemens, June 11, 1979.

WATER TEMPERATURE: Maximum, 29.5°C, Aug. 23, 1983; minimum daily, 1.0°C, Jan. 13, 14, 1981, Jan. 18, 1982.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV 1996											
14...	1430	787	95.0	6.40	9.5	778	8.50	73	20	4.7	2.0
DEC											
12...	1630	1890	--	6.00	8.5	768	10.6	--	19	4.3	1.9
APR 1997											
08...	1315	479	93.0	6.20	18.5	769	7.50	79	21	4.7	2.1
MAY											
20...	1315	268	95.0	6.95	22.5	760	6.27	73	23	5.3	2.3
JUN											
13...	1200	195	102	6.50	22.0	757	6.50	75	23	5.4	2.2
JUL											
10...	1230	122	123	7.0	27.5	762	6.1	77	24	5.7	2.3
24...	1230	196	113	6.97	26.5	762	5.38	67	24	5.8	2.2
AUG											
12...	1130	72	110	7.45	26.0	765	5.00	61	24	5.7	2.3
28...	1300	84	146	6.85	24.5	758	6.30	76	24	5.9	2.4
SEP											
09...	0930	64	131	7.01	24.0	760	7.20	86	24	5.7	2.4

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
NOV 1996											
14...	6.6	36	.6	4.1	13	11	5.3	13	<.10	5.7	75
DEC											
12...	5.7	34	.6	4.2	--	--	6.6	11	.10	5.2	67
APR 1997											
08...	6.4	37	.6	2.8	25.0	21.0	5.8	11	.2	4.9	75
MAY											
20...	7.2	37	.7	2.9	16.0	13.0	5.9	11	.1	6.5	80
JUN											
13...	9.1	43	.8	2.9	20.0	16.0	6.2	11	.1	5.0	78
JUL											
10...	12	47	1	3.7	24	20	8.5	14	.2	4.8	89
24...	9.3	42	.8	4.0	19.3	15.8	6.9	12	.2	5.3	82
AUG											
12...	9.0	41	.8	3.1	27.1	22.2	6.7	11	.2	6.9	81
28...	15	51	1	4.6	25.9	21.2	12	15	.2	6.6	106
SEP											
09...	12	48	1	4.2	29.0	23.8	10	14	.2	5.4	91

NEUSE RIVER BASIN

02091500 CONTENTNEA CREEK AT HOOKERTON, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
NOV 1996											
14...	.010	.590	.050	.55	.45	.60	.50	1.2	1.1	.090	.070
DEC											
12...	.010	.560	<.015	--	--	.50	.40	1.1	.96	.040	<.010
APR 1997											
08...	.020	.700	.100	.60	.50	.70	.60	1.4	1.3	.100	.080
MAY											
20...	.02	.76	<.02	--	--	.6	.5	1.3	1.3	.18	.09
JUN											
13...	<.01	.79	.04	.50	.50	.5	.5	1.3	1.3	.12	.09
JUL											
10...	<.01	.63	.05	.48	.57	.5	.6	1.2	1.3	.17	.16
24...	.02	.69	.15	.71	.40	.9	.5	1.5	1.2	.20	.14
AUG											
12...	<.01	.63	.06	.49	.46	.5	.5	1.2	1.1	.15	.12
28...	.01	.84	.07	.51	.45	.6	.5	1.4	1.4	.15	.11
SEP											
09...	<.01	.53	.05	.44	.45	.5	.5	1.0	1.0	.14	.12

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)
NOV 1996											
14...	.070	1500	23	10	.30	--	--	--	--	--	--
DEC											
12...	.030	740	12	7.9	.60	--	--	--	--	--	--
APR 1997											
08...	.080	1800	57	8.7	.5	.0110	.0280	<.002	E.0030	<.004	<.004
MAY											
20...	.08	2000	74	10	.5	.0109	.0829	<.002	<.002	E.0033	<.004
JUN											
13...	.09	1600	40	8.1	.3	.0142	.0385	<.002	<.002	<.004	<.004
JUL											
10...	.12	1500	57	7.8	.4	.0412	.0216	<.002	<.002	<.004	.0823
24...	.12	1200	62	8.3	.4	.0160	.0209	<.002	<.002	.0055	.171
AUG											
12...	.12	1500	81	7.2	.4	.0051	.0079	<.002	<.002	<.004	.116
28...	.12	1200	76	8.6	.6	.0096	.0238	<.002	<.002	<.004	.0184
SEP											
09...	.13	1200	54	6.9	.2	E.0040	.0069	<.002	<.002	<.004	.0076

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P,P' DDE DISSOLV (UG/L) (34653)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)
NOV 1996											
14...	--	--	--	--	--	--	--	--	--	--	--
DEC											
12...	--	--	--	--	--	--	--	--	--	--	--
APR 1997											
08...	<.002	<.006	E.0040	<.001	<.003	<.017	<.002	<.004	<.003	<.003	<.002
MAY											
20...	<.002	<.006	E.0033	<.001	<.003	<.017	<.002	<.004	<.003	<.003	<.002
JUN											
13...	<.002	<.006	.0074	<.001	<.003	<.017	<.002	<.004	<.003	<.003	<.002
JUL											
10...	<.002	<.006	<.002	<.001	<.003	<.017	<.002	<.004	<.003	<.003	<.002
24...	<.002	<.006	.0074	<.001	<.003	<.017	<.002	<.004	<.003	.0924	<.002
AUG											
12...	<.002	<.006	<.002	<.001	<.003	<.017	<.002	<.004	<.003	<.003	<.002
28...	<.002	<.006	<.002	<.001	<.003	<.017	<.002	<.004	<.003	.0125	<.002
SEP											
09...	<.002	<.006	.0047	<.001	<.003	<.017	<.002	<.004	<.003	.0053	<.002

DATE	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA-THION, DIS-SOLVED (UG/L) (39542)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
NOV 1996											
14...	--	--	--	--	--	--	--	--	--	--	--
DEC											
12...	--	--	--	--	--	--	--	--	--	--	--
APR 1997											
08...	<.004	<.002	<.005	.0260	<.004	<.004	<.003	<.004	<.006	<.004	<.004
MAY											
20...	<.004	<.002	<.005	.0787	<.004	<.004	<.003	<.004	<.006	<.004	<.004
JUN											
13...	<.004	<.002	<.005	.0359	.0150	<.004	<.003	<.004	<.006	<.004	<.004
JUL											
10...	<.004	<.002	<.005	.0964	.0135	<.004	<.003	<.004	<.006	<.004	<.004
24...	<.004	<.002	<.005	.142	.0113	<.004	<.003	<.004	<.006	<.004	<.004
AUG											
12...	<.004	<.002	<.005	.0213	<.004	<.004	<.003	<.004	<.006	<.004	<.004
28...	<.004	<.002	<.005	.0257	<.004	<.004	<.003	<.004	<.006	<.004	<.004
SEP											
09...	<.004	<.002	<.005	.0134	.0251	<.004	<.003	<.004	<.006	<.004	<.004

NEUSE RIVER BASIN

02091500 CONTENTNEA CREEK AT HOOKERTON, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)
NOV 1996											
14...	--	--	--	--	--	--	--	--	--	--	--
DEC											
12...	--	--	--	--	--	--	--	--	--	--	--
APR 1997											
08...	<.005	<.002	<.003	.0300	<.007	<.004	<.013	.0810	<.002	E.0060	<.013
MAY											
20...	<.005	<.002	<.003	.0435	<.007	<.004	<.013	.0215	<.002	E.0130	<.013
JUN											
13...	<.005	<.002	<.003	.0404	<.007	<.004	<.013	.0499	<.002	.0216	<.013
JUL											
10...	<.005	<.002	<.003	.0905	<.007	<.004	<.013	.0209	<.002	E.0554	<.013
24...	<.005	<.002	<.003	.0606	<.007	<.004	<.013	.0091	<.002	E.0239	<.013
AUG											
12...	<.005	<.002	<.003	.0611	<.007	<.004	<.013	.144	<.002	.0143	<.013
28...	<.005	<.002	<.003	.205	<.007	<.004	<.013	.0807	<.002	.0142	<.013
SEP											
09...	<.005	<.002	<.003	.0794	<.007	<.004	<.013	.0403	<.002	.0118	<.013

DATE	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 1996											
14...	--	--	--	--	--	--	--	--	3	6.4	100
DEC											
12...	--	--	--	--	--	--	--	--	5	26	100
APR 1997											
08...	<.001	<.002	E.0040	<.001	E.0090	<.003	<.007	<.002	6	7.8	88
MAY											
20...	<.001	<.002	E.0107	<.001	E.0268	<.009	<.007	<.002	17	12	41
JUN											
13...	<.001	<.002	E.0034	<.001	<.007	<.003	<.007	<.002	5	2.6	38
JUL											
10...	<.001	<.002	<.002	<.001	E.0444	<.003	<.007	<.002	4	1.3	27
24...	<.001	E.0071	E.0046	<.001	E.0196	<.003	<.007	<.002			
AUG											
12...	<.001	<.002	E.0036	<.001	<.003	<.003	<.007	<.002	6	1.2	75
28...	<.001	<.002	E.0052	<.001	E.0361	<.003	<.007	<.002	8	1.8	81
SEP											
09...	<.001	<.002	E.0033	<.001	E.0230	<.003	<.007	<.002	4	.69	71

NEUSE RIVER BASIN

02091814 NEUSE RIVER NEAR FORT BARNWELL, NC

LOCATION.--Lat 35°18'40", long 77°18'20", Craven County, Hydrologic Unit 03020202, on left bank 0.2 mi upstream from bridge on Secondary Road 1470, 1.5 mi upstream from Core Creek and 2.0 mi east of Fort Barnwell.

DRAINAGE AREA.--3,900 mi^2.

PERIOD OF RECORD.--Occasional measurements water years 1955-1995. October 1996 to September 1997.

GAGE.--Water-stage recorder and acoustic velocity meter. Datum of gage is at sea level. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e12200	e2800	e4390	6020	5570	8330	5270	5600	2210	1170	3690	839
2	e11000	e2900	e4570	5820	5490	8070	4710	6050	2110	1370	3680	938
3	e10000	e3300	e4910	5680	5360	7850	4320	6420	1920	1350	3180	880
4	e9700	e3400	e5180	5680	5280	7630	3950	6650	1940	1130	2390	1130
5	8210	e3500	e5550	5640	5320	7420	3690	6860	2050	1040	1800	1110
6	7880	e3700	e5810	5640	5360	6600	3450	7150	2380	1220	1580	937
7	7660	4180	e6110	5730	5260	5580	3100	7470	2480	1090	1580	714
8	8310	4100	e7000	5830	5210	5070	2800	7760	3020	1070	1450	636
9	10900	4230	7860	5870	5170	4620	2580	8000	3160	1030	1240	661
10	13200	4230	8030	5940	5090	4430	2340	8180	3220	1070	1120	738
11	14000	4090	8300	6000	4870	4410	2300	8220	3120	1300	1040	858
12	13800	4280	8490	6230	4610	4470	2280	8110	2730	1260	926	867
13	13300	4600	8590	6500	4060	4520	2290	7910	2240	1120	839	959
14	12800	4860	8530	6680	4230	4580	2120	7590	1920	1040	727	1020
15	12400	4810	8160	6830	4810	4750	1950	7190	1560	893	765	1060
16	12300	4700	7600	7290	5170	4610	2040	6740	e1570	751	697	952
17	12100	4550	6730	7700	5690	4760	2240	6270	1460	780	608	1060
18	12000	4440	6310	8060	6110	5040	2200	5990	e1430	788	503	960
19	11900	4340	6320	8330	7430	5350	2130	4550	e1340	923	918	933
20	11600	4340	6560	8480	7810	5550	1850	3230	1270	1060	903	775
21	11000	4360	6700	8410	8160	5470	1780	2460	1470	1200	858	920
22	10200	4350	7000	8190	8580	5360	1770	1860	1910	1090	1080	1120
23	10100	4380	7210	7920	8910	5420	1590	1820	1720	1060	1300	827
24	e9100	4390	7400	7640	9120	5450	2040	1810	1410	1340	1320	978
25	e8340	4520	7590	7410	9150	5520	2470	1870	1280	1410	1320	1040
26	e7200	4660	7780	6930	9050	5610	3000	1820	1100	1460	1180	1040
27	e6050	4790	7940	6650	8840	5860	3520	1360	1110	1630	1070	1690
28	e4550	e4600	7950	6240	8550	5930	4100	1220	1240	1990	916	1860
29	e3980	e4460	7690	5930	---	6490	4690	1410	1250	2430	754	1860
30	e3310	e4430	7180	5740	---	6940	5180	1960	1180	2980	995	1880
31	e3000	---	6610	5650	---	6120	---	2180	---	3420	900	---
TOTAL	302090	126290	216050	206660	178260	177810	87750	155710	56800	41465	41329	31242
MEAN	9745	4210	6969	6666	6366	5736	2925	5023	1893	1338	1333	1041
MAX	14000	4860	8590	8480	9150	8330	5270	8220	3220	3420	3690	1880
MIN	3000	2800	4390	5640	4060	4410	1590	1220	1100	751	503	636
CFSM	2.50	1.08	1.79	1.71	1.63	1.47	.75	1.29	.49	.34	.34	.27
IN.	2.88	1.20	2.06	1.97	1.70	1.70	.84	1.49	.54	.40	.39	.30

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

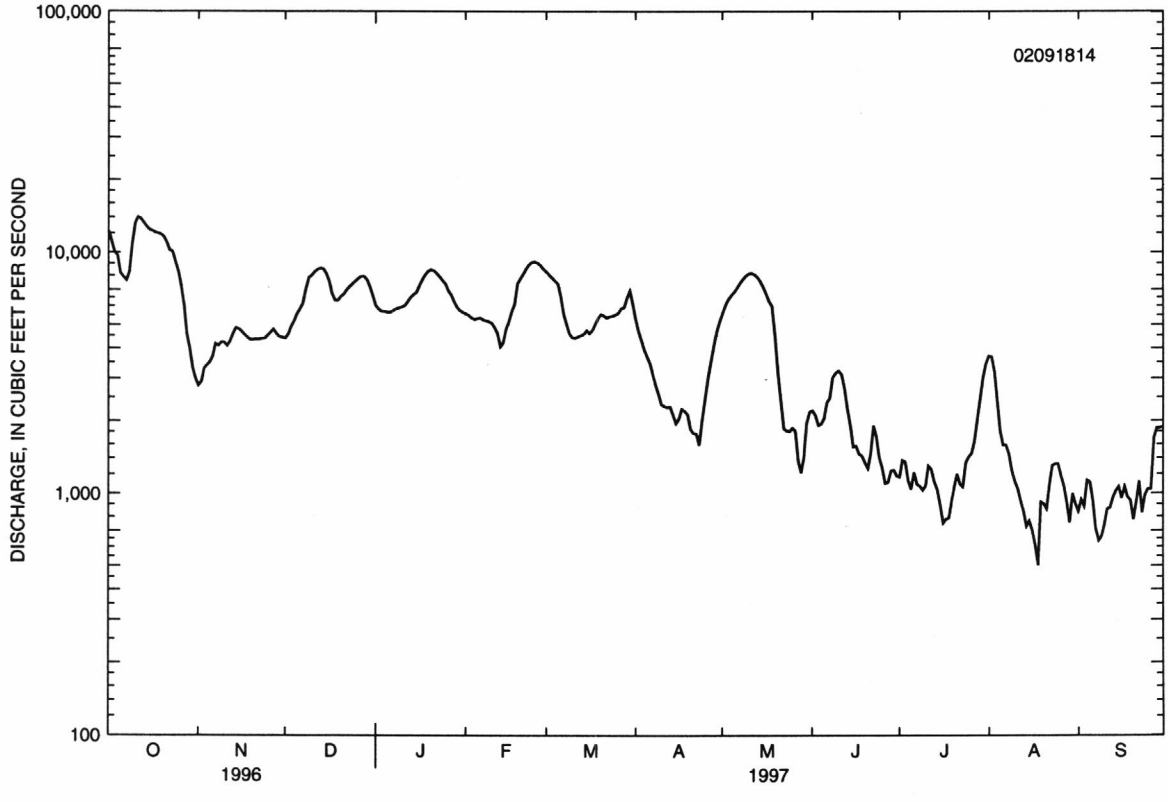
MEAN	9745	4210	6969	6666	6366	5736	2925	5023	1893	1338	1333	1041
MAX	9745	4210	6969	6666	6366	5736	2925	5023	1893	1338	1333	1041
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997
MIN	9745	4210	6969	6666	6366	5736	2925	5023	1893	1338	1333	1041
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997

NEUSE RIVER BASIN

02091814 NEUSE RIVER NEAR FORT BARNWELL, NC--Continued

SUMMARY STATISTICS	FOR 1997 WATER YEAR	
ANNUAL TOTAL	1621456	
ANNUAL MEAN	4442	
HIGHEST DAILY MEAN	14000	Oct 11
LOWEST DAILY MEAN	503	Aug 18
ANNUAL SEVEN-DAY MINIMUM	722	Aug 13
INSTANTANEOUS PEAK FLOW	14500	Oct 11
INSTANTANEOUS PEAK STAGE	11.83	Oct 11
INSTANTANEOUS LOW FLOW	450	Aug 18
ANNUAL RUNOFF (CFSM)	1.14	
ANNUAL RUNOFF (INCHES)	15.47	
10 PERCENT EXCEEDS	8300	
50 PERCENT EXCEEDS	4390	
90 PERCENT EXCEEDS	988	

e Estimated.



NEUSE RIVER BASIN

0209205053 SWIFT CREEK AT NC HWY 43 NEAR STREETS FERRY, NC

LOCATION.--Lat 35°13'56", long 77°06'52", Craven County, Hydrologic Unit 03020202, at downstream side of bridge on Highway 43, 0.5 mi upstream from mouth, 2 mi upstrean from Little Fisher Creek, and 1.3 mi north-northeast of Streets Ferry.

DRAINAGE AREA.--269 mi^2.

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

GAGE.--Water-stage recorder and acoustic velocity meter. Datum of gage is 10 ft below sea level, from topographic map. Satellite telemetry at station.

ANNUAL MEAN AND SUMMARY STATISTICS.--Values represent one complete water year of discharges (1997).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum gage, 5.52 ft Sept. 6, 1996 observed.

DISCHARGE, CUBIC FEET PER SECOND, FOR PERIOD JULY 1996 TO SEPTEMBER 1996

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										41	e320	293
2										e200	e370	273
3										106	e350	76
4										161	e450	326
5										188	e325	e-215
6										90	489	e2000
7										156	297	e3560
8										79	265	e3040
9										100	186	e3120
10										16	76	e2920
11										-471	106	e2940
12										-363	167	e2660
13										1830	e115	e2400
14										1930	e88	e2110
15										2330	e172	e1830
16										2480	116	e1800
17										e2370	125	e1730
18										2210	111	e1420
19										1510	27	e1480
20										758	147	e1930
21										460	209	e2020
22										328	86	e1780
23										205	101	e1430
24										171	106	e770
25										214	48	e610
26										e180	113	e300
27										e130	186	256
28										e110	399	249
29										e280	230	180
30										e310	298	-45
31										e290	96	---
TOTAL										18399	6174	43243
MEAN										594	199	1441
MAX										2480	489	3560
MIN										-471	27	-215

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD JULY 1996 TO SEPTEMBER 1996, BY WATER YEAR (WY)

MEAN	594	199	1441
MAX	594	199	1441
(WY)	1996	1996	1996
MIN	594	199	1441
(WY)	1996	1996	1996

NEUSE RIVER BASIN

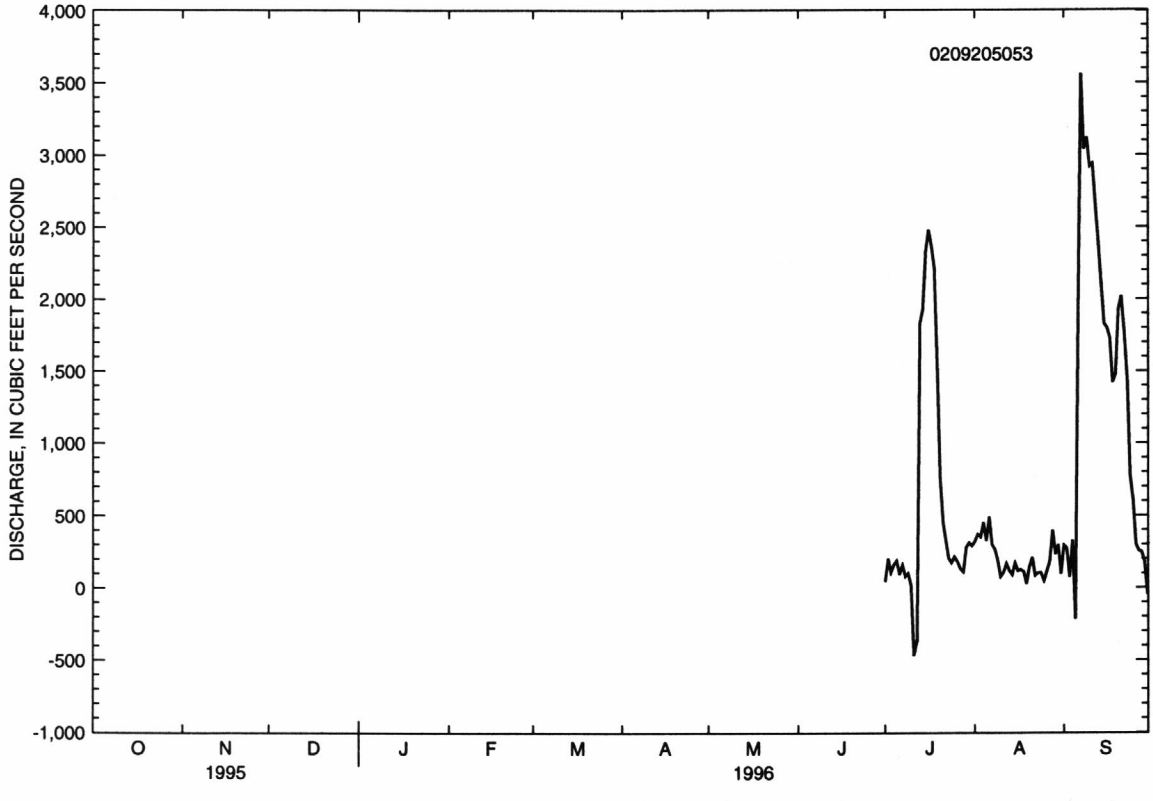
0209205053 SWIFT CREEK AT NC HWY 43 NEAR STREETS FERRY, NC--Continued

SUMMARY STATISTICS FOR PERIOD JULY 1996 TO SEPTEMBER 1996

INSTANTANEOUS PEAK FLOW	NOT DETERMINED	
INSTANTANEOUS PEAK STAGE	5.52	Sep 6
INSTANTANEOUS LOW FLOW	-2380	Jul 12

e Estimated.

Note.--Negative values indicate reverse flow.



NEUSE RIVER BASIN

0209205053 SWIFT CREEK AT NC HWY 43 NEAR STREETS FERRY, NC--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	e150	e150	-75	42	150	e10	552	75	15	206	70
2	e370	e50	e200	396	31	132	171	161	22	36	96	96
3	e150	e200	e175	157	33	250	172	406	-39	148	44	41
4	-155	e310	e210	280	78	65	79	117	-71	49	51	52
5	-76	e300	e150	295	100	206	35	141	-73	27	132	109
6	174	e280	e250	102	-19	149	54	110	-119	125	149	123
7	84	245	395	94	10	66	21	71	285	44	-19	65
8	e580	267	383	74	127	133	45	113	85	14	217	59
9	2190	216	693	210	-16	47	-65	84	190	-8.0	127	42
10	e3170	220	e560	e400	83	150	137	43	272	27	57	36
11	e3220	273	e600	533	218	181	68	77	16	34	29	123
12	3060	187	e500	505	179	114	37	107	15	74	50	-12
13	2980	95	e550	364	-249	-35	59	77	12	103	57	161
14	2210	95	e400	213	971	424	-17	e110	16	33	46	140
15	1030	-150	e300	126	503	154	32	93	-91	34	62	145
16	812	215	e200	215	671	779	163	42	114	30	55	52
17	585	147	135	243	1120	1110	36	58	78	37	37	137
18	326	95	141	501	1140	890	71	36	31	50	20	107
19	e310	51	160	283	815	385	17	55	-22	38	8.6	79
20	e290	108	110	283	323	471	30	-.81	4.1	59	95	131
21	e450	101	365	129	422	401	40	5.4	34	51	58	22
22	e400	248	550	154	195	319	56	60	20	56	85	101
23	e110	229	334	73	92	193	165	68	-102	53	97	171
24	195	308	211	63	245	133	215	64	94	167	103	4.1
25	128	259	99	71	130	540	162	22	28	161	66	330
26	77	293	124	2.2	161	149	69	-48	-4.1	159	124	71
27	151	e150	97	110	119	298	174	-150	-21	202	97	34
28	133	e250	71	28	59	403	217	148	8.7	59	112	502
29	e-220	e160	59	-39	---	360	140	282	44	2.7	31	132
30	e50	e150	36	121	---	141	330	277	.91	55	121	142
31	e60	---	56	89	---	276	---	55	---	16	93	---
TOTAL	22876	5502	8264	6000.2	7583	9034	2723	3235.59	902.61	1950.7	2506.6	3265.1
MEAN	738	183	267	194	271	291	90.8	104	30.1	62.9	80.9	109
MAX	3220	310	693	533	1140	1110	330	552	285	202	217	502
MIN	-220	-150	36	-75	-249	-35	-65	-150	-119	-8.0	-19	-12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1997, BY WATER YEAR (WY)

MEAN	738	183	267	194	271	291	90.8	104	30.1	328	140	775
MAX	738	183	267	194	271	291	90.8	104	30.1	594	199	1441
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1996	1996	1996
MIN	738	183	267	194	271	291	90.8	104	30.1	62.9	80.9	109
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997

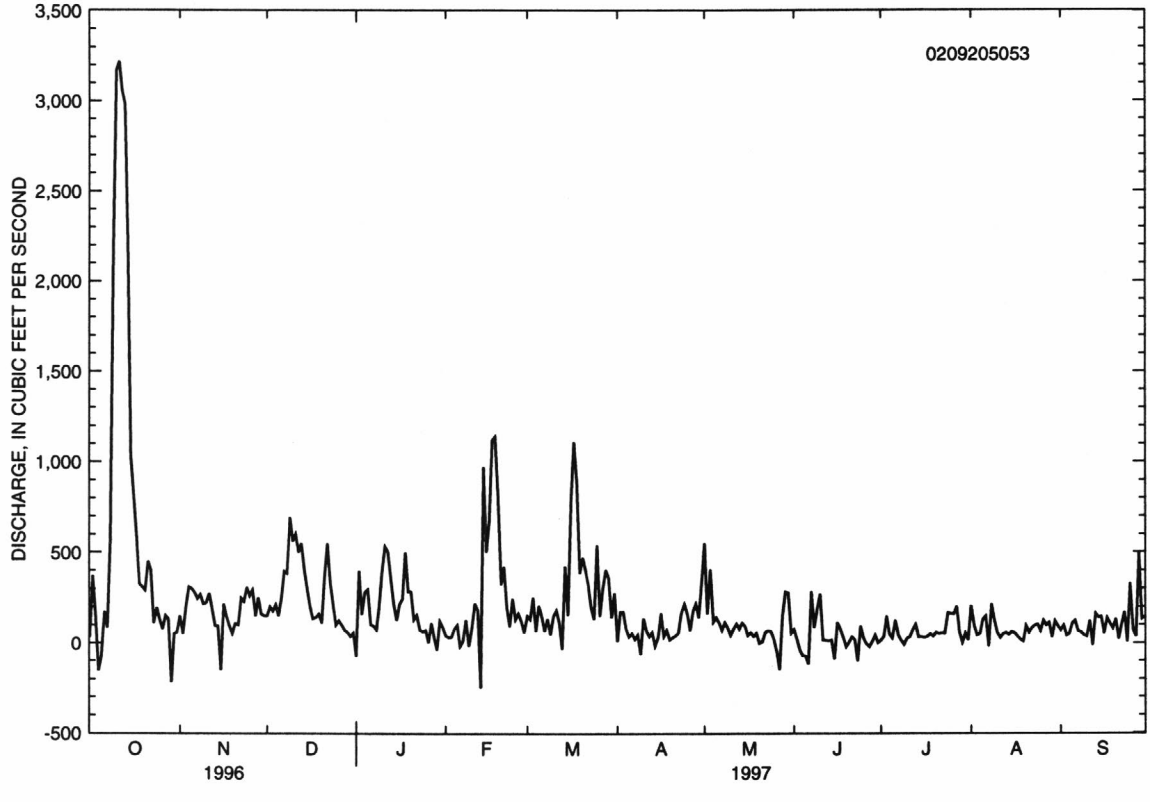
NEUSE RIVER BASIN

0209205053 SWIFT CREEK AT NC HWY 43 NEAR STREETS FERRY, NC--Continued

SUMMARY STATISTICS	FOR 1997 WATER YEAR		WATER YEARS 1996 - 1997		
ANNUAL TOTAL	73842.80				
ANNUAL MEAN	202		202		
HIGHEST ANNUAL MEAN			202		1997
LOWEST ANNUAL MEAN			202		1997
HIGHEST DAILY MEAN	3220	Oct 11	3560	Sep 7	1996
LOWEST DAILY MEAN	-249	Feb 13	-471	Jul 11	1996
ANNUAL SEVEN-DAY MINIMUM	-21	May 31	-56	Jul 6	1996
INSTANTANEOUS PEAK FLOW	4370	Oct 11	NOT DETERMINED		
INSTANTANEOUS PEAK STAGE	4.43	Oct 8	5.52*	Sep 6	1996
INSTANTANEOUS LOW FLOW	-657	Oct 8	-2380	Jul 12	1996
10 PERCENT EXCEEDS	404		602		
50 PERCENT EXCEEDS	110		129		
90 PERCENT EXCEEDS	10		16		

e Estimated.

Note.--Negative values indicate reverse flow.



NEUSE RIVER BASIN

02092162 NEUSE RIVER AT NEW BERN, NC

LOCATION.--Lat 35°06'33", long 77°01'59"(revised), Craven County, Hydrologic Unit 03020204, at bridge on U.S. Highway 17 at New Bern, and 0.9 mi upstream from Trent River.

DRAINAGE AREA.--4,470 mi^2.

TIDAL-ELEVATION RECORDS

PERIOD OF RECORD.--March 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 10 ft above sea level; gage readings have been adjusted to sea level.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 8.28 ft, Sept. 5, 1996; minimum elevation, -3.96 ft, Mar. 14, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 4.07 ft, Oct. 8; minimum elevation, -1.86 ft, Mar 31.

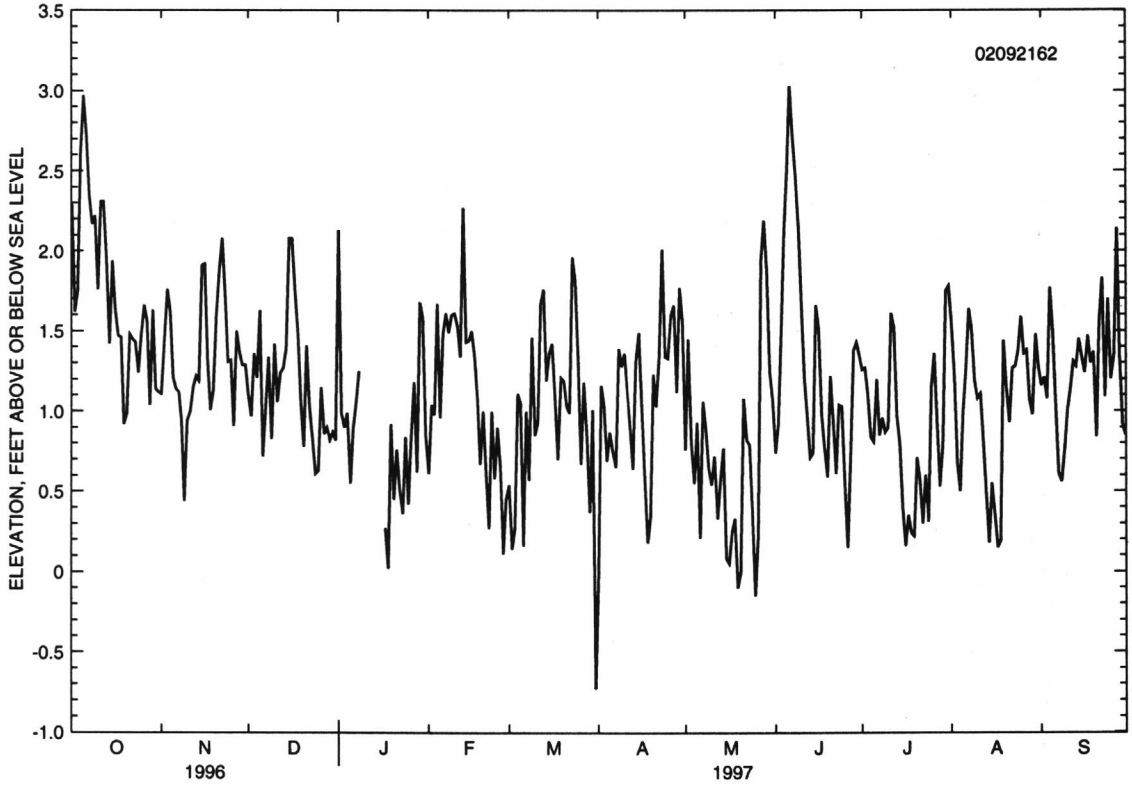
ELEVATION, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.29	1.11	1.10	2.13	.61	.54	-.04	.76	.74	1.26	1.55	1.16
2	1.62	1.45	.97	.99	1.04	.14	1.16	1.45	.92	1.27	1.21	1.21
3	1.75	1.76	1.36	.90	.98	.27	1.03	.80	1.48	1.10	.68	1.08
4	2.61	1.62	1.21	.99	1.67	1.11	.69	.55	2.11	.84	.50	1.77
5	2.97	1.21	1.63	.55	.96	1.05	.87	.93	2.49	.81	1.00	1.50
6	2.73	1.14	.72	.89	1.48	.16	.74	.21	3.03	1.20	1.27	1.04
7	2.35	1.12	1.02	1.05	1.61	1.00	.65	1.06	2.72	.85	1.64	.61
8	2.17	.94	1.34	1.25	1.49	.57	1.39	.89	2.48	.96	1.50	.56
9	2.22	.44	.83	---	1.60	1.46	1.28	.64	2.13	.87	1.19	.76
10	1.76	.94	1.42	---	1.61	.85	1.36	.54	1.64	.90	1.08	1.01
11	2.31	1.00	1.06	---	1.53	.93	1.12	.72	1.21	1.61	1.11	1.14
12	2.31	1.15	1.24	---	1.34	1.67	.90	.33	.97	1.52	.81	1.31
13	1.94	1.22	1.27	---	2.27	1.76	.64	.57	.71	.97	.49	1.28
14	1.42	1.19	1.39	---	1.43	1.19	1.31	.77	.74	.80	.18	1.45
15	1.94	1.91	2.08	---	1.44	1.36	1.49	.08	1.66	.38	.55	1.34
16	1.63	1.92	2.08	---	1.50	1.42	1.03	.05	1.51	.16	.36	1.24
17	1.47	1.32	1.76	.27	1.34	1.08	.59	.25	.99	.35	.15	1.47
18	1.46	1.01	1.48	.02	1.08	.70	.18	.33	.76	.24	.19	1.30
19	.92	1.13	1.05	.92	.67	1.21	.34	-.10	.59	.22	1.44	1.37
20	.99	1.59	.78	.45	1.00	1.19	1.23	.00	1.22	.71	1.15	.84
21	1.48	1.88	1.41	.76	.61	1.03	1.03	1.08	.94	.57	.93	1.55
22	1.45	2.08	1.03	.51	.27	.99	1.34	.82	.61	.30	1.27	1.83
23	1.43	1.73	.83	.36	1.00	1.96	2.01	.79	1.04	.60	1.28	1.09
24	1.24	1.31	.61	.84	.58	1.81	1.34	.37	1.03	.31	1.38	1.70
25	1.48	1.32	.63	.42	.90	1.33	1.33	-.15	.55	1.15	1.59	1.20
26	1.66	.91	1.15	.85	.65	.67	1.60	.22	.15	1.36	1.36	1.35
27	1.56	1.50	.86	1.18	.11	1.18	1.66	1.94	.74	.93	1.38	2.14
28	1.04	1.37	.90	.62	.45	.85	1.12	2.19	1.38	.53	1.07	1.33
29	1.63	1.29	.82	1.68	---	.37	1.77	1.88	1.43	.79	.98	.92
30	1.14	1.29	.87	1.58	---	1.01	1.56	1.25	1.35	1.75	1.48	.85
31	1.12	---	.82	.85	---	-.73	---	1.06	---	1.78	1.28	---
MEAN	1.74	1.33	1.15	---	1.12	.97	1.09	.72	1.31	.87	1.03	1.25
MAX	2.97	2.08	2.08	---	2.27	1.96	2.01	2.19	3.03	1.78	1.64	2.14
MIN	.92	.44	.61	---	.11	-.73	-.04	-.15	.15	.16	.15	.56

NEUSE RIVER BASIN

02092162 NEUSE RIVER AT NEW BERN, NC--Continued



NEUSE RIVER BASIN

02092500 TRENT RIVER NEAR TRENTON, NC

LOCATION.--Lat 35°03'54", long 77°27'24", Jones County, Hydrologic Unit 03020204, on left bank 50 ft downstream of Free Bridge on Secondary Road 1129, 800 ft downstream of Little Chinquapin Branch, 1.5 mi southwest of Phillips Crossroads, and 6 mi west of Trenton.

DRAINAGE AREA.--168 mi^2.

PERIOD OF RECORD.--January 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 19.15 ft above sea level. Prior to Mar. 21, 1951, nonrecording gage on bridge 50 ft upstream at same datum. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Minimum discharge for period of record also occurred Oct. 24, 25, 26, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1928 reached a stage of 17.3 ft; discharge, 7,600 ft^3/s, from information provided by North Carolina State Highway Commission.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	81	146	147	146	217	83	194	15	e8.0	e180	e14
2	108	79	157	169	139	215	79	219	15	e7.0	e170	e13
3	108	78	177	202	132	217	75	225	16	e6.5	e160	e13
4	116	77	199	230	124	225	72	208	23	e6.0	e150	e12
5	126	77	226	254	119	226	69	171	74	e5.5	e140	e12
6	134	77	257	267	116	217	67	131	85	e5.5	e110	e11
7	137	79	296	262	114	198	64	97	85	e10	e85	e10
8	339	80	396	244	115	175	62	82	79	e20	e78	e9.5
9	678	84	461	235	126	151	56	74	72	e25	e57	e9.2
10	1420	87	499	282	141	128	49	69	66	e20	e47	e9.0
11	2100	89	505	334	161	109	43	64	59	e17	e38	e10
12	1940	93	469	416	176	94	39	59	e55	e12	e33	e11
13	1490	93	417	472	180	87	37	56	e50	e7.0	e28	e14
14	1010	90	362	455	215	110	36	55	e45	e5.0	e24	e15
15	660	88	312	402	408	277	34	51	e40	e5.0	e18	e24
16	472	85	270	362	619	411	32	44	e38	e6.0	e16	e30
17	372	82	235	365	860	539	31	39	e34	e15	e14	e30
18	311	81	206	384	848	538	30	34	e30	e18	e12	e26
19	278	79	196	418	732	492	28	32	e27	e20	e8.5	e30
20	245	78	219	416	577	443	26	35	e25	e17	e8.0	e40
21	216	77	245	383	472	369	25	31	e23	e15	e8.0	e50
22	197	89	288	340	396	312	25	25	e20	e13	e48	e45
23	181	121	331	296	350	270	39	21	e18	e9.0	e50	e34
24	166	157	340	261	318	235	64	18	e17	e8.0	e46	e26
25	149	192	321	236	293	202	73	16	e16	e7.0	e38	e20
26	131	210	289	218	271	171	77	15	e15	e30	e29	e23
27	117	215	256	201	251	144	79	20	e13	e60	e24	e24
28	108	204	226	187	231	124	84	21	e12	e90	e20	e26
29	92	184	199	174	---	109	112	20	e10	e140	e18	42
30	87	162	176	162	---	93	159	18	e10	e160	e17	60
31	84	---	160	153	---	87	---	16	---	e200	e15	---
TOTAL	13690	3268	8836	8927	8630	7185	1749	2160	1087	967.5	1689.5	692.7
MEAN	442	109	285	288	308	232	58.3	69.7	36.2	31.2	54.5	23.1
MAX	2100	215	505	472	860	539	159	225	85	200	180	60
MIN	84	77	146	147	114	87	25	15	10	5.0	8.0	9.0
CFSM	2.63	.65	1.70	1.71	1.83	1.38	.35	.41	.22	.19	.32	.14
IN.	3.03	.72	1.96	1.98	1.91	1.59	.39	.48	.24	.21	.37	.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1997, BY WATER YEAR (WY)

MEAN	100	90.0	169	301	323	347	213	118	129	153	176	131
MAX	864	295	551	703	746	963	685	435	768	1381	1587	1577
(WY)	1972	1963	1958	1978	1973	1983	1973	1978	1961	1962	1955	1955
MIN	1.58	1.80	6.65	17.2	31.8	36.5	23.1	10.2	2.77	4.78	1.81	2.55
(WY)	1955	1955	1955	1955	1955	1955	1955	1985	1985	1993	1993	1995

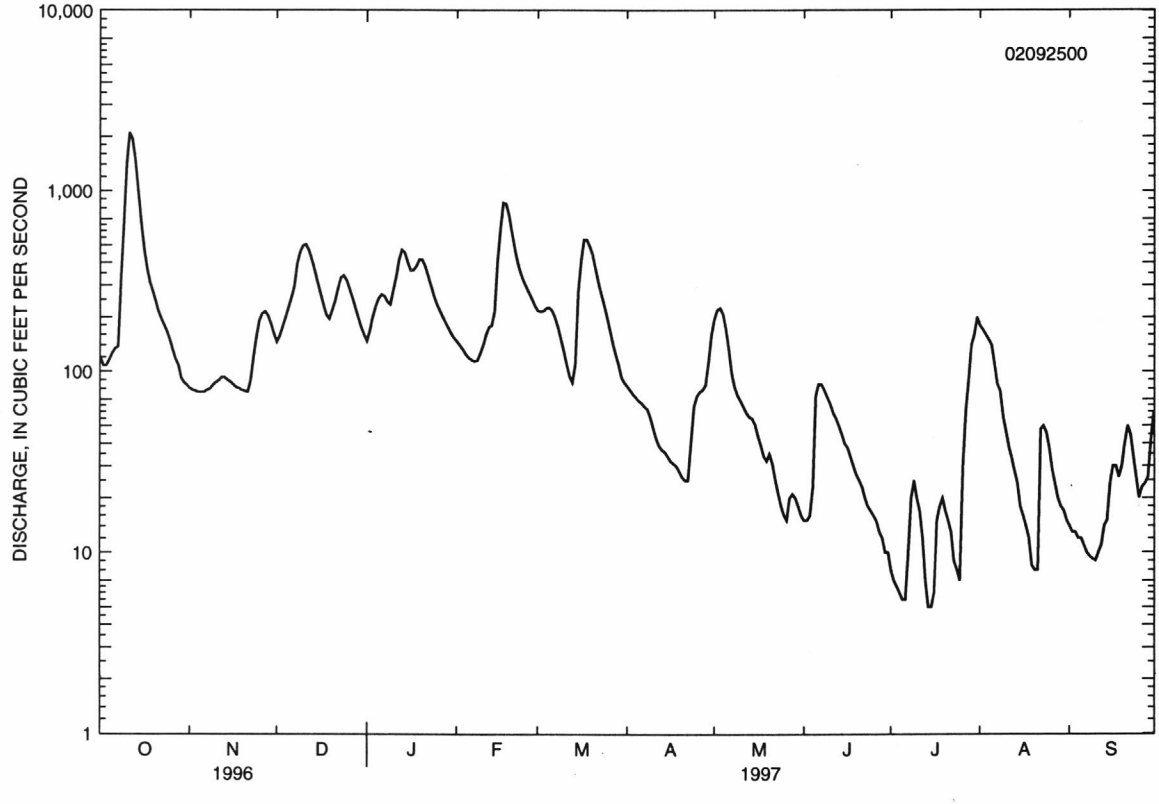
NEUSE RIVER BASIN

02092500 TRENT RIVER NEAR TRENTON, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1951 - 1997	
ANNUAL TOTAL	103102.0		58881.7			
ANNUAL MEAN	282		161		189	
HIGHEST ANNUAL MEAN					316	1960
LOWEST ANNUAL MEAN					79.8	1985
HIGHEST DAILY MEAN	2100	Oct 11	2100	Oct 11	8580	Sep 21 1955
LOWEST DAILY MEAN	4.4	Jun 7	5.0	Jul 14	.33	Oct 7 1993
ANNUAL SEVEN-DAY MINIMUM	6.4	May 22	6.9	Jun 30	.39	Oct 22 1973
INSTANTANEOUS PEAK FLOW			2120	Oct 11	9100	Sep 21 1955
INSTANTANEOUS PEAK STAGE			15.16	Oct 11	17.84	Sep 21 1955
INSTANTANEOUS LOW FLOW			NOT DETERMINED		.30*	Oct 23 1974
ANNUAL RUNOFF (CFSM)	1.68		.96		1.13	
ANNUAL RUNOFF (INCHES)	22.83		13.04		15.29	
10 PERCENT EXCEEDS	567		370		470	
50 PERCENT EXCEEDS	167		87		80	
90 PERCENT EXCEEDS	24		14		8.4	

e Estimated.

* See REMARKS.



NEUSE RIVER BASIN

02092554 TRENT RIVER AT POLLOCKSVILLE, NC

LOCATION.--Lat 35°00'38", long 77°13'10", Jones County, Hydrologic Unit 03020204, at downstream side of bridge on U.S. Highway 17, 0.5 mi downstream from Goshen Branch, and 0.2 mi northeast of Pollocksville.

DRAINAGE AREA.--370 mi^2.

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

GAGE.--Water-stage recorder and acoustic velocity meter. Datum of gage is 10 ft below sea level, from topographic map. Satellite telemetry at station.

ANNUAL MEAN AND SUMMARY STATISTICS.--Values represent one water year of complete discharge (1997).

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, FOR PERIOD JULY 1996 TO SEPTEMBER 1996

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										e40	705	217
2										e100	792	238
3										e150	799	59
4										38	907	368
5										151	785	-448
6										40	953	2380
7										262	757	3210
8										188	691	2690
9										80	585	2410
10										-134	434	2390
11										-98	418	e2470
12										-557	487	e2770
13										1770	393	3000
14										1090	370	3220
15										1090	400	3220
16										1120	352	3140
17										e1280	300	2900
18										1460	251	2510
19										1610	166	2180
20										1540	211	1950
21										1440	288	1700
22										1270	217	1550
23										1000	224	1340
24										821	213	1150
25										664	91	861
26										514	161	856
27										446	144	853
28										445	200	748
29										684	87	535
30										713	177	416
31										688	58	---
TOTAL										19905	12616	50883
MEAN										642	407	1696
MAX										1770	953	3220
MIN										-557	58	-448

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD JULY 1996 TO SEPTEMBER 1996

MEAN										642	407	1696
MAX										1770	953	3220
(WY)										1996	1996	1996
MIN										-557	58	-448
(WY)										1996	1996	1996

NEUSE RIVER BASIN

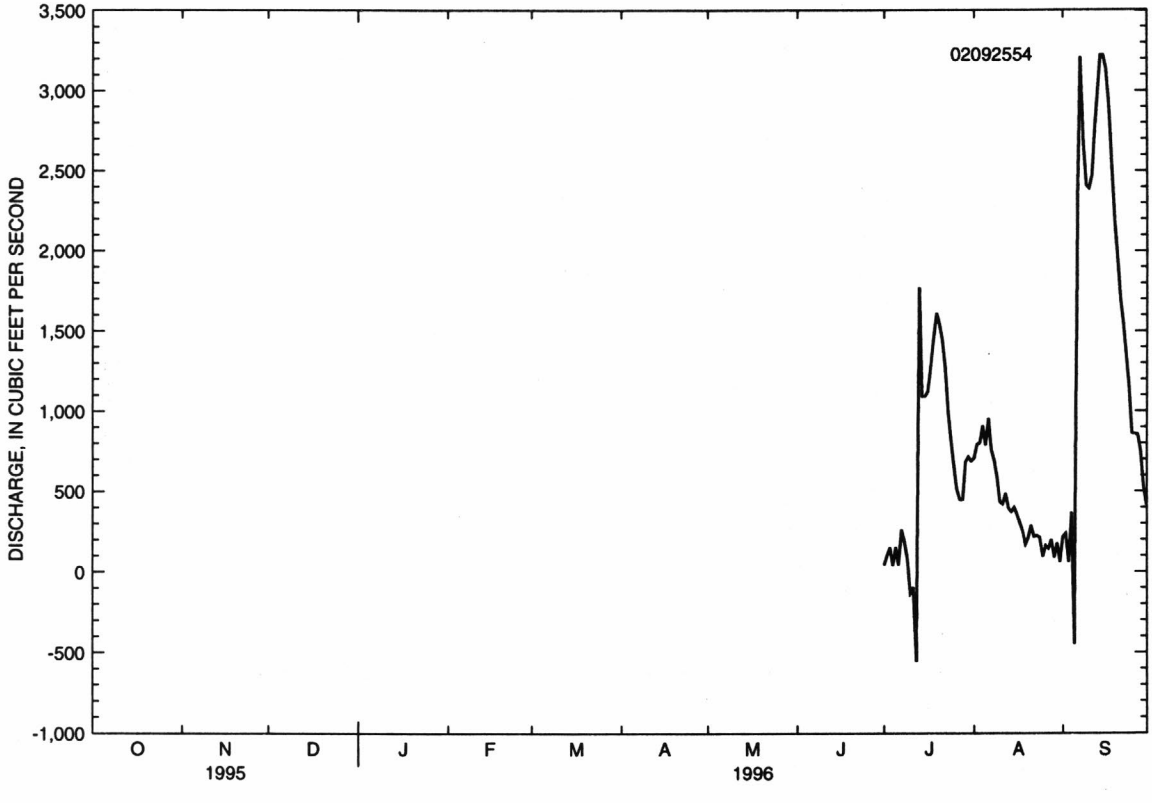
02092554 TRENT RIVER AT POLLOCKSVILLE, NC--Continued

SUMMARY STATISTICS FOR PERIOD JULY 1996 TO SEPTEMBER 1996

HIGHEST DAILY MEAN	3220	Sep 14
LOWEST DAILY MEAN	-557	Jul 12
INSTANTANEOUS PEAK FLOW	4210	Sep 6
INSTANTANEOUS PEAK STAGE	7.77	Sep 6
INSTANTANEOUS LOW FLOW	-3560	Sep 6

e Estimated.

Note--Negative values indicate reverse flow.



NEUSE RIVER BASIN

02092554 TRENT RIVER AT POLLOCKSVILLE, NC--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	475	363	453	304	470	703	56	542	256	49	139	43
2	612	140	494	851	420	660	273	e240	49	54	185	56
3	255	301	474	645	428	665	325	e450	-13	137	141	13
4	272	386	534	642	378	441	278	e350	-131	58	85	-53
5	250	374	417	701	454	643	226	e400	-33	-33	-22	60
6	662	307	612	517	336	598	323	e300	-41	119	11	128
7	424	282	621	649	379	492	201	e10	442	113	-67	94
8	1170	370	653	634	494	611	120	e160	277	32	199	45
9	2470	284	861	628	361	353	104	e230	320	61	123	12
10	2320	252	860	848	456	420	303	e90	461	99	110	19
11	2110	297	955	823	483	521	286	e230	246	84	51	58
12	2240	287	908	823	519	300	e200	e330	246	245	118	-100
13	2430	272	927	830	22	302	e210	e200	212	304	134	106
14	2570	310	836	829	956	596	e100	e100	123	223	103	60
15	2390	-60	780	803	977	622	154	e300	-37	214	11	107
16	2430	523	e805	947	1140	890	347	80	427	92	48	-.09
17	2110	343	829	918	1240	1010	212	229	374	42	86	6.9
18	1730	343	722	992	e1350	959	202	131	202	71	-70	64
19	1420	221	748	866	1460	864	79	199	74	11	-158	40
20	1100	243	551	948	1340	1070	77	19	30	-26	133	172
21	875	119	632	810	1520	1020	187	1.3	168	84	-3.5	-184
22	840	452	734	883	1400	943	22	174	157	81	59	6.8
23	704	473	674	e805	1200	e250	70	142	-134	-37	58	186
24	609	440	667	726	1210	e160	299	250	194	122	43	-114
25	528	432	586	755	955	e1140	238	175	256	-36	26	282
26	453	472	644	579	926	615	176	-116	144	98	100	-60
27	479	333	618	643	842	614	259	-293	-126	235	65	-73
28	e280	480	642	510	686	506	339	158	8.8	135	180	252
29	e-50	436	592	414	---	490	313	363	46	-95	57	81
30	e140	432	503	612	---	338	433	238	70	-1.7	-17	142
31	276	---	495	552	---	570	---	226	---	28	107	---
TOTAL	34574	9907	20827	22487	22402	19366	6412	5908.3	4267.8	2562.3	2034.5	1449.61
MEAN	1115	330	672	725	800	625	214	191	142	82.7	65.6	48.3
MAX	2570	523	955	992	1520	1140	433	542	461	304	199	282
MIN	-50	-60	417	304	22	160	22	-293	-134	-95	-158	-184

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1997, BY WATER YEAR (WY)

MEAN	1115	330	672	725	800	625	214	191	142	362	236	872
MAX	2570	523	955	992	1520	1140	433	542	461	642	407	1696
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1996	1996	1996
MIN	-50	-60	417	304	22	160	22	-293	-134	-557	-158	-448
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1996	1997	1996

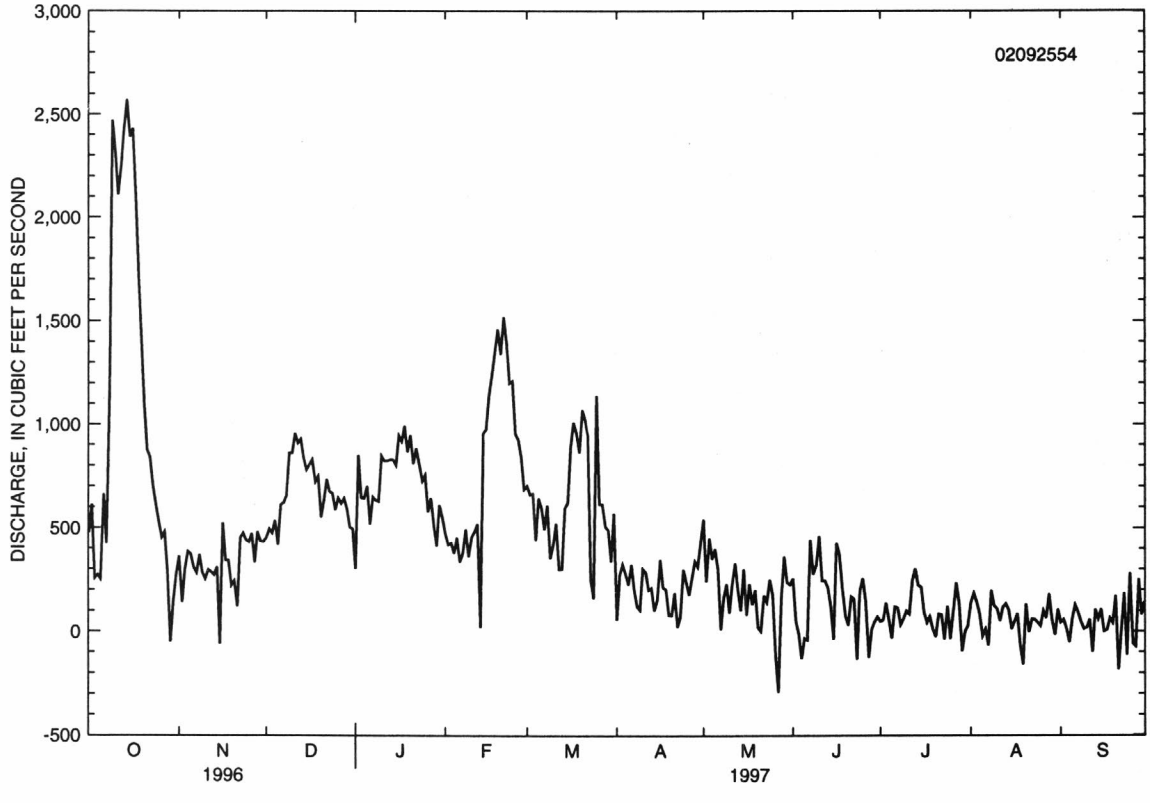
NEUSE RIVER BASIN

02092554 TRENT RIVER AT POLLOCKSVILLE, NC--Continued

SUMMARY STATISTICS	FOR 1997 WATER YEAR		WATER YEARS 1996 - 1997	
ANNUAL TOTAL	152197.51			
ANNUAL MEAN	417			
HIGHEST DAILY MEAN	2570	Oct 14	3220	Sep 14 1996
LOWEST DAILY MEAN	-293	May 27	-557	Jul 12 1996
ANNUAL SEVEN-DAY MINIMUM	6.3	Sep 21	6.3	Sep 21 1997
INSTANTANEOUS PEAK FLOW	2930	Oct 8	4210	Sep 6 1996
INSTANTANEOUS PEAK STAGE	4.73	Oct 8	7.77	Sep 6 1996
INSTANTANEOUS LOW FLOW	-1270	Sep 21	-3560	Sep 6 1996

e Estimated.

Note--Negative figures indicate reverse flow.



NEW RIVER BASIN

02093000 NEW RIVER NEAR GUM BRANCH, NC

LOCATION.--Lat 34°50'56", long 77°31'11", Onslow County, Hydrologic Unit 03030001, on right bank 5 ft downstream of Secondary Road 1314, 0.7 mi downstream of Jenkins Swamp, 1.8 mi southwest of Gum Branch, and 3.8 mi southeast of Richlands.

DRAINAGE AREA.--94 mi^2.

PERIOD OF RECORD.--August 1949 to September 1973. July 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers). Aug. 19, 1949, to Mar. 22, 1950, nonrecording gage and Mar. 23, 1950, to Mar. 25, 1969, water-stage recorder at site 0.2 mi upstream at 2.52 ft. Mar. 26, 1969, to Sept. 1973 water-stage recorder at present site and datum. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges and those below 5 ft^3/s, which are poor. Maximum gage height for period of record, from floodmark, site and datum then in use. Minimum discharge for period of record also occurred Oct. 3, 4, 1993. Low flows affected by tide.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1908 reached a stage of about 18 ft at former site and datum, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	e54	e95	81	93	161	45	123	23	11	30	8.8
2	128	e53	e110	261	87	169	42	89	26	13	20	8.2
3	122	e53	e130	288	82	145	42	73	26	14	15	8.5
4	108	e52	e140	244	78	127	42	81	33	13	12	8.2
5	98	e52	e160	192	83	112	40	65	34	11	15	9.0
6	93	e50	e170	157	82	106	39	55	38	11	57	10
7	90	e52	e190	134	77	95	39	48	40	11	29	8.6
8	431	e53	e260	117	76	85	36	43	37	10	18	6.9
9	958	e56	e300	150	86	80	34	41	32	8.5	14	6.5
10	1110	e58	e340	265	84	78	32	37	28	16	12	6.8
11	855	e59	e330	272	87	e75	32	34	24	45	11	12
12	523	e62	e320	e240	85	e72	34	33	20	19	9.9	14
13	325	e61	e270	e180	80	68	37	43	19	13	8.9	12
14	242	e59	e240	143	183	146	31	66	19	11	12	11
15	195	e58	e210	125	448	420	29	49	31	9.1	36	75
16	165	e57	e180	159	608	427	28	41	24	8.2	35	172
17	144	e55	e160	240	574	289	28	36	21	7.7	17	69
18	153	e54	e150	213	387	183	27	32	19	7.8	14	51
19	e140	e53	e140	168	268	138	26	29	16	7.5	15	101
20	e130	e52	e150	141	206	141	27	29	15	9.1	17	54
21	e120	e51	e160	127	172	132	28	26	14	34	42	35
22	e110	e58	e180	115	189	115	46	25	13	20	33	27
23	e100	e80	e230	110	177	98	88	23	12	12	21	23
24	e95	e100	e220	104	156	84	98	23	11	13	15	19
25	e85	e140	e210	113	135	74	68	22	12	44	12	33
26	e80	e150	e180	120	121	69	53	24	12	18	11	39
27	e75	e145	e150	107	125	63	46	37	11	13	9.6	34
28	e70	e140	e140	100	123	58	83	30	12	11	9.6	96
29	e65	e130	e100	97	---	55	187	26	11	8.9	9.1	109
30	e60	e120	e85	92	---	51	163	24	11	23	8.4	64
31	e55	---	e71	96	---	48	---	23	---	52	9.2	---
TOTAL	7063	2217	5771	4951	4952	3964	1550	1330	644	504.8	577.7	1131.5
MEAN	228	73.9	186	160	177	128	51.7	42.9	21.5	16.3	18.6	37.7
MAX	1110	150	340	288	608	427	187	123	40	52	57	172
MIN	55	50	71	81	76	48	26	22	11	7.5	8.4	6.5
CFSM	2.42	.79	1.98	1.70	1.88	1.36	.55	.46	.23	.17	.20	.40
IN.	2.80	.88	2.28	1.96	1.96	1.57	.61	.53	.25	.20	.23	.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1997@, BY WATER YEAR (WY)

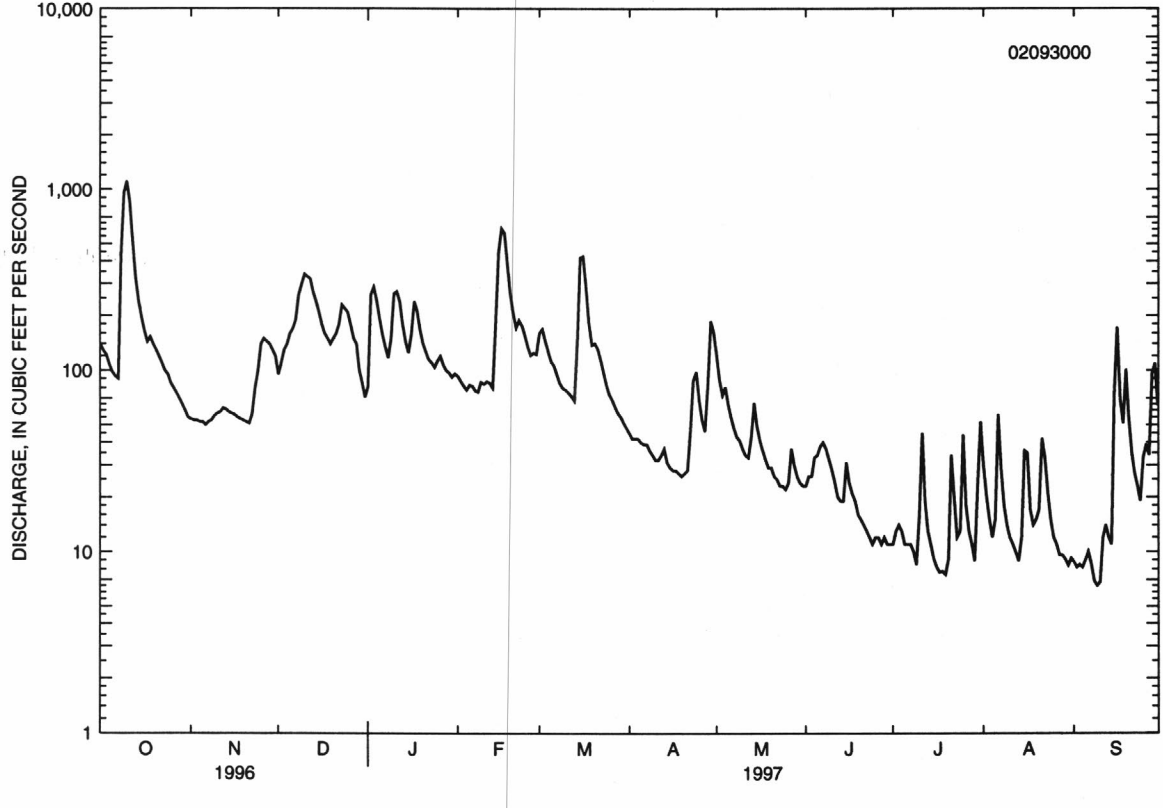
MEAN	77.7	63.0	92.8	155	172	181	115	70.7	94.7	122	109	97.8
MAX	553	190	277	374	403	418	377	188	423	717	734	887
(WY)	1972	1970	1958	1993	1973	1959	1973	1969	1961	1962	1955	1955
MIN	2.01	4.30	13.3	32.4	33.1	27.7	21.0	16.4	11.3	7.21	6.25	4.25
(WY)	1955	1955	1955	1955	1955	1955	1955	1957	1970	1993	1954	1954

NEW RIVER BASIN

02093000 NEW RIVER NEAR GUM BRANCH, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1949 - 1997@	
ANNUAL TOTAL	71381		34656.0			
ANNUAL MEAN	195		94.9	113		
HIGHEST ANNUAL MEAN					208	1972
LOWEST ANNUAL MEAN					59.9	1953
HIGHEST DAILY MEAN	2530	Sep 7	1110	Oct 10	6490	Sep 20 1955
LOWEST DAILY MEAN	11	Jun 8	6.5	Sep 9	1.9	Oct 6 1954
ANNUAL SEVEN-DAY MINIMUM	15	Jun 2	8.0	Sep 4	2.0	Oct 4 1954
INSTANTANEOUS PEAK FLOW			1140	Oct 10	7900	Sep 20 1955
INSTANTANEOUS PEAK STAGE			13.82	Oct 10	19.99*	Sep 20 1955
INSTANTANEOUS LOW FLOW			5.3	Sep 10	1.8*	Oct 7 1954
ANNUAL RUNOFF (CFSM)	2.07		1.01		1.20	
ANNUAL RUNOFF (INCHES)	28.25		13.71		16.30	
10 PERCENT EXCEEDS	420		193		245	
50 PERCENT EXCEEDS	104		57		52	
90 PERCENT EXCEEDS	29		11		12	

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



CAPE FEAR RIVER BASIN

02093800 REEDY FORK NEAR OAK RIDGE, NC

LOCATION.--Lat 36°10'22", long 79°57'12", Guilford County, Hydrologic Unit 03030002, on left bank at downstream side of bridge on Secondary Road 2128, 0.8 mi downstream of Beaver Creek, and 2 mi east of Oak Ridge.

DRAINAGE AREA.--20.6 mi^2.

PERIOD OF RECORD.--October 1955 to current year.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 771.30 ft above sea level. Prior to Dec. 13, 1955, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Some diurnal fluctuation at medium and low flows caused by upstream mill. Maximum discharge for period of record, from rating curve extended above 1,500 ft^3/s on basis of contracted-opening measurement; gage height: 10.94 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	14	179	21	24	62	23	63	20	13	12	7.1
2	85	25	113	20	22	45	23	49	19	15	11	9.9
3	50	17	43	20	22	72	23	50	38	13	10	7.9
4	28	14	33	20	24	69	22	47	22	11	11	7.0
5	23	14	38	25	25	47	22	36	18	12	14	6.6
6	19	14	85	24	22	82	38	33	19	12	11	6.4
7	18	15	51	21	20	44	42	29	20	11	9.9	6.2
8	62	39	46	21	31	36	29	25	18	11	10	6.2
9	38	46	34	65	28	32	25	25	17	11	9.7	6.4
10	27	24	30	52	26	32	23	24	17	10	9.2	14
11	21	20	28	39	25	30	23	22	16	9.6	9.2	13
12	18	19	27	30	23	28	38	22	17	9.0	8.9	8.5
13	17	19	69	27	23	27	34	22	37	9.1	8.9	7.6
14	16	18	41	24	51	37	26	21	27	8.6	9.0	7.5
15	15	18	32	25	217	33	23	21	19	8.6	8.6	7.4
16	15	17	29	67	81	27	22	20	17	14	8.1	7.2
17	15	17	29	41	45	26	21	19	17	16	7.3	7.0
18	16	18	28	31	36	27	20	19	16	10	6.6	6.9
19	23	22	33	27	33	100	20	18	15	11	6.5	6.8
20	16	19	27	27	30	87	20	19	14	11	12	6.9
21	14	20	25	26	30	47	20	20	14	12	15	6.2
22	14	25	24	26	34	39	46	18	14	18	8.3	6.2
23	14	20	25	26	28	33	112	18	14	26	7.5	6.1
24	14	19	27	25	26	31	60	18	13	20	7.6	15
25	13	17	35	31	24	30	37	20	13	15	8.2	19
26	13	45	28	25	25	37	30	27	12	13	8.5	11
27	15	29	28	23	26	30	40	22	15	12	7.7	9.2
28	15	23	25	32	47	28	162	19	13	12	7.5	9.4
29	14	21	24	29	---	28	758	18	12	14	8.4	9.8
30	14	24	24	26	---	25	103	18	12	17	7.3	8.2
31	13	---	22	25	---	25	---	18	---	15	7.1	---
TOTAL	748	652	1282	921	1048	1296	1885	800	535	399.9	286.0	256.6
MEAN	24.1	21.7	41.4	29.7	37.4	41.8	62.8	25.8	17.8	12.9	9.23	8.55
MAX	85	46	179	67	217	100	758	63	38	26	15	19
MIN	13	14	22	20	20	25	20	18	12	8.6	6.5	6.1
CFSM	1.17	1.06	2.01	1.44	1.82	2.03	3.05	1.25	.87	.63	.45	.42
IN.	1.35	1.18	2.32	1.66	1.89	2.34	3.40	1.44	.97	.72	.52	.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 1997, BY WATER YEAR (WY)

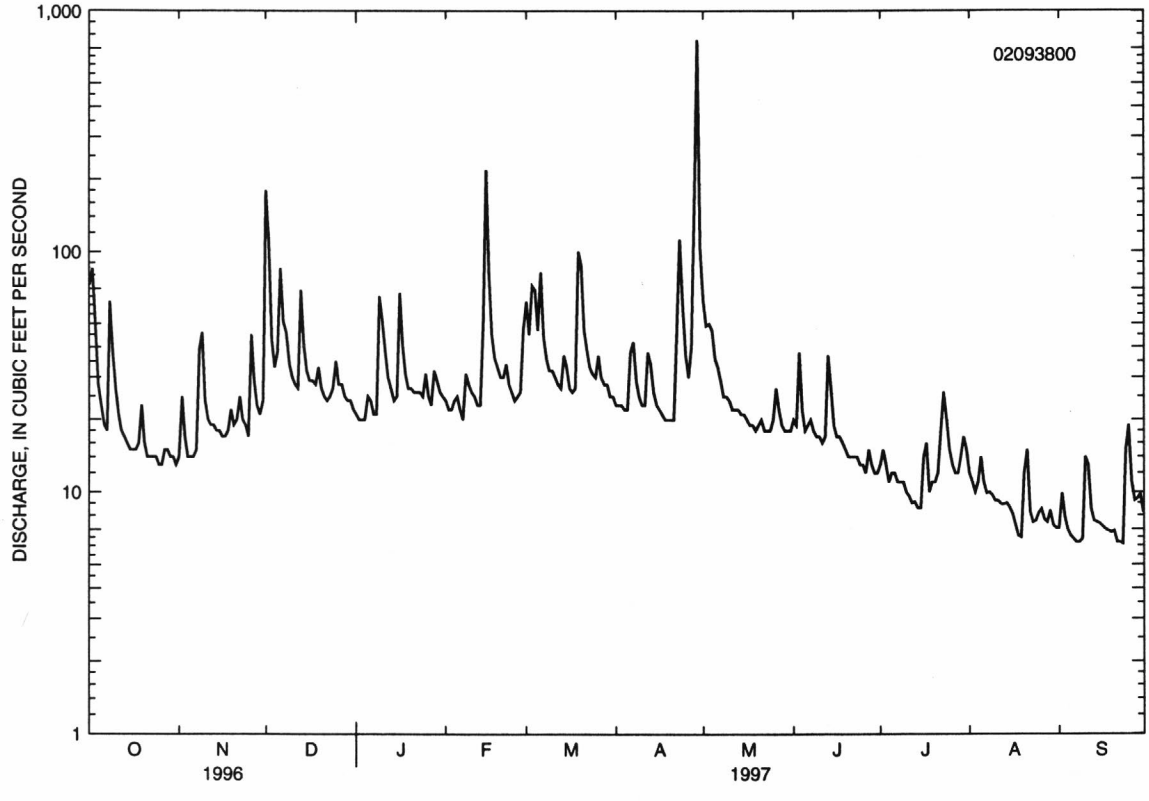
MEAN	19.0	17.9	23.8	30.4	35.5	37.9	29.8	23.3	19.4	19.8	16.9	18.1
MAX	80.2	40.4	48.7	82.0	78.7	102	75.8	58.9	74.4	152	62.0	100
(WY)	1991	1986	1963	1978	1979	1975	1987	1991	1982	1984	1978	1996
MIN	5.90	7.21	8.67	8.52	13.5	12.4	9.79	8.19	5.03	3.64	5.88	3.39
(WY)	1968	1968	1956	1956	1968	1967	1967	1986	1986	1977	1977	1968

CAPE FEAR RIVER BASIN

02093800 REEDY FORK NEAR OAK RIDGE, NC--Conintued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1956 - 1997	
ANNUAL TOTAL	11677.6		10109.5			
ANNUAL MEAN	31.9		27.7		24.3	
HIGHEST ANNUAL MEAN					42.7	1984
LOWEST ANNUAL MEAN					11.7	1967
HIGHEST DAILY MEAN	1090	Sep 6	758	Apr 29	1250	Jul 28 1984
LOWEST DAILY MEAN	5.4	Jul 23	6.1	Sep 23	1.7	Aug 7 1977
ANNUAL SEVEN-DAY MINIMUM	5.6	Jul 18	6.6	Sep 17	2.3	Sep 29 1968
INSTANTANEOUS PEAK FLOW			1880*	Apr 29	3950*	Oct 10 1959
INSTANTANEOUS PEAK STAGE			10.87	Apr 29	12.41	Sep 22 1979
INSTANTANEOUS LOW FLOW			5.7	Sep 23	1.2	Aug 7 1977
ANNUAL RUNOFF (CFSM)	1.55		1.34		1.18	
ANNUAL RUNOFF (INCHES)	21.09		18.26		16.01	
10 PERCENT EXCEEDS	46		45		39	
50 PERCENT EXCEEDS	18		21		15	
90 PERCENT EXCEEDS	9.3		8.6		7.1	

* See REMARKS.



CAPE FEAR RIVER BASIN

02094500 REEDY FORK NEAR GIBSONVILLE, NC

LOCATION.--Lat 36°10'31", long 79°37'01", Guilford County, Hydrologic Unit 03030002, on right bank 0.2 mi downstream of Huffines Mill on Secondary Road 2719, 1.2 mi upstream from Buffalo Creek, and 6 mi northwest of Gibsonville.

DRAINAGE AREA.--131 mi^2.

PERIOD OF RECORD.--September 1928 to current year.

REVISED RECORDS.--WSP 1303: 1929-40 (monthly and yearly runoff). WSP 1383: 1929-30, 1933(M), 1934, 1937(M), 1939-42(M), 1948. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder and rock-masonry control. Datum of gage is 626.88 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since 1923 by Lake Brandt (station 02094117), 14 mi upstream; since 1957 by Lake Higgins (station 02093981) on Brush Creek, a tributary to Lake Brandt; since 1943 by Richland Lake 12 mi. upstream from station; and since 1968 by Lake Townsend (station 02094305), 9 mi upstream from station. City of Greensboro diverted an average of 23.6 ft^3/s from Lake Brandt and an average of 36.1 ft^3/s from Lake Townsend for municipal water supply. Prior to regulation, maximum discharge: 11,600 ft^3/s, Sept. 25, 1947; gage height: 20.77 ft; minimum discharge not determined. Minimum discharge for regulated period also occurred July 30, Aug. 6, 7, 1977. Minimum discharge for current water year also occurred Sept. 24.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1916 reached a stage of 17.90 ft, from information by local resident; discharge, 8,640 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	17	608	20	26	425	25	943	205	19	15	11
2	47	28	529	21	23	426	24	216	54	21	13	11
3	33	24	464	21	21	949	24	313	182	19	13	11
4	20	18	441	20	21	567	23	61	89	16	12	13
5	15	16	239	22	24	435	24	37	43	15	15	15
6	15	16	484	27	24	433	30	31	91	16	14	11
7	14	16	444	93	22	78	53	27	161	15	14	9.5
8	1110	17	152	414	39	43	39	26	35	15	12	11
9	100	32	42	200	42	34	35	26	29	17	12	10
10	33	20	30	100	32	32	31	28	26	18	11	33
11	22	17	26	428	59	29	30	27	25	19	11	28
12	18	18	24	86	348	27	350	26	23	19	11	17
13	17	17	438	37	342	27	307	26	28	16	11	11
14	15	17	398	77	447	37	43	27	356	16	13	10
15	15	16	57	451	542	40	25	27	92	15	12	9.3
16	14	15	78	530	476	31	22	26	41	16	12	9.1
17	13	15	426	166	449	29	23	25	36	18	11	9.1
18	13	15	82	37	411	28	21	24	36	17	10	9.2
19	16	19	89	28	398	458	21	22	34	15	10	9.2
20	15	18	79	26	393	510	21	21	32	15	12	9.3
21	13	16	29	26	362	444	21	19	76	79	21	9.5
22	14	24	26	60	74	363	239	19	32	105	15	9.1
23	13	20	38	440	33	59	1100	23	26	99	12	8.9
24	14	17	375	432	29	33	681	23	23	158	11	14
25	15	32	63	378	25	69	76	25	20	81	10	32
26	15	245	28	53	26	422	55	31	19	28	13	19
27	15	235	29	29	30	262	473	38	20	21	13	15
28	15	60	26	38	65	42	1180	36	20	17	12	16
29	15	21	24	40	---	33	2780	35	18	14	11	26
30	15	53	22	32	---	27	2270	40	16	15	10	15
31	16	---	21	28	---	27	---	45	---	19	11	---
TOTAL	1726	1094	5811	4360	4783	6419	10046	2293	1888	973	383	421.2
MEAN	55.7	36.5	187	141	171	207	335	74.0	62.9	31.4	12.4	14.0
MAX	1110	245	608	530	542	949	2780	943	356	158	21	33
MIN	13	15	21	20	21	27	21	19	16	14	10	8.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1997*, BY WATER YEAR (WY)

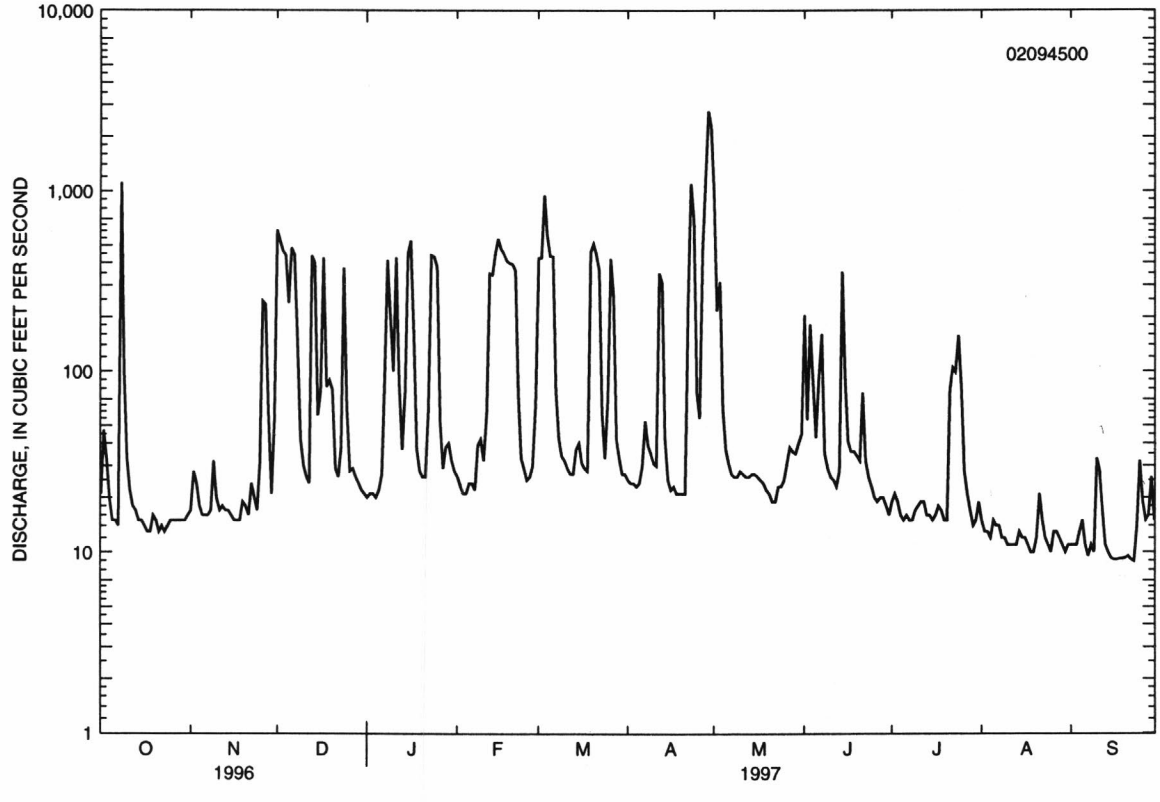
MEAN	57.2	47.2	94.9	184	155	180	143	96.3	67.6	66.6	44.1	67.2
MAX	432	165	221	644	456	613	613	365	477	596	216	518
(WY)	1991	1993	1973	1978	1979	1993	1987	1978	1982	1984	1978	1996
MIN	2.85	6.70	5.97	11.1	19.9	16.4	11.2	7.43	6.08	2.83	2.82	3.31
(WY)	1969	1970	1969	1981	1977	1976	1976	1986	1986	1986	1977	1983

CAPE FEAR RIVER BASIN

02094500 REEDY FORK NEAR GIBSONVILLE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1969 - 1997*	
ANNUAL TOTAL	46997.9		40197.2			
ANNUAL MEAN	128		110		100	
HIGHEST ANNUAL MEAN					188	1984
LOWEST ANNUAL MEAN					20.8	1981
HIGHEST DAILY MEAN	5230	Sep 6	2780	Apr 29	5230	Sep 6 1996
LOWEST DAILY MEAN	6.0	Sep 2	8.9	Sep 23	1.2	Oct 3 1968
ANNUAL SEVEN-DAY MINIMUM	8.4	Jul 18	9.2	Sep 17	1.4	Oct 1 1968
INSTANTANEOUS PEAK FLOW			2930	Apr 29	6330	Sep 6 1996
INSTANTANEOUS PEAK STAGE			10.21	Apr 29	15.65	Sep 6 1996
INSTANTANEOUS LOW FLOW			8.8*	Sep 23	1.4*	Jul 29 1977
10 PERCENT EXCEEDS	375		412		283	
50 PERCENT EXCEEDS	26		26		23	
90 PERCENT EXCEEDS	12		12		5.8	

* Regulated period only (1969-1997). See REMARKS.



CAPE FEAR RIVER BASIN

02096500 HAW RIVER AT HAW RIVER, NC

LOCATION.--Lat 36°05'13", long 79°22'02", Alamance County, Hydrologic unit 03030002, on left bank at Haw River, 650 ft downstream of Southern Railway bridge, 800 ft downstream of bridge on U.S. Highway 70 and State Highway 49, and 3 mi downstream of Stony Creek.

DRAINAGE AREA.--606 mi^2.

PERIOD OF RECORD.--October 1928 to current year.

REVISED RECORDS.--WSP 757: 1929 (M). WSP 782: 1934. WSP 1383: 1930,1932(M), 1933(m), 1936, 1943, 1944 (M), 1947(m). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 471.69 ft above sea level. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuations and occasional regulation at low flows. City of Burlington diverted an average of 3.5 ft^3/s from two Stony Creek Reservoirs (stations 02096003 and 02096432) for municipal water supply, about half of which was returned upstream of station as treated effluent, the remainder was returned downstream of station. Maximum discharge for period of record from rating curve extended above 38,000 ft^3/s, by logarithmic plotting; maximum gage height, 32.83 ft, from floodmark. Minimum discharge for the current water year also occurred Aug. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	568	219	2360	407	510	2000	429	4200	302	247	205	103
2	2060	338	3250	380	453	1740	360	1980	460	365	168	295
3	1040	550	1770	368	418	2680	341	1730	1790	233	159	201
4	702	292	1560	355	404	4230	333	1810	1580	167	145	118
5	571	265	1280	383	438	2030	324	837	742	160	175	117
6	485	249	2780	532	451	2970	341	613	626	192	190	108
7	383	242	1780	413	405	1600	850	494	726	159	162	105
8	2580	379	2140	663	605	1020	554	425	397	153	147	104
9	2380	786	1170	1770	1110	787	469	401	315	153	135	138
10	1000	420	812	2460	679	648	389	437	273	190	125	1030
11	734	344	626	1590	621	574	347	373	250	202	124	633
12	515	310	521	1240	777	509	558	334	235	137	120	305
13	413	270	1520	801	846	462	1470	326	365	127	128	180
14	363	250	1520	606	2610	672	650	311	2270	120	135	140
15	345	239	835	828	6240	1090	440	317	720	122	140	130
16	318	226	587	1990	3550	660	381	291	348	188	120	124
17	298	220	806	1730	2310	528	354	269	338	202	120	125
18	390	221	719	839	1800	477	333	257	334	177	126	120
19	409	290	794	617	1480	1680	297	246	276	153	100	118
20	359	313	827	526	1170	3320	280	243	250	157	206	114
21	318	281	515	492	1000	1880	286	261	271	165	330	111
22	285	417	427	e445	879	1610	2050	248	223	1420	210	107
23	262	379	394	e505	648	1060	4450	220	200	1660	164	106
24	253	307	637	e650	541	669	3740	211	193	1120	134	160
25	246	282	751	e810	483	517	1510	211	185	1070	122	626
26	238	475	500	e1000	453	989	1030	324	198	398	654	254
27	232	702	558	e590	511	1190	1090	712	233	293	237	182
28	248	519	588	e540	1020	618	4790	333	228	238	141	158
29	237	362	471	1100	---	546	12400	321	176	513	128	264
30	231	328	436	680	---	484	7490	263	159	269	124	188
31	223	---	415	591	---	441	---	239	---	262	111	---
TOTAL	18686	10475	33349	25901	32412	39681	48336	19237	14663	11012	5285	6464
MEAN	603	349	1076	836	1158	1280	1611	621	489	355	170	215
MAX	2580	786	3250	2460	6240	4230	12400	4200	2270	1660	654	1030
MIN	223	219	394	355	404	441	280	211	159	120	100	103
CFSM	.99	.58	1.78	1.38	1.91	2.11	2.66	1.02	.81	.59	.28	.36
IN.	1.15	.64	2.05	1.59	1.99	2.44	2.97	1.18	.90	.68	.32	.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1997, BY WATER YEAR (WY)

MEAN	400	412	578	896	1004	1020	820	486	425	400	357	410
MAX	2480	1286	1487	2977	2394	3276	2771	1948	2145	2348	1662	4373
(WY)	1960	1948	1946	1937	1960	1993	1987	1978	1982	1984	1939	1996
MIN	48.9	61.1	118	172	272	289	184	139	101	70.9	57.2	33.4
(WY)	1942	1954	1934	1956	1931	1967	1967	1986	1986	1932	1953	1954

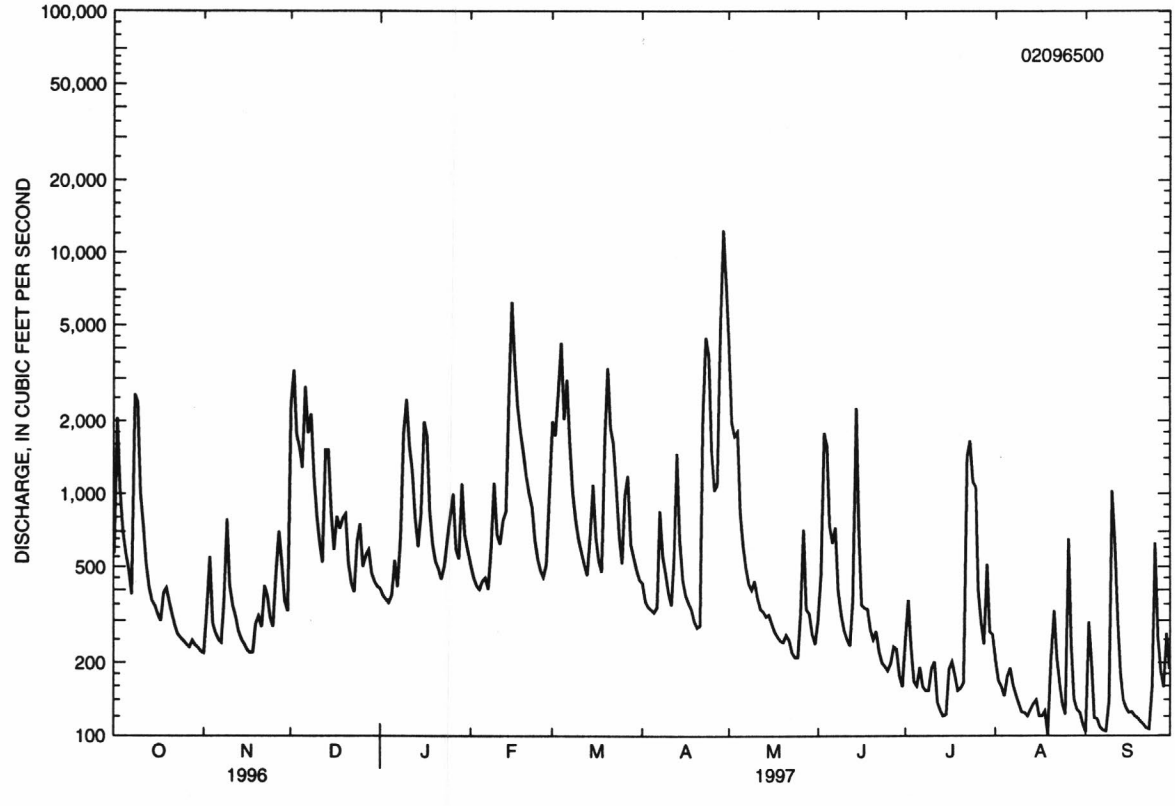
CAPE FEAR RIVER BASIN

02096500 HAW RIVER AT HAW RIVER, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1929 - 1997		
ANNUAL TOTAL	386099		265501				
ANNUAL MEAN	1055		727		599		
HIGHEST ANNUAL MEAN					1082		1996
LOWEST ANNUAL MEAN					229		1967
HIGHEST DAILY MEAN	42000	Sep 7	12400	Apr 29	42000	Sep 7	1996
LOWEST DAILY MEAN	95	Jul 22	100	Aug 19	5.0	Sep 6	1930
ANNUAL SEVEN-DAY MINIMUM	110	Jul 17	114	Sep 17	16	Oct 7	1954
INSTANTANEOUS PEAK FLOW			15500	Apr 29	51400*	Sep 6	1996
INSTANTANEOUS PEAK STAGE			22.34	Apr 29	32.83*	Sep 6	1996
INSTANTANEOUS LOW FLOW			90*	Aug 19	3.0	Sep 5	1930
ANNUAL RUNOFF (CFSM)	1.74		1.20		.99		
ANNUAL RUNOFF (INCHES)	23.70		16.30		13.42		
10 PERCENT EXCEEDS	1860		1730		1240		
50 PERCENT EXCEEDS	471		397		298		
90 PERCENT EXCEEDS	184		140		102		

e Estimated.

* See REMARKS.



CAPE FEAR RIVER BASIN

02096846 CANE CREEK NEAR ORANGE GROVE, NC

LOCATION.--Lat 35°59'13", long 79°12'23", Orange County, Hydrologic Unit 03030002, on right bank at downstream side of bridge on Secondary Road 1114, and 1.0 mi northwest of Orange Grove.

DRAINAGE AREA.--7.54 mi^2

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 510 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum discharge for period of record from rating curve extended above 500 ft^3/s, based on contracted-opening measurement of peak flow; maximum gage-height, 7.90 ft, from floodmark. No flow occurs at times most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	1.9	49	5.4	11	12	3.6	12	2.0	.65	.17	0
2	17	4.4	29	5.0	8.5	9.1	3.2	8.3	3.3	.91	.13	.02
3	7.3	3.5	12	5.0	7.5	13	3.1	38	2.3	.75	.08	.01
4	4.5	2.5	8.3	4.7	6.9	15	3.0	20	4.7	.63	.09	.01
5	3.5	2.3	16	4.8	7.2	9.9	3.0	10	1.7	.49	.09	0
6	3.1	2.5	39	4.7	6.6	22	2.9	8.0	1.4	.46	.09	0
7	2.9	2.5	19	4.2	5.9	11	3.0	6.5	2.0	.44	.07	0
8	54	4.3	20	3.8	8.6	8.6	2.5	5.4	1.3	.40	.06	0
9	17	7.5	11	50	9.0	7.4	2.4	5.2	1.1	.34	.05	0
10	9.5	3.9	8.4	35	7.2	6.9	2.3	4.7	.95	.28	.04	.58
11	5.5	3.1	7.4	17	6.8	6.3	2.2	4.1	.77	.27	.04	4.6
12	4.3	2.7	6.7	12	6.1	5.7	7.8	4.1	.72	.25	.03	1.0
13	3.7	2.4	6.3	9.4	6.4	5.3	8.3	3.8	e6.2	.21	.03	.36
14	3.8	2.3	5.7	8.1	74	20	3.7	3.5	e3.1	.18	.02	.18
15	3.0	2.2	5.1	7.5	131	15	3.0	3.1	e1.8	.15	.02	.10
16	2.8	2.1	4.9	43	29	8.5	2.6	2.8	e1.2	.15	.02	.05
17	2.7	2.1	5.1	18	17	7.0	2.5	2.7	e1.0	.17	.02	.04
18	2.9	2.2	5.2	e11	13	6.5	2.3	2.4	e.89	.17	.01	.03
19	5.3	3.0	10	e9.5	11	55	2.2	1.4	e.85	.14	.01	.03
20	3.3	2.6	7.4	e8.0	9.4	32	2.1	1.2	e.85	.12	.05	.02
21	2.8	2.9	5.7	7.6	8.6	15	2.1	1.1	e.77	.11	.10	.02
22	2.5	8.0	5.2	7.2	8.5	11	12	1.0	e.90	.16	.05	.01
23	2.3	4.2	5.1	7.3	7.0	7.9	43	.98	e.79	1.0	.02	.01
24	2.4	3.3	5.4	6.6	6.3	6.5	16	.94	.72	.99	.02	.06
25	2.3	3.0	8.2	21	6.1	5.8	7.6	.92	.68	.64	.02	.12
26	2.1	6.3	6.2	12	6.1	6.5	5.0	1.2	.65	.46	.02	.10
27	2.1	5.0	10	8.8	7.1	5.5	6.4	1.2	1.1	.40	.01	.07
28	2.2	3.5	7.8	20	9.9	4.8	176	.96	.89	.24	0	.10
29	2.2	3.1	6.8	16	---	4.7	130	.82	.74	.18	0	.18
30	2.1	3.6	6.0	12	---	4.3	20	.78	.60	.16	0	.15
31	2.0	---	5.7	13	---	4.1	---	.79	---	.18	0	---
TOTAL	185.3	102.9	347.6	397.6	441.7	352.3	483.8	157.89	45.97	11.68	1.36	7.85
MEAN	5.98	3.43	11.2	12.8	15.8	11.4	16.1	5.09	1.53	.38	.044	.26
MAX	54	8.0	49	50	131	55	176	38	6.2	1.0	.17	4.6
MIN	2.0	1.9	4.9	3.8	5.9	4.1	2.1	.78	.60	.11	0	0
CFSM	.79	.45	1.49	1.70	2.09	1.51	2.14	.68	.20	.05	.01	.03
IN.	.91	.51	1.71	1.96	2.18	1.74	2.39	.78	.23	.06	.01	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1997, BY WATER YEAR (WY)

MEAN	3.13	4.16	5.94	13.4	12.5	19.1	9.54	6.71	4.85	2.23	1.16	4.01
MAX	8.72	15.5	11.2	26.0	23.9	39.2	16.7	18.7	16.4	10.2	4.47	25.9
(WY)	1996	1996	1997	1991	1989	1993	1993	1989	1995	1989	1995	1996
MIN	.031	.62	.75	3.89	4.66	9.03	1.47	1.30	.53	.19	.044	.018
(WY)	1994	1992	1992	1989	1991	1995	1995	1995	1993	1994	1997	1990

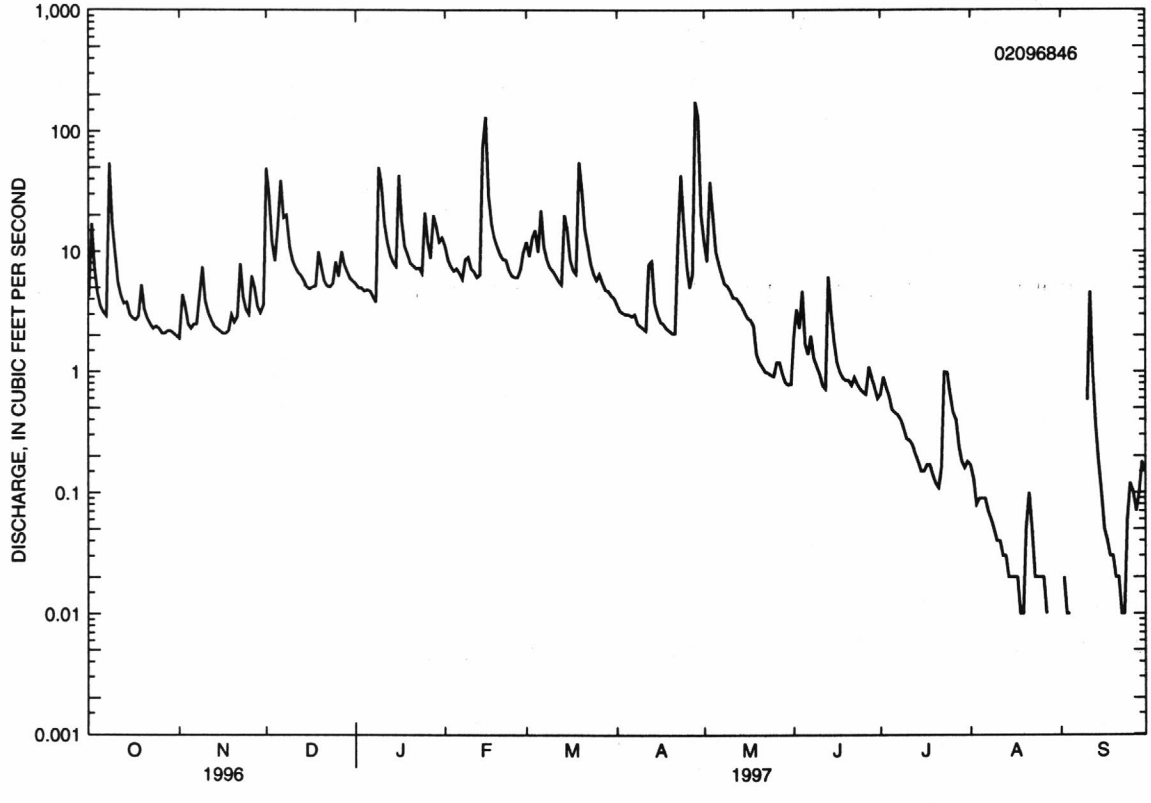
CAPE FEAR RIVER BASIN

02096846 CANE CREEK NEAR ORANGE GROVE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1989 - 1997	
ANNUAL TOTAL	3227.14		2535.95			
ANNUAL MEAN	8.82		6.95		6.97	
HIGHEST ANNUAL MEAN					9.65	1996
LOWEST ANNUAL MEAN					4.86	1995
HIGHEST DAILY MEAN	355	Sep 6	176	Apr 28	516	Mar 4 1993
LOWEST DAILY MEAN	.06	Jul 23	0	Aug 28	0	Sep 17 1990
ANNUAL SEVEN-DAY MINIMUM	.10	Jul 19	0	Sep 3	0	Sep 17 1990
INSTANTANEOUS PEAK FLOW			458	Apr 28	2060*	Sep 6 1996
INSTANTANEOUS PEAK STAGE			4.59	Apr 28	7.90*	Sep 6 1996
INSTANTANEOUS LOW FLOW			0*	Aug 27	0*	Sep 17 1990
ANNUAL RUNOFF (CFSM)	1.17		.92		.93	
ANNUAL RUNOFF (INCHES)	15.92		12.51		12.57	
10 PERCENT EXCEEDS	17		13		14	
50 PERCENT EXCEEDS	4.4		3.1		2.4	
90 PERCENT EXCEEDS	.30		.05		.15	

e Estimated.

* See REMARKS.



02096846 CANE CREEK NEAR ORANGE GROVE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1989 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
OCT											
08...	1030	141	66.5	6.75	15.5	180	741	8.90	92	19	4.6
24...	1215	2.3	90.0	7.08	13.5	22	755	9.90	96	30	7.5
DEC											
06...	1215	29	56.0	6.60	7.0	100	753	11.7	98	18	4.1
JAN											
23...	1315	7.2	70.0	6.80	8.5	37	756	12.7	110	22	5.4
MAR											
11...	1230	6.2	73.0	7.05	13.5	48	752	10.4	101	23	5.7
MAY											
21...	1300	1.2	82.0	7.05	19.5	30	756	7.89	86	27	6.8
SEP											
09...	1245	<0.01	120	6.95	22.5	24	745	4.77	56	43	11

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	ANC UNFLTRD CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
OCT											
08...	1.9	3.2	23	.3	3.4	16.0	13.0	3.9	5.5	<.10	9.3
24...	2.7	5.5	27	.4	1.5	34	28	3.1	6.2	<.10	16
DEC											
06...	1.8	3.5	28	.4	1.3	12.0	10.0	5.3	4.0	<.10	8.7
JAN											
23...	2.0	5.2	33	.5	1.1	24.0	20.0	4.2	5.6	<.10	15
MAR											
11...	2.1	5.0	32	.5	.40	25.0	20.0	3.5	5.2	<.10	13
MAY											
21...	2.5	5.2	29	.4	.7	32.0	25.0	2.1	5.1	<.1	14
SEP											
09...	3.8	5.9	22	.4	2.0	48	40	1.5	6.8	.1	6.6

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT											
08...	56	<.010	.290	.050	1.0	.45	1.1	.50	1.4	.79	.370
24...	82	.003	.650	<.002	--	--	.20	--	.85	--	.010
DEC											
06...	50	.002	.310	<.002	--	--	.30	--	.61	--	.020
JAN											
23...	56	<.001	.710	.008	--	--	<.20	--	--	--	<.010
MAR											
11...	52	.004	.600	.004	.30	--	.30	--	.90	--	.020
MAY											
21...	62	.004	.60	<.002	--	--	.2	--	.83	--	.03
SEP											
09...	71	.001	.063	.021	.23	--	.3	--	.32	--	.02

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
OCT											
08...	.140	.150	1900	<1	<1	2	3	2	3600	4	630
24...	--	.006	50	<1	<1	<1	<1	<1	360	<1	10
DEC											
06...	--	.001	--	--	--	--	--	--	--	--	--
JAN											
23...	--	.009	--	--	--	--	--	--	--	--	--
MAR											
11...	--	.003	200	<1	<1	<1	<1	<1	680	<1	30
MAY											
21...	--	.008	--	--	--	--	--	--	--	--	--
SEP											
09...	--	.013	--	--	--	--	--	--	--	--	--

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
OCT										
08...	<.10	<1	2	<1	<1	20	21	304	116	--
24...	<.10	<1	<1	<1	<1	<10	3.9	1	.01	--
DEC										
06...	--	--	--	--	--	--	11	17	1.3	--
JAN										
23...	--	--	--	--	--	--	2.8	5	.10	5
MAR										
11...	<.10	<1	<1	<1	<1	<10	3.3	8	.13	8
MAY										
21...	--	--	--	--	--	--	3.4	10	.03	--
SEP										
09...	--	--	--	--	--	--	3.9	--	--	7

0209684980 CANE CREEK RESERVOIR AT DAM NEAR WHITE CROSS, NC

LOCATION.--Lat 35°56'59", long 79°14'29", Orange County, Hydrologic Unit 03030002, at Orange Water and Sewage Authority intakes, 0.7 mi above State Highway 54, and 3.6 mi northwest of White Cross.

DRAINAGE AREA.--31.4 mi^2.

PERIOD OF RECORD.--Water years 1989 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. Samples for nutrient and chlorophyll *a* and *b* analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	BAROMETRIC PRESSURE (MM OF HG) (00025)	TRANSPARENCY (SECCHI DISK) (M) (00078)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
OCT										
30...	1130	1.00	62.0	6.42	16.5	45	749	1.20	4.63	48
APR										
22...	1030	1.00	70.0	6.63	16.0	20	746	1.10	9.42	97
JUN										
19...	1000	1.00	71.0	8.59	25.5	25	750	1.25	8.77	109
AUG										
27...	1045	1.00	77.0	8.56	26.0	13	748	1.05	8.79	111

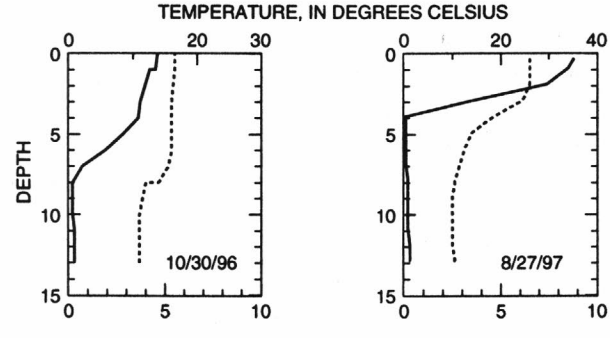
DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	ANC UNFLTRD CARBONATE IT-FLD (MG/L - CAC03) (99430)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
OCT										
30...	22	5.2	2.1	2.8	20	.3	2.7	23.0	19	3.3
APR										
22...	22	5.4	2.2	4.0	26	.4	1.8	25	20	4.5
JUN										
19...	24	5.6	2.3	4.0	25	.4	1.7	20	16	3.9
AUG										
27...	25	5.9	2.4	4.3	26	.4	1.8	26	21	3.5

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT										
30...	3.9	<.10	7.3	50	.009	.087	.129	.37	.50	.59
APR										
22...	5.2	<.1	7.3	53	.003	.16	.007	.48	.5	.65
JUN										
19...	4.9	<.1	6.3	69	.002	.008	.004	.55	.6	.56
AUG										
27...	5.4	<.1	6.2	58	<.0010	<.00500	.008	.68	.7	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70954)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT										
30...	<.010	.001	E.700	E.100	60	<1	<1	<1	<1	<1
APR										
22...	<.01	.002	1.9	<.1	30	<1	<1	1.0	<1	<1
JUN										
19...	.03	.002	3.9	<.1	--	--	--	--	--	--
AUG										
27...	<.01	.001	21	<.1	--	--	--	--	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT										
30...	480	<1	80	<.10	<1	<1	<1	<1	<10	5.5
APR										
22...	250	<1	40	<.1	<1.0	<1	<1	<1	<10	5.6
JUN										
19...	--	--	--	--	--	--	--	--	--	7
AUG										
27...	--	--	--	--	--	--	--	--	--	13



CAPE FEAR RIVER BASIN

02096960 HAW RIVER NEAR BYNUM, NC

LOCATION.--Lat 35°45'48", long 79°08'02", Chatham County, Hydrologic Unit 03030002, on right bank 500 ft upstream from Pokeberry Creek, 0.9 mi south of Bynum, and 1.1 mi downstream of U.S. Highways 15 and 501.

DRAINAGE AREA.--1,275 mi^2.

PERIOD OF RECORD.--October 1973 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 283.31 ft above sea level. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Considerable regulation for short periods at low flow caused by power plant above station. Maximum discharge for period of record, from rating curve extended above 36,000 ft^3/s, on basis of slope-conveyance measurement of peak flow; maximum gage height, 21.76 ft, from floodmarks. Minimum discharge for period of record also occurred Sept. 27, 1983. Minimum discharge for each year affected by regulation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	799	475	2160	865	1290	2660	e895	6360	539	278	401	152
2	4450	482	6480	861	1120	2800	779	3880	964	793	317	170
3	3010	893	3250	763	994	2320	715	e3300	1600	583	268	308
4	1670	770	2330	761	909	5940	712	e3500	e2600	414	243	303
5	1130	475	1930	754	895	3180	695	e1700	e1370	283	240	190
6	895	552	3880	907	980	3570	700	e1300	1060	281	275	156
7	733	533	3250	947	920	3040	866	e1200	993	289	362	156
8	4460	587	3440	779	907	1870	1160	1030	1060	268	177	147
9	6190	1540	2440	2750	1750	1510	839	e930	622	256	e232	137
10	2500	1300	1670	5780	1430	1280	760	910	635	237	210	393
11	1640	807	1320	3230	1200	1160	664	899	564	246	201	1740
12	1160	665	1120	2420	1130	1050	724	780	529	297	195	763
13	893	579	1110	1680	1270	948	1870	757	779	228	188	438
14	745	555	2520	1330	4860	1240	1530	698	2360	201	182	199
15	692	509	1610	1160	12500	2380	983	666	1960	190	181	232
16	614	494	1160	2900	8560	1650	776	644	933	187	193	199
17	544	470	1010	4050	3990	1220	719	593	584	309	178	181
18	565	470	1300	2020	2920	1070	683	563	749	387	161	174
19	1300	578	1200	1440	2340	2600	631	545	583	312	163	177
20	1190	689	1630	1190	1960	6620	585	530	493	251	162	171
21	750	642	1210	1070	1660	3530	577	522	468	239	362	167
22	621	895	952	1010	1600	2610	1580	546	451	519	448	147
23	587	971	823	1020	1400	2040	6070	539	391	1760	270	141
24	530	735	839	1340	1140	e1200	6990	516	332	2670	232	172
25	511	656	1280	1660	1020	e800	e3190	521	320	1490	196	380
26	465	758	1170	2030	956	e1100	1920	563	308	1090	174	705
27	408	1440	1100	1310	980	1860	1520	886	e360	526	601	307
28	412	1090	1230	1200	1230	1400	9430	955	e370	414	294	274
29	488	842	1080	2280	---	1120	23400	566	e340	371	195	239
30	485	713	953	1670	---	1080	14600	617	e300	779	173	324
31	473	---	901	1450	---	931	---	544	---	369	149	---
TOTAL	40910	22165	56348	52627	61911	65779	86563	37560	24617	16517	7623	9242
MEAN	1320	739	1818	1698	2211	2122	2885	1212	821	533	246	308
MAX	6190	1540	6480	5780	12500	6620	23400	6360	2600	2670	601	1740
MIN	408	470	823	754	895	800	577	516	300	187	149	137
CFSM	1.04	.58	1.43	1.33	1.73	1.66	2.26	.95	.64	.42	.19	.24
IN.	1.19	.65	1.64	1.54	1.81	1.92	2.53	1.10	.72	.48	.22	.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1997, BY WATER YEAR (WY)

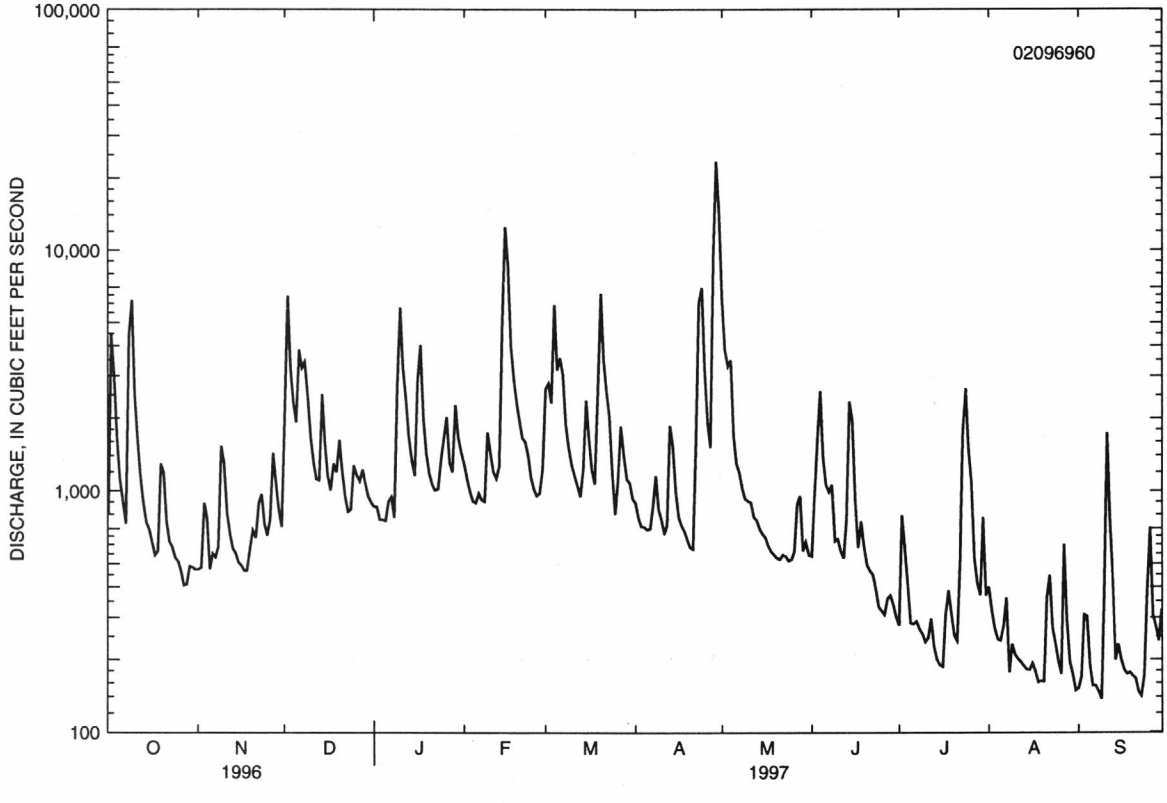
MEAN	698	769	1186	2265	2169	2617	1714	1167	938	840	600	827
MAX	2906	2888	2681	5895	5465	6110	4044	3936	4633	4477	1893	4904
(WY)	1991	1986	1984	1978	1979	1975	1987	1978	1982	1975	1985	1996
MIN	154	225	275	262	627	648	412	256	155	135	118	111
(WY)	1987	1974	1981	1981	1977	1988	1995	1986	1986	1986	1987	1983

CAPE FEAR RIVER BASIN

02096960 HAW RIVER NEAR BYNUM, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1973 - 1997	
ANNUAL TOTAL	602753		481862			
ANNUAL MEAN	1647		1320		1312	
HIGHEST ANNUAL MEAN					2181	1975
LOWEST ANNUAL MEAN					164	1973
HIGHEST DAILY MEAN	58000	Sep 6	23400	Apr 29	58000	Sep 6 1996
LOWEST DAILY MEAN	136	Jul 24	137	Sep 9	.18	Sep 10 1983
ANNUAL SEVEN-DAY MINIMUM	167	Jul 18	164	Sep 18	46	Sep 7 1983
INSTANTANEOUS PEAK FLOW			29800	Apr 29	76700*	Sep 6 1996
INSTANTANEOUS PEAK STAGE			14.91	Apr 29	21.76*	Sep 6 1996
INSTANTANEOUS LOW FLOW			111	Sep 9	.18*	Sep 10 1983
ANNUAL RUNOFF (CFSM)	1.29		1.04		1.03	
ANNUAL RUNOFF (INCHES)	17.59		14.06		13.98	
10 PERCENT EXCEEDS	3060		2700		2840	
50 PERCENT EXCEEDS	954		800		592	
90 PERCENT EXCEEDS	279		206		169	

e Estimated.
* See REMARKS.



CAPE FEAR RIVER BASIN

0209719700 JORDAN LAKE, HAW RIVER ARM, ABOVE B. EVERETT JORDAN DAM, NC

LOCATION.--Lat 35°39'39", long 79°04'23", Chatham County, Hydrologic Unit 03030002, 0.5 mi above B. Everett Jordan Dam, and 1.4 mi southwest of Merry Oaks.

PERIOD OF RECORD.--Water years 1989 to current year. Prior to October 1993, published as "Haw River at U.S. Highway 64 near Pittsboro" (0209699980).

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. Samples for nutrient and chlorophyll *a* and *b* analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	BAROMETRIC PRESSURE (MM OF HG) (00025)	TRANSPARENCY (SECCHI DISK) (M) (00078)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
OCT										
21...	1400	1.00	110	7.13	18.5	50	755	.650	10.4	112
APR										
03...	1330	1.00	123	7.89	18.0	40	768	.550	10.9	114
AUG										
01...	1315	1.00	194	8.76	28.5	29	755	.600	8.15	106
26...	1300	1.00	172	7.84	28.0	15	758	.850	7.41	95

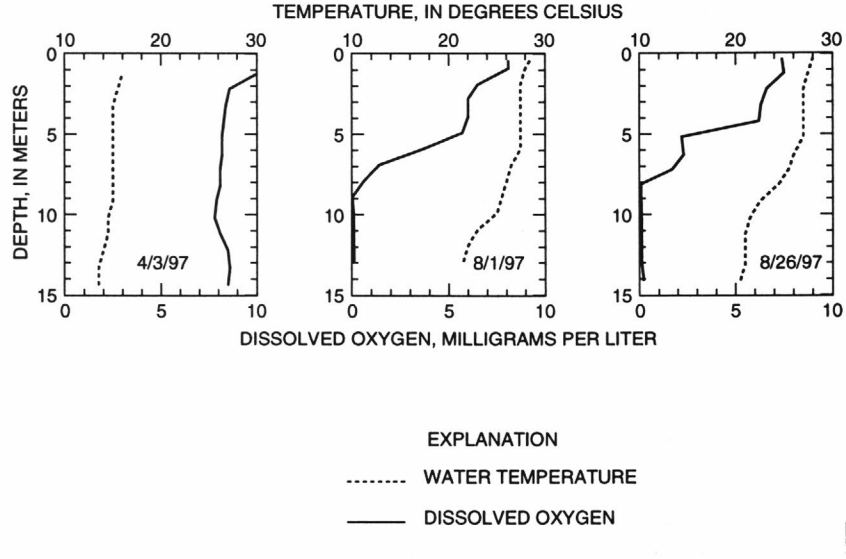
DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	ANC UNFLTRD CARBONATE IT-FLD (MG/L - CAC03) (99430)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
OCT										
21...	25	6.4	2.3	9.9	42	.9	3.0	30.0	24.0	10
APR										
03...	29	7.1	2.8	11	43	.9	2.4	35	29	13
AUG										
01...	31	7.6	3.0	23	58	2	3.5	37.0	35.0	24
26...	28	7.0	2.6	11	44	.9	2.6	37	31	11

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT										
21...	8.4	.20	7.2	74	.013	.240	.020	.38	.40	.64
APR										
03...	8.9	.1	10	82	.019	.610	.020	--	<.20	--
AUG										
01...	17	.2	6.9	118	.027	.10	.005	.92	.9	1.0
26...	11	.2	4.6	83	<.0010	<.00500	<.002	--	.6	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70954)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT										
21...	.040	<.001	3.50	.600	130	<1	<1	<1	<1	4
APR										
03...	<.010	.020	3.8	.3	120	<1	<1	<1.0	<1	2
AUG										
01...	.04	.005	25	1.3	--	--	--	--	--	--
26...	.02	<.0010	10	--	--	--	--	--	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT										
21...	370	<1	70	<.10	<1	1	<1	<1	<10	9.6
APR										
03...	450	<1	80	<.1	<1.0	2	<1	<1	<10	7
AUG										
01...	--	--	--	--	--	--	--	--	--	8.1
26...	--	--	--	--	--	--	--	--	--	14



CAPE FEAR RIVER BASIN

02097314 NEW HOPE CREEK NEAR BLANDS, NC

LOCATION.--Lat 35°53'05", long 78°57'58", Durham County, Hydrologic Unit 03030002, on right bank 15 ft downstream of bridge on Secondary Road 1107, 0.5 mi southwest of Blands, and 2 mi downstream of Third Fork Creek.

DRAINAGE AREA.--75.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is 230 ft above sea level, from topographic map. Satellite telemetry at station.

REMARKS.--Records poor. Considerable diurnal fluctuations at low flow. An average of 39.6 ft^3/s was diverted from the Neuse River Basin for Durham municipal water supply; 22.3 ft^3/s was returned to the Cape Fear River Basin, and about 14.6 ft^3/s was returned to the Neuse River Basin. Maximum discharge for period of record and 12,700 ft^3/s, from rating curve extended above 3,500 ft^3/s, by logarithmic plotting. Maximum gage height for period of record, 18.74 ft, occurred as a result of backwater from B. Everett Jordan Lake; maximum gage height unaffected by backwater, 14.05 ft, Sept. 6, 1996. Minimum discharge for period of record and current water year not determined due to regulation. Minimum discharge unregulated, 4.2 ft^3/s, Apr. 28, 29, May 1, 2, and July 10, 1985.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	242	26	82	65	130	189	43	3130	51	15	e16	12
2	73	26	153	59	108	124	38	3040	186	19	15	15
3	77	25	396	55	90	78	35	2540	269	18	15	12
4	35	23	345	51	78	77	35	1890	275	15	e16	15
5	8.4	22	239	49	69	86	34	857	146	13	25	12
6	21	22	247	47	63	82	33	354	49	13	23	12
7	21	23	311	46	59	121	76	142	61	13	e18	12
8	136	30	337	44	68	113	43	70	45	13	e14	12
9	419	52	302	119	80	57	32	45	34	13	15	13
10	529	87	211	282	87	60	30	40	29	12	13	14
11	396	103	113	372	81	45	29	36	26	12	e17	85
12	217	97	80	310	72	38	35	33	25	12	e15	62
13	89	83	68	216	68	34	120	34	34	11	15	22
14	50	68	63	143	209	54	68	34	39	12	14	17
15	37	56	60	102	830	174	40	34	34	12	14	15
16	33	48	58	135	991	116	34	32	27	13	13	14
17	30	42	57	229	403	54	32	29	23	89	13	14
18	30	39	30	251	288	44	30	28	22	36	13	14
19	75	38	13	190	217	139	29	27	20	12	13	14
20	174	38	26	134	152	535	28	28	19	8.4	14	12
21	85	41	78	99	111	481	28	27	19	7.5	14	13
22	1.2	63	74	81	88	297	87	26	17	8.1	15	13
23	6.4	88	64	71	68	110	258	25	16	e76	13	13
24	10	97	59	67	98	68	385	24	16	e860	12	15
25	15	91	60	94	171	57	291	24	15	209	13	60
26	18	84	67	143	155	53	97	49	15	50	12	26
27	21	75	92	152	174	56	53	37	27	25	12	17
28	23	68	95	142	197	49	255	29	21	21	12	15
29	25	62	90	165	---	48	907	25	16	18	13	20
30	26	57	81	178	---	46	2450	24	14	e17	11	17
31	27	---	73	154	---	43	---	23	---	e17	11	---
TOTAL	2950.0	1674	4024	4245	5205	3528	5655	12736	1590	1670.0	449	607
MEAN	95.2	55.8	130	137	186	114	189	411	53.0	53.9	14.5	20.2
MAX	529	103	396	372	991	535	2450	3130	275	860	25	85
MIN	1.2	22	13	44	59	34	28	23	14	7.5	11	12
CFSM	1.25	.74	1.71	1.80	2.45	1.50	2.48	5.41	.70	.71	.19	.27
IN.	1.45	.82	1.97	2.08	2.55	1.73	2.77	6.24	.78	.82	.22	.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997, BY WATER YEAR (WY)

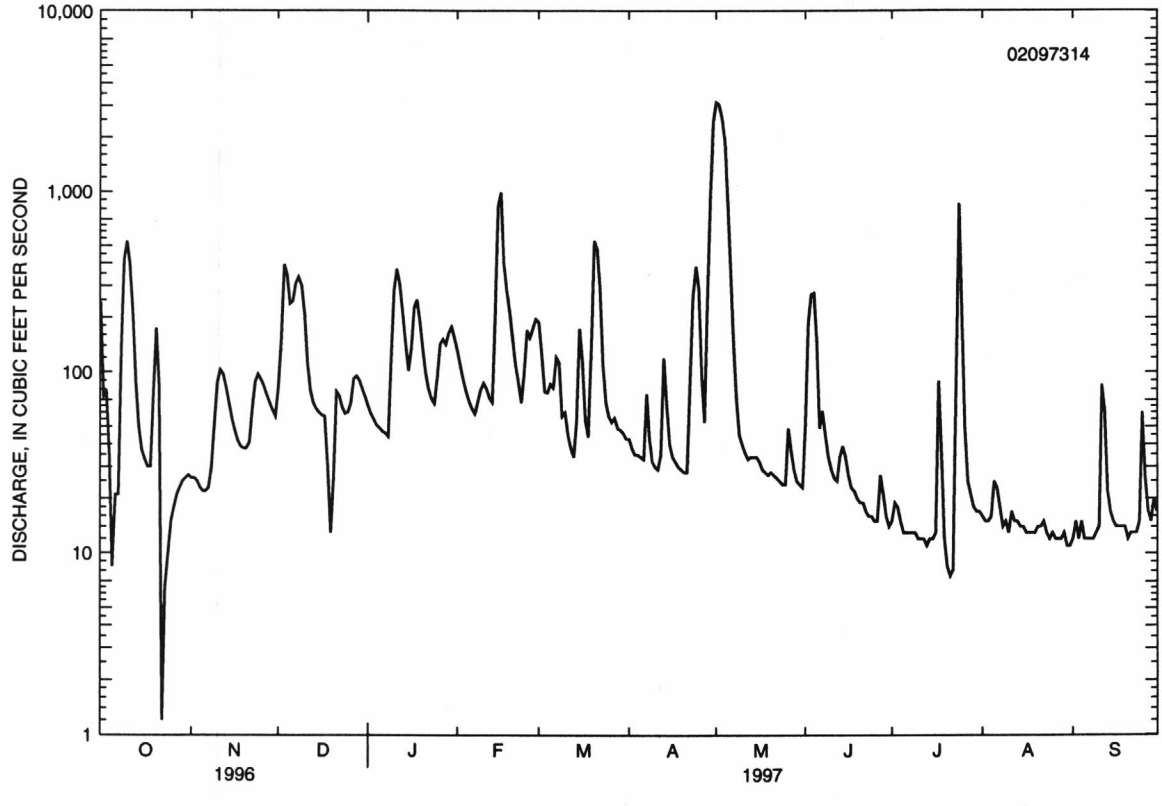
MEAN	48.8	83.0	87.0	167	201	204	150	106	47.8	47.3	41.1	45.8
MAX	122	371	264	509	402	399	618	411	154	156	97.8	318
(WY)	1990	1986	1984	1991	1985	1993	1987	1997	1995	1995	1986	1996
MIN	12.8	16.1	17.0	38.6	62.3	42.0	13.5	29.4	14.3	12.9	14.5	10.8
(WY)	1987	1985	1989	1986	1986	1985	1985	1994	1985	1993	1997	1984

CAPE FEAR RIVER BASIN

02097314 NEW HOPE CREEK NEAR BLANDS, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1983 - 1997	
ANNUAL TOTAL	43174.3		44333.0			
ANNUAL MEAN	118		121		102	
HIGHEST ANNUAL MEAN					156	1984
LOWEST ANNUAL MEAN					48.3	1988
HIGHEST DAILY MEAN	6300	Sep 6	3130	May 1	6300	Sep 6 1996
LOWEST DAILY MEAN	1.2	Oct 22	1.2	Oct 22	.39	Dec 30 1988
ANNUAL SEVEN-DAY MINIMUM	8.9	Sep 19	12	Aug 26	4.8	Nov 29 1990
INSTANTANEOUS PEAK FLOW			3250	May 1	12700*	Sep 6 1996
INSTANTANEOUS PEAK STAGE			10.81	May 1	18.74*	Sep 12 1996
INSTANTANEOUS LOW FLOW			NOT DETERMINED*		NOT DETERMINED*	
ANNUAL RUNOFF (CFSM)	1.55		1.60		1.34	
ANNUAL RUNOFF (INCHES)	21.16		21.73		18.24	
10 PERCENT EXCEEDS	255		240		224	
50 PERCENT EXCEEDS	63		44		35	
90 PERCENT EXCEEDS	17		13		13	

e Estimated.
* See REMARKS.



02097314 NEW HOPE CREEK NEAR BLANDS, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983-86, 1989 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1982 to September 1985.

WATER TEMPERATURE: December 1982 to September 1985.

INSTRUMENTATION.--Water-quality monitor from October 1982 to September 1985.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 535 microsiemens, Sept. 30, 1984; minimum, 38 microsiemens. Mar. 6, 7, 1984.

WATER TEMPERATURE: Maximum, 27.5°C, Aug. 23, 1983; minimum, 0.0°C, Jan. 21, 22, 1985.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
APR 23...	0945	247	128	6.45	12.5	80	748	7.53	72	36	9.6	3.0

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
APR 23...	8.4	31	.6	3.0	11	9.4	.1	7.9	92	.017	1.1	.151

WATER-QUALITY RECORDS

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)
APR 23...	.89	1.0	2.1	.22	.087	40	1	<1	2.0	1	5

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
APR 23...	1900	4	230	<.1	<1.0	3	<1	<1	20	9.9	200

CAPE FEAR RIVER BASIN

0209736050 BATTLE BRANCH NEAR CHAPEL HILL, NC

LOCATION.--Lat 35°55'02", long 79°01'57", Orange County, Hydrologic Unit 03030002, 0.8 mi upstream from mouth, and 1.2 mi east of Chapel Hill.

DRAINAGE AREA.--0.42 mi^2.

PERIOD OF RECORD.--October 1996 to September 1997. Prior to October 1994, published as "Little Creek Tributary near Chapel Hill, NC". Records for February 1987 to September 1995 are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 377 ft above sea level, from topographic map. Satellite telemetry at station.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	.20	1.3	e.17	e.16	e.36	e.17	e1.0	9.8	1.8	.13	e.09
2	.57	1.5	.24	e.16	e.15	e.26	e.16	e.50	1.1	.19	.12	e.08
3	.17	.68	.20	e.16	e.14	e.48	.15	e1.0	2.1	.07	.20	e.07
4	.09	.56	.21	e.15	e.13	e.38	.14	e.60	.16	.05	.78	.05
5	.09	.49	.75	e.15	e.14	e.46	.12	e.50	.10	e.05	1.1	.06
6	.12	.45	.27	e.14	e.13	e.56	.37	e.46	.91	e.04	.17	.05
7	.12	.43	.40	e.14	e.12	e.46	.14	e.40	.21	e.04	.11	.05
8	6.2	2.4	.23	e.13	.23	e.44	.12	e.36	e.16	e.03	.10	.04
9	.80	.85	e.22	1.8	.20	e.40	.11	e.28	e.12	e.03	e.09	.06
10	.73	.74	e.20	.22	e.18	e.36	.09	e.26	e.09	e.03	e.08	11
11	.65	.65	e.19	.20	e.16	e.34	.08	e.24	e.08	e.03	e.06	10
12	.56	.57	e.18	e.18	.23	e.32	.28	e.22	e.08	e.02	e.05	e.20
13	.68	.50	e.17	e.17	.48	e.30	.14	e.20	6.8	e.02	e.04	e.16
14	.65	.48	e.16	e.18	2.2	.69	.11	e.18	.89	e.02	e.04	e.12
15	.54	.44	e.15	.20	2.7	e.30	e.10	e.16	e.40	e.02	e.04	e.10
16	.46	.40	e.15	1.2	e.80	e.26	e.10	e.14	e.30	e2.0	e.03	e.08
17	.38	.38	e.16	.20	e.50	e.24	e.09	e.13	e.16	e.40	e.03	e.07
18	2.9	.36	e.26	.19	e.36	e.22	e.09	e.12	e.12	e.16	e.03	e.06
19	.80	.40	.27	e.16	.32	1.6	e.08	e.11	e.10	e.10	e.20	e.05
20	.67	.39	.26	.13	e.28	e.24	e.08	e.10	e.09	e.08	.47	e.05
21	.59	1.2	.24	e.12	e.27	e.18	e.10	e.09	e.08	e.05	.10	e.04
22	.51	.26	.21	e.11	e.26	e.16	e.16	e.08	e.07	e1.0	e.02	e.04
23	.48	.18	.20	e.10	e.24	e.14	e1.2	e.07	e.06	4.4	.01	e.10
24	.44	.17	.24	.17	e.23	e.13	e.70	e.06	e.05	e3.0	.01	6.4
25	.38	.17	.20	.38	e.22	e.12	e.50	e.05	e.04	e1.0	.01	.33
26	.34	.17	.25	.15	e.21	e.18	e.20	e.04	.34	e.80	.02	.11
27	.30	.16	.21	.15	e.30	e.26	e1.0	e.16	.75	e.60	e.03	.08
28	.29	.15	.20	.37	e.40	e.22	e2.0	e.10	.05	e.30	e.02	.24
29	.26	.14	e.19	e.17	---	e.20	e4.0	e.08	.04	e.20	e.01	.13
30	.25	.22	e.18	e.20	---	e.19	e2.0	e.07	.03	.47	e.01	.09
31	.23	---	e.17	e.17	---	e.18	---	.36	---	.16	e.05	---
TOTAL	21.42	15.69	8.26	8.12	11.74	10.63	14.58	8.12	25.28	17.16	4.16	30.00
MEAN	.69	.52	.27	.26	.42	.34	.49	.26	.84	.55	.13	1.00
MAX	6.2	2.4	1.3	1.8	2.7	1.6	4.0	1.0	9.8	4.4	1.1	11
MIN	.09	.14	.15	.10	.12	.12	.08	.04	.03	.02	.01	.04
CFSM	1.65	1.25	.63	.62	1.00	.82	1.16	.62	2.01	1.32	.32	2.38
IN.	1.90	1.39	.73	.72	1.04	.94	1.29	.72	2.24	1.52	.37	2.66

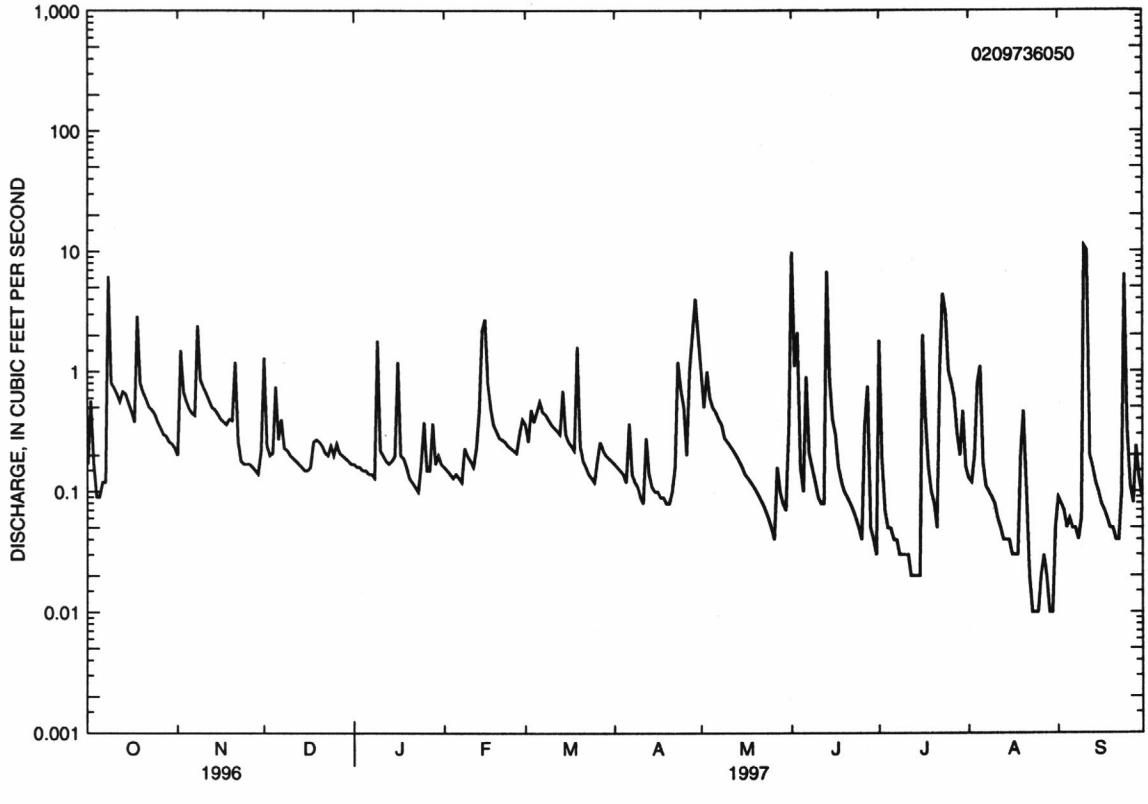
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1997, BY WATER YEAR (WY)

MEAN	.69	.52	.27	.26	.42	.34	.49	.26	.84	.55	.13	1.00
MAX	.69	.52	.27	.26	.42	.34	.49	.26	.84	.55	.13	1.00
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997
MIN	.69	.52	.27	.26	.42	.34	.49	.26	.84	.55	.13	1.00
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997

SUMMARY STATISTICS FOR 1997 WATER YEAR

ANNUAL TOTAL	175.16	
ANNUAL MEAN	.48	
HIGHEST DAILY MEAN	11	Sep 10
LOWEST DAILY MEAN	.01	Aug 23
ANNUAL SEVEN-DAY MINIMUM	.02	Aug 23
INSTANTANEOUS PEAK FLOW	NOT DETERMINED	
INSTANTANEOUS PEAK STAGE	NOT DETERMINED	
INSTANTANEOUS LOW FLOW	NOT DETERMINED	
ANNUAL RUNOFF (CFSM)	1.14	
ANNUAL RUNOFF (INCHES)	15.51	
10 PERCENT EXCEEDS	.80	
50 PERCENT EXCEEDS	.19	
90 PERCENT EXCEEDS	.05	

e Estimated.



CAPE FEAR RIVER BASIN

0209741955 NORTHEAST CREEK AT SECONDARY ROAD 1100 NEAR GENLEE, NC

LOCATION.--Lat 35°52'20", long 78°54'49", Durham County, Hydrologic Unit 03030002, on left bank at downstream side of bridge on Secondary Road 1100, 1.3 mi west of Genlee, and 1.6 mi downstream of Burdens Creek.

DRAINAGE AREA.--21.1 mi^2.

PERIOD OF RECORD.--October 1982 to January 1994, August 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 235 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, and discharges below 5 ft^3/s, which are poor. Slight diurnal fluctuation at low flow. An average of 39.6 ft^3/s was diverted from the Neuse River basin for Durham municipal water supply; 22.3 ft^3/s was returned to the Cape Fear River basin, of which 6.2 ft^3/s entered upstream from station as treated effluent. About 14.6 ft^3/s was returned to Neuse River basin as treated effluent. Maximum discharge for period of record from rating curve extended above 2,000 ft^3/s, by logarithmic plotting. Minimum discharge for the current year also occurred on Sept. 22, 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	8.2	145	20	29	25	9.3	57	8.8	6.2	7.6	6.1
2	14	23	362	25	22	18	8.1	118	21	8.9	6.3	7.7
3	12	22	103	21	19	20	7.8	38	26	6.5	5.8	6.3
4	9.0	12	37	18	18	30	8.1	38	16	5.2	6.7	5.9
5	6.7	9.7	30	17	17	20	7.2	16	8.8	7.5	8.1	5.7
6	5.8	9.5	213	18	17	38	7.4	12	8.3	5.7	8.8	5.2
7	6.1	9.3	126	15	15	21	16	9.8	13	5.6	6.8	5.0
8	385	80	162	14	35	14	11	8.5	7.3	5.4	6.5	5.8
9	417	307	71	165	55	12	8.0	8.2	6.4	5.5	5.6	7.4
10	71	70	34	334	27	13	7.2	7.0	6.0	5.6	5.5	14
11	17	21	27	82	23	12	6.9	6.3	5.8	5.4	6.4	45
12	10	15	24	30	19	11	12	6.8	6.0	4.5	6.5	12
13	7.7	12	22	23	17	12	19	7.2	12	4.4	6.5	5.1
14	7.2	11	20	19	328	37	9.8	7.6	8.3	5.2	6.6	4.2
15	7.2	9.6	17	18	438	61	7.9	7.0	5.8	5.5	6.6	4.7
16	6.7	8.0	16	139	245	19	7.6	6.4	5.7	6.1	5.7	4.6
17	6.8	7.7	16	182	52	14	10	5.7	5.9	11	5.6	4.3
18	7.8	8.5	18	36	29	13	7.3	5.5	5.9	6.9	6.2	4.3
19	38	12	52	e22	25	153	6.2	6.3	5.9	5.3	6.1	4.2
20	17	10	45	e21	21	315	5.8	6.4	5.6	4.8	6.3	3.7
21	9.9	12	24	e19	19	67	6.6	6.3	4.9	5.5	7.4	3.3
22	8.6	156	19	e17	22	23	40	6.2	4.6	6.5	6.6	3.8
23	8.2	78	18	e18	17	15	112	5.8	5.3	37	5.6	3.9
24	8.1	28	17	19	17	13	82	5.3	5.5	290	5.1	10
25	7.7	22	32	75	14	11	19	6.2	5.7	261	5.8	20
26	7.0	39	24	74	13	14	11	21	5.8	19	6.0	7.6
27	6.7	37	170	28	14	12	7.7	13	7.8	9.0	6.0	4.7
28	7.6	23	99	49	16	9.8	280	7.2	6.3	9.5	6.0	4.1
29	7.7	18	34	90	---	9.9	875	6.2	5.1	8.5	5.8	4.9
30	8.0	18	26	35	---	9.9	249	6.2	5.6	8.3	5.3	4.5
31	8.5	---	22	39	---	9.6	---	5.7	---	8.5	5.1	---
TOTAL	1160.0	1096.5	2025	1682	1583	1052.2	1864.9	466.8	245.1	784.0	194.9	228.0
MEAN	37.4	36.5	65.3	54.3	56.5	33.9	62.2	15.1	8.17	25.3	6.29	7.60
MAX	417	307	362	334	438	315	875	118	26	290	8.8	45
MIN	5.8	7.7	16	14	13	9.6	5.8	5.3	4.6	4.4	5.1	3.3
CFSM	1.77	1.73	3.10	2.57	2.68	1.61	2.95	.71	.39	1.20	.30	.36
IN.	2.05	1.93	3.57	2.97	2.79	1.86	3.29	.82	.43	1.38	.34	.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997@, BY WATER YEAR (WY)

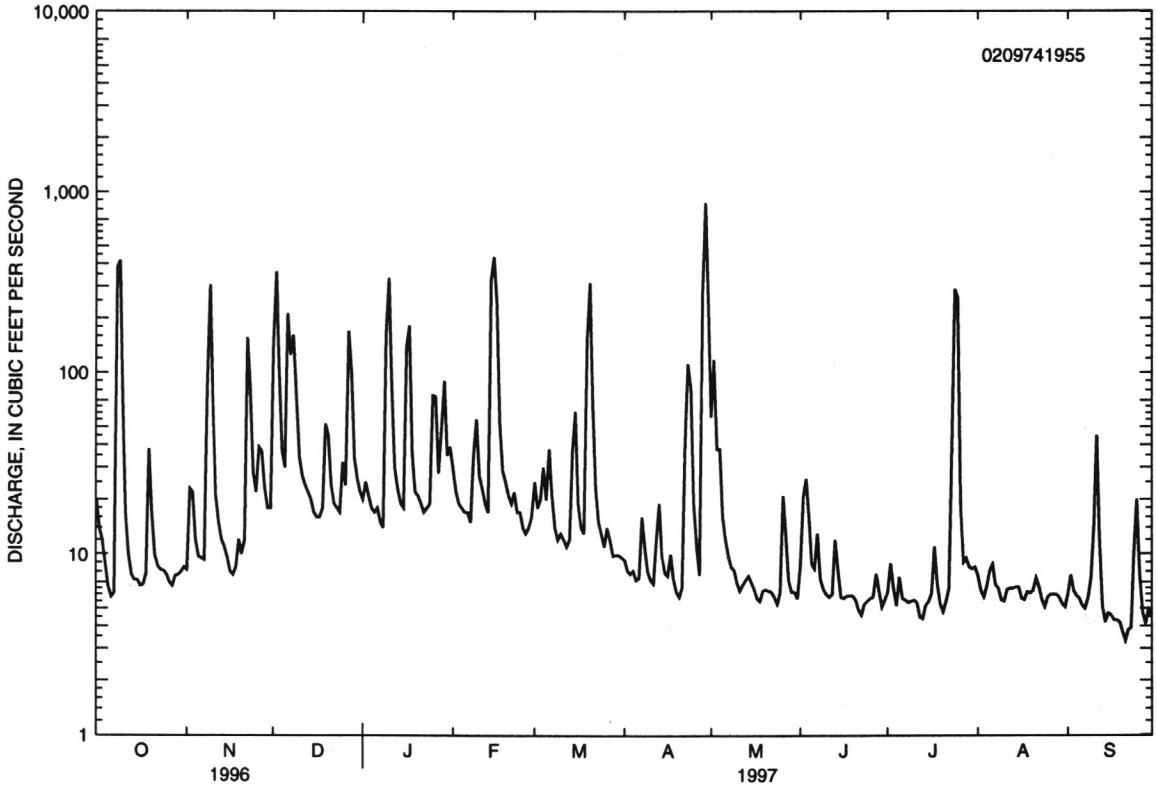
MEAN	20.7	28.6	32.9	51.9	58.1	60.6	38.1	22.1	13.3	16.3	17.6	24.0
MAX	60.2	82.7	86.3	90.5	102	111	84.5	59.1	44.4	48.6	66.7	210
(WY)	1996	1993	1984	1993	1989	1989	1993	1990	1992	1989	1986	1996
MIN	3.27	3.89	4.32	12.6	10.8	8.18	4.00	8.57	4.55	3.33	3.50	2.49
(WY)	1986	1985	1989	1986	1991	1985	1985	1987	1987	1983	1983	1983

CAPE FEAR RIVER BASIN

0209741955 NORTHEAST CREEK AT SECONDARY ROAD 1100 NEAR GENLEE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1983 - 1997@	
ANNUAL TOTAL	17557.9		12382.4			
ANNUAL MEAN	48.0		33.9		32.4	
HIGHEST ANNUAL MEAN					49.1	1996
LOWEST ANNUAL MEAN					14.7	1988
HIGHEST DAILY MEAN	3350	Sep 6	875	Apr 29	3350	Sep 6 1996
LOWEST DAILY MEAN	3.7	Jul 4	3.3	Sep 21	.74	Jul 16 1991
ANNUAL SEVEN-DAY MINIMUM	4.6	Jun 30	3.9	Sep 17	1.5	Oct 7 1985
INSTANTANEOUS PEAK FLOW			1400	Apr 29	5140*	Sep 6 1996
INSTANTANEOUS PEAK STAGE			10.87	Apr 29	13.92	Sep 6 1996
INSTANTANEOUS LOW FLOW			2.5*	Sep 21	.76	Oct 7 1985
ANNUAL RUNOFF (CFSM)	2.27		1.61		1.54	
ANNUAL RUNOFF (INCHES)	30.96		21.83		20.88	
10 PERCENT EXCEEDS	98		71		63	
50 PERCENT EXCEEDS	16		10		8.8	
90 PERCENT EXCEEDS	6.7		5.5		3.9	

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



CAPE FEAR RIVER BASIN

02097464 MORGAN CREEK NEAR WHITE CROSS, NC

LOCATION.--Lat 35°55'25", long 79°06'56", Orange County, Hydrologic Unit 030200201, at bridge on State Highway 54, 2 mi upstream from University Lake, and 3.5 miles east of White Cross.

DRAINAGE AREA.--8.35 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 420 ft above sea level, from topographic map. Satellite telemetry at station.

REMARKS.--Records fair. Maximum discharge for period of record from rating curve extended above 2,700 ft^3/s, by logarithmic plotting. Minimum discharge for period of record also occurred Sept. 25-30, Oct. 1-4, 1990. Minimum discharge for the current water year also occurred Sept. 6,7,8,9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	2.6	32	5.0	8.6	8.8	4.9	14	5.3	1.0	.33	.07
2	6.8	4.9	24	4.9	7.5	7.3	4.5	9.2	4.7	1.4	.30	.07
3	5.0	3.6	10	4.7	6.6	9.8	4.5	14	20	1.1	.26	.07
4	3.4	3.0	7.0	4.4	6.2	11	4.3	11	8.4	.91	.23	.06
5	2.9	2.9	11	4.8	6.4	8.2	4.2	7.3	4.1	.71	.42	.05
6	2.7	3.1	31	4.7	5.8	16	4.3	6.3	3.5	.65	.33	.05
7	2.7	2.9	14	4.0	5.4	9.3	4.4	5.3	4.1	.63	.26	.05
8	49	4.5	14	3.7	7.6	7.6	3.7	5.0	3.2	.57	.21	.05
9	18	5.2	8.8	37	7.8	6.8	3.5	4.9	2.7	.51	.20	.07
10	11	3.7	6.8	28	6.7	6.5	3.3	4.2	2.4	.50	.17	1.3
11	6.8	3.4	6.1	14	6.3	6.0	3.4	4.0	2.2	.45	.16	4.1
12	5.3	3.1	5.7	9.5	5.7	5.5	6.8	3.9	2.2	.44	.14	.53
13	4.5	2.9	5.4	7.7	5.9	5.2	7.4	3.9	3.1	.41	.15	.23
14	3.9	2.9	4.9	6.6	55	12	4.7	3.8	2.6	.94	.15	.19
15	3.6	2.7	4.4	6.0	113	10	4.0	3.5	2.3	.40	.13	.20
16	3.2	2.6	4.2	30	30	7.0	3.8	3.3	1.9	1.0	.12	.19
17	3.0	2.7	4.5	15	18	6.2	3.9	3.0	1.8	.85	.11	.23
18	3.1	2.9	4.6	9.9	12	6.0	3.3	2.9	1.8	.51	.10	.25
19	3.5	3.2	7.2	8.3	10	40	3.3	2.9	1.7	.38	.10	.26
20	3.2	3.0	6.0	7.3	8.8	30	3.3	2.7	1.6	.35	.10	.28
21	2.9	3.5	6.7	6.5	8.0	15	3.4	2.5	1.4	.34	.16	.28
22	2.8	6.6	4.5	6.5	7.8	11	17	2.5	1.4	.39	.15	.27
23	2.8	4.2	4.3	6.5	7.1	8.3	36	2.4	1.2	1.9	.11	.28
24	2.8	3.6	4.6	5.9	6.9	7.1	16	2.3	1.1	3.9	.09	.54
25	2.7	3.4	6.0	15	6.7	6.7	8.6	2.7	1.0	1.1	.09	.75
26	2.6	4.7	5.0	10	6.6	7.0	6.3	2.8	.94	.65	.09	.41
27	2.6	4.0	7.6	7.8	6.6	6.2	6.3	2.5	1.2	.54	.08	.29
28	2.8	3.6	6.6	15	7.5	6.1	53	2.2	1.3	.44	.08	.28
29	2.8	3.3	6.3	13	---	6.2	91	2.0	.99	.37	.07	.35
30	2.7	3.7	5.7	9.6	---	5.6	23	2.0	.83	.37	.07	.30
31	2.7	---	5.4	10	---	5.5	---	2.1	---	.42	.07	---
TOTAL	177.4	106.4	274.3	321.3	390.5	303.9	346.1	141.1	90.96	24.13	5.03	12.05
MEAN	5.72	3.55	8.85	10.4	13.9	9.80	11.5	4.55	3.03	.78	.16	.40
MAX	49	6.6	32	37	113	40	91	14	20	3.9	.42	4.1
MIN	2.6	2.6	4.2	3.7	5.4	5.2	3.3	2.0	.83	.34	.07	.05
CFSM	.69	.42	1.06	1.24	1.67	1.17	1.38	.55	.36	.09	.02	.05
IN.	.79	.47	1.22	1.43	1.74	1.35	1.54	.63	.41	.11	.02	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1997, BY WATER YEAR (WY)

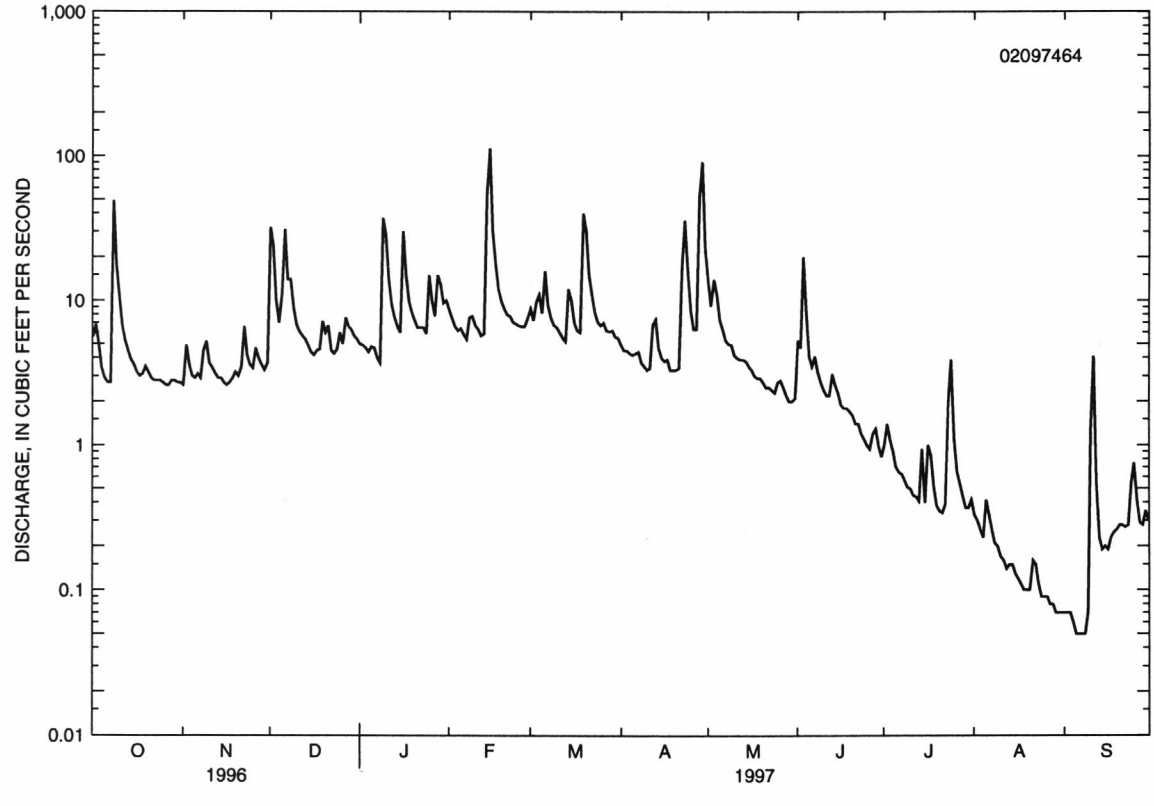
MEAN	4.79	5.36	5.77	12.2	13.8	19.5	10.5	8.71	6.22	2.88	3.64	5.05
MAX	13.1	15.3	13.2	20.6	22.7	39.8	18.2	30.1	19.9	7.37	18.7	32.0
(WY)	1990	1996	1990	1991	1990	1993	1993	1989	1995	1991	1995	1996
MIN	.65	1.22	1.03	2.54	4.15	9.80	2.33	2.41	.96	.54	.16	.075
(WY)	1995	1995	1995	1989	1991	1997	1995	1995	1993	1994	1997	1990

CAPE FEAR RIVER BASIN

02097464 MORGAN CREEK NEAR WHITE CROSS, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1989 - 1997	
ANNUAL TOTAL	3462.55		2193.17			
ANNUAL MEAN	9.46		6.01		7.92	
HIGHEST ANNUAL MEAN					10.7	1996
LOWEST ANNUAL MEAN					5.38	1992
HIGHEST DAILY MEAN	737	Sep 6	113	Feb 15	737	Sep 6 1996
LOWEST DAILY MEAN	.41	Jul 22	.05	Sep 5	.02	Sep 27 1990
ANNUAL SEVEN-DAY MINIMUM	.52	Aug 18	.06	Sep 2	.02	Sep 26 1990
INSTANTANEOUS PEAK FLOW			221	Feb 15	3100*	Aug 27 1995
INSTANTANEOUS PEAK STAGE			5.62	Feb 15	11.20	Aug 27 1995
INSTANTANEOUS LOW FLOW			.05*	Sep 5	.02*	Sep 24 1990
ANNUAL RUNOFF (CFSM)	1.13		.72		.95	
ANNUAL RUNOFF (INCHES)	15.43		9.77		12.88	
10 PERCENT EXCEEDS	16		11		16	
50 PERCENT EXCEEDS	4.6		3.7		3.5	
90 PERCENT EXCEEDS	.64		.22		.48	

* See REMARKS.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1989 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT										
24...	1330	2.8	101	7.23	13.5	22	755	10.0	96	35
DEC										
06...	1315	24	74.0	6.85	7.5	110	755	11.6	97	23
JAN										
23...	1400	6.5	80.0	6.89	9.0	32	756	12.7	111	27
MAR										
11...	1330	5.9	78.0	7.99	14.5	30	753	12.7	126	25
19...	1230	62	90.0	6.70	11.0	140	756	10.2	94	26
MAY										
21...	1415	2.5	92.0	7.10	19.0	30	756	8.80	95	32
SEP										
09...	1400	.05	163	7.15	22.5	29	745	4.44	52	56

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	ANC UNFLTRD CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT										
24...	8.9	3.1	5.3	23	.4	2.2	40	33	3.7	6.4
DEC										
06...	5.4	2.3	3.8	24	.3	2.4	18.0	15.0	6.2	5.1
JAN										
23...	6.7	2.4	5.0	28	.4	1.3	28.0	23.0	4.9	5.5
MAR										
11...	6.3	2.3	4.7	28	.4	1.2	28.0	23.0	3.8	5.4
19...	6.2	2.5	4.2	23	.4	4.4	--	--	5.7	5.5
MAY										
21...	8.0	2.9	5.0	25	.4	1.6	33.0	27.0	2.6	5.1
SEP										
09...	14	5.0	7.7	21	.4	4.1	67	55	1.9	7.5

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT										
24...	<.10	15	68	.013	.390	<.002	--	.20	.59	.060
DEC										
06...	<.10	9.4	58	.004	.500	.014	.39	.40	.90	.100
JAN										
23...	<.10	13	58	.005	.760	.012	--	<.20	--	.040
MAR										
11...	<.10	11	50	.006	.500	.003	.20	.20	.70	.050
19...	<.1	9.4	70	.019	.620	.365	1.9	2.3	2.9	.830
MAY										
21...	<.1	15	69	.018	.76	.014	.32	.3	1.1	.13
SEP										
09...	.1	18	102	.004	.068	.044	.27	.3	.38	.09

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
OCT										
24...	.062	60	<1	<1	<1	<1	<1	300	<1	20
DEC										
06...	.050	--	--	--	--	--	--	--	--	--
JAN										
23...	.038	--	--	--	--	--	--	--	--	--
MAR										
11...	.043	190	<1	<1	<1	<1	<1	640	<1	30
19...	.360	1500	1	<1	1.8	3	3	3600	4	540
MAY										
21...	.079	--	--	--	--	--	--	--	--	--
SEP										
09...	.038	--	--	--	--	--	--	--	--	--

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
OCT										
24...	<.10	<1	<1	<1	<1	<10	3.3	3	.02	--
DEC										
06...	--	--	--	--	--	--	10	21	1.4	--
JAN										
23...	--	--	--	--	--	--	3.4	--	--	9
MAR										
11...	<.10	<1	<1	<1	<1	<10	3.2	--	--	16
19...	<.1	<1.0	5	<1	<1	20	22	--	--	300
MAY										
21...	--	--	--	--	--	--	4.4	15	.10	--
SEP										
09...	--	--	--	--	--	--	5	--	--	31

CAPE FEAR RIVER BASIN

0209749990 UNIVERSITY LAKE AT INTAKES NEAR CHAPEL HILL, NC

LOCATION.--Lat 35°53'48", long 79°05'33", Orange County, Hydrologic Unit 03030002, at Orange Water and Sewage Authority intakes, and 1.8 mi southwest of Chapel Hill.

DRAINAGE AREA.--30 mi^2.

PERIOD OF RECORD.--Water years 1989 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. Samples for nutrient and chlorophyll *a* and *b* analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	BAROMETRIC PRESSURE (MM OF HG) (00025)	TRANSPARENCY (SECCHI DISK) (M) (00078)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
OCT										
30...	1300	1.00	77.0	6.94	18.5	37	749	.450	10.4	113
APR										
22...	1230	1.00	81.0	6.81	16.0	20	746	.950	9.45	98
JUN										
19...	1115	1.00	85.0	7.74	27.0	29	750	.950	8.19	105
AUG										
27...	1230	1.00	88.0	7.76	27.0	14	748	.900	8.34	107

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	ANC UNFLTRD CARBONATE IT-FLD (MG/L - CAC03) (99430)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
OCT										
30...	24	6.1	2.1	4.5	27	.4	2.4	27.0	22.0	5.4
APR										
22...	26	6.5	2.3	5.5	30	.5	1.6	32	26	5.2
JUN										
19...	31	7.5	2.8	5.9	28	.5	1.8	26	21	4.3
AUG										
27...	26	6.5	2.4	5.7	30	.5	2.1	34	28	3.3

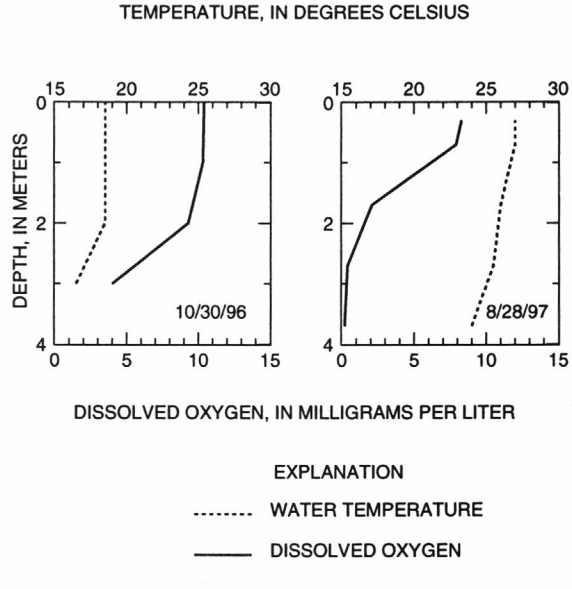
DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT										
30...	4.6	<.10	13	60	.005	<.005	.007	.59	.60	--
APR										
22...	5.3	<.1	14	62	.001	.008	<.002	--	.6	.59
JUN										
19...	5.1	<.1	15	--	.003	.009	.005	.52	.5	.54
AUG										
27...	5.6	<.1	17	75	<.0010	<.00500	<.002	--	.8	--

0209749990 UNIVERSITY LAKE AT INTAKES NEAR CHAPEL HILL, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70954)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT										
30...	.020	<.001	6.40	.700	20	<1	<1	<1	<1	<1
APR										
22...	.05	.002	10	.3	30	<1	<1	<1.0	<1	<1
JUN										
19...	.06	.004	2.0	.2	--	--	--	--	--	--
AUG										
27...	.02	.001	12	E.2	--	--	--	--	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT										
30...	480	<1	90	<.10	<1	<1	<1	<1	<10	8.5
APR										
22...	460	<1	150	<.1	<1.0	<1	<1	<1	<10	5.2
JUN										
19...	--	--	--	--	--	--	--	--	--	7.3
AUG										
27...	--	--	--	--	--	--	--	--	--	6.5



CAPE FEAR RIVER BASIN

02097517 MORGAN CREEK NEAR CHAPEL HILL, NC

LOCATION.--Lat 35°53'36", long 79°01'10", Orange County, Hydrologic Unit 03030002, on left bank 2.5 mi southeast of Chapel Hill, and 3.8 mi downstream of U.S. Highway 501.

DRAINAGE AREA.--41.0 mi^2

PERIOD OF RECORD.--November 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is 245 ft above sea level, from topographic map. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. The City of Chapel Hill diverted an average of 8.7 ft^3/s for water supply upstream of station, and an average of 12.2 ft^3/s was returned as treated effluent upstream of station. Considerable diurnal fluctuation and occasional slight regulation caused by small reservoir and treated effluent outfall upstream from station. Maximum discharge for period of record from rating curve extended above 1,700 ft^3/s, by logarithmic plotting; maximum gage height, 16.18 ft, from floodmark.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e14	e14	e120	23	55	e38	e25	112	e75	22	14	14
2	e20	e24	e100	24	48	e38	19	93	e31	21	14	15
3	e18	e18	e50	23	42	e37	19	86	29	18	13	15
4	e16	e16	e36	20	39	41	20	77	e22	18	14	14
5	e14	e15	e60	23	41	36	19	52	e23	17	16	14
6	e13	e16	e100	21	38	57	28	42	24	17	16	14
7	e14	e15	e70	18	35	44	33	36	25	18	14	14
8	e250	e22	e60	15	51	33	24	32	21	19	14	14
9	e100	e26	e44	210	48	29	19	31	18	18	13	15
10	e50	e18	e34	169	41	28	18	30	17	18	13	44
11	e36	e17	e32	92	39	27	17	25	16	18	14	55
12	e28	e16	e30	65	36	23	34	25	16	17	14	17
13	e24	e16	e28	52	43	22	44	24	35	16	14	16
14	e20	e15	e26	45	345	58	33	23	20	16	14	15
15	e18	e14	e22	42	702	69	24	22	17	17	15	16
16	e17	e13	e20	176	236	45	22	21	17	34	14	16
17	e16	e14	e26	101	118	e35	21	15	17	26	14	16
18	e17	e15	e30	66	89	e28	21	14	17	18	15	16
19	e18	e16	45	51	75	232	19	15	17	17	16	16
20	e17	e15	35	48	67	215	17	16	17	17	17	16
21	e16	e18	27	43	62	93	18	15	16	20	18	15
22	e15	e32	24	41	63	65	83	14	16	20	16	16
23	e15	e22	20	41	56	48	197	13	16	48	14	16
24	e14	e18	23	44	54	44	107	13	16	101	14	42
25	e14	e17	33	88	51	41	57	16	16	20	14	22
26	e14	e24	29	67	50	42	40	23	16	17	15	17
27	e15	e20	45	51	49	38	42	16	22	15	15	16
28	e16	e18	34	78	e39	32	302	15	16	16	15	17
29	e16	e16	30	e85	---	36	872	14	15	15	14	17
30	e15	e18	27	e65	---	28	182	14	16	16	14	16
31	e15	---	26	63	---	33	---	13	---	15	14	---
TOTAL	885	538	1286	1950	2612	1635	2376	957	639	685	451	566
MEAN	28.5	17.9	41.5	62.9	93.3	52.7	79.2	30.9	21.3	22.1	14.5	18.9
MAX	250	32	120	210	702	232	872	112	75	101	18	55
MIN	13	13	20	15	35	22	17	13	15	15	13	14
CFSM	.70	.44	1.01	1.53	2.28	1.29	1.93	.75	.52	.54	.35	.46
IN.	.80	.49	1.17	1.77	2.37	1.48	2.16	.87	.58	.62	.41	.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997, BY WATER YEAR (WY)

MEAN	23.7	38.5	38.7	65.0	75.4	96.6	57.5	35.1	25.5	19.6	21.9	21.8
MAX	47.8	141	105	143	141	226	131	91.2	84.9	51.5	65.0	115
(WY)	1991	1986	1984	1993	1984	1993	1984	1990	1992	1984	1985	1996
MIN	13.3	10.5	12.9	15.2	17.3	18.0	17.5	14.5	11.1	8.93	12.1	8.77
(WY)	1985	1983	1989	1989	1991	1988	1986	1986	1986	1988	1988	1983

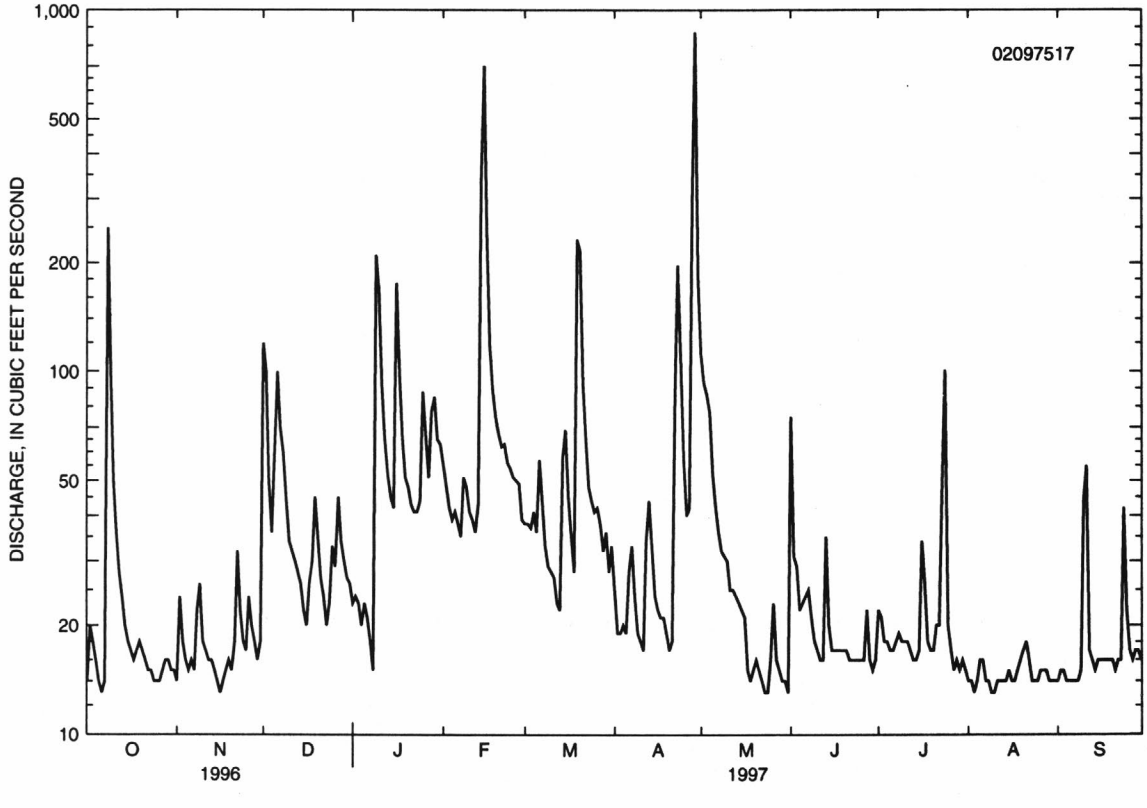
CAPE FEAR RIVER BASIN

02097517 MORGAN CREEK NEAR CHAPEL HILL, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1983 - 1997	
ANNUAL TOTAL	15252.0		14580			
ANNUAL MEAN	41.7		39.9		42.1	
HIGHEST ANNUAL MEAN					75.6	1984
LOWEST ANNUAL MEAN					21.7	1988
HIGHEST DAILY MEAN	2600	Sep 6	872	Apr 29	2600	Sep 6 1996
LOWEST DAILY MEAN	6.5	Sep 24	13	Oct 6	.60	Nov 26 1982
ANNUAL SEVEN-DAY MINIMUM	8.0	Sep 19	14	Aug 7	2.1	Nov 22 1982
INSTANTANEOUS PEAK FLOW			1290	Apr 29	4210*	Sep 6 1996
INSTANTANEOUS PEAK STAGE			10.52	Apr 29	16.18*	Sep 6 1996
INSTANTANEOUS LOW FLOW			8.9	May 25	NOT DETERMINED	
ANNUAL RUNOFF (CFSM)	1.02		.97		1.03	
ANNUAL RUNOFF (INCHES)	13.84		13.23		13.95	
10 PERCENT EXCEEDS	69		68		87	
50 PERCENT EXCEEDS	22		21		18	
90 PERCENT EXCEEDS	13		14		12	

e Estimated.

* See REMARKS.



CAPE FEAR RIVER BASIN

0209768310 JORDAN LAKE AT BUOY 12 AT FARRINGTON, NC

LOCATION.--Lat 35°47'55", long 79°00'22", Chatham County, Hydrologic Unit 03030002, .02 mi above Secondary Road 1008, and 0.2 mi east of Farrington.

PERIOD OF RECORD.--Water years 1992 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. Samples for nutrient and chlorophyll *a* and *b* analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	BAROMETRIC PRESSURE (MM OF HG) (00025)	TRANSPARENCY (SECCHI DISK) (M) (00078)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
OCT										
21...	1200	1.00	98.0	7.10	17.5	60	755	.450	10.8	114
APR										
03...	1145	1.00	126	8.95	17.0	50	768	.300	13.5	138
AUG										
01...	1115	1.00	133	7.25	27.5	35	755	.400	6.72	86
26...	1015	1.00	139	6.96	28.0	16	758	.450	5.87	75

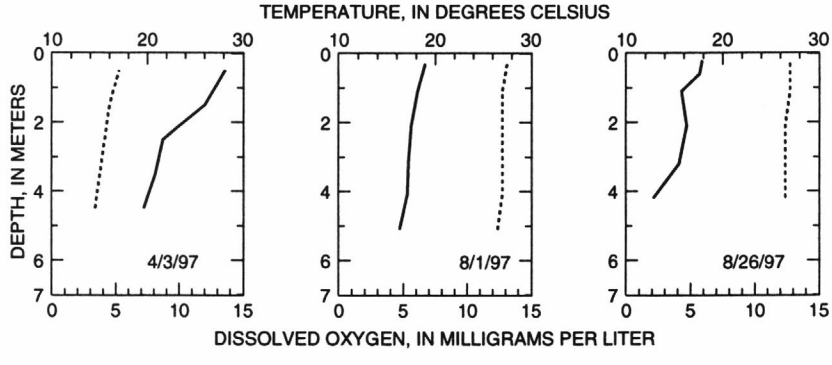
DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	ANC UNFLTRD CARBONATE IT-FLD (MG/L - CAC03) (99430)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
OCT										
21...	25	6.7	2.1	8.1	38	.7	3.0	27.0	22	8.3
APR										
03...	32	8.2	2.7	11	41	.9	2.3	16	29	11
AUG										
01...	30	7.8	2.5	12	45	1	2.6	--	--	10
26...	31	7.9	2.6	13	45	1	2.9	34	28	11

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT										
21...	7.4	.20	6.3	60	.031	.120	.040	.46	.50	.62
APR										
03...	11	.2	4.0	80	.004	.078	<.002	--	1.0	1.1
AUG										
01...	11	.2	5.2	84	.005	.011	.018	1.0	1.0	1.0
26...	11	.2	4.9	83	<.0010	<.00500	.004	3.4	3.4	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70954)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT										
21...	.040	<.001	9.10	1.10	160	<1	<1	<1	<1	2
APR										
03...	.080	.003	7.9	.8	200	<1	<1	<1.0	<1	2
AUG										
01...	.04	.003	25	1.3	--	--	--	--	--	--
26...	.30	.001	22	.9	--	--	--	--	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT										
21...	600	<1	130	<.10	2	1	<1	<1	<10	12
APR										
03...	550	<1	130	<.1	<1.0	1	<1	<1	<10	9.9
AUG										
01...	--	--	--	--	--	--	--	--	--	9.8
26...	--	--	--	--	--	--	--	--	--	9.3



EXPLANATION

..... WATER TEMPERATURE

——— DISSOLVED OXYGEN

CAPE FEAR RIVER BASIN

0209799150 JORDAN LAKE ABOVE U.S. HIGHWAY 64 NEAR WILSONVILLE, NC

LOCATION.--Lat 35°44'29", long 79°01'10", Chatham County, Hydrologic Unit 03030002, 0.2 mi above bridge on U.S. Highway 64, and 1.1 mi west of Wilsonville.

PERIOD OF RECORD.--Water years 1991 to current year.

REMARKS.-- Station operated to define water quality as part of a six-county regional surface-water quality assessment. Samples for nutrient and chlorophyll *a* and *b* analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	BAROMETRIC PRESSURE (MM OF HG) (00025)	TRANSPARENCY (SECCHI DISK) (M) (00078)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
OCT										
21...	1300	1.00	103	7.04	18.0	50	754	.650	9.75	104
APR										
03...	1245	1.00	111	8.54	16.5	40	768	1.00	11.9	121
AUG										
01...	1215	1.00	120	7.62	28.0	22	755	.650	7.36	95
26...	1145	1.00	125	7.13	27.5	15	758	.550	6.54	83

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	ANC UNFLTRD CARBONATE IT-FLD (MG/L - CAC03) (99430)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
OCT										
21...	26	6.7	2.2	9.8	42	.8	2.9	28.0	23.0	8.8
APR										
03...	26	6.7	2.3	9.5	41	.8	2.3	28	25	11
AUG										
01...	29	7.2	2.6	11	42	.9	2.5	33.0	27.0	9.4
26...	29	7.1	2.8	18	53	1	3.1	32	26	18

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT										
21...	8.2	.20	5.3	66	.009	.095	.018	.48	.50	.60
APR										
03...	9.8	.2	3.4	73	.005	.110	<.002	--	.60	.71
AUG										
01...	10	.1	4.3	78	.003	.009	.004	.73	.7	.75
26...	14	.2	5.9	107	<.0010	<.00500	<.002	--	.8	--

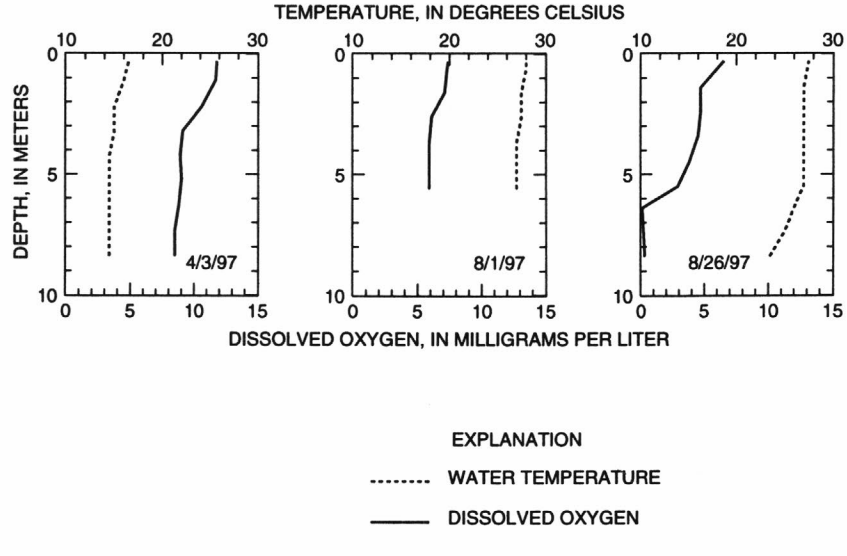
CAPE FEAR RIVER BASIN

0209799150 JORDAN LAKE ABOVE U.S. HIGHWAY 64 NEAR WILSONVILLE, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70954)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT										
21...	.030	<.001	4.30	.500	90	<1	<1	<1	<1	1
APR										
03...	.030	.001	8.6	<.1	50	<1	<1	<1.0	<1	1
AUG										
01...	<.01	.002	5.8	<.1	--	--	--	--	--	--
26...	.04	.001	17	.8	--	--	--	--	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT										
21...	260	<1	<10	<.10	2	<1	<1	<1	<10	9.7
APR										
03...	150	<1	70	<.1	<1.0	<1	<1	<1	<10	8.2
AUG										
01...	--	--	--	--	--	--	--	--	--	8.1
26...	--	--	--	--	--	--	--	--	--	14



CAPE FEAR RIVER BASIN

02099500 DEEP RIVER NEAR RANDLEMAN, NC

LOCATION.--Lat 35°54'06", long 79°51'05", Randolph County, Hydrologic Unit 03030003, on left bank 500 ft downstream of bridge on Secondary Road 1929, 0.2 mi downstream of Coltrane's Mill, 0.5 mi south of Guilford County line, 4.8 mi upstream from Muddy Creek, and 7 mi north of Randleman.

DRAINAGE AREA.--125 mi^2.

PERIOD OF RECORD.--October 1928 to current year.

REVISED RECORDS.--WSP 782: 1929-30. WSP 1383: 1934-35, 1941. WSP 1723: 1929(M). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 638.11 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Diurnal fluctuation at times during periods of low flow caused by Coltrane's Mill. Some regulation by Oak Hollow Reservoir (station 02098495) and High Point Lake (station 02099096). City of High Point diverted an average of 20.6 ft^3/s for municipal water supply, 17.9 ft^3/s was discharged as treated effluent into Richland Creek upstream from station and 5.7 ft^3/s into Rich Fork Creek in Pee Dee River basin. Maximum discharge for period of record from rating curve extended above 7,100 ft^3/s on basis of contracted-opening measurement of peak flow at bridge 1.5 mi upstream; maximum gage height for period of record from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	550	e37	1120	91	105	807	100	382	46	24	24	e9.9
2	1010	e45	905	85	93	454	71	210	62	51	22	6.6
3	536	e110	303	89	84	428	63	406	181	40	22	28
4	262	e58	162	89	82	602	61	622	111	25	23	17
5	176	e46	180	131	101	279	60	222	63	28	53	12
6	145	e40	746	139	98	477	166	147	56	27	34	17
7	138	e48	430	98	79	238	356	116	83	25	27	17
8	908	e82	457	76	185	158	145	89	52	24	25	16
9	721	e190	208	649	190	131	97	84	43	23	23	16
10	491	e130	134	677	124	120	75	103	39	24	21	54
11	e255	e70	108	333	117	114	63	71	40	25	20	63
12	e170	e55	96	196	98	100	336	59	36	23	19	32
13	e110	e54	1100	140	87	87	351	58	246	23	18	26
14	e81	e46	438	114	857	236	149	57	162	22	19	23
15	e89	44	201	99	2210	330	100	52	99	22	19	29
16	e69	41	142	774	859	147	81	48	64	25	19	22
17	e60	40	125	399	372	112	75	45	53	21	19	8.9
18	e71	39	118	177	228	101	74	40	47	20	18	19
19	e235	79	288	120	184	827	65	37	43	20	18	18
20	e150	62	164	104	151	799	57	37	39	19	21	18
21	e87	62	113	98	138	331	57	51	40	18	20	17
22	e56	135	99	93	214	202	595	45	21	32	18	16
23	e56	76	93	103	145	142	1590	38	28	198	17	16
24	e47	61	101	103	115	111	774	32	26	55	17	36
25	e43	55	220	277	102	102	291	32	25	59	17	97
26	e40	113	133	183	98	386	166	65	25	30	20	39
27	e42	103	138	119	126	214	258	71	24	27	17	36
28	e45	67	119	241	694	134	1360	56	25	25	16	26
29	e40	56	107	219	---	133	4220	45	24	24	17	31
30	e50	60	105	138	---	112	903	39	22	23	29	26
31	e48	---	99	114	---	115	---	37	---	25	31	---
TOTAL	6781	2104	8752	6268	7936	8529	12759	3396	1825	1027	683	792.4
MEAN	219	70.1	282	202	283	275	425	110	60.8	33.1	22.0	26.4
MAX	1010	190	1120	774	2210	827	4220	622	246	198	53	97
MIN	40	37	93	76	79	87	57	32	21	18	16	6.6
CFSM	1.75	.56	2.26	1.62	2.27	2.20	3.40	.88	.49	.27	.18	.21
IN.	2.02	.63	2.60	1.87	2.36	2.54	3.80	1.01	.54	.31	.20	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1997, BY WATER YEAR (WY)

MEAN	79.7	82.9	128	198	231	229	175	105	78.8	82.0	75.0	84.1
MAX	474	354	389	645	584	697	529	445	351	465	311	831
(WY)	1991	1986	1933	1937	1960	1975	1936	1978	1982	1975	1949	1996
MIN	5.78	9.56	16.9	15.8	38.7	54.4	27.6	23.5	16.7	17.2	17.1	10.6
(WY)	1931	1932	1934	1942	1986	1967	1985	1977	1933	1947	1945	1941

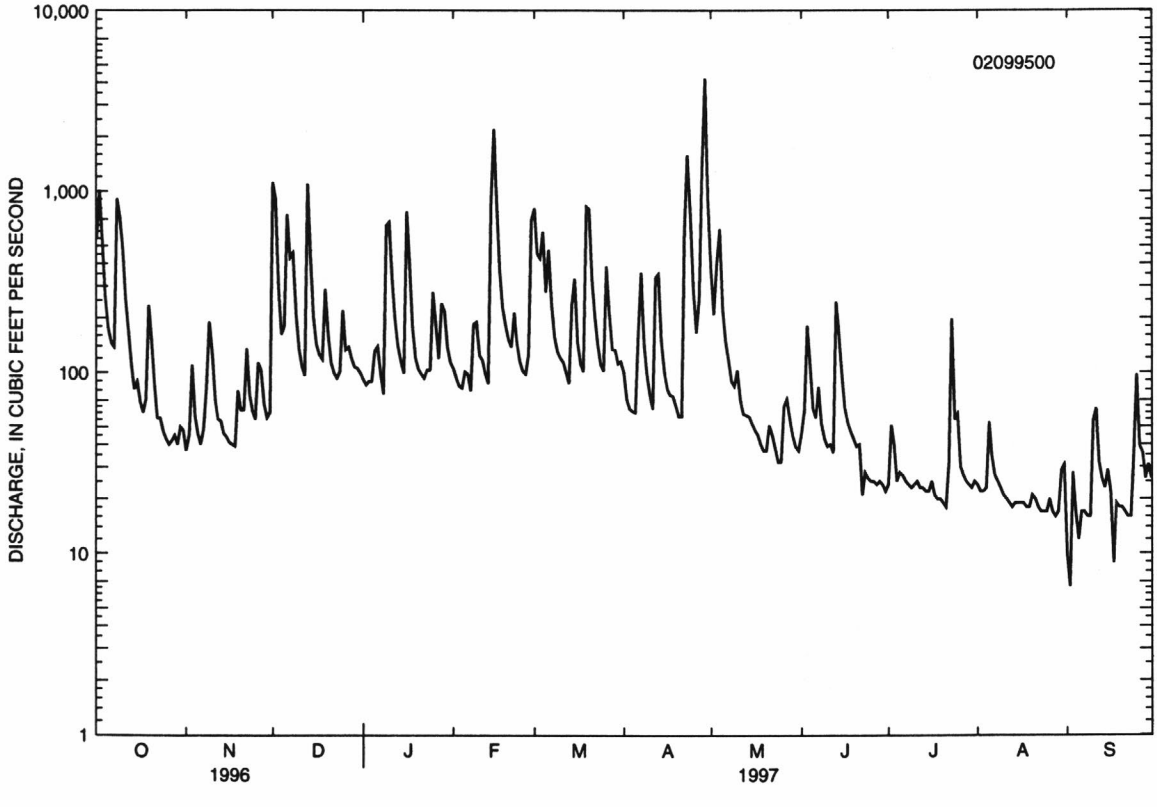
CAPE FEAR RIVER BASIN

02099500 DEEP RIVER NEAR RANDLEMAN, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1929 - 1997	
ANNUAL TOTAL	77770		60852.4			
ANNUAL MEAN	212		167		129	
HIGHEST ANNUAL MEAN					230	1978
LOWEST ANNUAL MEAN					45.9	1967
HIGHEST DAILY MEAN	9000	Sep 6	4220	Apr 29	12000	Sep 25 1947
LOWEST DAILY MEAN	13	Jun 27	6.6	Sep 2	1.2	Nov 12 1933
ANNUAL SEVEN-DAY MINIMUM	19	Jun 26	15	Sep 1	3.9	Sep 30 1930
INSTANTANEOUS PEAK FLOW			5540	Apr 29	20000*	Sep 25 1947
INSTANTANEOUS PEAK STAGE			20.18	Apr 29	32.20*	Sep 25 1947
INSTANTANEOUS LOW FLOW			4.2	Sep 1	.50	Nov 28 1931
ANNUAL RUNOFF (CFSM)	1.70		1.33		1.03	
ANNUAL RUNOFF (INCHES)	23.14		18.11		13.97	
10 PERCENT EXCEEDS	432		391		241	
50 PERCENT EXCEEDS	88		79		52	
90 PERCENT EXCEEDS	32		20		16	

e Estimated.

* See REMARKS.



CAPE FEAR RIVER BASIN

02100500 DEEP RIVER AT RAMSEUR, NC

LOCATION.--Lat 35°43'34", long 79°39'20", Randolph County, Hydrologic Unit 03030003, on right bank 0.2 mi downstream of Main Street bridge in Ramseur, 0.5 mi downstream of mill dam, and 1.5 mi downstream of Sandy Creek.

DRAINAGE AREA.--349 mi^2.

PERIOD OF RECORD.--November 1922 to current year.

REVISED RECORDS.--WSP 1032: 1923-24, 1925(M), 1926, 1927-28(M), 1929, 1930(M), 1932-33, 1934(M), 1935, 1936-37(M), 1944(M). WSP 1383: 1923(m), 1925, 1927, 1930, 1936. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 419.50 ft above sea level. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow slightly regulated by Oak Hollow Reservoir (station 02098495), High Point Municipal Lake (station 02099096), and small power plant reservoirs. Prior to January 1963, diurnal fluctuation caused by power plant immediately upstream from station. Town of Asheboro diverted an average of 7.7ft^3/s from Yadkin River Basin for water supply and discharged an average of 7.9 ft^3/s of treated effluent upstream from the station into Deep River. Maximum discharge for period of record from rating curve extended above 18,000 ft^3/s, on basis of slope-area measurement of peak flow; gage height: 34.04 ft. Minimum discharge for period of record occurred frequently in 1941. Minimum discharge for the current water year also occurred Aug. 31, due to regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1901 reached a stage of 28.75 ft, from floodmarks 0.2 mi upstream; discharge, 30,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	756	100	e1450	253	330	1550	288	891	121	62	62	36
2	2820	132	e2690	232	290	905	239	717	177	175	54	129
3	929	355	e1690	215	264	653	216	816	251	145	53	142
4	450	181	457	226	257	1030	163	996	297	79	55	88
5	293	144	358	229	253	629	187	569	185	78	57	51
6	169	121	1280	360	299	824	189	405	163	71	75	34
7	155	e145	738	286	254	613	488	335	178	66	77	27
8	1840	e260	888	231	258	436	385	290	169	60	69	26
9	1480	e583	548	1590	483	366	261	254	151	56	61	26
10	719	354	390	1790	349	334	184	256	129	81	56	177
11	416	206	306	853	308	315	188	244	82	81	55	633
12	294	149	290	567	285	288	353	205	94	68	54	178
13	226	145	1260	425	272	261	950	191	318	60	69	129
14	174	113	827	360	2230	510	443	188	342	56	61	83
15	178	119	472	299	5560	1030	290	187	222	53	48	42
16	158	118	356	1600	2140	494	242	174	176	227	41	36
17	130	119	299	1070	881	356	229	153	126	478	38	40
18	147	136	308	531	584	316	199	146	105	110	40	42
19	434	135	532	382	469	2050	168	149	109	91	37	39
20	279	200	478	325	402	2190	191	132	105	65	37	31
21	200	165	344	315	360	885	189	128	98	56	49	e27
22	162	365	286	287	419	572	555	138	100	71	73	e28
23	124	273	e235	289	380	433	2810	118	77	e840	56	e30
24	127	179	e210	293	306	342	1710	147	69	e745	30	e32
25	132	176	e235	507	285	306	679	127	70	335	33	188
26	127	429	e283	559	274	450	438	101	66	140	41	156
27	124	429	305	370	302	562	383	152	53	108	27	98
28	145	235	312	355	831	373	5520	148	56	85	32	73
29	122	172	283	615	---	345	9800	138	62	76	44	109
30	156	177	266	421	---	316	2440	149	63	71	47	132
31	147	---	260	369	---	266	---	132	---	77	24	---
TOTAL	13613	6415	18636	16204	19325	20000	30377	8776	4214	4766	1555	2862
MEAN	439	214	601	523	690	645	1013	283	140	154	50.2	95.4
MAX	2820	583	2690	1790	5560	2190	9800	996	342	840	77	633
MIN	122	100	210	215	253	261	163	101	53	53	24	26
CFSM	1.26	.61	1.72	1.50	1.98	1.85	2.90	.81	.40	.44	.14	.27
IN.	1.45	.68	1.99	1.73	2.06	2.13	3.24	.94	.45	.51	.17	.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1997, BY WATER YEAR (WY)

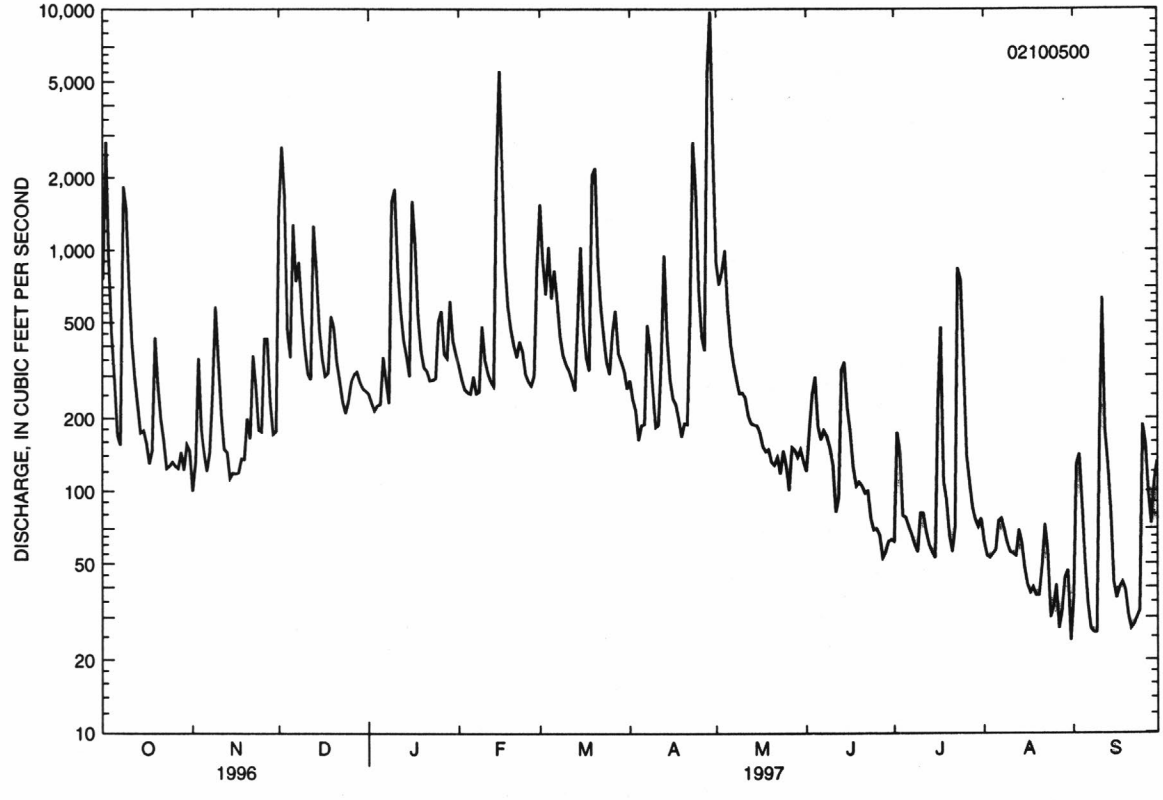
MEAN	213	219	349	552	658	649	496	291	217	226	209	240
MAX	1193	1237	1050	1660	1642	1842	1440	944	978	1434	896	1934
(WY)	1991	1986	1933	1937	1979	1975	1936	1978	1982	1975	1939	1928
MIN	8.69	14.1	39.1	40.8	131	144	116	71.3	48.1	36.5	32.4	17.7
(WY)	1942	1942	1934	1942	1931	1967	1967	1986	1933	1986	1956	1954

CAPE FEAR RIVER BASIN

02100500 DEEP RIVER AT RAMSEUR, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1923 - 1997	
ANNUAL TOTAL	175346		146743			
ANNUAL MEAN	479		402		358	
HIGHEST ANNUAL MEAN					665	1975
LOWEST ANNUAL MEAN					155	1967
HIGHEST DAILY MEAN	16600	Sep 6	9800	Apr 29	27800	Sep 18 1945
LOWEST DAILY MEAN	27	Jul 23	24	Aug 31	.70	Nov 29 1941
ANNUAL SEVEN-DAY MINIMUM	36	Jul 5	33	Sep 18	3.6	Oct 19 1941
INSTANTANEOUS PEAK FLOW			11900	Apr 29	43000*	Sep 18 1945
INSTANTANEOUS PEAK STAGE			17.81	Apr 29	34.04*	Sep 18 1945
INSTANTANEOUS LOW FLOW			23*	Aug 27	.40*	May 27 1941
ANNUAL RUNOFF (CFSM)	1.37		1.15		1.03	
ANNUAL RUNOFF (INCHES)	18.69		15.64		13.95	
10 PERCENT EXCEEDS	969		829		688	
50 PERCENT EXCEEDS	227		222		153	
90 PERCENT EXCEEDS	75		55		37	

e Estimated.
* See REMARKS.



CAPE FEAR RIVER BASIN

0210166029 ROCKY RIVER NEAR CRUTCHFIELD CROSSROADS, NC

LOCATION.--Lat 35°48'25", long 79°31'41", Chatham County, Hydrologic Unit 03030003, on right bank at downstream side of culvert on Secondary Road 1300, and 5.5 mi west of Crutchfield Crossroads.

DRAINAGE AREA.--7.42 mi^2.

PERIOD OF RECORD.--May 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 620 ft above sea level, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Maximum discharge for period of record and current water year from rating curve extended above 350 ft^3/s, by logarithmic plotting. No flow occurred several days in Aug. 1988. Minimum discharge for current water year also occurred Aug. 31, Sept. 1, 2, 4, 5, 7, 8, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	1.7	40	3.4	6.1	14	3.5	12	7.2	9.9	.57	.19
2	21	5.6	25	3.3	4.8	8.3	3.2	8.3	18	4.4	.53	.20
3	7.3	3.3	9.0	3.3	4.3	8.9	3.1	35	6.2	1.8	.47	.22
4	3.6	2.5	5.7	3.1	4.0	11	3.0	15	2.7	1.0	.45	.19
5	2.7	2.0	5.7	3.7	4.2	6.8	2.9	6.7	1.9	.73	1.6	.20
6	2.2	2.0	15	3.7	4.0	24	2.8	5.1	2.0	.66	1.3	.22
7	1.9	1.9	11	3.0	3.6	7.5	2.9	4.2	2.9	.66	.64	.19
8	66	9.0	12	2.6	8.2	5.4	2.6	3.7	1.8	.58	.49	.18
9	19	8.9	6.2	56	6.9	4.7	2.4	3.8	1.6	.53	.47	.19
10	10	3.9	4.6	29	4.9	4.8	2.1	3.4	1.4	.58	1.2	9.6
11	5.1	3.7	4.1	12	4.7	4.4	2.1	2.9	1.3	.53	1.3	8.3
12	3.8	2.3	5.0	7.5	4.1	3.7	11	2.6	1.3	.53	.51	1.3
13	2.8	1.9	6.6	5.7	6.0	3.5	7.0	2.3	7.9	.48	.39	.59
14	2.4	2.1	4.8	4.8	80	23	3.8	2.1	4.4	.44	.33	.37
15	2.0	1.9	3.9	4.7	111	15	3.3	1.9	3.2	.43	.32	.37
16	1.8	1.7	3.7	45	24	7.2	2.9	1.6	2.3	.67	.29	.32
17	1.8	1.7	3.8	12	12	5.0	2.5	1.5	1.5	.95	.28	.27
18	1.8	1.8	3.9	8.0	8.4	4.4	2.4	1.5	1.2	.60	.26	.29
19	3.1	3.3	9.8	7.3	7.1	71	2.2	1.4	1.0	.48	.22	.31
20	2.1	2.5	5.1	5.5	6.1	33	2.3	1.6	.91	.45	.25	.31
21	1.8	5.8	3.9	4.5	5.6	13	2.2	2.5	.81	.44	.43	.29
22	2.1	11	3.8	4.4	6.5	9.1	12	1.6	.77	.39	.30	.30
23	1.8	3.8	3.7	4.6	4.7	6.3	55	1.4	.70	5.6	.23	.36
24	1.7	3.4	4.3	4.1	4.1	5.0	14	1.3	.65	19	.22	4.1
25	1.5	4.8	7.6	19	3.9	4.6	6.7	1.2	.60	7.4	.22	4.1
26	1.4	5.9	4.4	7.9	4.1	5.2	4.7	1.4	.59	2.0	.22	1.0
27	1.6	4.0	5.2	5.3	5.9	4.4	12	1.3	.67	1.1	.21	.54
28	2.1	3.2	4.4	9.4	12	4.2	277	1.2	.74	.84	.22	.51
29	2.5	2.7	4.2	7.6	---	7.9	183	1.1	.63	.68	.22	1.2
30	2.0	3.0	4.2	6.7	---	5.0	25	1.1	.57	.61	.22	.62
31	1.8	---	3.9	8.1	---	4.1	---	1.1	---	.73	.21	---
TOTAL	190.7	111.3	234.5	305.2	361.2	334.4	659.6	131.8	77.44	65.19	14.57	36.83
MEAN	6.15	3.71	7.56	9.85	12.9	10.8	22.0	4.25	2.58	2.10	.47	1.23
MAX	66	11	40	56	111	71	277	35	18	19	1.6	9.6
MIN	1.4	1.7	3.7	2.6	3.6	3.5	2.1	1.1	.57	.39	.21	.18
CFSM	.83	.50	1.02	1.33	1.74	1.45	2.96	.57	.35	.28	.06	.17
IN.	.96	.56	1.18	1.53	1.81	1.68	3.31	.66	.39	.33	.07	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1997, BY WATER YEAR (WY)

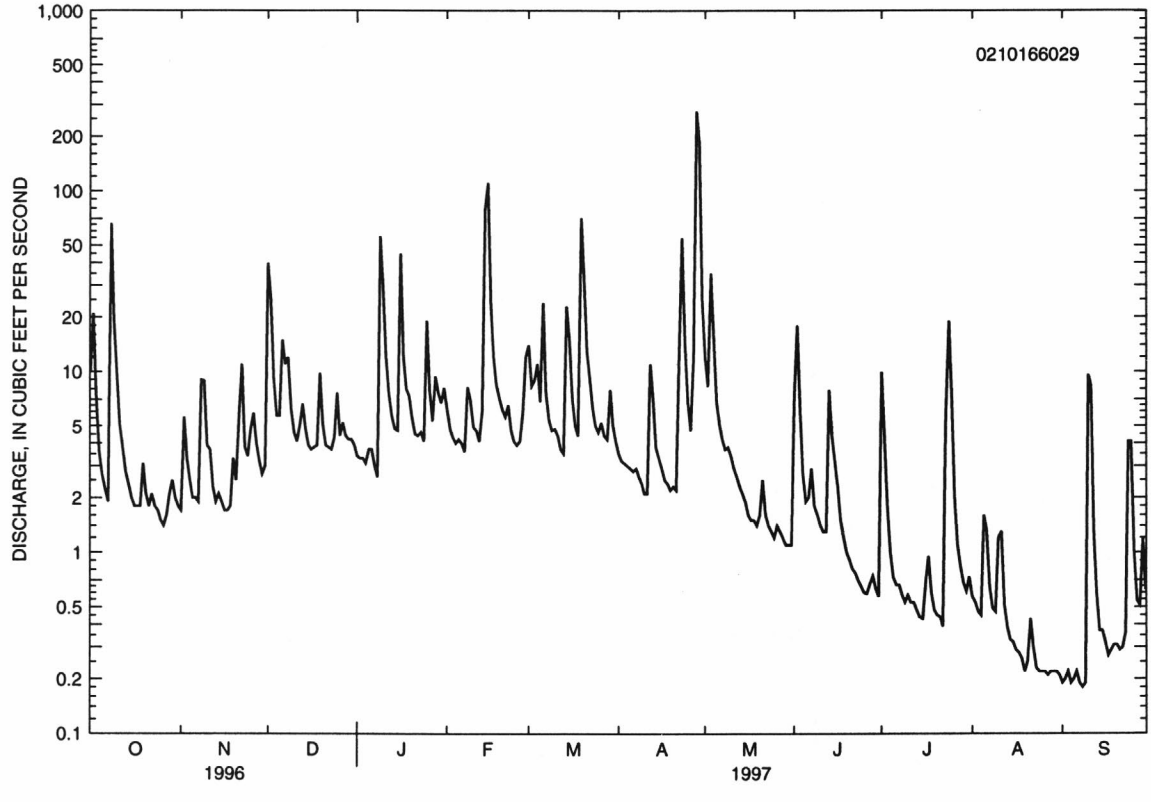
MEAN	7.08	6.01	5.12	12.6	13.1	16.6	10.4	5.66	4.60	4.23	2.08	4.26
MAX	17.1	18.3	10.6	19.8	20.8	29.6	22.0	19.2	20.5	14.8	8.61	23.7
(WY)	1990	1996	1990	1993	1995	1993	1997	1990	1995	1989	1994	1996
MIN	.77	1.52	1.29	2.33	4.89	6.95	1.94	1.58	.44	.50	.41	.26
(WY)	1994	1995	1995	1989	1991	1992	1995	1988	1988	1988	1993	1990

CAPE FEAR RIVER BASIN

0210166029 ROCKY RIVER NEAR CRUTCHFIELD CROSSROADS, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1988 - 1997	
ANNUAL TOTAL	2994.27		2522.73			
ANNUAL MEAN	8.18		6.91		7.74	
HIGHEST ANNUAL MEAN					10.0	1996
LOWEST ANNUAL MEAN					4.26	1992
HIGHEST DAILY MEAN	531	Sep 6	277	Apr 28	531	Sep 6 1996
LOWEST DAILY MEAN	.32	Jul 25	.18	Sep 8	0	Aug 20 1988
ANNUAL SEVEN-DAY MINIMUM	.38	Jul 21	.20	Sep 3	.02	Aug 17 1988
INSTANTANEOUS PEAK FLOW			673*	Apr 28	1260*	Sep 6 1996
INSTANTANEOUS PEAK STAGE			8.80	Apr 28	11.91	Sep 6 1996
INSTANTANEOUS LOW FLOW			.18*	Aug 27	0*	Aug 19 1988
ANNUAL RUNOFF (CFSM)	1.10		.93		1.04	
ANNUAL RUNOFF (INCHES)	15.01		12.65		14.17	
10 PERCENT EXCEEDS	14		12		15	
50 PERCENT EXCEEDS	3.7		3.1		2.4	
90 PERCENT EXCEEDS	.69		.38		.43	

* See REMARKS.



CAPE FEAR RIVER BASIN

02101800 TICK CREEK NEAR MOUNT VERNON SPRINGS, NC

LOCATION.--Lat 35°39'37", long 79°24'08", Chatham County, Hydrologic Unit 03030003, on right bank 200 ft upstream from bridge on U.S. Highway 421, 1.5 mi east of Mount Vernon Springs, and 4 mi upstream from mouth.

DRAINAGE AREA.--15.5 mi^2

PERIOD OF RECORD.--June 1958 to September 1981, January 1994 to current year.

GAGE.--Water-stage recorder and v-notch sharp-crested weir. Elevation of gage is 455 ft above sea level, by barometer. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Maximum discharge for period of record from rating curve extended above 2,200 ft^3/s, on basis of contracted-opening measurement of peak flow. No flow occurs at times most years. Minimum discharge for the current water year also occurred Sept. 8, 9, 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	8.4	39	7.9	14	19	6.5	34	2.6	82	1.4	.09
2	28	16	30	8.7	12	12	5.9	31	11	27	1.2	.08
3	10	13	14	7.8	9.9	11	5.7	36	12	5.5	1.0	.07
4	5.6	9.9	9.4	7.2	9.2	9.3	5.5	23	8.6	3.0	.91	.05
5	4.1	9.2	13	6.7	9.2	8.1	5.1	13	4.2	2.2	.91	.04
6	3.3	9.5	49	6.7	8.9	18	5.0	9.9	3.8	2.3	1.0	.04
7	3.1	9.9	22	5.8	7.9	10	5.4	8.3	6.8	1.8	.83	.02
8	168	16	23	5.0	15	8.2	4.4	6.8	4.8	1.4	.72	.02
9	41	18	13	135	15	7.4	4.0	6.3	3.2	1.1	.74	.02
10	19	9.1	9.8	59	11	7.0	3.7	5.7	2.5	e.93	.66	.16
11	11	7.4	8.9	24	10	6.7	3.9	4.8	2.1	e.73	e.65	1.2
12	8.5	6.3	8.0	16	8.9	5.9	13	4.4	1.9	e.59	e.57	.15
13	7.4	5.7	7.4	12	13	5.5	13	4.2	69	e.50	.47	.06
14	6.6	5.2	6.7	10	160	49	6.9	3.9	9.1	e.39	.41	.11
15	7.1	5.0	6.1	9.3	215	45	5.2	4.0	4.4	.30	.29	.14
16	7.2	3.8	5.7	79	51	17	4.6	3.6	2.7	.25	.22	.12
17	7.5	2.1	6.2	26	25	12	4.4	3.2	1.9	.36	.21	.11
18	8.3	2.2	6.7	15	18	10	4.0	3.2	1.3	.35	.19	.09
19	8.5	5.0	14	11	15	168	3.8	2.9	1.1	.29	.16	.09
20	6.6	3.9	9.5	11	13	73	4.2	2.7	.95	.24	.16	.11
21	11	5.2	6.8	9.9	11	29	3.9	2.6	.75	.28	.35	.10
22	16	17	6.1	9.4	13	20	55	2.3	.50	.49	.20	.07
23	18	7.8	6.0	9.7	9.7	14	118	2.2	.36	64	.16	.05
24	16	6.0	6.4	8.5	8.4	11	32	2.2	.48	299	.13	5.6
25	14	5.3	11	28	7.8	9.5	15	2.5	.97	39	.12	9.6
26	14	6.0	8.3	16	7.7	11	10	3.9	.92	11	.15	e2.0
27	4.4	5.5	17	11	8.3	9.2	13	3.2	.75	5.6	.10	e.98
28	5.7	4.2	12	16	11	8.5	179	2.5	1.2	3.5	.07	e.57
29	6.3	4.0	9.7	16	---	11	296	2.1	1.2	2.5	.09	e.36
30	8.1	4.2	8.6	16	---	8.8	46	2.1	1.1	2.0	.10	e.15
31	10	---	8.0	19	---	7.9	---	2.1	---	2.0	.09	---
TOTAL	498.3	230.8	401.3	622.6	717.9	642.0	882.1	238.6	162.18	560.60	14.26	22.25
MEAN	16.1	7.69	12.9	20.1	25.6	20.7	29.4	7.70	5.41	18.1	.46	.74
MAX	168	18	49	135	215	168	296	36	69	299	1.4	9.6
MIN	3.1	2.1	5.7	5.0	7.7	5.5	3.7	2.1	.36	.24	.07	.02
CFSM	1.04	.50	.84	1.30	1.65	1.34	1.90	.50	.35	1.17	.03	.05
IN.	1.20	.55	.96	1.49	1.72	1.54	2.12	.57	.39	1.35	.03	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1997@, BY WATER YEAR (WY)

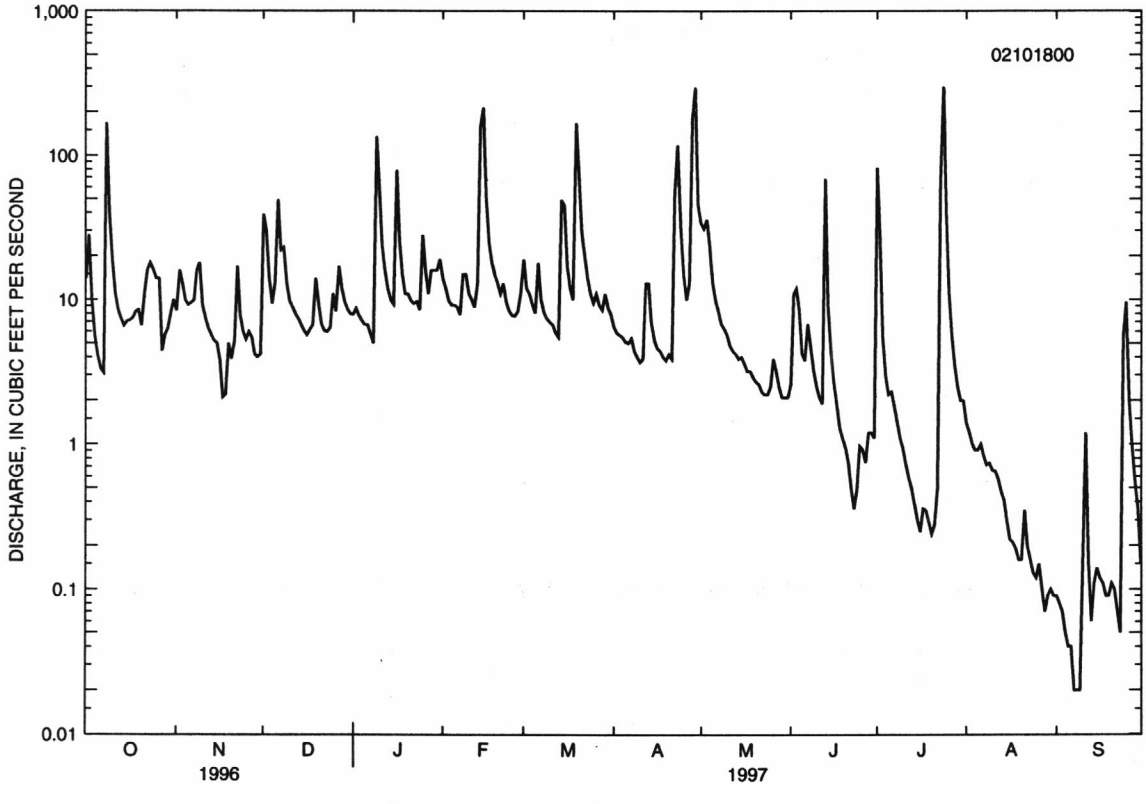
MEAN	8.32	7.28	11.7	26.0	33.3	30.2	18.5	9.30	8.34	8.96	7.96	6.31
MAX	56.6	33.0	53.4	80.4	81.0	63.0	48.3	39.1	48.0	66.6	55.3	75.2
(WY)	1972	1980	1973	1978	1960	1975	1960	1978	1973	1975	1964	1996
MIN	.003	.16	.79	1.27	5.18	4.80	2.45	1.59	.55	.098	.003	.000
(WY)	1964	1974	1961	1981	1968	1981	1981	1981	1981	1966	1977	1980

CAPE FEAR RIVER BASIN

02101800 TICK CREEK NEAR MOUNT VERNON SPRINGS, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1958 - 1997@	
ANNUAL TOTAL	6285.10		4992.89			
ANNUAL MEAN	17.2		13.7		14.8	
HIGHEST ANNUAL MEAN					26.5	1973
LOWEST ANNUAL MEAN					3.84	1981
HIGHEST DAILY MEAN	1570	Sep 6	299	Jul 24	1570	Sep 6 1996
LOWEST DAILY MEAN	.01	Jul 4	.02	Sep 7	0*	Sep 2 1962
ANNUAL SEVEN-DAY MINIMUM	.01	Jul 2	.04	Sep 3	0*	Sep 2 1962
INSTANTANEOUS PEAK FLOW			708	Jul 24	4010*	Sep 6 1996
INSTANTANEOUS PEAK STAGE			5.70	Jul 24	13.41	Sep 6 1996
INSTANTANEOUS LOW FLOW			.02*	Sep 7	0*	Sep 2 1962
ANNUAL RUNOFF (CFSM)	1.11		.88		.96	
ANNUAL RUNOFF (INCHES)	15.08		11.98		13.01	
10 PERCENT EXCEEDS	25		23		27	
50 PERCENT EXCEEDS	7.0		6.4		3.8	
90 PERCENT EXCEEDS	.36		.21		.19	

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



CAPE FEAR RIVER BASIN

02102000 DEEP RIVER AT MONCURE, NC

LOCATION.--Lat 35°37'38", long 79°06'58", Lee County, Hydrologic Unit 03030003, on right bank 1.0 mi upstream from Lockville Dam, 1.2 mi upstream from bridge on U.S. Highway 1, 1.5 mi northwest of Moncure, 2.2 mi downstream of Rocky River, and 4.5 mi upstream from confluence with Haw River.

DRAINAGE AREA.--1,434 mi^2.

PERIOD OF RECORD.--July 1930 to current year. Records for May 1898 to December 1899 published in 21st Annual Report, Part 4, and in Bulletins 34 and 39 of North Carolina Department of Conservation and Development have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1082: (1930-46 not previously published). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 185.06 ft above sea level. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Diurnal fluctuation and some regulation at low flow caused by small power plants upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	430	302	867	947	2130	2210	1070	15500	414	156	523	101
2	1380	426	4040	893	1670	3710	997	6830	387	852	366	101
3	3820	523	4260	950	1330	2600	858	3110	750	452	332	97
4	2050	701	2240	859	1130	2020	804	4190	905	443	298	91
5	1170	701	1430	787	1010	2020	783	3410	873	397	298	169
6	741	444	2280	751	1030	1900	711	2130	753	274	263	199
7	500	373	3230	738	980	2270	649	1550	656	251	184	156
8	5480	393	3400	827	1090	1910	766	1260	587	224	392	127
9	10400	927	2980	3270	1770	1410	1030	1110	572	210	244	112
10	5930	1390	1990	9890	1910	1190	827	1010	564	187	117	110
11	2620	1160	1410	6300	1500	1090	687	922	510	215	122	277
12	1470	784	1130	2930	1240	1010	629	866	466	180	224	1580
13	1000	517	980	1980	1140	929	1340	794	916	159	156	970
14	788	448	1350	1500	7480	1390	2510	753	1350	158	184	484
15	626	501	1790	1240	14800	4770	1480	714	1060	157	184	253
16	551	323	1190	2680	14000	3660	1050	688	722	252	179	358
17	471	437	919	5840	10500	2040	825	653	561	251	176	151
18	485	383	845	3470	3610	1450	743	630	528	451	163	104
19	539	385	892	2010	2320	2570	713	494	435	530	137	99
20	619	462	1350	1480	1920	7640	645	588	329	240	111	100
21	709	575	1510	1290	1660	6060	555	606	322	357	146	105
22	585	1200	1100	1150	1690	2910	971	425	307	232	767	111
23	442	1680	878	1070	1870	2040	5220	532	298	4930	335	112
24	405	1250	789	1040	1580	1550	8200	406	289	17700	189	132
25	317	861	794	1510	1270	1280	4430	378	275	20200	173	1250
26	299	666	944	2940	1130	1210	2210	434	200	18600	162	2000
27	422	660	1810	2320	1060	1380	1500	647	95	7880	146	905
28	287	932	2170	1620	1060	1600	7690	498	72	1140	135	514
29	335	795	1590	1600	---	1510	17600	422	78	670	121	371
30	340	643	1250	1790	---	1790	16100	456	66	651	114	253
31	342	---	1080	2130	---	1400	---	412	---	391	105	---
TOTAL	45553	20842	52488	67802	83880	70519	83593	52418	15340	78790	7046	11392
MEAN	1469	695	1693	2187	2996	2275	2786	1691	511	2542	227	380
MAX	10400	1680	4260	9890	14800	7640	17600	15500	1350	20200	767	2000
MIN	287	302	789	738	980	929	555	378	66	156	105	91
CFSM	1.02	.48	1.18	1.53	2.09	1.59	1.94	1.18	.36	1.77	.16	.26
IN.	1.18	.54	1.36	1.76	2.18	1.83	2.17	1.36	.40	2.04	.18	.30

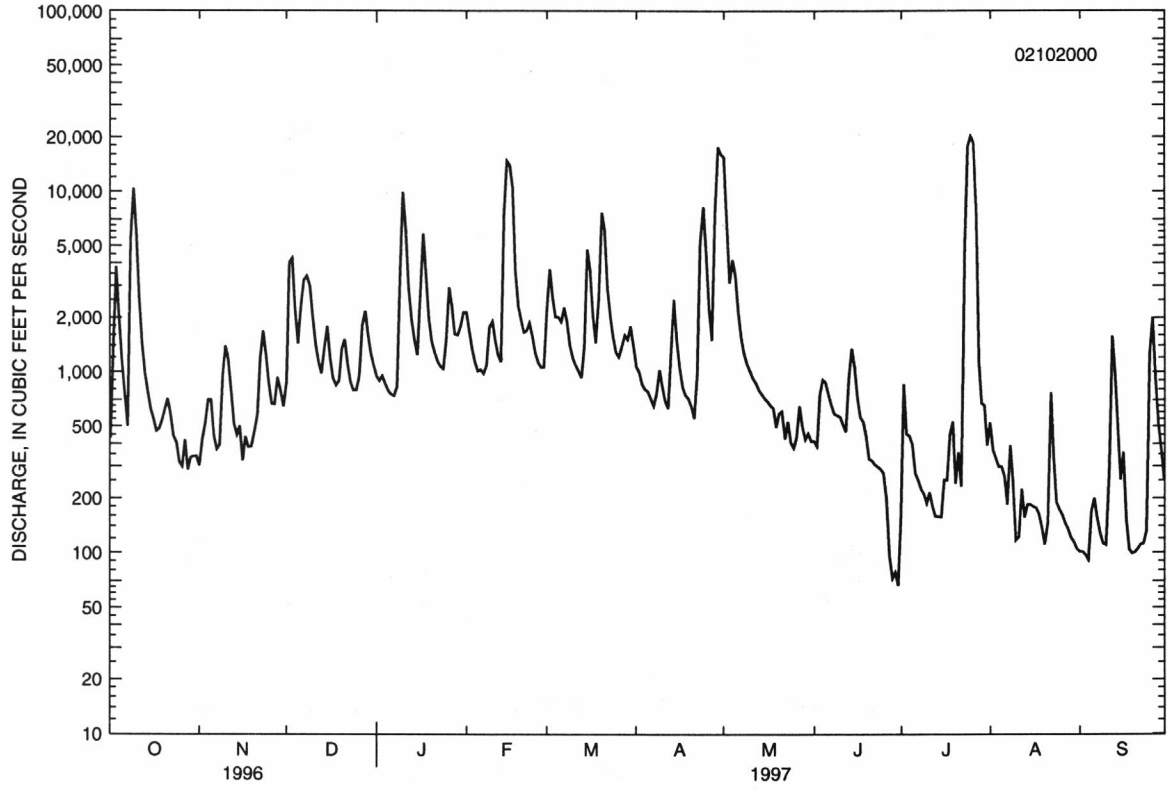
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1997, BY WATER YEAR (WY)

MEAN	740	855	1327	2378	2870	2852	2072	1126	804	875	840	789
MAX	3590	4789	4765	7182	7945	7103	6455	3590	4147	5528	3861	10580
(WY)	1965	1986	1973	1978	1960	1952	1936	1989	1982	1975	1931	1945
MIN	28.2	14.1	34.6	130	424	566	393	193	135	79.7	75.2	24.1
(WY)	1931	1942	1934	1934	1931	1981	1981	1981	1977	1986	1980	1968

CAPE FEAR RIVER BASIN

02102000 DEEP RIVER AT MONCURE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1930 - 1997	
ANNUAL TOTAL	618465		589663			
ANNUAL MEAN	1690		1616		1456	
HIGHEST ANNUAL MEAN					2711	1984
LOWEST ANNUAL MEAN					606	1988
HIGHEST DAILY MEAN	33600	Sep 6	20200	Jul 25	66400	Sep 18 1945
LOWEST DAILY MEAN	62	Jul 5	66	Jun 30	6.0	Oct 9 1954
ANNUAL SEVEN-DAY MINIMUM	65	Jul 3	104	Aug 29	6.6	Oct 8 1954
INSTANTANEOUS PEAK FLOW			21800	Jul 24	80300	Sep 18 1945
INSTANTANEOUS PEAK STAGE			8.92	Jul 24	17.20	Sep 18 1945
INSTANTANEOUS LOW FLOW			61	Jun 30	5.5	Oct 10 1954
ANNUAL RUNOFF (CFSM)	1.18		1.13		1.02	
ANNUAL RUNOFF (INCHES)	16.04		15.30		13.79	
10 PERCENT EXCEEDS	3460		3320		3330	
50 PERCENT EXCEEDS	889		804		541	
90 PERCENT EXCEEDS	220		163		99	



0210215985 CAPE FEAR RIVER AT STATE HIGHWAY 42 NEAR BRICKHAVEN, NC

LOCATION.--Lat 35°32'54", long 79°01'34", Chatham County, Hydrologic Unit 03030004, at bridge on State Highway 42, and 1.8 mi south of Brickhaven.

DRAINAGE AREA.--3,160 mi^2.

PERIOD OF RECORD.--Water years 1989 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. Daily mean discharge values were obtained from the U.S. Army Corps of Engineers reservoir releases from the B. Everett Jordan Lake at the 2400 hour and the daily mean discharge value from Deep River near Moncure, 02102000. The values from these two sites were added together and entered as a daily mean discharge for each date and time that a water-quality sample was collected.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT										
25...	1045	1400	120	6.85	16.5	52	769	10.1	103	27
DEC										
09...	1045	8630	111	7.25	6.5	100	765	11.6	94	28
JAN										
24...	1130	2220	110	6.85	6.0	96	770	13.1	104	23
MAR										
13...	1030	2110	116	7.05	13.5	80	774	9.80	92	28
MAY										
22...	1030	743	116	7.10	22.0	35	765	7.00	80	29
SEP										
05...	1000	686	208	7.30	25.5	24	761	4.20	51	33

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	ANC UNFLTRD CARBON-ATE IT-FLD (MG/L - CAC03) (99430)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT										
25...	6.8	2.5	11	44	.9	2.5	21	17	11	13
DEC										
09...	6.5	2.9	8.7	37	.7	3.0	24.0	20.0	11	9.1
JAN										
24...	5.6	2.2	8.7	42	.8	2.2	23.0	19.0	9.4	9.3
MAR										
13...	6.9	2.7	9.4	40	.8	2.2	31.0	25.0	10	9.3
MAY										
22...	6.9	2.8	9.5	40	.8	2.3	32.0	27.0	8.8	9.2
SEP										
05...	7.9	3.2	23	57	2	3.9	42	34	21	19

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT										
25...	.10	9.7	84	.011	.480	.020	.48	.50	.98	.060
DEC										
09...	<.10	10	82	.008	.580	.037	.46	.50	1.1	.070
JAN										
24...	.10	11	76	.008	.610	.099	.50	.60	1.2	.060
MAR										
13...	.10	10	76	.009	.530	.035	.47	.50	1.0	.060
MAY										
22...	<.1	8.2	79	.006	.44	.041	.41	.4	.88	.06
SEP										
05...	.3	5.2	119	.013	.072	.069	.69	.8	.83	.05

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
OCT										
25...	.021	220	<1	<1	<1	<1	3	670	<1	90
DEC										
09...	.027	--	--	--	--	--	--	--	--	--
JAN										
24...	.033	--	--	--	--	--	--	--	--	--
MAR										
13...	.024	320	1	<1	1	<1	2	880	<1	90
MAY										
22...	.031	--	--	--	--	--	--	--	--	--
SEP										
05...	.002	--	--	--	--	--	--	--	--	--

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)
OCT										
25...	<.10	2	1	<1	<1	<10	7.9	13	49	--
DEC										
09...	--	--	--	--	--	--	8.5	20	466	--
JAN										
24...	--	--	--	--	--	--	7.4	--	--	20
MAR										
13...	<.10	<1	1	<1	<1	<10	7.0	--	--	18
MAY										
22...	--	--	--	--	--	--	5.8	7	14	--
SEP										
05...	--	--	--	--	--	--	6.4	--	--	9

CAPE FEAR RIVER BASIN

02102192 BUCKHORN CREEK NEAR CORINTH, NC

LOCATION.--Lat 35°33'34", long 78°58'25", Chatham County, Hydrologic Unit 03030004, on left bank at upstream side of bridge on State Highway 42, 0.2 mi downstream of White Oak Creek, 1.2 mi downstream of Harris Lake, and 2 mi east of Corinth.

DRAINAGE AREA.--76.3 mi^2.

PERIOD OF RECORD.--June 1972 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 154.63 ft above sea level. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records poor. Since Dec. 1, 1980, considerable regulation by Harris Lake (station 02102190). Maximum discharge prior to regulation: 6,920 ft^3/s, Feb. 2, 1973; gage height: 20.02 ft. Minimum discharge prior to regulation: 0.01 ft^3/s, Sept. 2, 1976. Minimum discharge for the current water year also occurred Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	30	98	63	76	112	55	315	23	1.8	17	.53
2	48	44	135	59	73	102	46	309	42	3.2	13	.43
3	44	39	124	56	69	102	41	283	69	2.2	10	.42
4	39	34	115	54	67	96	36	268	71	1.8	8.5	.78
5	33	32	107	51	64	89	30	229	58	1.9	8.5	.40
6	28	30	119	49	61	91	27	200	57	3.2	9.1	.39
7	26	28	120	46	58	83	25	176	58	2.8	6.1	.36
8	209	73	126	43	67	77	24	154	51	2.9	4.0	.38
9	155	87	118	109	73	72	21	137	47	2.5	2.5	.38
10	135	77	106	138	71	68	16	127	41	2.4	1.4	.56
11	117	69	97	132	69	63	13	107	37	2.3	.72	2.3
12	102	62	90	121	65	59	16	94	33	2.2	.50	1.0
13	89	56	85	111	67	55	19	89	30	2.4	.43	.75
14	79	52	79	99	181	60	18	80	27	2.4	.43	.65
15	70	47	72	90	373	70	15	71	26	2.1	.48	.65
16	63	41	65	117	353	65	14	63	21	3.0	.48	.68
17	57	38	61	119	314	59	14	56	18	5.5	.47	.57
18	66	36	57	110	274	56	14	51	16	3.7	.49	.59
19	86	38	72	100	241	71	11	46	15	3.5	.49	.61
20	72	36	74	92	216	98	11	45	13	3.6	.74	.49
21	64	39	71	87	191	97	11	50	11	3.7	1.7	.46
22	58	65	68	81	187	94	27	43	9.1	3.4	1.0	.36
23	54	58	64	77	170	86	74	38	8.7	10	.76	.36
24	50	56	61	73	152	79	94	34	6.8	188	.72	5.7
25	45	54	64	84	136	71	90	32	4.2	54	.76	5.6
26	42	60	61	85	123	73	83	38	2.7	44	.80	1.5
27	40	58	72	82	113	69	81	38	2.7	38	.76	.62
28	38	53	72	80	110	64	143	32	3.5	33	.69	.78
29	36	49	70	79	---	67	480	28	2.2	29	.67	1.0
30	33	49	67	79	---	63	357	26	1.5	26	.59	.74
31	32	---	65	79	---	61	---	24	---	24	.55	---
TOTAL	2061	1490	2655	2645	4014	2372	1906	3283	805.4	508.5	94.33	30.04
MEAN	66.5	49.7	85.6	85.3	143	76.5	63.5	106	26.8	16.4	3.04	1.00
MAX	209	87	135	138	373	112	480	315	71	188	17	5.7
MIN	26	28	57	43	58	55	11	24	1.5	1.8	.43	.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1997*, BY WATER YEAR (WY)

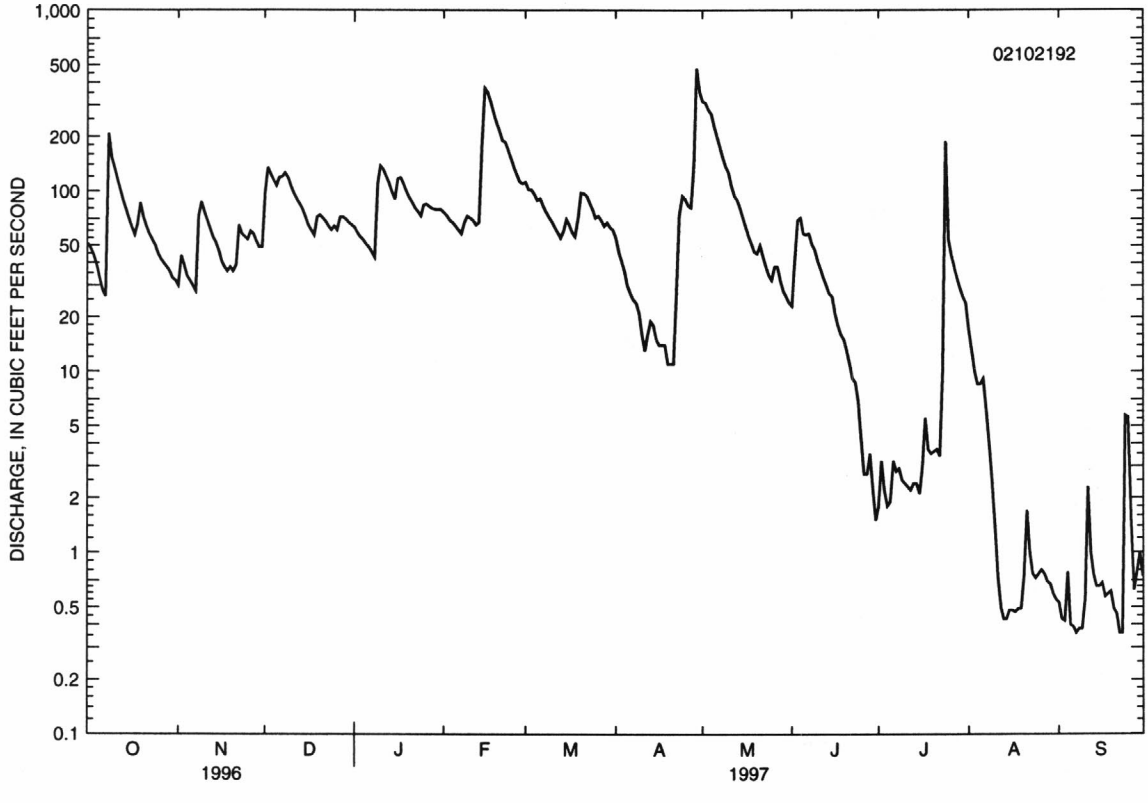
MEAN	18.2	26.5	36.0	65.5	92.5	128	91.4	43.0	27.4	22.5	19.8	24.1
MAX	128	146	143	241	223	335	312	184	138	102	199	335
(WY)	1996	1996	1984	1984	1984	1989	1993	1989	1984	1989	1986	1996
MIN	.70	.81	1.40	2.48	1.37	1.66	1.13	1.56	.67	.34	.75	.88
(WY)	1982	1992	1992	1992	1992	1992	1992	1992	1981	1981	1988	1981

CAPE FEAR RIVER BASIN

02102192 BUCKHORN CREEK NEAR CORINTH, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1981 - 1997*	
ANNUAL TOTAL	30767.10		21864.27			
ANNUAL MEAN	84.1		59.9		49.3	
HIGHEST ANNUAL MEAN					126	1984
LOWEST ANNUAL MEAN					2.47	1981
HIGHEST DAILY MEAN	1940	Sep 6	480	Apr 29	1940	Sep 6 1996
LOWEST DAILY MEAN	.63	Sep 2	.36	Sep 7	.11	Jul 23 1981
ANNUAL SEVEN-DAY MINIMUM	1.1	Aug 15	.44	Sep 3	.12	Oct 14 1981
INSTANTANEOUS PEAK FLOW			1000	Jul 24	4300	Sep 6 1996
INSTANTANEOUS PEAK STAGE			7.60	Jul 24	16.79	Sep 6 1996
INSTANTANEOUS LOW FLOW			.31*	Sep 8	.05	May 10 1988
10 PERCENT EXCEEDS	169		120		151	
50 PERCENT EXCEEDS	54		51		8.4	
90 PERCENT EXCEEDS	6.0		.75		.70	

* Regulated period only (1981-1997). See REMARKS.



CAPE FEAR RIVER BASIN

02102500 CAPE FEAR RIVER AT LILLINGTON, NC

LOCATION.--Lat 35°24'22", long 78°48'48", Harnett County, Hydrologic Unit 03030004, on right bank 60 ft downstream of downstream bridge on U.S. Highway 401, 1,860 ft downstream of Southern Railway bridge, 0.5 mi north of Lillington, 1 mile downstream of Neal Creek, and at mile 178.

DRAINAGE AREA.--3,464 mi^2.

PERIOD OF RECORD.--December 1923 to current year.

REVISED RECORDS.--WSP 1002: 1930(M). WSP 1032: 1942(m). WSP 1303: 1944(M). WSP 1333: 1945. WSP 1383:

GAGE.--Water-stage recorder. Datum of gage is 104.62 ft above sea level. Dec. 6, 1923, to Oct. 7, 1927, nonrecording gage and Oct. 8, 1927, to Dec. 2, 1975, water-stage recorder at site 60 ft upstream in bridge pier at same datum. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Some regulation at high flows, December 1972 to August 1981, caused by temporary storage in B. Everett Jordan Lake. Flow regulated since Sept. 1981 by B. Everett Jordan Lake (station 02098197). Diurnal fluctuation and slight regulation at low flow caused by power plants upstream from station. Fluctuation and regulation by Buckhorn Reservoir, 13 mi upstream from station, ended in December 1962. Prior to regulation, maximum discharge: 150,000 ft^3/s, Sept. 19, 1945, from rating curve extended above 76,000 ft^3/s; gage height: 33.19 ft, from floodmark; minimum discharge: 11 ft^3/s, Oct. 14, 15, 1954; gage height: -0.17 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4070	838	2490	2820	2440	2980	2310	23000	1180	671	2330	586
2	3820	1010	5340	2530	2040	4920	1290	17200	1260	1040	2270	591
3	6470	1190	7630	1800	1650	4490	1120	10300	1660	1180	2080	583
4	7330	1140	6400	1770	1500	4970	1040	12400	2120	909	2030	569
5	4490	1250	6730	1690	1370	5890	1000	18100	4200	904	1210	560
6	2410	1380	7800	1590	1320	6450	962	14100	4210	830	1150	630
7	1500	1270	8780	1110	1310	7450	889	15700	4150	746	1010	648
8	6430	1480	9100	1110	1390	6710	878	15100	3470	711	725	617
9	14800	2140	8740	2250	1950	5660	1070	12400	1400	683	872	573
10	10100	2240	7090	10600	2350	3850	1720	5420	1380	696	656	626
11	7580	2540	4780	8320	5510	2330	3330	4670	1330	721	605	651
12	6940	2110	3530	4280	5560	2180	3380	4410	1300	676	594	1120
13	6280	1880	2300	4310	5910	2150	3090	4580	1280	590	647	1440
14	5940	1700	2280	5910	9950	2340	3270	2440	2020	614	592	887
15	5210	1740	2960	6140	17100	5410	2760	1530	1880	612	633	539
16	3050	1680	2530	6950	17300	6010	2810	1270	1560	606	619	520
17	1750	1630	2460	10800	14900	4820	2420	1100	766	952	617	479
18	1740	1590	3300	9210	11000	3980	1750	1030	532	635	610	525
19	1940	1130	3490	6990	12800	3960	1370	973	600	947	582	536
20	1560	1220	2600	6260	13500	9340	1200	880	950	736	608	525
21	1510	1210	2800	6010	12000	10200	1080	922	920	558	632	544
22	1880	2070	2520	5660	8980	8240	1070	769	912	848	810	543
23	1790	2560	2220	4050	8920	6880	3760	770	881	3290	1010	566
24	1630	2300	2130	2330	7380	6200	8820	893	859	20800	673	753
25	1640	2020	2150	2630	3480	5860	7000	782	868	23600	595	1350
26	1210	2880	2260	4370	2460	5790	7780	848	833	19600	584	2390
27	1250	2540	3290	5450	2380	5000	6660	984	793	12500	592	1410
28	1240	2050	4080	5750	2400	2690	9490	1100	751	3460	572	943
29	1150	2150	3510	5240	---	2740	18700	1180	712	2740	576	823
30	1060	2000	2710	4850	---	2900	19800	1180	666	2630	542	687
31	943	---	2810	3860	---	2640	---	1170	---	2480	537	---
TOTAL	118713	52938	130810	146640	178850	155030	121819	177201	45443	107965	27563	23214
MEAN	3829	1765	4220	4730	6388	5001	4061	5716	1515	3483	889	774
MAX	14800	2880	9100	10800	17300	10200	19800	23000	4210	23600	2330	2390
MIN	943	838	2130	1110	1310	2150	878	769	532	558	537	479

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1997*, BY WATER YEAR (WY)

MEAN	1992	2183	2917	5376	6261	7638	5118	2769	2512	1916	1761	1682
MAX	6442	7919	8595	10470	11560	15710	11670	7784	12510	5694	5448	13920
(WY)	1990	1986	1984	1991	1984	1993	1993	1989	1982	1995	1985	1996
MIN	637	653	723	1373	1860	1628	969	824	702	654	634	596
(WY)	1994	1995	1995	1986	1986	1988	1985	1986	1986	1986	1983	1990

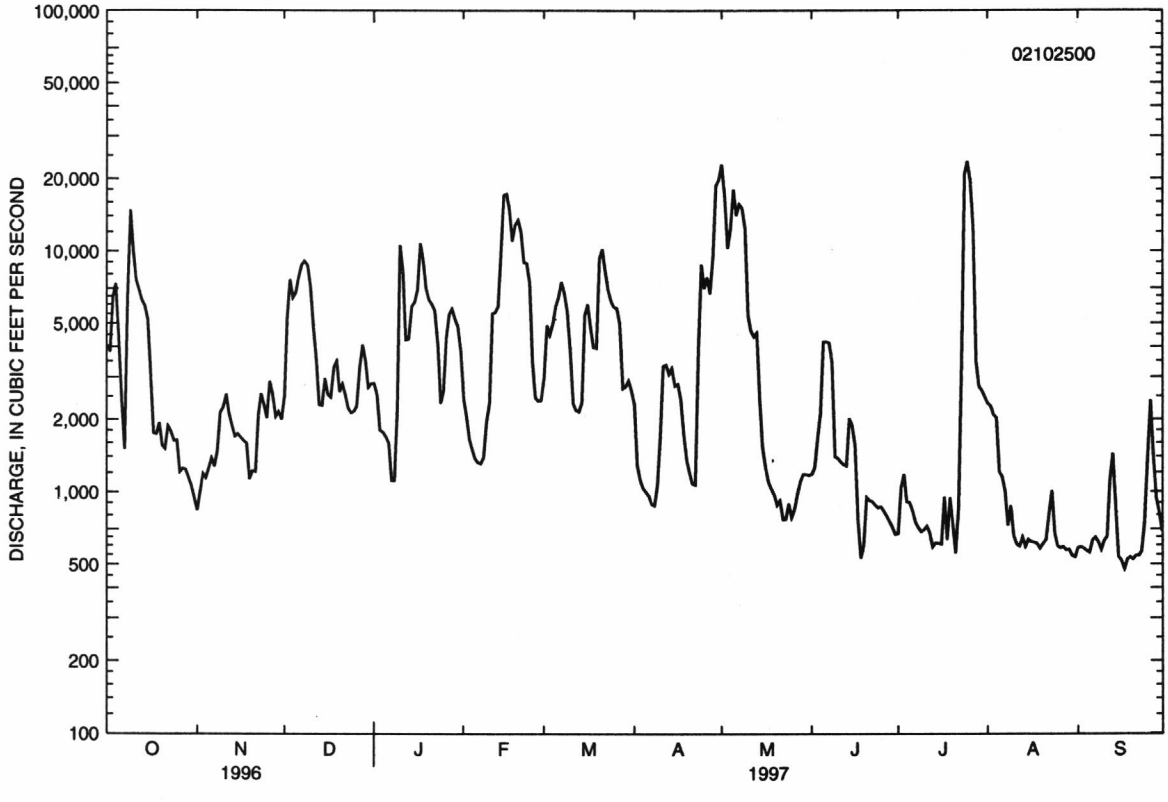
CAPE FEAR RIVER BASIN

02102500 CAPE FEAR RIVER AT LILLINGTON, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1982 - 1997*	
ANNUAL TOTAL	1587247		1286186			
ANNUAL MEAN	4337		3524		3497	
HIGHEST ANNUAL MEAN					6167	1984
LOWEST ANNUAL MEAN					1488	1988
HIGHEST DAILY MEAN	41400	Sep 6	23600	Jul 25	e41400	Sep 6 1996
LOWEST DAILY MEAN	528	Jul 7	479	Sep 17	210	Oct 23 1981
ANNUAL SEVEN-DAY MINIMUM	572	Jul 2	524	Sep 15	223	Oct 2 1981
INSTANTANEOUS PEAK FLOW			29000	Jul 24	51800	Sep 7 1996
INSTANTANEOUS PEAK STAGE			14.26	Jul 24	18.97	Sep 7 1996
INSTANTANEOUS LOW FLOW			390	Sep 17	190	Oct 23 1981
10 PERCENT EXCEEDS	10500		8760		10300	
50 PERCENT EXCEEDS	2540		2030		1310	
90 PERCENT EXCEEDS	808		617		626	

e Estimated.

* Regulated period only (1982-1997).



CAPE FEAR RIVER BASIN

02102908 FLAT CREEK NEAR INVERNESS, NC

LOCATION.--Lat 35°10'54", long 79°10'40", Hoke County, Hydrologic Unit 03030004, on left bank 15 ft downstream of culvert on Manchester Road, Fort Bragg military reservation, 0.4 mi upstream from mouth, and 3.6 mi east of Inverness.

DRAINAGE AREA.--7.63 mi^2.

PERIOD OF RECORD.--June 1968 to current year.

REVISED RECORDS.--WDR NC-72-1: 1968-70 (M). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 191.18 ft above sea level. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Some diurnal fluctuation at low flow during growing season. Minimum discharge some years effected by regulation from unknown source. Minimum discharge for period of record also occurred June 8, 25, 1988. Minimum discharge for the current water year also occurred July 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	9.9	24	13	13	23	9.1	13	10	7.4	14	6.2
2	16	22	28	14	12	14	9.0	11	9.0	12	10	6.4
3	12	19	15	12	12	13	9.0	16	8.5	7.2	9.0	5.9
4	10	12	14	11	12	12	8.7	17	8.9	6.0	8.2	5.4
5	9.6	12	14	11	12	12	8.6	11	8.4	5.5	7.8	5.2
6	9.4	11	19	11	11	17	8.8	10	11	6.4	7.5	5.2
7	9.8	11	17	11	11	13	10	9.3	13	6.0	7.3	5.0
8	88	19	19	11	17	12	8.5	9.0	9.5	5.8	7.0	5.0
9	42	26	14	31	15	11	8.4	10	8.4	5.7	6.8	5.1
10	18	14	13	32	12	11	8.2	9.2	7.7	5.6	12	7.4
11	15	13	13	15	12	11	8.4	8.5	7.3	5.7	16	12
12	14	12	13	14	11	11	14	8.3	7.7	5.3	8.6	7.8
13	14	12	12	13	14	11	16	8.4	8.1	5.2	7.4	6.7
14	13	12	12	13	39	21	9.6	8.1	8.0	5.1	6.9	6.4
15	13	11	12	12	39	19	8.9	7.6	7.6	5.1	6.8	6.3
16	12	11	12	28	22	12	8.5	7.1	7.1	9.4	6.4	6.2
17	12	11	12	20	16	11	8.4	7.1	6.7	6.9	5.9	5.9
18	16	12	12	14	14	11	8.2	6.9	7.9	6.1	5.9	5.8
19	20	16	29	13	14	14	8.0	6.5	9.7	8.7	6.3	5.8
20	14	13	17	13	13	19	8.0	7.3	7.1	6.6	7.5	5.7
21	12	13	13	13	14	13	7.7	9.3	6.4	9.7	17	5.3
22	12	23	13	13	21	11	11	7.1	7.3	6.4	8.3	5.5
23	11	14	12	13	15	10	20	6.7	12	23	6.8	5.6
24	11	12	12	12	13	10	13	6.5	7.3	138	6.4	9.1
25	11	12	13	21	13	10	9.7	9.9	6.6	33	6.1	24
26	11	21	12	16	13	16	8.7	27	5.9	15	5.8	12
27	11	15	15	13	13	13	10	24	6.8	11	5.7	8.0
28	11	12	13	13	14	11	29	11	8.7	9.6	5.7	9.0
29	11	12	12	12	---	11	33	8.9	6.6	8.4	5.4	8.4
30	10	13	12	16	---	9.8	17	8.2	6.2	29	5.4	6.5
31	10	---	12	16	---	9.8	---	7.9	---	36	5.8	---
TOTAL	491.8	425.9	460	470	437	402.6	345.4	317.8	245.4	450.8	245.7	218.8
MEAN	15.9	14.2	14.8	15.2	15.6	13.0	11.5	10.3	8.18	14.5	7.93	7.29
MAX	88	26	29	32	39	23	33	27	13	138	17	24
MIN	9.4	9.9	12	11	11	9.8	7.7	6.5	5.9	5.1	5.4	5.0
CFSM	2.08	1.86	1.94	1.99	2.05	1.70	1.51	1.34	1.07	1.91	1.04	.96
IN.	2.40	2.08	2.24	2.29	2.13	1.96	1.68	1.55	1.20	2.20	1.20	1.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1997, BY WATER YEAR (WY)

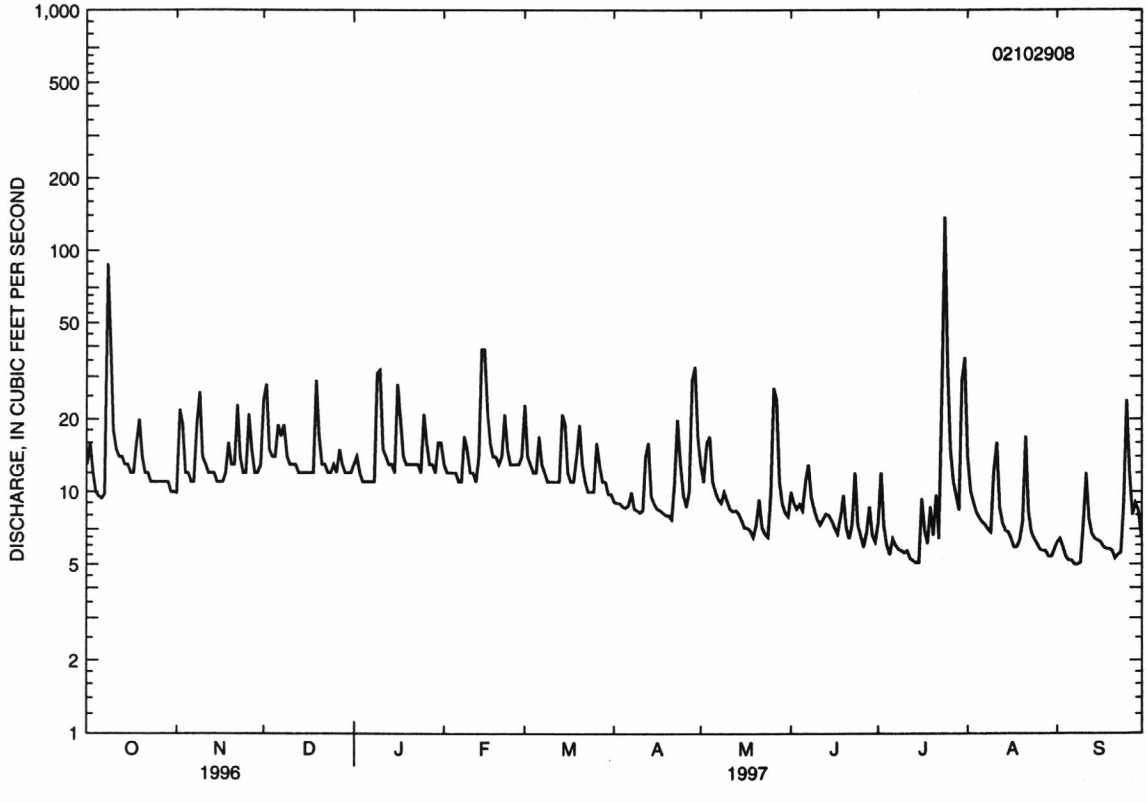
MEAN	10.7	11.4	12.2	14.2	15.2	17.3	16.7	11.3	11.1	11.2	10.1	10.1
MAX	19.9	20.5	19.5	20.2	32.0	73.6	106	18.9	25.3	24.5	16.4	22.3
(WY)	1972	1980	1973	1975	1973	1974	1974	1973	1995	1989	1974	1996
MIN	5.73	6.10	7.64	8.69	9.76	8.77	6.50	6.59	4.85	4.70	5.28	4.35
(WY)	1987	1982	1971	1969	1989	1981	1981	1988	1981	1986	1968	1968

CAPE FEAR RIVER BASIN

02102908 FLAT CREEK NEAR INVERNESS, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1968 - 1997	
ANNUAL TOTAL	4973.8		4511.2			
ANNUAL MEAN	13.6		12.4		12.6	
HIGHEST ANNUAL MEAN					26.3	1974
LOWEST ANNUAL MEAN					8.12	1981
HIGHEST DAILY MEAN	137	Sep 6	138	Jul 24	314	Apr 9 1974
LOWEST DAILY MEAN	4.7	Jul 8	5.0	Sep 7	2.2	Jun 24 1988
ANNUAL SEVEN-DAY MINIMUM	5.2	Jul 4	5.3	Sep 3	3.2	Jul 6 1988
INSTANTANEOUS PEAK FLOW			284	Jul 24	394	Apr 1 1973
INSTANTANEOUS PEAK STAGE			5.69	Jul 24	7.30	Apr 1 1973
INSTANTANEOUS LOW FLOW			4.2*	Jul 14	1.9*	Jun 7 1988
ANNUAL RUNOFF (CFSM)	1.78		1.62		1.66	
ANNUAL RUNOFF (INCHES)	24.25		21.99		22.51	
10 PERCENT EXCEEDS	19		19		20	
50 PERCENT EXCEEDS	12		11		10	
90 PERCENT EXCEEDS	6.7		6.2		5.8	

* See REMARKS.



CAPE FEAR RIVER BASIN

02104220 ROCKFISH CREEK AT RAEFORD, NC

LOCATION.--Lat 34°59'55", long 79°12'55", Hoke County, Hydrologic Unit 03030004, at upstream side of bridge on U.S. Highway 401, 1.0 mi downstream of Nicholsons Creek, and 1.0 mile north of Raeford.

DRAINAGE AREA.--93.1 mi^2.

PERIOD OF RECORD.--July 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 178 ft above sea level, from topographic map. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Minimum discharge for the current water year also occurred July 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	143	133	163	138	176	188	123	236	84	59	397	68
2	157	161	228	148	162	191	116	172	91	84	259	71
3	163	211	251	150	146	182	116	134	88	81	159	70
4	149	215	235	143	139	162	115	160	e90	65	95	64
5	130	194	199	137	137	145	112	154	86	57	85	59
6	123	162	183	135	137	146	112	127	88	55	80	57
7	122	148	192	134	134	149	127	112	126	55	76	55
8	277	152	202	136	141	147	120	104	109	54	73	55
9	586	190	192	169	162	135	113	111	91	64	70	55
10	453	205	178	259	162	133	108	114	82	59	71	58
11	310	198	162	288	150	130	108	101	76	68	90	93
12	233	176	154	257	140	126	125	95	72	58	81	95
13	173	152	151	204	139	123	170	94	73	54	72	87
14	153	145	148	157	205	148	169	95	70	52	67	76
15	146	142	145	145	314	204	136	88	70	50	66	76
16	140	140	144	163	354	193	119	84	68	64	64	80
17	138	138	144	200	310	157	112	80	64	103	61	69
18	174	139	146	206	250	138	109	78	61	75	59	65
19	303	156	181	186	195	137	106	75	63	71	66	64
20	276	164	227	158	164	164	106	73	64	71	65	63
21	225	158	219	148	153	166	104	96	59	106	94	60
22	180	182	183	145	162	151	108	87	56	140	103	e59
23	154	193	153	146	172	135	149	81	59	101	77	e61
24	147	183	144	144	168	127	172	73	60	251	68	e61
25	143	163	146	159	152	123	161	72	57	845	63	120
26	139	162	144	182	144	174	128	126	54	449	60	150
27	138	178	148	177	144	218	119	159	56	267	58	135
28	138	175	151	159	149	176	162	163	76	139	58	97
29	140	156	147	147	---	148	220	119	67	90	57	93
30	139	146	142	150	---	137	255	88	60	116	56	80
31	136	---	138	172	---	130	---	81	---	269	58	---
TOTAL	6028	5017	5340	5242	4961	4783	4000	3432	2220	4072	2808	2296
MEAN	194	167	172	169	177	154	133	111	74.0	131	90.6	76.5
MAX	586	215	251	288	354	218	255	236	126	845	397	150
MIN	122	133	138	134	134	123	104	72	54	50	56	55
CFSM	2.10	1.80	1.86	1.82	1.91	1.66	1.44	1.19	.80	1.42	.98	.83
IN.	2.42	2.01	2.14	2.10	1.99	1.92	1.61	1.38	.89	1.63	1.13	.92

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1997, BY WATER YEAR (WY)

MEAN	120	122	116	138	131	153	132	106	100	101	106	105
MAX	201	169	186	178	186	193	195	182	175	224	176	247
(WY)	1990	1990	1990	1993	1995	1993	1993	1989	1989	1989	1989	1996
MIN	72.0	87.7	84.0	95.7	94.7	97.0	88.3	72.5	73.1	54.4	65.2	59.9
(WY)	1993	1991	1989	1992	1992	1992	1992	1994	1991	1992	1988	1992

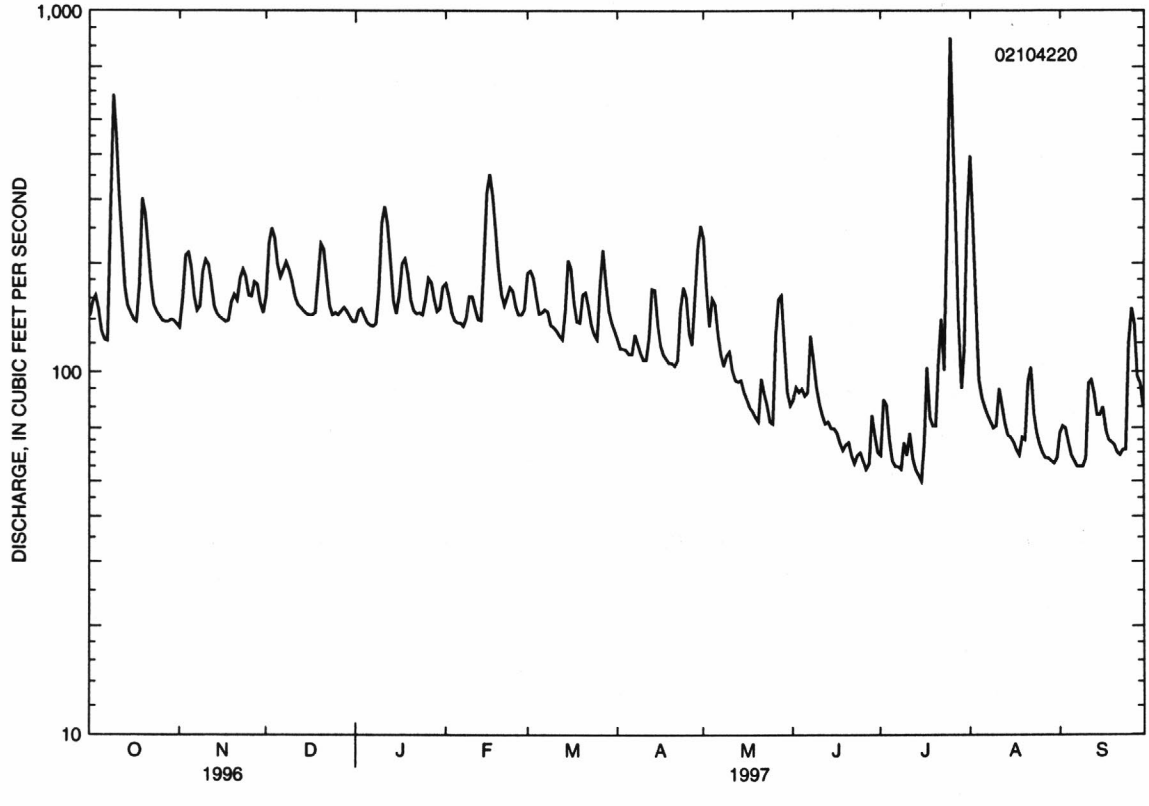
CAPE FEAR RIVER BASIN

02104220 ROCKFISH CREEK AT RAEFORD, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1988 - 1997	
ANNUAL TOTAL	49216		50199			
ANNUAL MEAN	134		138		120	
HIGHEST ANNUAL MEAN					147	1989
LOWEST ANNUAL MEAN					88.8	1992
HIGHEST DAILY MEAN	884	Sep 7	845	Jul 25	884	Sep 7 1996
LOWEST DAILY MEAN	45	Jul 5	50	Jul 15	39	Aug 2 1992
ANNUAL SEVEN-DAY MINIMUM	46	Jul 4	57	Jun 21	41	Jul 27 1992
INSTANTANEOUS PEAK FLOW			941	Jul 25	1030	Sep 7 1996
INSTANTANEOUS PEAK STAGE			8.15	Jul 25	8.29	Sep 7 1996
INSTANTANEOUS LOW FLOW			49*	Jul 15	38	Aug 2 1992
ANNUAL RUNOFF (CFSM)	1.45		1.48		1.29	
ANNUAL RUNOFF (INCHES)	19.75		20.14		17.55	
10 PERCENT EXCEEDS	200		204		193	
50 PERCENT EXCEEDS	118		138		100	
90 PERCENT EXCEEDS	64		61		59	

e Estimated.

* See REMARKS.



CAPE FEAR RIVER BASIN

02105500 CAPE FEAR RIVER AT WILLIAM O. HUSKE LOCK NEAR TARHEEL, NC

LOCATION.--Lat 34°50'05", long 78°49'27", Bladen County, Hydrologic Unit 03030005, on right bank 100 ft upstream from William O. Huske Lock, 1 mi downstream of Cumberland-Bladen County line, 7 mi north of Tar Heel, 9 mi upstream from Phillips Creek, and at mile 123.

DRAINAGE AREA.--4,852 mi^2.

PERIOD OF RECORD.--October 1937 to current year. Prior to October 1964, published as "Cape Fear River at Lock 3 near Tarheel".

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

GAGE.--Water-stage recorder and concrete lock and dam control. Datum of gage is 28.97 ft above sea level. Prior to Jan. 8, 1939, nonrecording gage on upper lock wall 100 ft downstream at same datum. Auxiliary water-stage recorder 1.8 mi downstream of base gage; prior to Jan. 14, 1943, auxiliary nonrecording gage 400 ft downstream on lower end of lock wall; Jan. 14, 1943, to Sept. 30, 1953, auxiliary water-stage recorder at site 600 ft downstream. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Slight regulation at high flow, December 1972 to August 1981, caused by temporary storage in B. Everett Jordan Lake. Flow regulated since September 1981 by B. Everett Jordan Lake (station 02098197). Slight diurnal fluctuation and some regulation for short periods at low flow caused by power plants above station. Prior to regulation, maximum discharge not determined; minimum discharge, 170 ft^3/s, Sep. 20, 1950. Minimum discharge during regulation also occurred Oct. 8, 9, 10, 1981.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5490	2350	3990	4790	5900	5390	3920	e32000	1610	866	4760	953
2	5300	2560	6660	4860	4610	6680	3200	25000	1630	906	4400	950
3	5820	3190	9760	4410	4090	7900	2280	18500	1720	1170	4190	980
4	8430	3240	10100	4120	3610	7520	2010	12500	e2400	1510	3560	989
5	7760	3120	9500	3830	3310	7910	1750	17700	3590	1370	2980	e960
6	5210	3080	10300	3450	3040	8410	1720	18400	5480	1380	2100	e940
7	3430	3000	11700	3060	2880	9230	1700	16900	5710	1290	1790	e920
8	8630	2950	13100	2570	2920	9500	1680	17100	5370	1060	1560	e910
9	e18800	4120	13300	3260	3180	8690	1660	16300	3770	971	1290	e900
10	e25500	4820	12200	8820	3720	7310	1800	16500	2280	925	1350	907
11	e18000	4900	9250	16100	5210	5370	2670	7050	2070	898	1290	1130
12	e16000	4700	7200	12500	7290	4150	4130	5740	1900	882	1270	1250
13	e14000	4100	5460	7830	7600	3670	4610	5610	1790	806	1200	1850
14	11400	3610	4390	7950	9480	3970	4280	4820	1760	728	1170	1900
15	8820	3300	4160	8670	21000	6550	4410	2970	2310	694	1100	1460
16	6780	3160	4560	9020	24000	9050	3850	2110	2250	683	1070	1120
17	4760	2980	4150	11800	31600	8470	3620	1780	2000	817	999	1030
18	3510	2980	4390	16500	18900	6770	3000	1560	1300	1140	971	957
19	4440	2910	6100	14100	16200	5760	2390	1400	1000	1210	941	958
20	4810	2640	6830	10400	17400	7000	2000	1320	978	1250	900	945
21	4540	2740	6040	9090	16700	12100	1720	1310	1170	1290	1160	913
22	4650	3370	5510	8540	12200	12700	1680	1270	1180	1220	1260	905
23	4290	4680	4980	7780	9650	10300	2060	1130	1180	2500	1370	894
24	3840	4840	4470	5980	e9300	8640	7190	1090	1190	9960	1570	907
25	3500	4390	4240	4780	9140	7600	10000	1210	1170	34100	1270	1720
26	3180	4410	4080	5540	5720	7730	9220	1300	1150	26700	1090	2660
27	2740	4970	4400	7270	4770	8370	9050	1650	1150	25900	998	3360
28	2750	4340	5550	8090	4590	6350	9050	1850	1050	e16000	946	2530
29	2670	4000	5970	8100	---	4610	16800	1970	954	12400	916	2070
30	2590	3780	5460	7540	---	4400	30900	1930	881	5770	873	1710
31	2550	---	4620	7290	---	4400	---	1750	---	5480	887	---
TOTAL	224190	109230	212420	238040	268010	226500	154350	241720	61993	161876	51231	39678
MEAN	7232	3641	6852	7679	9572	7306	5145	7797	2066	5222	1653	1323
MAX	25500	4970	13300	16500	31600	12700	30900	32000	5710	34100	4760	3360
MIN	2550	2350	3990	2570	2880	3670	1660	1090	881	683	873	894

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1997*, BY WATER YEAR (WY)

MEAN	2954	3302	4345	7510	8342	10210	6855	3923	3631	3180	2797	2702
MAX	8666	10190	11360	12790	14160	19760	15410	11770	14200	9262	7358	18950
(WY)	1990	1996	1984	1993	1984	1989	1993	1989	1982	1995	1984	1996
MIN	979	1297	1647	2197	2799	3078	1508	1184	1052	958	969	935
(WY)	1987	1982	1989	1986	1986	1988	1986	1986	1986	1986	1983	1990

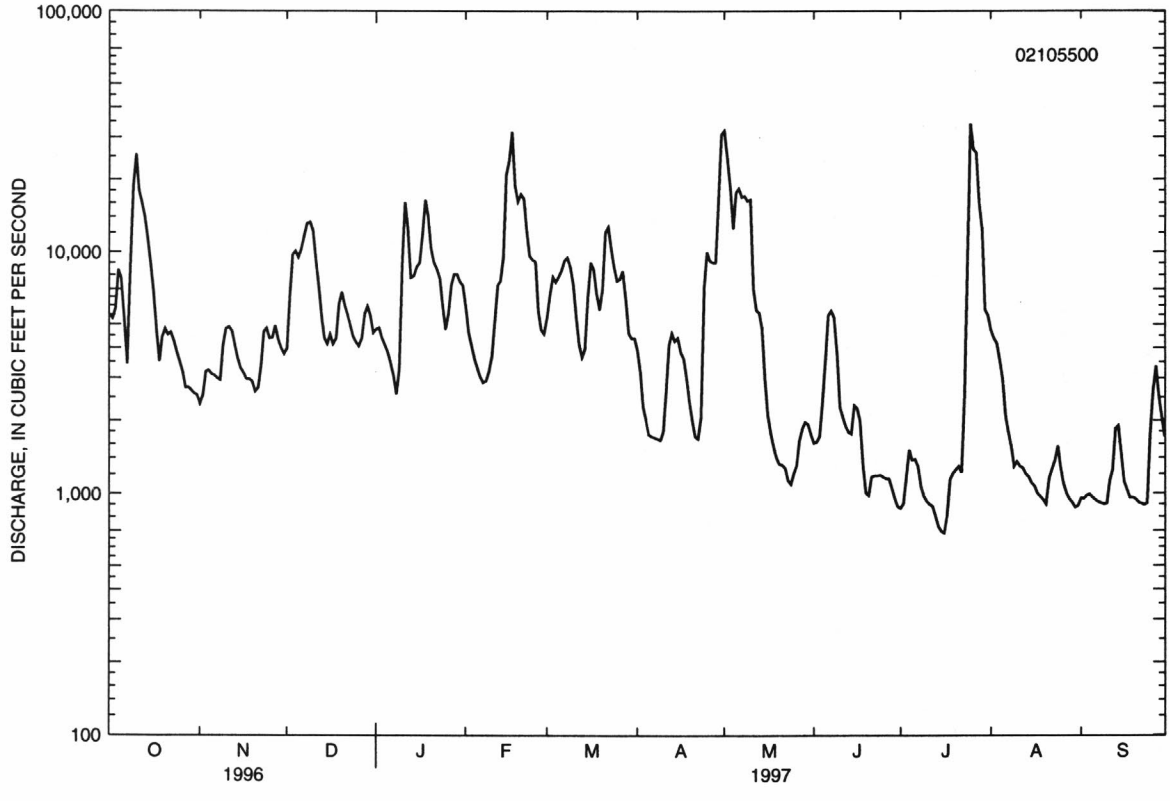
CAPE FEAR RIVER BASIN

02105500 CAPE FEAR RIVER AT WILLIAM O. HUSKE LOCK NEAR TARHEEL, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1982 - 1997*	
ANNUAL TOTAL	2302233		1989238			
ANNUAL MEAN	6290		5450		4964	
HIGHEST ANNUAL MEAN					8328	1984
LOWEST ANNUAL MEAN					2426	1988
HIGHEST DAILY MEAN	60000	Sep 8	34100	Jul 25	60000	Sep 8 1996
LOWEST DAILY MEAN	786	Jul 9	683	Jul 16	414	Oct 8 1981
ANNUAL SEVEN-DAY MINIMUM	885	Jul 4	787	Jul 11	429	Oct 4 1981
INSTANTANEOUS PEAK FLOW			38500	Jul 25	NOT DETERMINED	
INSTANTANEOUS PEAK STAGE			17.06	Jul 27	26.75	Sep 8 1996
INSTANTANEOUS LOW FLOW			670	Jul 16	408*	Oct 8 1981
10 PERCENT EXCEEDS	13800		12300		13400	
50 PERCENT EXCEEDS	4180		3840		2450	
90 PERCENT EXCEEDS	1360		979		1030	

e Estimated.

* Regulated period only (1982-1997). See REMARKS.



CAPE FEAR RIVER BASIN

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC

LOCATION.--Lat 34°24'15", long 78°17'38", Bladen County, Hydrologic Unit 03030005, on right bank near upstream end of lock No. 1, 1.3 mi upstream from Natmore Creek, 2.0 mi upstream from bridge on State Highway 11, 4.6 mi southeast of Kelly, and at mile 67.

DRAINAGE AREA.--5,255 mi^2.

PERIOD OF RECORD.--July 1969 to current year.

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

GAGE.--Water-stage recorder with concrete lock and dam control. Datum of gage is 2.90 ft below sea level (U.S. Army Corps of Engineers bench mark). Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Slight regulation at high flow December 1972 to August 1981, caused by storage in B. Everett Jordan Lake. Flow regulated since September 1981 by B. Everett Jordan Lake (station 02098197). Slight diurnal fluctuation and some regulation for short periods at low flow caused by power plants upstream from station. The City of Wilmington diverted an average of 16.1 ft^3/s for municipal water supply, most of which was returned downstream of station as treated effluent. Prior to regulation, maximum discharge: 57,000 ft^3/s, March 3, 1979; gage height: 24.92 ft, from floodmarks. Minimum discharge prior to regulation, 406 ft^3/s, July 1, 1981.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7870	3060	4740	5870	8720	6520	5250	17800	1880	992	e8000	953
2	7550	2910	6060	6040	6950	7650	4630	19800	1950	971	6630	966
3	7120	3360	8900	6020	5720	8910	3590	21600	1990	1090	5850	e1000
4	8200	3870	11200	5440	4880	9330	2760	22300	2250	1620	4570	e1200
5	9930	3890	11500	5130	4240	9270	2490	20600	2990	1580	3840	e1100
6	9030	3720	11500	4790	3800	9640	2370	19300	4870	1540	3030	983
7	6250	3620	12200	4260	3470	10100	2260	19100	6170	1470	2250	964
8	8280	3600	13200	3670	3440	10800	2170	18700	6400	1290	1900	974
9	15700	4120	13900	3620	3830	10800	2130	18400	5820	1100	1550	964
10	18500	5290	14000	6320	4380	10100	2080	17900	3680	908	1430	929
11	20600	5840	13500	11600	5090	8460	2430	15100	2490	1000	1350	1060
12	21500	5960	11500	13900	7360	6040	3940	10300	2070	1060	1140	1290
13	20400	5540	9300	12900	8670	4930	5150	7390	1880	990	1080	1460
14	18000	4900	6940	10800	9920	4880	5400	6410	1910	912	1030	2140
15	15100	4330	5630	10500	12800	6850	5240	4900	2250	863	974	2090
16	12500	4000	5450	10800	16300	9280	5050	3090	2490	786	937	1740
17	9400	3780	5480	11500	18700	10700	4610	2250	2290	869	1100	1290
18	6490	3600	5150	13400	20300	10200	4140	1920	1740	e1300	1070	1110
19	5410	3690	6110	14500	20900	8820	3240	1710	1180	e1400	1090	997
20	6110	3490	8260	13900	20200	8160	2650	1530	931	e1700	1020	963
21	6160	3330	8380	12500	19500	10300	2240	1490	1030	e1650	1120	933
22	5920	3620	7730	11300	19000	12700	2060	1520	1350	1420	1330	889
23	5840	4640	6990	10600	17900	12900	2320	1360	1370	1420	1350	869
24	5350	5820	6290	9310	16300	11800	4280	1180	1310	4230	1600	850
25	4780	5850	5760	7200	14700	10600	9290	1230	1260	12200	1500	1280
26	4400	5420	5420	6550	11500	9540	10600	1350	1130	17000	1240	2400
27	3850	5800	5250	7670	7970	9820	10700	1590	1040	19400	1090	3410
28	3500	5980	5910	9030	6410	9680	10700	1910	1070	21400	998	3510
29	3440	5230	7030	9710	---	7470	11700	2080	1020	e21800	834	2850
30	3290	4930	7120	9700	---	5940	15000	2160	1000	e17000	677	2270
31	3200	---	6480	9350	---	5610	---	1990	---	10400	884	---
TOTAL	283670	133190	256880	277880	302950	277800	150470	267960	68811	151361	62464	43434
MEAN	9151	4440	8286	8964	10820	8961	5016	8644	2294	4883	2015	1448
MAX	21500	5980	14000	14500	20900	12900	15000	22300	6400	21800	8000	3510
MIN	3200	2910	4740	3620	3440	4880	2060	1180	931	786	677	850

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1997*, BY WATER YEAR (WY)

MEAN	3305	3619	4958	8384	9198	11250	8018	4290	4142	3431	3203	3275
MAX	9751	11390	11060	15190	14970	20140	17730	12110	15070	10860	7883	22580
(WY)	1990	1996	1984	1993	1983	1989	1993	1989	1982	1995	1984	1996
MIN	1068	1398	1855	2265	3025	3629	1667	1272	1147	1046	1046	985
(WY)	1988	1988	1992	1986	1986	1988	1986	1986	1986	1986	1983	1990

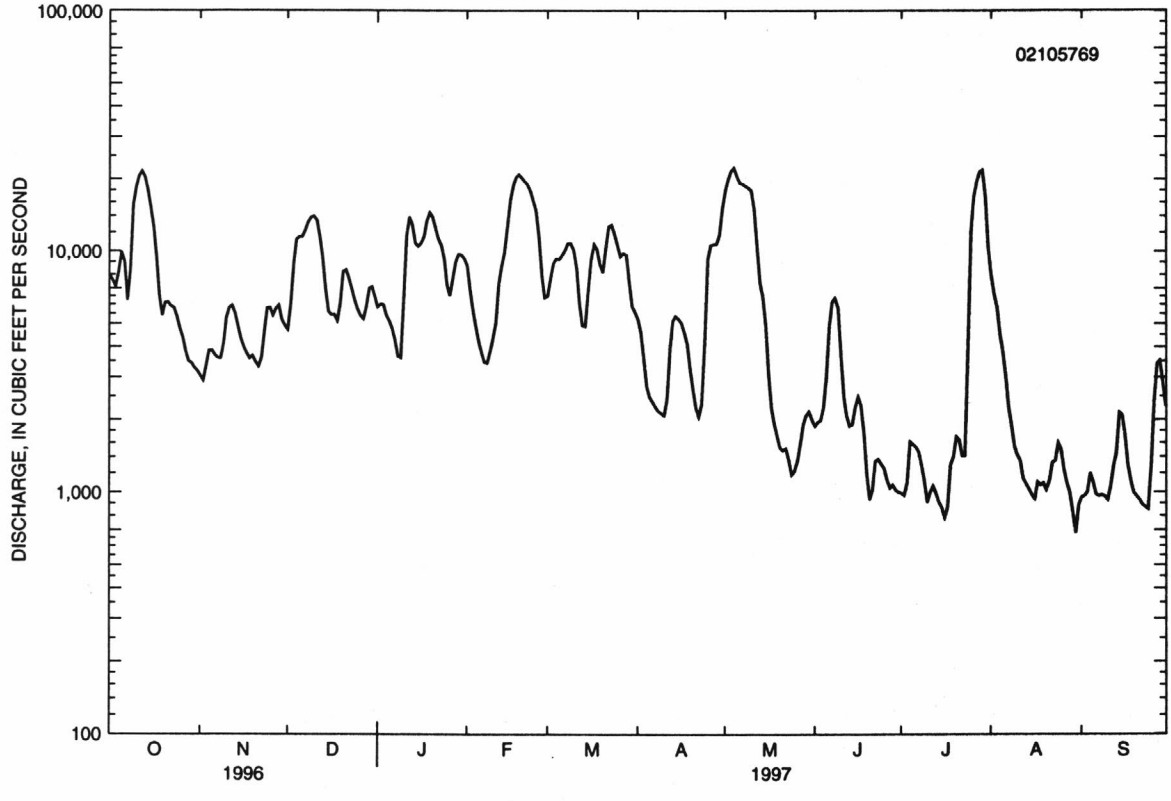
CAPE FEAR RIVER BASIN

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1982 - 1997*	
ANNUAL TOTAL	2729064		2276870			
ANNUAL MEAN	7456		6238		5571	
HIGHEST ANNUAL MEAN					8530	1984
LOWEST ANNUAL MEAN					2865	1988
HIGHEST DAILY MEAN	47600	Sep 11	22300	May 4	47600	Sep 11 1996
LOWEST DAILY MEAN	863	Jul 2	677	Aug 30	445	Oct 9 1981
ANNUAL SEVEN-DAY MINIMUM	1010	Jul 5	902	Aug 28	463	Oct 4 1981
INSTANTANEOUS PEAK FLOW			22600	May 4	48300	Sep 11 1996
INSTANTANEOUS PEAK STAGE			20.85	May 4	24.29	Sep 11 1996
INSTANTANEOUS LOW FLOW			519	Aug 30	380	Oct 7 1981
10 PERCENT EXCEEDS	14800		13900		15000	
50 PERCENT EXCEEDS	5310		4900		2910	
90 PERCENT EXCEEDS	1800		1050		1120	

e Estimated.

* Regulated period only (1982-1997). See REMARKS.



CAPE FEAR RIVER BASIN

02105900 HOOD CREEK NEAR LELAND, NC

LOCATION.--Lat 34°16'43", long 78°07'34", Hydrologic Unit 03030005, Brunswick County, on right bank 150 ft downstream from bridge on U.S. Highway 74 and 76, 0.4 mile downstream from Pasture Pond Branch, 1 mile southeast of Maco, and 4.8 miles northwest of Leland.

DRAINAGE AREA.--21.6 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements water years 1950-56, and annual maximum, water years 1953-56. October 1956 to September 1973. October 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 12.22 ft above sea level. Prior to Nov. 28, 1956, crest-stage gage at site 150 ft upstream at datum 9.60 ft lower. Nov. 29, 1956 to Apr. 24, 1969, water-stage recorder 150 ft upstream at datum 0.19 ft higher. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum discharge for period of record, from rating curve extended above 850 ft^3/s, by logarithmic plotting. Low flows possibly affected by tide. Minimum discharge for period of record, no flow, also occurred Sept. 10,11, 1997.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	8.4	25	e16	22	37	3.0	15	.12	.15	18	.04
2	57	9.5	70	e16	19	29	2.1	9.9	.13	.17	12	.02
3	107	10	59	e18	17	23	1.7	8.1	.19	.14	8.9	.04
4	85	11	32	e20	15	18	1.9	9.4	e.30	.08	7.1	.07
5	58	9.8	24	e22	15	16	1.8	8.8	.16	.04	5.8	.03
6	40	9.7	23	24	14	14	2.1	7.2	.91	.05	7.8	.02
7	30	9.2	22	22	13	12	2.9	6.0	3.5	.07	8.3	.02
8	516	11	24	19	13	11	3.6	4.5	6.7	2.0	7.6	.01
9	557	16	27	29	13	9.7	3.7	3.8	8.4	1.9	6.2	.01
10	243	16	22	74	13	8.5	3.8	3.4	7.8	3.5	4.9	0
11	145	13	19	71	15	7.9	3.9	3.5	6.6	6.3	3.2	.55
12	102	11	18	49	16	7.1	5.0	3.4	5.7	5.1	2.4	.29
13	77	10	17	36	16	6.4	6.0	5.1	5.0	4.2	1.8	.18
14	58	10	16	28	52	34	6.7	4.2	3.9	3.7	1.9	.15
15	42	11	15	24	202	133	6.6	4.6	2.4	2.1	1.2	2.8
16	32	11	15	31	187	88	6.0	4.5	.99	.55	.55	13
17	25	11	14	60	115	51	5.6	3.8	.84	.19	.37	14
18	22	12	15	38	82	31	5.2	3.7	.69	5.2	.27	13
19	19	15	22	29	62	24	5.2	2.5	.32	12	.17	35
20	17	16	32	25	48	34	5.2	.88	.19	9.6	.11	17
21	15	16	28	23	40	39	5.3	.39	.14	11	.13	9.7
22	13	19	22	21	78	26	5.3	.25	.11	8.1	.20	7.0
23	12	19	20	21	108	19	7.3	.25	.07	6.2	.12	5.8
24	10	18	19	20	82	14	7.6	.33	.05	6.0	.09	5.3
25	9.1	16	18	19	58	11	8.4	.34	.04	9.5	.09	6.5
26	8.5	17	17	18	44	9.5	8.3	.29	.03	9.1	.07	8.0
27	8.2	16	16	17	45	8.8	8.1	.19	.07	7.7	.06	20
28	8.2	15	16	16	47	7.6	14	.18	.25	5.9	.06	95
29	8.5	15	e16	15	---	6.5	48	.18	.12	4.1	.04	120
30	8.5	14	e15	19	---	5.1	30	.17	.10	3.1	.05	58
31	8.2	---	e15	23	---	4.0	---	.14	---	16	.06	---
TOTAL	2358.2	395.6	713	863	1451	745.1	224.3	114.99	55.82	143.74	99.54	431.53
MEAN	76.1	13.2	23.0	27.8	51.8	24.0	7.48	3.71	1.86	4.64	3.21	14.4
MAX	557	19	70	74	202	133	48	15	8.4	16	18	120
MIN	8.2	8.4	14	15	13	4.0	1.7	.14	.03	.04	.04	0
CFSM	3.52	.61	1.06	1.29	2.40	1.11	.35	.17	.09	.21	.15	.67
IN.	4.06	.68	1.23	1.49	2.50	1.28	.39	.20	.10	.25	.17	.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1997@, BY WATER YEAR (WY)

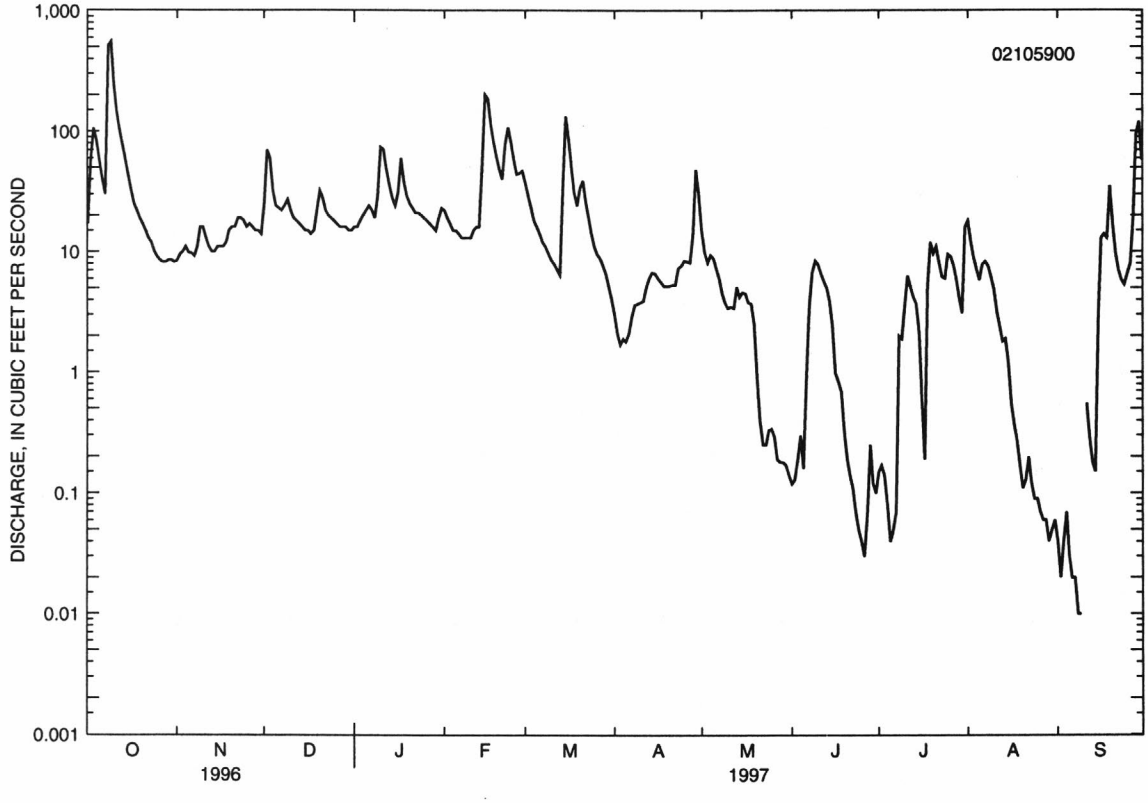
MEAN	30.1	20.0	27.8	44.9	52.6	55.6	33.3	13.7	25.8	39.6	49.7	34.4
MAX	91.8	52.6	74.5	93.8	112	111	115	81.9	143	133	153	190
(WY)	1972	1960	1973	1964	1973	1959	1961	1969	1961	1996	1969	1996
MIN	1.48	3.51	3.39	9.95	11.5	12.5	3.69	1.67	.32	.73	.15	.51
(WY)	1968	1966	1966	1957	1957	1967	1967	1995	1960	1957	1957	1963

CAPE FEAR RIVER BASIN

02105900 HOOD CREEK NEAR LELAND, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1957 - 1997@	
ANNUAL TOTAL	18998.2		7595.82			
ANNUAL MEAN	51.9		20.8		35.6	
HIGHEST ANNUAL MEAN					50.8	1996
LOWEST ANNUAL MEAN					15.6	1968
HIGHEST DAILY MEAN	1290	Sep 6	557	Oct 9	1320	Aug 18 1971
LOWEST DAILY MEAN	5.5	May 7	0	Sep 10	0	Sep 10 1997
ANNUAL SEVEN-DAY MINIMUM	6.9	May 5	.02	Sep 4	.02	Sep 4 1997
INSTANTANEOUS PEAK FLOW			949	Oct 8	2050*	Sep 20 1955
INSTANTANEOUS PEAK STAGE			7.91	Oct 8	10.58	Sep 20 1955
INSTANTANEOUS LOW FLOW			0*	Sep 10	0*	Oct 5 1968
ANNUAL RUNOFF (CFSM)	2.40		.96		1.65	
ANNUAL RUNOFF (INCHES)	32.72		13.08		22.38	
10 PERCENT EXCEEDS	100		46		83	
50 PERCENT EXCEEDS	18		9.6		15	
90 PERCENT EXCEEDS	9.2		.14		1.3	

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



CAPE FEAR RIVER BASIN

02106500 BLACK RIVER NEAR TOMAHAWK, NC

LOCATION.--Lat 34°45'17", long 78°17'21", Sampson County, Hydrologic Unit 03030006, on left bank 30 ft upstream from bridge on State Highway 411, 0.2 mi downstream of Clear Run Swamp, and 3.8 mi northeast of Tomahawk.

DRAINAGE AREA.--676 mi^2.

PERIOD OF RECORD.--October 1951 to current year.

REVISED RECORDS.--WSP 1723: 1955(M). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 24.61 ft above sea level. Nonrecording gage on downstream side of bridge Oct. 1, 1951 to June 29, 1961. Water-stage recorder was at present site at 24.26 ft June 30, 1961 to Sept. 30, 1964. Satellite telemetry at station

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Minimum discharge for period of record, present site and datum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1928 reached a stage of 22.0 ft, present datum; discharge, 14,500 ft^3/s and floods in 1945 and 1948 reached a stage of 17.6 ft, present datum; discharge, 5,420 ft^3/s, from information furnished by North Carolina State Highway Commission.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1830	1020	968	1050	1090	1240	1060	1230	190	81	1090	73
2	1770	961	1050	1060	1090	1290	1080	1270	182	80	1010	83
3	1680	925	1150	1120	1070	1330	1060	1270	199	95	931	112
4	1600	916	1220	1160	1040	1340	1000	1210	280	95	879	106
5	1500	923	1290	1180	1010	1330	939	1080	333	75	751	90
6	1380	958	1390	1180	969	1300	872	969	288	63	533	88
7	1280	1030	1500	1130	924	1220	804	884	280	59	410	85
8	1860	1120	1630	1090	899	1140	739	e780	309	120	349	76
9	2880	1170	1660	1070	929	1060	676	e695	297	149	311	65
10	4100	1210	1670	1170	963	984	601	e620	267	125	268	57
11	5640	1240	1630	1230	989	926	507	e550	243	105	237	62
12	6250	1240	1560	1270	986	870	485	471	220	102	212	63
13	5750	1210	1470	1310	967	812	535	425	201	76	183	75
14	5110	1170	1350	1390	1020	837	586	393	183	51	151	93
15	4420	1120	1250	1460	1180	1090	566	360	168	47	132	156
16	3720	1050	1160	1520	1400	1250	533	325	156	49	131	310
17	3140	972	1100	1570	1610	1400	515	292	144	78	130	326
18	2620	907	1050	1600	1820	1610	493	265	134	119	118	367
19	2240	885	1050	1600	2040	1840	468	245	127	125	104	468
20	2010	879	1130	1600	2150	1970	446	231	121	100	95	499
21	1860	872	1200	1570	2100	1940	430	225	115	86	96	398
22	1740	913	1260	1500	2000	1810	427	234	107	68	123	244
23	1630	978	1310	1390	1880	1650	539	220	100	72	152	180
24	1530	1030	1360	1280	1750	1470	647	201	104	60	236	148
25	1430	1070	1390	1210	1610	1320	634	187	106	66	276	178
26	1340	1100	1350	1180	1480	1200	579	185	e200	186	240	223
27	1250	1110	1290	1160	1350	1110	536	225	e170	374	191	223
28	1190	1090	1230	1140	1240	1050	629	262	133	568	150	273
29	1150	1050	1180	1110	---	1020	945	247	120	772	119	437
30	1120	998	1130	1090	---	1010	1130	221	97	997	97	474
31	1070	---	1080	1090	---	1040	---	199	---	1110	82	---
TOTAL	76090	31117	40058	39480	37556	39459	20461	15971	5574	6153	9787	6032
MEAN	2455	1037	1292	1274	1341	1273	682	515	186	198	316	201
MAX	6250	1240	1670	1600	2150	1970	1130	1270	333	1110	1090	499
MIN	1070	872	968	1050	899	812	427	185	97	47	82	57
CFSM	3.63	1.53	1.91	1.88	1.98	1.88	1.01	.76	.27	.29	.47	.30
IN.	4.19	1.71	2.20	2.17	2.07	2.17	1.13	.88	.31	.34	.54	.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1997, BY WATER YEAR (WY)

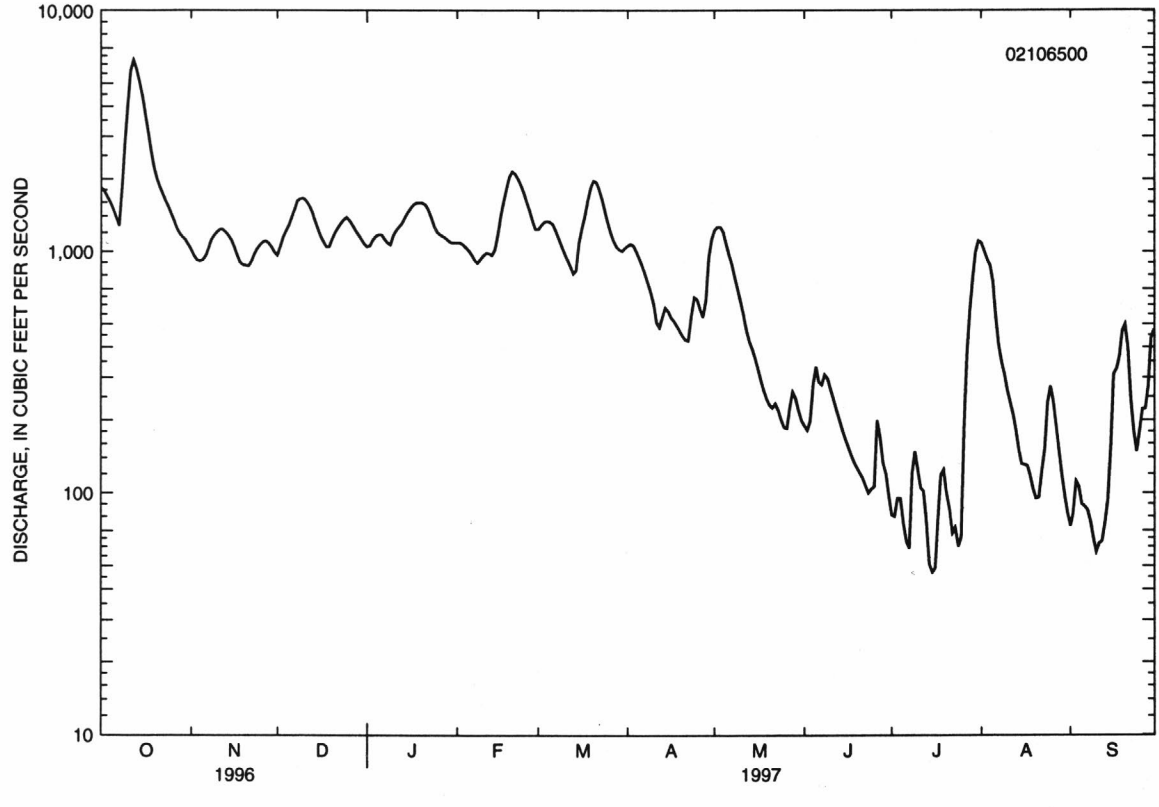
MEAN	479	491	721	1123	1284	1435	1066	538	478	504	713	620
MAX	2613	1412	2164	2903	2903	3410	3070	1687	3089	2088	2810	4740
(WY)	1965	1963	1993	1993	1973	1983	1973	1978	1995	1965	1974	1996
MIN	29.6	57.1	238	287	448	460	225	141	113	76.7	25.2	13.4
(WY)	1955	1974	1989	1986	1989	1981	1981	1986	1985	1953	1954	1954

CAPE FEAR RIVER BASIN

02106500 BLACK RIVER NEAR TOMAHAWK, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1952 - 1997	
ANNUAL TOTAL	482638		327738			
ANNUAL MEAN	1319		898		785	
HIGHEST ANNUAL MEAN					1300	1960
LOWEST ANNUAL MEAN					327	1986
HIGHEST DAILY MEAN	13500	Sep 10	6250	Oct 12	17000	Sep 17 1984
LOWEST DAILY MEAN	133	Jul 10	47	Jul 15	8.9	Sep 13 1954
ANNUAL SEVEN-DAY MINIMUM	164	Jun 4	69	Sep 7	9.9	Oct 9 1954
INSTANTANEOUS PEAK FLOW			6290	Oct 12	17500	Sep 17 1984
INSTANTANEOUS PEAK STAGE			18.22	Oct 12	22.08	Sep 17 1984
INSTANTANEOUS LOW FLOW			44	Jul 16	8.5*	Oct 13 1954
ANNUAL RUNOFF (CFSM)	1.95		1.33		1.16	
ANNUAL RUNOFF (INCHES)	26.56		18.04		15.78	
10 PERCENT EXCEEDS	2150		1610		1770	
50 PERCENT EXCEEDS	970		945		515	
90 PERCENT EXCEEDS	316		101		107	

e Estimated.
* See REMARKS.



CAPE FEAR RIVER BASIN

0210783230 HERRINGS MARSH RUN NEAR SUMMERLINS CROSSROADS, NC

LOCATION.--Lat 35°05'37", long 77°56'35", Duplin County, Hydrologic Unit 03030007, on right bank 150 ft downstream of Secondary Road 1508, and 1.1 mi northeast of Summerlins Crossroads.

DRAINAGE AREA.--2.25 mi^2.

PERIOD OF RECORD.--April 1991 to current year.

GAGE.--Water stage recorder. Elevation of gage is 102 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum discharge for period of record from rating curve extended above 40 ft^3/s by logarithmic plotting. Minimum discharge for period of record occurred several days in June 1991. Minimum discharge for current water year also occurred June 27, 29, 30, July 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	1.2	4.6	2.8	1.6	5.8	1.5	1.3	.17	.11	.75	.24
2	2.2	7.0	5.6	4.5	1.3	2.5	1.4	1.0	.17	1.3	.43	.24
3	2.0	3.6	2.9	2.6	1.1	2.2	1.4	1.0	.23	.19	.34	.24
4	1.5	2.1	2.3	1.9	.85	1.8	1.4	.94	.39	.12	.26	.23
5	1.2	1.8	2.2	1.8	.95	1.7	1.4	.62	.25	.26	2.4	.21
6	1.2	1.7	4.2	1.6	.72	2.0	1.4	.48	.27	.88	4.7	.21
7	1.3	1.6	5.7	1.4	.70	1.4	1.2	.42	.43	.61	.80	.23
8	82	2.0	7.6	1.3	2.1	1.3	.74	.34	.28	.21	.57	.21
9	18	2.4	4.1	6.2	1.6	1.3	.73	.39	.22	.16	.42	.23
10	7.5	1.5	2.9	5.3	1.3	1.3	.73	.33	.16	.34	.32	.26
11	4.6	1.4	2.7	3.1	1.2	1.2	.77	.25	.15	.82	.32	.48
12	3.5	1.2	2.5	2.2	1.0	1.1	e1.0	.23	.12	.21	.26	.35
13	2.8	1.1	2.4	1.9	1.1	1.1	e1.3	.36	.12	.13	.23	.54
14	2.5	1.1	2.1	1.7	5.9	11	e.95	.26	.15	.10	.23	1.2
15	2.2	1.1	2.0	1.6	12	9.3	e.85	.22	.19	.09	.30	4.2
16	1.9	1.0	2.0	9.5	4.9	4.2	e.76	.18	.16	.10	.31	2.3
17	1.9	1.1	2.1	4.6	3.1	2.9	.74	.16	.14	.11	.26	.75
18	2.1	1.1	2.0	2.8	2.4	2.3	.71	.15	.13	.10	.19	.57
19	5.8	2.0	8.8	2.2	2.2	2.6	.65	.14	.16	.10	.20	.52
20	2.9	1.4	5.5	2.1	1.8	3.4	.63	.14	.13	2.6	.27	.49
21	2.3	1.7	3.5	1.9	2.1	2.4	.70	.13	.11	1.5	2.6	.35
22	2.0	6.0	2.9	1.8	4.0	2.1	1.0	.13	.10	.26	.84	.37
23	1.8	2.4	2.6	1.8	2.0	1.7	2.0	.14	.11	.16	.53	.35
24	1.7	1.9	2.6	1.6	1.8	1.5	1.0	.13	.13	4.9	.40	.54
25	1.6	1.7	2.4	2.3	1.6	1.5	.73	.14	.10	4.5	.33	2.2
26	1.5	2.0	2.1	1.5	1.5	3.1	.66	.77	.09	.81	.31	1.2
27	1.5	1.6	2.3	1.4	1.7	2.0	.65	.63	.08	.46	.34	.71
28	1.5	1.4	2.1	1.6	3.2	2.5	13	.26	.10	.34	.32	3.4
29	1.5	1.3	2.1	1.5	---	1.8	4.5	.20	.08	.26	.27	1.5
30	1.3	1.4	2.0	2.0	---	1.6	2.1	.17	.07	1.9	.25	.63
31	1.2	---	1.8	1.9	---	1.7	---	.15	---	1.9	.24	---
TOTAL	168.8	58.8	100.6	80.4	65.72	82.3	46.60	11.76	4.99	25.53	19.99	24.95
MEAN	5.45	1.96	3.25	2.59	2.35	2.65	1.55	.38	.17	.82	.64	.83
MAX	82	7.0	8.8	9.5	12	11	13	1.3	.43	4.9	4.7	4.2
MIN	1.2	1.0	1.8	1.3	.70	1.1	.63	.13	.07	.09	.19	.21
CFSM	2.42	.87	1.44	1.15	1.04	1.18	.69	.17	.07	.37	.29	.37
IN.	2.79	.97	1.66	1.33	1.09	1.36	.77	.19	.08	.42	.33	.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1997, BY WATER YEAR (WY)

MEAN	1.56	1.49	2.27	3.59	2.49	3.12	1.84	.51	1.71	1.62	1.90	1.94
MAX	5.45	3.23	4.47	8.75	3.75	5.39	4.24	1.32	7.44	5.76	6.26	7.36
(WY)	1997	1993	1993	1993	1995	1993	1993	1992	1995	1991	1992	1996
MIN	.28	.55	1.02	1.50	1.62	1.47	.57	.20	.11	.11	.22	.26
(WY)	1994	1994	1996	1996	1992	1992	1995	1995	1994	1992	1993	1993

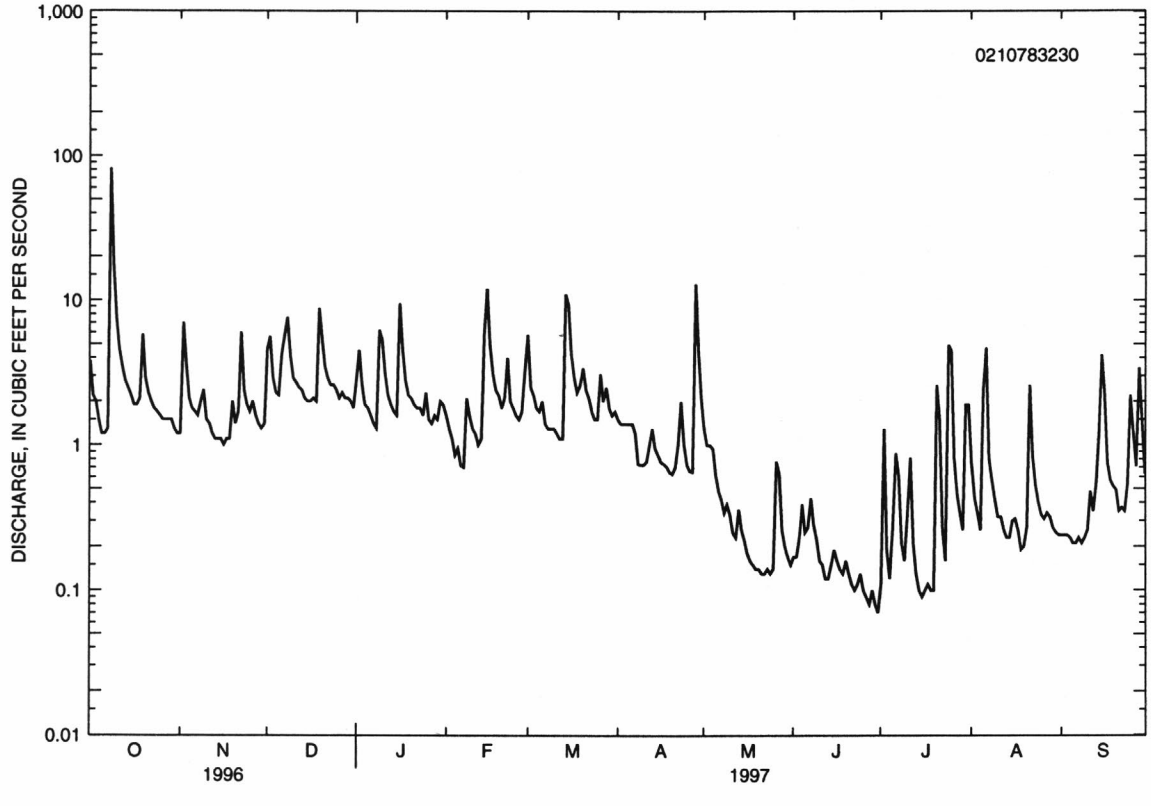
CAPE FEAR RIVER BASIN

0210783230 HERRINGS MARSH RUN NEAR SUMMERLINS CROSSROADS, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1991 - 1997	
ANNUAL TOTAL	861.99		690.44			
ANNUAL MEAN	2.36		1.89		1.86	
HIGHEST ANNUAL MEAN					2.69	1993
LOWEST ANNUAL MEAN					1.13	1994
HIGHEST DAILY MEAN	92	Sep 6	82	Oct 8	92	Sep 6 1996
LOWEST DAILY MEAN	.06	Jun 7	.07	Jun 30	.02	Jun 10 1991
ANNUAL SEVEN-DAY MINIMUM	.10	Jul 5	.09	Jun 25	.02	Jun 10 1991
INSTANTANEOUS PEAK FLOW			312	Oct 8	375*	Sep 6 1996
INSTANTANEOUS PEAK STAGE			5.12	Oct 8	5.33	Sep 6 1996
INSTANTANEOUS LOW FLOW			.07*	Jun 26	.01*	Jun 12 1991
ANNUAL RUNOFF (CFSM)	1.05		.84		.83	
ANNUAL RUNOFF (INCHES)	14.25		11.42		11.22	
10 PERCENT EXCEEDS	4.0		3.5		4.3	
50 PERCENT EXCEEDS	1.4		1.3		.97	
90 PERCENT EXCEEDS	.20		.16		.13	

e Estimated.

* See REMARKS.



CAPE FEAR RIVER BASIN

0210783240 HERRINGS MARSH RUN TRIBUTARY NEAR SUMMERLINS CROSSROADS, NC

LOCATION.--Lat 35°05'49", long 77°56'01", Duplin County, Hydrologic Unit 03030007, at upstream side of culvert on Secondary Road 1508, and 1.6 mi northeast of Summerlins Crossroads.

DRAINAGE AREA.--1.49 mi^2.

PERIOD OF RECORD.--May 1991 to current year.

GAGE.--Water stage recorder. Elevation of gage is 95 ft above sea level, from topographic map.

REMARKS.--Records poor. All discharges are questionable, due to beaver activity. Maximum discharge and stage for period of record, result of beaver dam failure.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e6.0	e.90	e2.0	e2.4	e2.0	e7.0	e1.4	e2.0	e.68	e.30	e3.0	e.16
2	e3.0	e4.0	e5.0	e4.2	e1.8	e4.0	e1.4	e1.6	e.68	e.70	e1.0	e.15
3	e2.4	e4.4	e2.4	e3.0	e1.6	e3.0	e1.3	e1.5	e.80	e.90	e.60	e.12
4	e1.6	e2.0	e1.6	e2.2	e1.6	e2.4	e1.3	e1.7	e1.2	e.40	e.40	e.12
5	e1.2	e1.6	e1.4	e2.1	e2.0	e2.0	e1.3	e1.8	e1.0	e.50	e1.2	e.11
6	e1.0	e1.4	e2.4	e2.1	e1.8	e2.2	e1.3	e1.4	e.90	e1.4	e9.0	e.11
7	e1.2	e1.2	e3.0	e2.0	e1.6	e2.0	e1.3	e1.3	e1.4	e1.5	e3.0	e.10
8	e30	e2.0	e6.0	e1.8	e2.6	e1.7	e1.3	e1.2	e1.0	e.80	e1.2	e.10
9	e18	e2.8	e4.0	e4.4	e3.6	e1.6	e1.2	e1.4	e.80	e.42	e.70	e.10
10	e9.0	e1.8	e3.0	e5.6	e2.6	e1.5	e1.1	e1.2	e.64	e.38	e.50	e.11
11	e6.0	e1.4	e2.8	e3.0	e1.6	e1.5	e1.0	e1.0	e.50	e.40	e.38	e.30
12	e4.6	e1.2	e2.6	e2.6	e1.4	e1.4	e2.0	e.90	e.48	e.50	e.32	e.42
13	e3.8	e1.0	e2.4	e2.2	e1.6	e1.3	e3.0	e1.4	e.46	e.36	e.30	e.70
14	e3.2	e1.1	e2.4	e1.8	e5.0	e5.0	e2.4	e1.6	e.50	e.30	e.60	e2.0
15	e3.0	e1.0	e2.2	e1.6	e8.0	e8.0	e2.0	e1.2	e.58	e.26	e.70	e8.0
16	e2.8	e.90	e2.1	e2.5	e5.0	e4.0	e1.6	e.94	e.52	e.26	e.40	e9.0
17	e2.6	e.80	e2.1	e5.0	e3.2	e2.6	e1.4	e.86	e.50	e.26	e.30	e5.0
18	e2.5	e1.0	e2.2	e3.0	e2.6	e2.4	e1.6	e.80	e.48	e.26	e.32	e2.0
19	e6.0	e2.0	e6.0	e2.2	e2.4	e3.0	e1.4	e.74	e.46	e.25	e.36	e1.6
20	e4.0	e1.6	e5.6	e2.2	e2.2	e3.4	e1.3	e.72	e.40	e.38	e.44	e1.0
21	e2.6	e1.8	e3.4	e2.2	e2.4	e2.4	e1.4	e.72	e.38	e4.0	e4.0	e.90
22	e2.0	e6.0	e3.0	e2.1	e4.0	e1.8	e2.8	e.74	e.37	e1.0	e2.6	e.60
23	e1.8	e3.0	e2.8	e2.1	e3.0	e1.6	e5.0	e.80	e.80	e.38	e1.0	e.40
24	e1.7	e2.5	e2.6	e1.9	e2.4	e1.5	e2.0	e.70	e.64	e1.8	e.44	e.60
25	e1.6	e1.6	e2.5	e2.4	e2.2	e1.4	e1.4	e.60	e.48	e10	e.26	e4.0
26	e1.5	e1.5	e2.4	e2.2	e1.8	e2.0	e1.0	e1.0	e.34	e3.0	e.18	e5.0
27	e1.4	e1.4	e2.3	e1.8	e2.2	e2.2	e1.0	e2.0	e.30	e1.2	e.14	e4.0
28	e1.4	e1.0	e2.3	e1.9	e3.0	e1.8	e8.0	e1.6	e.32	e.70	e.13	e5.0
29	e1.3	e.90	e2.2	e2.2	---	e1.9	e5.6	e1.0	e.30	e.50	e.13	e7.0
30	e1.2	e.96	e2.1	e2.4	---	e1.7	e3.0	e.80	e.30	e1.8	e1.0	e4.0
31	e1.1	---	e2.1	e2.2	---	e1.5	---	e.70	---	e4.4	e.70	---
TOTAL	129.5	54.76	88.9	79.3	75.2	79.8	61.8	35.92	18.21	39.31	35.30	62.70
MEAN	4.18	1.83	2.87	2.56	2.69	2.57	2.06	1.16	.61	1.27	1.14	2.09
MAX	30	6.0	6.0	5.6	8.0	8.0	8.0	2.0	1.4	10	9.0	9.0
MIN	1.0	.80	1.4	1.6	1.4	1.3	1.0	.60	.30	.25	.13	.10
CFSM	2.80	1.23	1.92	1.72	1.80	1.73	1.38	.78	.41	.85	.76	1.40
IN.	3.23	1.37	2.22	1.98	1.88	1.99	1.54	.90	.45	.98	.88	1.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1997, BY WATER YEAR (WY)

MEAN	1.40	1.35	1.62	2.39	2.62	2.68	1.76	.95	1.83	1.43	1.47	2.03
MAX	4.18	2.49	3.12	4.63	5.93	3.75	3.31	1.62	4.59	3.25	3.77	6.35
(WY)	1997	1993	1993	1993	1995	1993	1993	1996	1995	1991	1992	1996
MIN	.096	.66	.77	1.25	1.19	1.60	.78	.46	.23	.29	.26	.61
(WY)	1995	1995	1996	1994	1994	1996	1995	1994	1994	1993	1996	1994

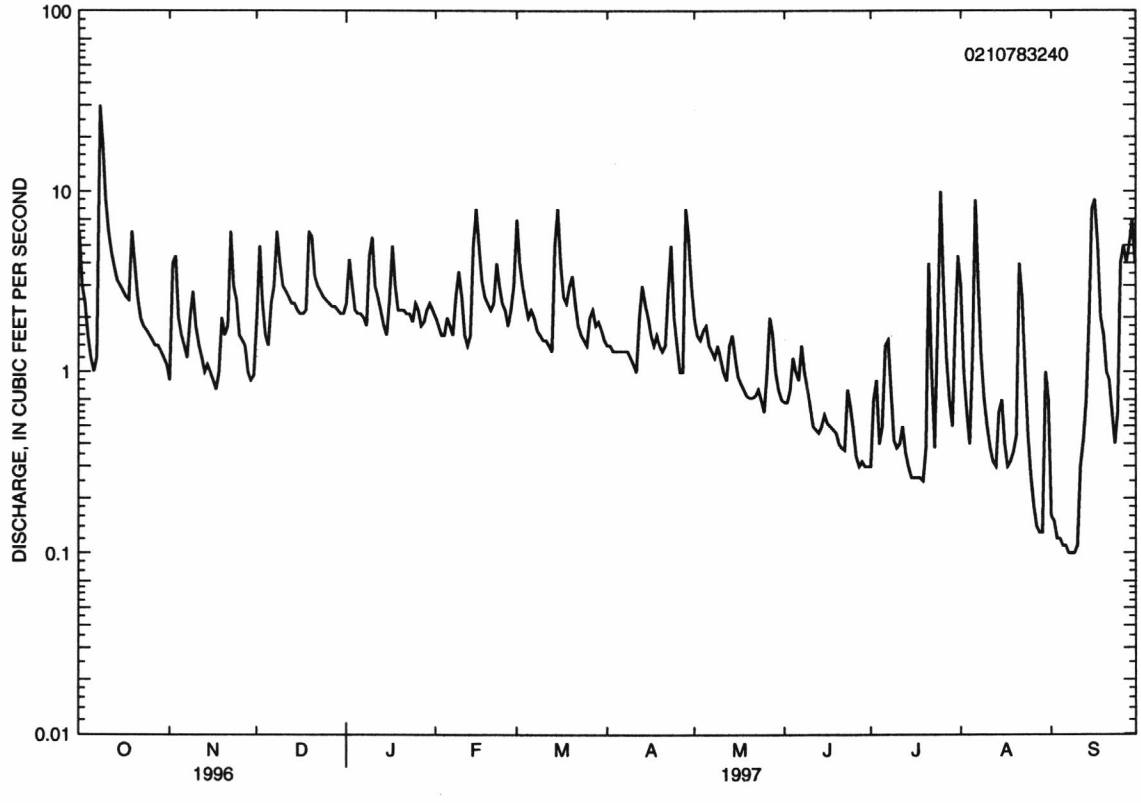
CAPE FEAR RIVER BASIN

0210783240 HERRINGS MARSH RUN TRIBUTARY NEAR SUMMERLINS CROSSROADS, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1991 - 1997	
ANNUAL TOTAL	838.93		760.70			
ANNUAL MEAN	2.29		2.08		1.75	
HIGHEST ANNUAL MEAN					2.11	1993
LOWEST ANNUAL MEAN					1.07	1994
HIGHEST DAILY MEAN	59	Sep 6	30	Oct 8	59	Sep 6 1996
LOWEST DAILY MEAN	.03	Aug 15	.10	Sep 7	.02	Jun 29 1994
ANNUAL SEVEN-DAY MINIMUM	.05	Aug 14	.11	Sep 4	.02	Jun 27 1994
INSTANTANEOUS PEAK FLOW			NOT DETERMINDED		649*	Sep 6 1996
INSTANTANEOUS PEAK STAGE			5.54	OCT 8	6.69*	Sep 6 1996
INSTANTANEOUS LOW FLOW			NOT DETERMINDED		.01	Aug 15 1996
ANNUAL RUNOFF (CFSM)	1.54		1.40		1.17	
ANNUAL RUNOFF (INCHES)	20.95		18.99		15.93	
10 PERCENT EXCEEDS	4.9		4.0		3.5	
50 PERCENT EXCEEDS	1.4		1.6		1.2	
90 PERCENT EXCEEDS	.13		.38		.21	

e Estimated.

* See REMARKS.



CAPE FEAR RIVER BASIN

0210783273 HERRINGS MARSH RUN TRIBUTARY AT RED HILL, NC

LOCATION.--Lat 35°04'32", long 77°54'49", Duplin County, Hydrologic Unit 03030007, on left bank 260 ft upstream from Secondary Road 1306, and 0.1 mi west of Red Hill.

DRAINAGE AREA.--1.14 mi^2.

PERIOD OF RECORD.--August 1991 to September 1997 (discontinued).

GAGE.--Water stage recorder. Elevation of gage is 79 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	2.3	3.3	2.8	1.8	4.2	.52	1.1	.36	e.36	e2.2	e.12
2	1.6	3.6	4.1	3.1	1.7	3.0	.42	.89	.39	e.50	e.77	e.11
3	1.6	3.6	3.3	2.8	1.5	2.4	.45	.77	.42	e.66	e.48	e.10
4	1.3	3.0	2.9	2.5	1.5	2.0	.49	.78	.43	e.30	e.32	e.09
5	1.0	2.8	2.8	2.3	1.5	1.7	.53	2.8	.50	e.30	e.90	e.09
6	.89	2.7	3.1	2.1	1.5	1.7	.63	2.4	.51	e1.0	e3.9	e.09
7	.99	2.6	3.9	2.0	1.5	1.5	.56	1.4	.54	e1.0	e2.4	e.08
8	51	3.4	4.5	1.8	1.9	1.4	.50	1.0	.42	e.57	e.88	e.08
9	19	3.5	3.6	3.7	2.0	1.5	.42	1.1	.42	e.34	e.53	e.08
10	8.2	2.9	3.1	4.1	1.8	1.2	.38	.80	.39	e.28	e.38	e.08
11	6.1	2.6	2.9	3.2	1.8	1.2	.32	.61	.36	e.30	e.28	e.26
12	5.1	2.3	2.7	2.7	1.6	1.1	.66	.46	.35	e.37	e.26	e.33
13	4.4	2.2	2.6	2.3	1.8	1.1	.93	.83	.36	e.28	e.26	e.55
14	4.0	2.3	2.4	2.0	3.1	3.1	.68	.64	.41	e.24	e.43	e1.6
15	4.0	2.4	2.2	1.9	5.3	3.6	.58	.47	.46	e.20	e.55	e6.0
16	4.7	2.0	2.1	3.8	3.7	2.6	.45	.35	.40	e.20	e.30	e7.0
17	4.3	1.9	2.2	3.4	2.8	2.0	.41	.32	.39	e.20	e.24	e3.5
18	3.7	2.1	2.4	2.6	2.3	1.7	.38	.39	.38	e.20	e.25	e1.8
19	4.7	2.8	4.7	2.2	2.0	1.7	.31	.29	.40	e.20	e.28	e1.3
20	3.8	2.6	4.2	2.0	1.9	1.8	.39	.30	.40	e.28	e.34	e.85
21	3.4	3.1	3.4	1.9	2.0	1.6	.43	.34	.41	e3.4	e4.6	e.75
22	3.1	5.6	2.9	1.8	2.7	1.4	.80	.28	.47	e.87	e2.2	e.45
23	3.0	4.0	2.7	1.9	2.2	1.2	1.6	.43	.59	e.29	e.80	e.35
24	2.8	3.3	2.7	1.8	1.9	1.1	1.1	.32	.56	e1.4	e.35	e.50
25	2.7	3.1	2.6	2.1	1.8	.91	.84	.32	.50	e7.0	e.20	e2.7
26	2.5	3.0	2.4	1.9	1.7	1.2	.76	.46	e.42	e2.5	e.15	e3.8
27	2.5	2.7	2.6	1.7	1.8	1.2	.73	.69	e.37	e1.0	e.10	e2.8
28	2.6	2.4	3.3	1.9	2.9	1.1	2.9	.50	e.38	e.54	e.10	e3.7
29	2.6	2.4	2.9	2.0	---	1.0	2.3	.39	e.37	e.39	e.10	e5.6
30	2.5	2.4	2.6	1.9	---	.75	1.5	.35	e.36	e1.5	e.80	e2.8
31	2.4	---	2.4	1.8	---	.66	---	.36	---	e3.3	e.60	---
TOTAL	162.38	85.6	93.5	74.0	60.0	52.62	22.97	22.14	12.72	29.97	25.95	47.56
MEAN	5.24	2.85	3.02	2.39	2.14	1.70	.77	.71	.42	.97	.84	1.59
MAX	51	5.6	4.7	4.1	5.3	4.2	2.9	2.8	.59	7.0	4.6	7.0
MIN	.89	1.9	2.1	1.7	1.5	.66	.31	.28	.35	.20	.10	.08
CFSM	4.59	2.50	2.65	2.09	1.88	1.49	.67	.63	.37	.85	.73	1.39
IN.	5.30	2.79	3.05	2.41	1.96	1.72	.75	.72	.42	.98	.85	1.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1997, BY WATER YEAR (WY)

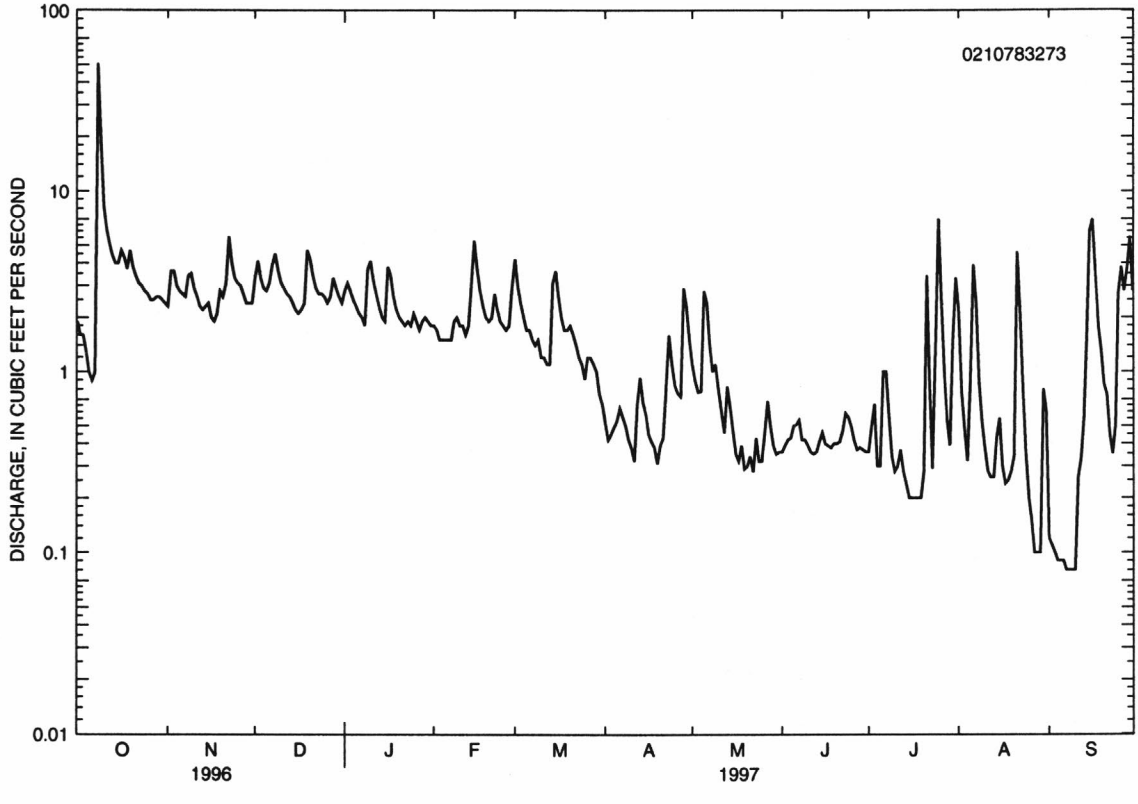
MEAN	1.46	1.21	1.47	2.09	1.74	2.08	1.21	.48	.98	1.52	.98	1.61
MAX	5.24	2.85	3.02	3.84	2.57	3.50	2.84	.79	3.41	5.60	2.38	5.82
(WY)	1997	1997	1997	1993	1995	1993	1993	1992	1995	1996	1992	1996
MIN	.51	.64	.56	1.04	.96	.93	.49	.13	.28	.12	.12	.070
(WY)	1996	1996	1996	1996	1992	1992	1995	1995	1994	1992	1995	1995

CAPE FEAR RIVER BASIN

0210783273 HERRINGS MARSH RUN TRIBUTARY AT RED HILL, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1991 - 1997	
ANNUAL TOTAL	929.17		689.41			
ANNUAL MEAN	2.54		1.89		1.38	
HIGHEST ANNUAL MEAN					1.89	1997
LOWEST ANNUAL MEAN					.80	1994
HIGHEST DAILY MEAN	56	Sep 6	51	Oct 8	56	Sep 6 1996
LOWEST DAILY MEAN	.06	May 23	.08	Sep 7	.05	Jul 14 1994
ANNUAL SEVEN-DAY MINIMUM	.09	May 20	.08	Sep 4	.06	Sep 10 1995
INSTANTANEOUS PEAK FLOW			103	Oct 8	103	Oct 8 1996
INSTANTANEOUS PEAK STAGE			6.11	Oct 8	6.42	Sep 6 1996
INSTANTANEOUS LOW FLOW			NOT DETERMINED		0	Sep 11 1991
ANNUAL RUNOFF (CFSM)	2.23		1.66		1.21	
ANNUAL RUNOFF (INCHES)	30.32		22.50		16.44	
10 PERCENT EXCEEDS	5.0		3.6		3.0	
50 PERCENT EXCEEDS	1.3		1.5		.81	
90 PERCENT EXCEEDS	.33		.30		.17	

e Estimated.



0210783276 HERRINGS MARSH RUN BELOW SECONDARY ROAD 1306 AT RED HILL, NC

LOCATION.--Lat 35°04'25", long 77°54'50", Duplin County, Hydrologic Unit 03030007, on left bank, 200 ft downstream of Secondary Road 1306, and 0.1 mi southwest of Red Hill.

DRAINAGE AREA.--9.11 mi^2.

PERIOD OF RECORD.--May 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 75 ft above sea level, from topographic map. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minimum discharge for period of record also occurred several days in July 1994. Minimum discharge for current water year also occurred Sept. 8, 9, 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	4.5	12	14	11	40	6.9	12	2.1	.91	8.6	.43
2	14	23	27	24	10	22	6.3	9.3	2.1	2.0	3.1	.41
3	11	25	13	16	9.4	16	6.0	8.2	2.4	2.6	1.9	.37
4	8.7	12	8.8	13	9.4	13	5.9	8.6	3.7	1.2	1.2	.35
5	7.1	9.3	8.1	12	11	12	5.9	10	3.4	1.2	3.7	.33
6	6.2	8.3	14	12	10	13	6.0	8.6	2.7	3.9	28	.33
7	6.4	7.8	17	11	8.6	11	5.9	6.6	3.8	4.1	9.9	.31
8	194	11	36	10	15	9.6	5.9	5.5	3.2	2.3	3.6	.30
9	106	15	24	25	21	9.4	5.6	5.6	2.5	1.3	2.1	.30
10	49	9.2	18	32	11	9.0	5.0	5.2	1.8	1.1	1.5	.31
11	33	7.2	16	18	9.1	9.1	4.5	4.4	1.5	1.2	1.1	.99
12	26	6.3	15	14	8.2	8.2	5.8	3.9	1.4	1.5	.99	1.3
13	22	5.9	14	12	8.9	7.6	10	4.9	1.4	1.1	.94	2.2
14	19	5.9	13	e9.5	28	30	7.4	5.0	1.6	.89	1.7	6.5
15	17	5.7	12	e8.0	48	48	5.8	3.8	1.7	.79	2.2	25
16	16	4.9	12	e14	30	22	4.7	3.1	1.6	.78	1.2	27
17	15	4.8	12	28	19	15	4.6	2.8	1.5	.78	.89	13
18	14	5.6	13	16	15	14	4.7	2.7	1.4	.78	.96	6.8
19	33	11	33	13	14	18	4.3	2.3	1.4	.78	1.1	4.5
20	21	8.5	33	13	13	19	4.0	2.2	1.2	1.1	1.3	3.3
21	15	10	20	13	14	14	4.5	2.2	1.1	13	14	3.0
22	12	34	16	12	22	10	8.4	2.1	1.1	3.4	8.6	1.7
23	11	17	15	12	17	9.0	16	2.3	2.3	1.1	3.2	1.3
24	10	11	14	11	13	8.8	12	2.0	2.0	4.8	1.3	2.1
25	9.1	9.2	14	14	12	8.4	7.7	1.8	1.3	28	.78	11
26	8.4	8.8	13	13	11	12	5.8	3.0	1.0	9.3	.62	15
27	8.2	7.7	13	10	12	13	5.8	8.5	.90	3.9	.42	11
28	8.3	5.9	13	11	16	9.7	46	4.6	.94	2.1	.40	15
29	8.0	5.4	12	13	---	11	34	2.8	.90	1.5	.40	22
30	7.2	5.6	12	13	---	8.6	17	2.3	.90	5.5	3.1	11
31	6.0	---	12	13	---	8.3	---	2.1	---	13	2.3	---
TOTAL	741.6	305.5	504.9	449.5	426.6	458.7	272.4	148.4	54.84	115.91	111.10	187.13
MEAN	23.9	10.2	16.3	14.5	15.2	14.8	9.08	4.79	1.83	3.74	3.58	6.24
MAX	194	34	36	32	48	48	46	12	3.8	28	28	27
MIN	6.0	4.5	8.1	8.0	8.2	7.6	4.0	1.8	.90	.78	.40	.30
CFSM	2.63	1.12	1.79	1.59	1.67	1.62	1.00	.53	.20	.41	.39	.68
IN.	3.03	1.25	2.06	1.84	1.74	1.87	1.11	.61	.22	.47	.45	.76

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1997, BY WATER YEAR (WY)

MEAN	8.05	7.32	9.55	13.9	12.6	15.0	8.15	3.13	7.54	6.97	7.47	8.58
MAX	23.9	12.5	16.9	28.2	18.4	22.6	17.3	4.79	32.0	15.4	19.6	33.3
(WY)	1997	1993	1993	1993	1995	1993	1993	1997	1995	1991	1992	1996
MIN	3.67	4.25	5.09	8.06	7.13	7.85	3.59	1.57	.75	1.36	1.70	1.78
(WY)	1994	1995	1996	1996	1992	1992	1994	1994	1994	1992	1993	1995

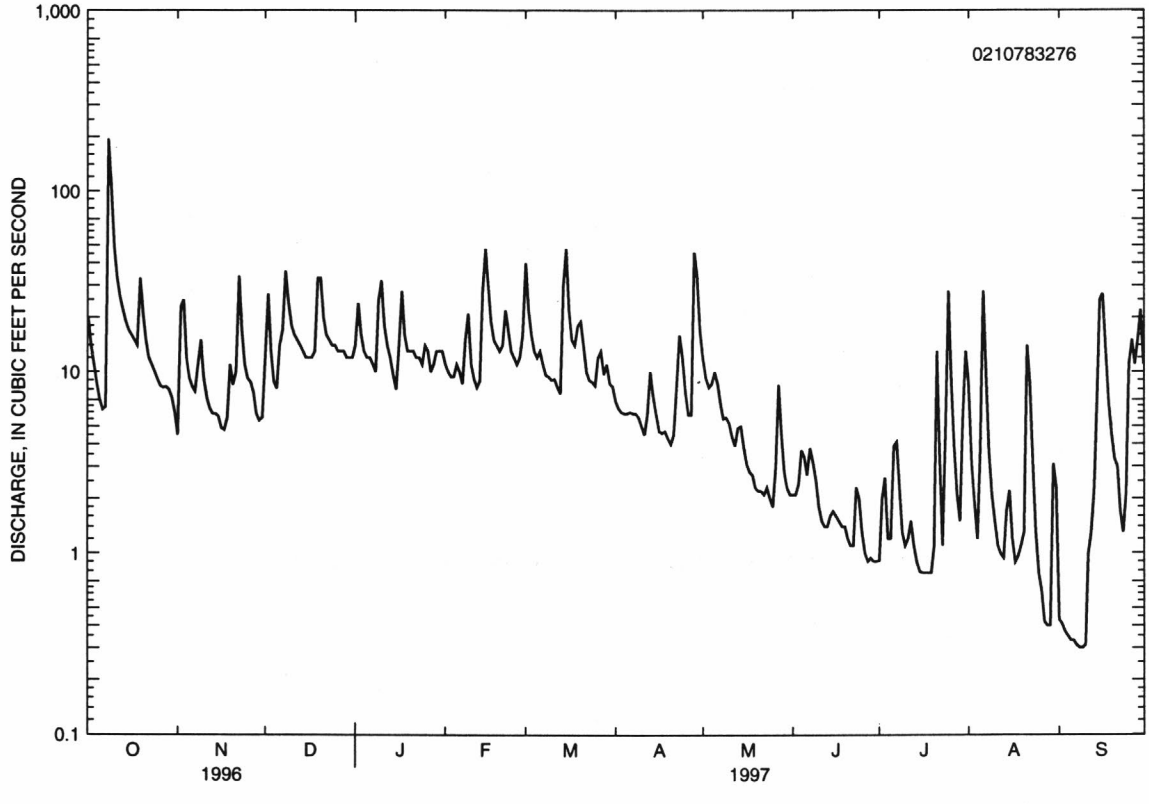
CAPE FEAR RIVER BASIN

0210783276 HERRINGS MARSH RUN BELOW SECONDARY ROAD 1306 AT RED HILL, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1991 - 1997	
ANNUAL TOTAL	4476.88		3776.58			
ANNUAL MEAN	12.2		10.3		8.76	
HIGHEST ANNUAL MEAN					10.9	1993
LOWEST ANNUAL MEAN					5.56	1994
HIGHEST DAILY MEAN	266	Sep 6	194	Oct 8	266	Sep 6 1996
LOWEST DAILY MEAN	.60	Jun 24	.30	Sep 8	.24	Jul 3 1994
ANNUAL SEVEN-DAY MINIMUM	.89	May 20	.32	Sep 4	.28	Jul 10 1994
INSTANTANEOUS PEAK FLOW			359	Oct 8	401	Sep 6 1996
INSTANTANEOUS PEAK STAGE			7.76	Oct 8	8.09	Sep 6 1996
INSTANTANEOUS LOW FLOW			.30*	Sep 7	.24*	Jul 2 1994
ANNUAL RUNOFF (CFSM)	1.34		1.14		.96	
ANNUAL RUNOFF (INCHES)	18.28		15.42		13.06	
10 PERCENT EXCEEDS	22		21		19	
50 PERCENT EXCEEDS	8.1		8.4		5.1	
90 PERCENT EXCEEDS	1.8		1.1		1.1	

e Estimated.

* See REMARKS.



CAPE FEAR RIVER BASIN

02108000 NORTHEAST CAPE FEAR RIVER NEAR CHINQUAPIN, NC

LOCATION.--Lat 34°49'40", long 77°50'00", Duplin County, Hydrologic Unit 03030007, on right bank 540 ft downstream of bridge on State Highway 41, 0.5 mi downstream of Muddy Creek, and 1.2 mi west of Chinquapin.

DRAINAGE AREA.--599 mi^2.

PERIOD OF RECORD.--July 1940 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 17.28 ft above sea level (levels by U.S. Army Corps of Engineers). Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Minimum discharge for period of record also occurred Oct. 11, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1908 reached a stage of 22.6 ft at old bridge site 1,000 ft upstream from gage. Flood in 1928 reached a stage 0.8 ft lower than the flood in 1908, from information by North Carolina State Highway Commission.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1170	638	821	846	873	1030	633	1040	180	75	477	57
2	1100	609	970	1020	857	1060	639	1060	176	72	575	48
3	1050	595	1050	1170	835	1070	647	1080	177	96	563	41
4	1010	585	1060	1230	809	1100	628	1060	211	221	446	36
5	973	586	1050	1210	800	1120	584	973	261	224	336	33
6	938	618	1080	1170	799	1080	537	856	279	163	269	32
7	893	688	1170	1100	779	1020	492	726	272	133	249	35
8	1340	770	1370	1040	768	932	453	607	257	187	265	40
9	4530	876	1590	1040	826	852	420	515	238	225	259	41
10	7310	941	1700	1260	866	785	391	452	218	204	231	36
11	8050	951	1680	1440	884	727	367	404	197	180	202	36
12	7740	920	1590	1570	888	671	351	365	178	199	170	33
13	6920	868	1440	1570	866	622	354	345	162	179	132	33
14	5960	810	1310	1470	978	723	353	337	153	152	105	54
15	5000	749	1180	1350	1420	1260	346	315	143	132	93	194
16	4030	692	1060	1320	1840	1470	338	293	138	108	84	725
17	2930	652	993	1430	2140	1530	329	272	136	97	90	987
18	2300	630	929	1540	2180	1520	321	249	131	101	108	982
19	1800	630	936	1520	2100	1510	314	226	125	98	104	892
20	1600	637	1070	1450	1960	1460	304	208	120	91	107	721
21	1400	633	1170	1360	1780	1400	294	192	118	91	112	530
22	1160	757	1210	1280	1650	1350	291	175	114	93	157	421
23	1080	892	1240	1200	1550	1280	398	161	106	113	214	346
24	1040	945	1230	1120	1420	1140	567	151	101	112	214	263
25	993	960	1190	1080	1320	1020	599	143	117	124	174	213
26	933	980	1120	1050	1230	918	597	139	147	148	136	252
27	867	976	1070	1010	1120	828	562	158	118	196	111	292
28	809	947	1040	968	1040	764	600	165	97	242	96	337
29	760	903	987	923	---	721	833	178	88	250	84	420
30	716	850	931	892	---	681	975	186	81	257	75	452
31	677	---	876	885	---	649	---	181	---	356	66	---
TOTAL	77079	23288	36113	37514	34578	32293	14517	13212	4839	4919	6304	8582
MEAN	2486	776	1165	1210	1235	1042	484	426	161	159	203	286
MAX	8050	980	1700	1570	2180	1530	975	1080	279	356	575	987
MIN	677	585	821	846	768	622	291	139	81	72	66	32
CFSM	4.15	1.30	1.94	2.02	2.06	1.74	.81	.71	.27	.26	.34	.48
IN.	4.79	1.45	2.24	2.33	2.15	2.01	.90	.82	.30	.31	.39	.53

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

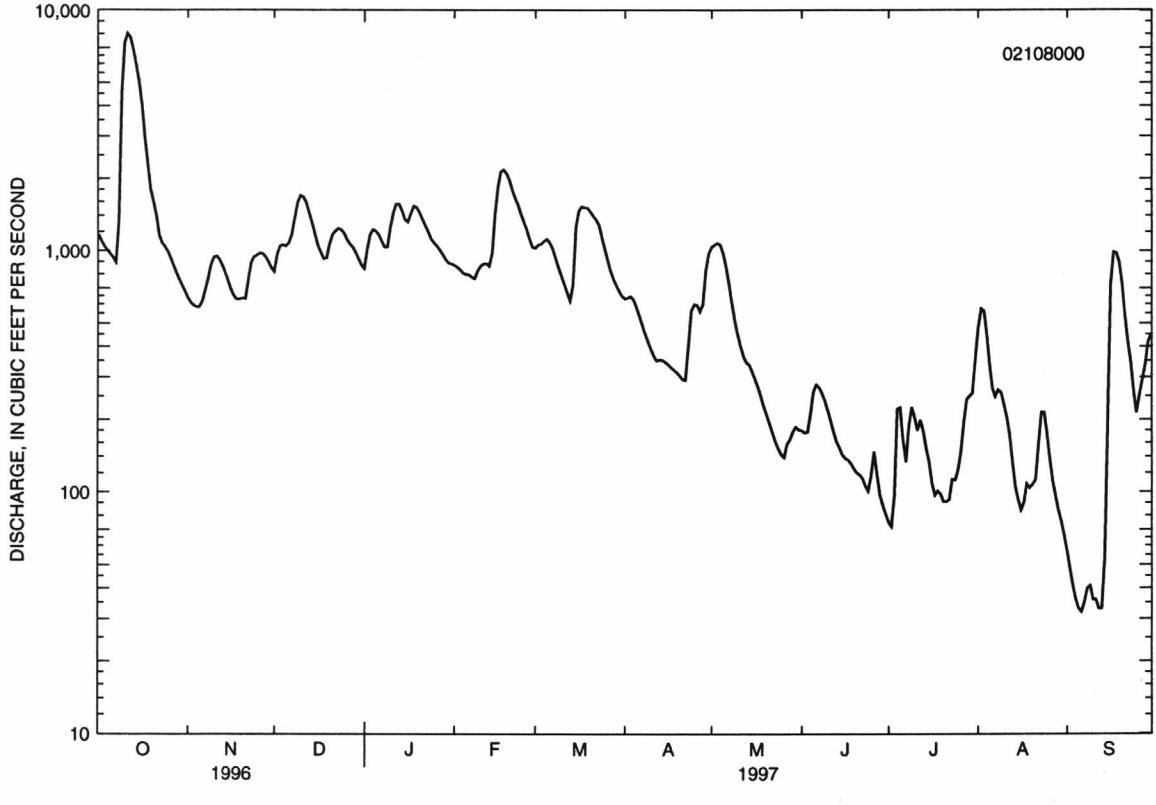
MEAN	432	421	663	1042	1171	1225	835	466	401	561	679	570
MAX	2486	1852	2225	2548	3832	3506	2958	1901	1953	3922	2681	4754
(WY)	1997	1948	1949	1993	1973	1983	1973	1969	1961	1962	1955	1955
MIN	7.59	15.6	59.6	158	249	261	145	64.9	17.3	25.9	13.8	11.0
(WY)	1955	1955	1955	1955	1955	1955	1986	1995	1994	1954	1954	1954

CAPE FEAR RIVER BASIN

02108000 NORTHEAST CAPE FEAR RIVER NEAR CHINQUAPIN, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1940 - 1997	
ANNUAL TOTAL	438863		293238			
ANNUAL MEAN	1199		803		705	
HIGHEST ANNUAL MEAN					1243	1973
LOWEST ANNUAL MEAN					279	1951
HIGHEST DAILY MEAN	9550	Sep 9	8050	Oct 11	19500	Jul 6 1962
LOWEST DAILY MEAN	57	May 27	32	Sep 6	5.3	Oct 10 1954
ANNUAL SEVEN-DAY MINIMUM	74	May 22	36	Sep 4	5.5	Oct 8 1954
INSTANTANEOUS PEAK FLOW			8110	Oct 11	20400	Jul 6 1962
INSTANTANEOUS PEAK STAGE			15.43	Oct 11	20.16	Jul 6 1962
INSTANTANEOUS LOW FLOW			31	Sep 6	5.3*	Oct 10 1954
ANNUAL RUNOFF (CFSM)	2.00		1.34		1.18	
ANNUAL RUNOFF (INCHES)	27.25		18.21		15.99	
10 PERCENT EXCEEDS	2320		1440		1680	
50 PERCENT EXCEEDS	761		671		396	
90 PERCENT EXCEEDS	228		106		59	

* See REMARKS.



WACCAMAW RIVER BASIN

02109500 WACCAMAW RIVER AT FREELAND, NC

LOCATION.--Lat 34°05'43", long 78°32'55", Brunswick County, Hydrologic Unit 03040206, on left bank 150 ft downstream of New Britton bridge on State Highway 130, 1 mi southwest of Freeland, 7 mi downstream of Juniper Creek, and 117 mi upstream from mouth in Winyah Bay.

DRAINAGE AREA.--680 mi^2.

PERIOD OF RECORD.--July 1939 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 15.52 ft above sea level. Prior to July 15, 1943, nonrecording gage 150 ft upstream at same datum. Auxiliary nonrecording gage 3.3 mi downstream of base gage Oct. 7, 1949, to July 14, 1952. Since July 15, 1952, auxiliary water-stage recorder at same site and datum. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Minimum discharge for period of record also occurred Sept. 9, 19, 28, and Oct. 4-14, 1954. Minimum discharge for current water year also occurred Sept. 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1800	826	342	701	971	e2000	647	423	e34	e34	42	3.8
2	1760	759	386	696	981	e1800	585	439	e32	e36	49	e3.0
3	1750	712	431	695	972	e1600	524	422	e30	e38	46	e2.6
4	1670	679	475	694	947	e1500	463	408	e44	e36	42	e2.4
5	1590	659	503	687	e920	e1450	408	397	e52	e34	e40	e2.0
6	1500	642	511	675	885	1310	361	380	e60	75	e50	1.6
7	1430	624	531	659	857	1100	317	366	e100	105	e56	1.6
8	1820	604	567	633	830	1010	277	359	127	152	e60	1.6
9	2530	581	595	619	806	920	242	349	131	146	e62	1.4
10	3400	550	610	644	781	832	e210	335	e115	117	e60	1.3
11	4430	521	616	656	762	757	e190	312	e108	94	e56	4.9
12	6000	491	617	714	742	693	e186	288	e90	82	e50	5.1
13	6840	467	620	743	721	639	e184	269	e70	70	e46	4.3
14	6860	447	628	773	771	632	e180	254	e56	e56	e40	4.9
15	6250	430	641	812	1050	749	182	233	e36	e48	e30	13
16	5310	415	659	891	1490	858	172	203	e38	e40	e22	6.8
17	4370	403	672	1020	1770	e950	157	170	e38	e50	18	6.2
18	3770	394	677	1120	2010	e1000	140	138	e34	45	15	5.2
19	3400	392	666	1270	e2200	1010	125	112	e30	37	13	5.7
20	3060	e390	686	1380	e2500	e1000	110	91	e28	31	13	6.4
21	2770	e380	711	1410	e2600	e980	99	82	e26	27	11	6.3
22	2480	e370	733	1400	e2800	e980	89	e76	e24	23	9.5	5.2
23	e2200	376	730	1380	2880	e970	95	e66	e22	21	8.3	4.7
24	2000	383	729	1330	2830	e960	103	e64	e20	23	7.6	4.7
25	1820	388	719	1150	2700	e950	100	e54	e20	27	6.9	6.7
26	1660	386	709	1100	e2500	e940	92	e52	e18	25	6.0	9.0
27	1510	378	708	1070	e2200	900	84	e62	e22	23	5.2	13
28	1380	368	712	1020	e2100	857	105	e58	e26	20	4.5	29
29	1100	355	715	972	---	811	259	e48	e28	18	3.6	51
30	1010	342	712	947	---	759	364	e40	e30	16	3.1	54
31	913	---	707	952	---	708	---	e36	---	25	3.5	---
TOTAL	88383	14712	19318	28813	43576	31625	7050	6586	1489	1574	879.2	267.4
MEAN	2851	490	623	929	1556	1020	235	212	49.6	50.8	28.4	8.91
MAX	6860	826	733	1410	2880	2000	647	439	131	152	62	54
MIN	913	342	342	619	721	632	84	36	18	16	3.1	1.3
CFSM	4.19	.72	.92	1.37	2.29	1.50	.35	.31	.07	.07	.04	.01
IN.	4.84	.80	1.06	1.58	2.38	1.73	.39	.36	.08	.09	.05	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1997, BY WATER YEAR (WY)

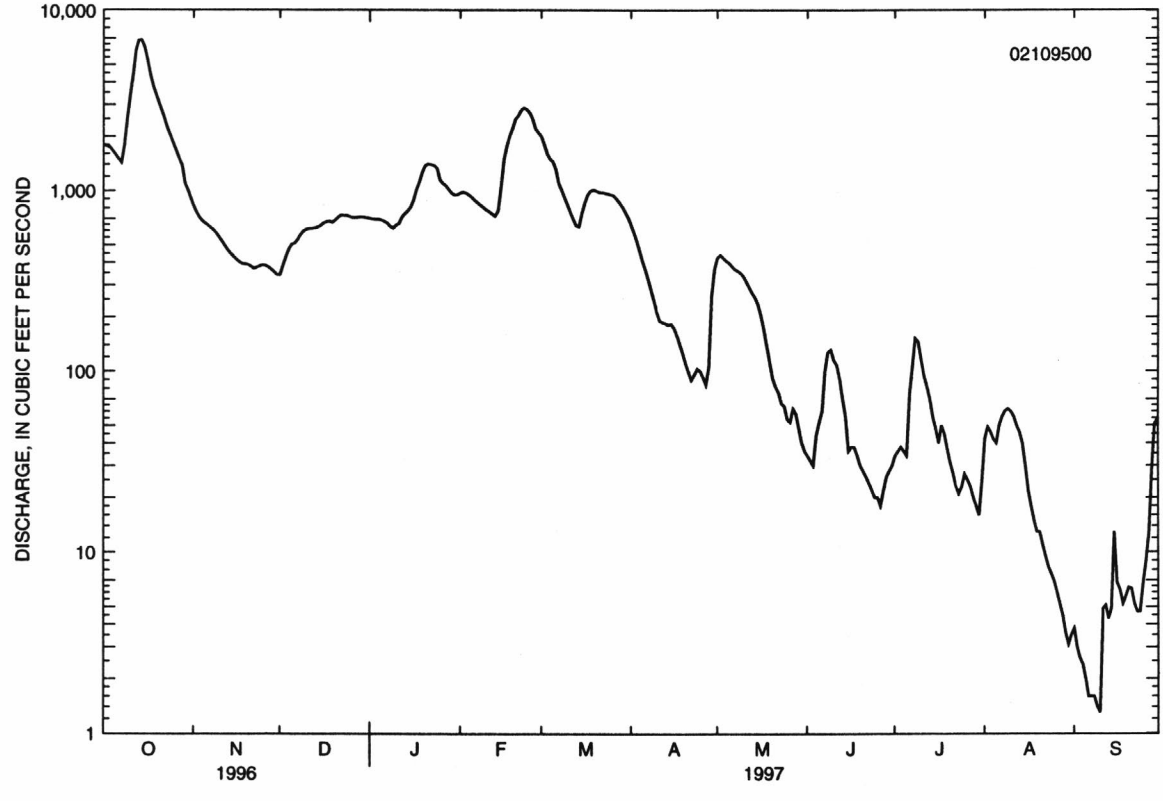
MEAN	447	340	492	1018	1310	1431	979	330	310	533	668	679
MAX	2851	2332	3080	3722	4197	5319	2895	1928	1474	3040	2740	5111
(WY)	1997	1978	1949	1993	1948	1983	1973	1978	1969	1961	1981	1996
MIN	1.14	.54	3.53	20.6	44.6	219	120	17.5	5.51	5.72	7.59	.31
(WY)	1941	1955	1955	1955	1941	1955	1967	1995	1952	1952	1954	1954

02109500 WACCAMAW RIVER AT FREELAND, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1939 - 1997	
ANNUAL TOTAL	485613		244272.6			
ANNUAL MEAN	1327		669		709	
HIGHEST ANNUAL MEAN					1392	1948
LOWEST ANNUAL MEAN					230	1941
HIGHEST DAILY MEAN	12200	Sep 12	6860	Oct 14	12200	Sep 12 1996
LOWEST DAILY MEAN	28	Jun 9	1.3	Sep 10	.10	Sep 27 1983
ANNUAL SEVEN-DAY MINIMUM	39	Jun 5	1.7	Sep 4	.10	Oct 4 1954
INSTANTANEOUS PEAK FLOW			7030	Oct 14	12400	Sep 12 1996
INSTANTANEOUS PEAK STAGE			15.84	Oct 14	17.02	Sep 12 1996
INSTANTANEOUS LOW FLOW			1.2*	Sep 10	.10*	Aug 30 1954
ANNUAL RUNOFF (CFSM)	1.95		.98		1.04	
ANNUAL RUNOFF (INCHES)	26.57		13.36		14.17	
10 PERCENT EXCEEDS	2400		1660		1860	
50 PERCENT EXCEEDS	721		386		355	
90 PERCENT EXCEEDS	249		12		27	

e Estimated.

* See REMARKS.



PEE DEE RIVER BASIN

02111000 YADKIN RIVER AT PATTERSON, NC

LOCATION.--Lat 35°59'29", long 81°33'30", Caldwell County, Hydrologic Unit 03040101, on left bank 200 ft upstream from bridge on State Highway 268, 0.4 mi upstream from Warrior Creek, 0.5 mi south of Patterson, 2.0 mi downstream of Walnut Branch, and at mile 416.

DRAINAGE AREA.--28.8 mi^2.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 1303: 1940(m), 1947-48(M). WSP 1553: 1948(P). WDR NC-80-1: 1975(P), drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,211.47 ft above sea level. Prior to Feb. 9, 1940, nonrecording gage at present site, at datum 1,212.47 ft. Feb. 9, 1940, to Oct. 20, 1970, recording gage at present site, at datum 1,212.47 ft. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records good except those during period of ice effect, Jan. 18-20, which are poor.. Maximum discharge, for period of record, from rating curve extended above 1,400 ft^3/s on basis of computation of peak flow over dam 1 mi upstream at gage heights 4.58, 6.60, 7.70, and 12.70 ft. Minimum discharge for current water year also occurred Sept. 22, 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	25	489	37	46	132	56	108	119	49	33	20
2	35	27	263	37	44	109	54	89	145	45	32	20
3	34	25	140	36	42	175	53	102	95	50	31	27
4	31	24	98	36	85	164	52	83	71	41	31	23
5	29	25	81	47	84	126	51	75	61	39	30	20
6	29	25	71	40	72	105	83	70	54	37	29	19
7	28	29	65	37	64	87	70	65	52	35	29	19
8	34	133	58	36	69	78	59	62	50	34	29	19
9	37	76	53	49	61	71	56	60	48	34	29	20
10	32	52	49	44	58	69	53	57	46	40	28	35
11	29	44	48	42	54	64	52	55	44	41	29	36
12	26	40	58	38	51	59	99	52	56	35	29	29
13	27	34	70	37	52	60	82	51	59	33	30	23
14	27	34	57	37	55	344	68	49	56	32	31	20
15	27	32	53	36	93	200	62	48	52	31	28	19
16	26	31	50	66	79	135	59	46	47	33	32	18
17	25	30	55	45	67	109	56	45	45	39	27	17
18	28	34	51	e43	61	99	53	44	52	32	26	17
19	30	34	52	e48	58	146	53	43	47	31	25	16
20	28	31	46	e44	55	139	51	43	48	30	26	16
21	27	31	45	41	79	111	50	41	44	30	27	15
22	27	32	43	40	97	97	62	39	41	30	24	15
23	30	29	43	42	76	84	127	38	39	68	21	15
24	28	29	46	46	68	75	87	38	37	47	20	60
25	27	29	43	50	62	71	71	38	48	38	20	36
26	27	68	41	45	60	75	64	41	66	35	21	22
27	28	45	41	43	58	66	65	46	66	37	21	20
28	26	41	40	59	133	70	111	39	50	36	21	20
29	28	38	41	52	---	68	254	38	47	33	20	26
30	25	63	39	50	---	63	141	40	44	47	20	19
31	25	---	38	48	---	60	---	39	---	41	19	---
TOTAL	898	1190	2367	1351	1883	3311	2254	1684	1729	1183	818	681
MEAN	29.0	39.7	76.4	43.6	67.3	107	75.1	54.3	57.6	38.2	26.4	22.7
MAX	38	133	489	66	133	344	254	108	145	68	33	60
MIN	25	24	38	36	42	59	50	38	37	30	19	15
CFSM	1.01	1.38	2.65	1.51	2.34	3.71	2.61	1.89	2.00	1.33	.92	.79
IN.	1.16	1.54	3.06	1.75	2.43	4.28	2.91	2.18	2.23	1.53	1.06	.88

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

MEAN	37.4	42.2	46.3	51.6	62.0	74.1	69.8	54.8	49.1	39.7	45.5	36.6
MAX	149	140	98.8	132	143	160	164	125	122	98.9	194	136
(WY)	1991	1978	1974	1946	1960	1993	1980	1973	1992	1941	1940	1979
MIN	8.45	9.07	11.8	11.4	27.0	23.7	26.5	20.5	13.0	9.04	9.05	6.95
(WY)	1955	1982	1956	1956	1988	1988	1981	1940	1956	1988	1988	1954

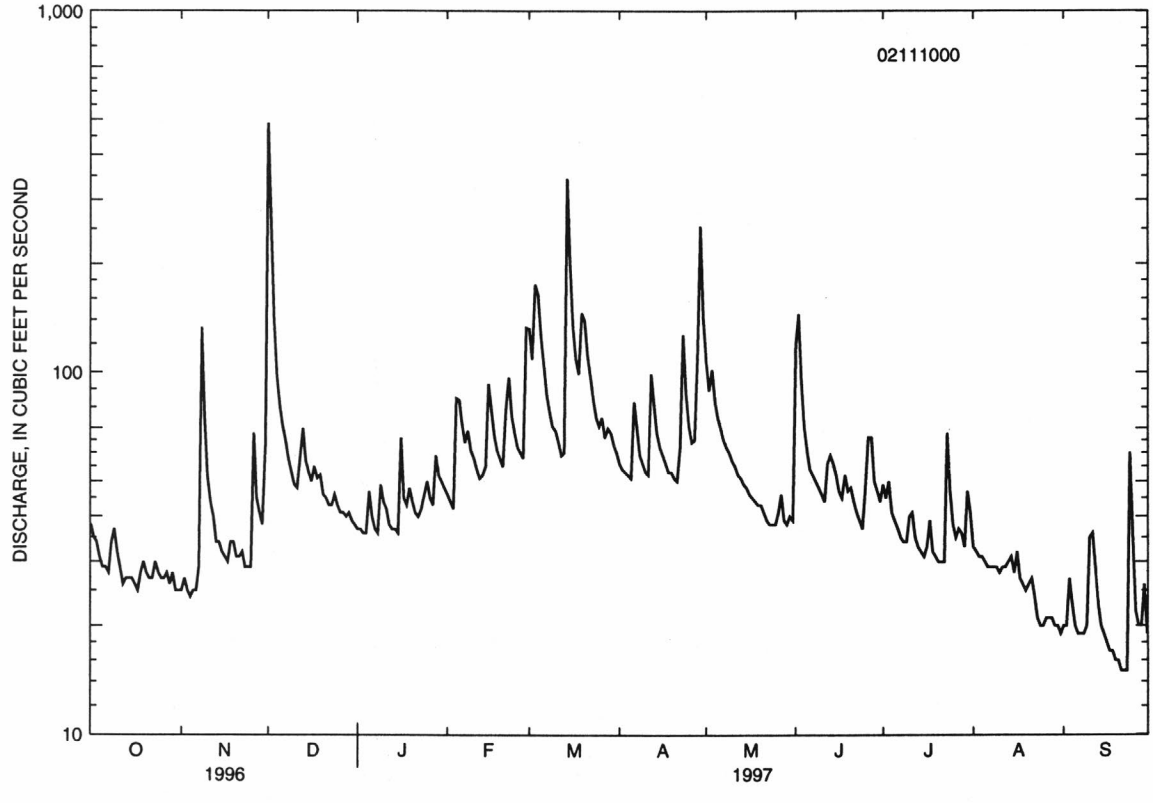
PEE DEE RIVER BASIN

02111000 YADKIN RIVER AT PATTERSON, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1940 - 1997	
ANNUAL TOTAL	18646		19349			
ANNUAL MEAN	50.9		53.0		50.7	
HIGHEST ANNUAL MEAN					78.3	1973
LOWEST ANNUAL MEAN					21.5	1956
HIGHEST DAILY MEAN	878	Aug 12	489	Dec 1	2130	Aug 13 1940
LOWEST DAILY MEAN	18	Jul 24	15	Sep 21	5.3	Sep 30 1954
ANNUAL SEVEN-DAY MINIMUM	20	Jul 19	16	Sep 17	5.7	Sep 25 1954
INSTANTANEOUS PEAK FLOW			853	Dec 1	16200*	Aug 13 1940
INSTANTANEOUS PEAK STAGE			4.25	Dec 1	12.70	Aug 13 1940
INSTANTANEOUS LOW FLOW			15*	Sep 21	3.0	May 15 1940
ANNUAL RUNOFF (CFSM)	1.77		1.84		1.76	
ANNUAL RUNOFF (INCHES)	24.08		24.99		23.91	
10 PERCENT EXCEEDS	76		86		88	
50 PERCENT EXCEEDS	39		44		38	
90 PERCENT EXCEEDS	25		25		17	

e Estimated.

* See REMARKS.



PEE DEE RIVER BASIN

02111180 ELK CREEK AT ELKVILLE, NC

LOCATION.--Lat 36°04'16", long 81°24'13", Wilkes County, Hydrologic Unit 03040101, on left bank 700 ft upstream from bridge on State Highway 268 in Elkville, and 3,400 ft upstream from mouth.

DRAINAGE AREA.--48.1 mi^2.

PERIOD OF RECORD.--October 1965 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 1,082.40 ft above sea level. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS --Records fair except those for estimated daily discharges, which are poor. Maximum discharge for period of record, from rating curve extended above 3,200 ft^3/s on basis of contracted-opening computation. Minimum discharge for period of record, result of freezeup. Minimum discharge for current water year also occurred Sept. 22, 23.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 13, 1940, reached a stage of about 22 ft; discharge, about 70,000 ft^3/s, on basis of several contracted-opening and slope-area measurements. A discharge of 6.0 ft^3/s was measured Sept. 19, 1956.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e85	53	e950	e70	e75	e275	108	210	e210	e88	e60	e36
2	e80	55	e500	e70	e70	e240	109	173	e260	e80	e58	e36
3	e75	53	e320	e69	e80	e360	102	184	e170	e90	e56	e48
4	68	52	e225	e68	e150	e330	96	149	e130	e73	e56	e42
5	63	53	e190	e88	e145	e260	93	132	117	e70	e54	e36
6	62	53	e150	e150	e125	e200	132	127	97	e66	e52	e34
7	62	59	e140	e68	e110	e180	126	115	95	e62	e52	e34
8	77	311	116	67	e130	e160	114	107	90	e60	e52	e34
9	86	220	112	90	e120	e150	103	99	84	e62	e52	e36
10	70	156	109	83	e110	e150	96	102	81	e72	e50	e64
11	64	113	104	81	e105	e140	90	100	78	e74	e52	e66
12	61	91	106	71	e100	e130	161	87	99	e62	e52	e52
13	60	83	116	69	e110	e140	147	84	e105	e58	e54	e41
14	59	78	118	67	e120	e650	126	85	e100	e57	e56	e36
15	58	73	110	67	e200	e380	121	84	e92	e55	e50	e34
16	58	67	107	e120	e160	e250	115	77	e84	e58	e58	e32
17	57	65	118	e80	e140	e200	114	73	e80	e70	e49	e30
18	57	69	125	e95	e125	140	102	85	e94	e58	e47	26
19	63	70	104	e110	e115	e260	98	78	e84	e56	e45	26
20	59	64	91	e90	e110	254	94	85	e86	e54	e47	25
21	57	63	85	e75	e170	218	97	74	e80	e53	e48	24
22	57	62	86	e70	e210	197	120	e68	e74	e53	e42	24
23	62	56	84	e75	e150	181	247	66	e70	e125	e37	e24
24	58	55	90	e80	e140	167	185	68	e66	e84	e36	e110
25	55	53	87	e90	e135	156	153	e68	e86	e68	e36	e65
26	55	e140	80	e80	e130	160	135	e74	e125	e62	e37	42
27	57	e95	e80	e75	e125	142	128	e82	e120	e67	e37	35
28	56	e85	e78	e100	e300	143	164	e70	e90	e67	e37	35
29	57	e80	e80	e90	---	147	422	e68	e84	e60	e36	46
30	57	e130	e75	e85	---	131	259	71	e79	e84	e36	33
31	53	---	e72	e80	---	122	---	68	---	e74	e34	---
TOTAL	1948	2657	4808	2573	3760	6613	4157	3013	3110	2122	1468	1206
MEAN	62.8	88.6	155	83.0	134	213	139	97.2	104	68.5	47.4	40.2
MAX	86	311	950	150	300	650	422	210	260	125	60	110
MIN	53	52	72	67	70	122	90	66	66	53	34	24
CFSM	1.31	1.84	3.22	1.73	2.79	4.43	2.88	2.02	2.16	1.42	.98	.84
IN.	1.51	2.05	3.72	1.99	2.91	5.11	3.21	2.33	2.41	1.64	1.14	.93

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1997, BY WATER YEAR (WY)

MEAN	80.8	95.3	92.0	107	122	154	145	114	105	71.4	84.7	67.1
MAX	298	365	193	323	250	317	379	291	226	185	384	257
(WY)	1991	1978	1974	1995	1966	1993	1980	1973	1992	1989	1994	1979
MIN	19.8	19.8	24.7	22.5	48.2	47.9	51.5	37.3	21.7	17.6	18.9	24.9
(WY)	1982	1982	1989	1981	1989	1988	1986	1988	1988	1988	1988	1968

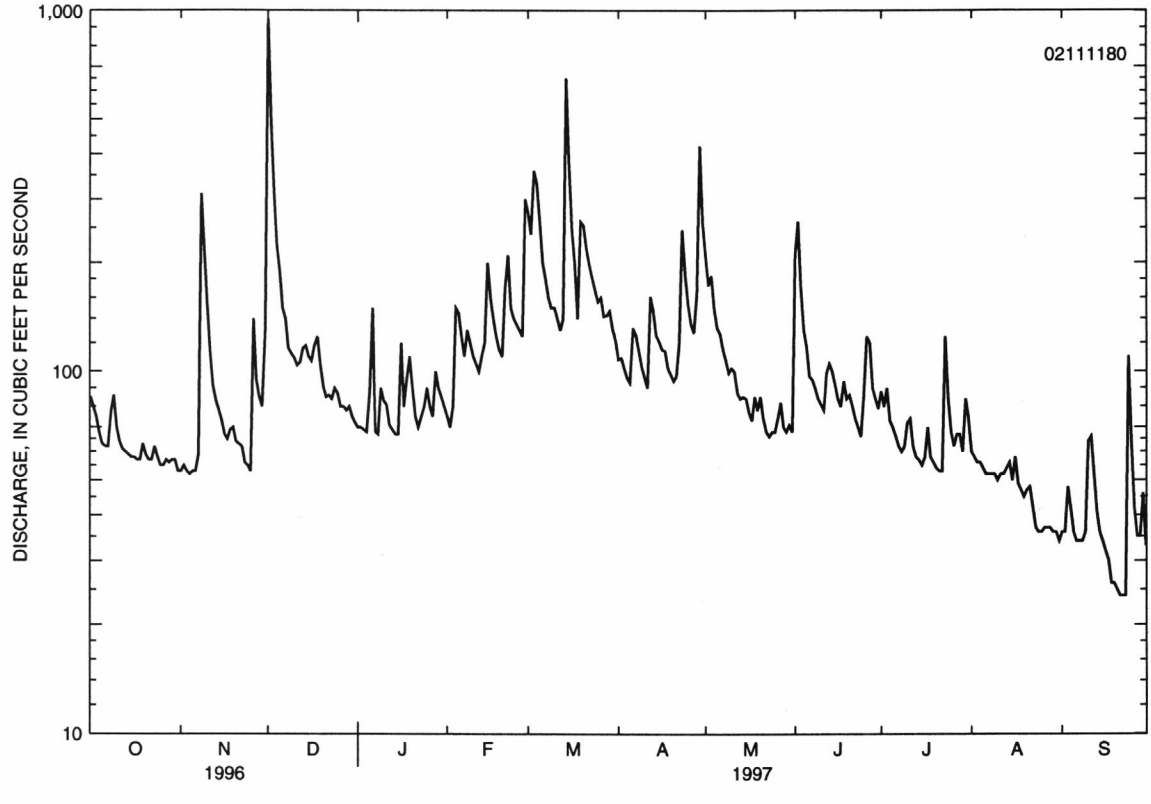
PEE DEE RIVER BASIN

02111180 ELK CREEK AT ELKVILLE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1966 - 1997	
ANNUAL TOTAL	41650		37435			
ANNUAL MEAN	114		103		103	
HIGHEST ANNUAL MEAN					154	1973
LOWEST ANNUAL MEAN					43.7	1988
HIGHEST DAILY MEAN	3140	Aug 12	950	Dec 1	5890	Aug 17 1994
LOWEST DAILY MEAN	32	Jul 30	24	Sep 21	12	Jul 18 1988
ANNUAL SEVEN-DAY MINIMUM	39	Jul 27	26	Sep 17	14	Jul 12 1988
INSTANTANEOUS PEAK FLOW			1440	Dec 1	18700*	Aug 17 1994
INSTANTANEOUS PEAK STAGE			3.45	Dec 1	12.02	Aug 17 1994
INSTANTANEOUS LOW FLOW			24*	Sep 21	11*	Jan 5 1981
ANNUAL RUNOFF (CFSM)	2.37		2.13		2.14	
ANNUAL RUNOFF (INCHES)	32.21		28.95		29.12	
10 PERCENT EXCEEDS	166		170		175	
50 PERCENT EXCEEDS	77		81		72	
90 PERCENT EXCEEDS	50		47		32	

e Estimated.

* See REMARKS.



PEE DEE RIVER BASIN

02111500 REDDIES RIVER AT NORTH WILKESBORO, NC

LOCATION.--Lat 36°10'29", long 81°10'09", Wilkes County, Hydrologic Unit 03040101, on left bank 550 ft upstream from bridge on Secondary Road 1517, 1.4 mi upstream from North Wilkesboro municipal dam, 1.2 mi northwest of North Wilkesboro, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--89.2 mi^2.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 1433: 1944. WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 978.62 ft above sea level.

REMARKS.--Records good except those during period of ice effect, Jan. 18-20, and those for estimated daily discharges, which are poor. Slight diurnal fluctuation at low flow during growing season. Maximum discharge for period of record, from rating curve extended above 5,600 ft^3/s on basis of computation of peak flow over dam; gage height: 22.02 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e70	61	1530	92	97	224	196	e210	331	88	63	36
2	e64	63	526	92	92	187	142	e170	381	81	59	39
3	e62	59	253	89	89	420	129	e190	294	72	56	37
4	e58	59	188	86	140	312	124	e160	201	68	56	34
5	e53	59	162	111	144	231	121	e140	161	67	56	33
6	e53	59	155	96	125	212	119	e130	141	66	52	33
7	e51	62	151	88	115	172	114	e128	133	64	52	32
8	e62	741	140	84	124	157	114	e126	127	63	52	33
9	e80	253	129	130	113	147	111	e124	121	66	51	35
10	95	144	121	121	108	145	123	e121	116	61	50	150
11	81	115	118	112	104	135	160	116	109	59	50	147
12	78	100	124	100	99	128	213	114	115	59	49	90
13	78	92	170	93	101	125	147	112	129	57	52	80
14	77	89	132	88	116	618	132	108	114	56	51	79
15	73	83	122	87	228	328	125	107	110	55	47	e76
16	69	80	117	188	164	229	e110	100	100	68	47	e73
17	68	78	127	122	138	195	e105	100	184	56	44	70
18	70	85	120	e90	125	180	e100	98	119	54	43	70
19	71	88	133	e98	118	279	e95	97	97	52	42	69
20	66	80	115	e104	113	249	e95	100	91	99	44	68
21	65	79	107	93	185	205	e95	94	97	69	46	63
22	65	83	105	94	235	184	e115	89	88	146	41	62
23	70	76	105	102	154	165	e190	87	84	120	39	64
24	67	74	116	110	136	155	e135	87	80	106	39	179
25	64	74	111	121	126	152	e120	88	80	79	39	129
26	65	133	102	106	121	167	e110	109	82	73	39	87
27	67	93	101	100	120	139	e115	133	78	71	38	79
28	65	85	99	120	238	124	e205	97	80	64	37	78
29	64	82	98	107	---	120	e490	92	76	67	37	92
30	63	115	95	103	---	117	e270	101	90	84	36	75
31	61	---	94	103	---	118	---	94	---	81	36	---
TOTAL	2095	3344	5766	3230	3768	6319	4420	3622	4009	2271	1443	2192
MEAN	67.6	111	186	104	135	204	147	117	134	73.3	46.5	73.1
MAX	95	741	1530	188	238	618	490	210	381	146	63	179
MIN	51	59	94	84	89	117	95	87	76	52	36	32
CFSM	.76	1.25	2.09	1.17	1.51	2.29	1.65	1.31	1.50	.82	.52	.82
IN.	.87	1.39	2.40	1.35	1.57	2.64	1.84	1.51	1.67	.95	.60	.91

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

MEAN	112	121	132	144	165	196	196	161	149	123	126	116
MAX	309	379	273	374	386	405	536	353	412	335	587	479
(WY)	1977	1978	1974	1996	1960	1975	1980	1973	1976	1941	1940	1945
MIN	34.5	46.7	49.5	44.5	71.5	77.3	78.4	68.6	47.6	43.0	31.0	30.8
(WY)	1955	1982	1956	1956	1989	1940	1986	1941	1956	1986	1956	1954

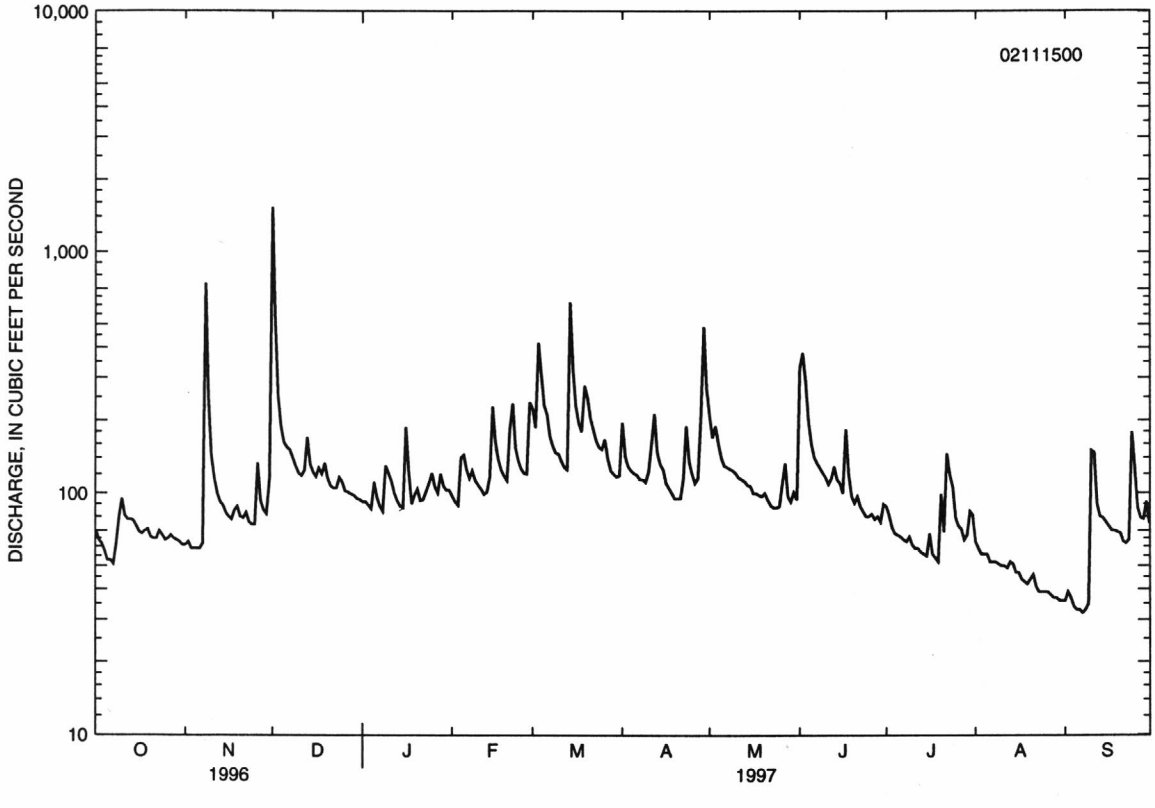
PEE DEE RIVER BASIN

02111500 REDDIES RIVER AT NORTH WILKESBORO, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1940 - 1997	
ANNUAL TOTAL	61763		42479			
ANNUAL MEAN	169		116		145	
HIGHEST ANNUAL MEAN					218	1973
LOWEST ANNUAL MEAN					67.5	1956
HIGHEST DAILY MEAN	4000	Aug 12	1530	Dec 1	7600	Aug 14 1940
LOWEST DAILY MEAN	51	Oct 7	32	Sep 7	23	Aug 17 1954
ANNUAL SEVEN-DAY MINIMUM	58	Oct 2	34	Sep 3	25	Aug 11 1954
INSTANTANEOUS PEAK FLOW			3150	Dec 1	27000*	Aug 14 1940
INSTANTANEOUS PEAK STAGE			7.52	Dec 1	22.02	Aug 14 1940
INSTANTANEOUS LOW FLOW			30	Sep 8	22	Aug 17 1954
ANNUAL RUNOFF (CFSM)	1.89		1.30		1.62	
ANNUAL RUNOFF (INCHES)	25.76		17.72		22.07	
10 PERCENT EXCEEDS	202		184		232	
50 PERCENT EXCEEDS	123		98		113	
90 PERCENT EXCEEDS	71		52		61	

e Estimated.

* See REMARKS.



PEE DEE RIVER BASIN

02112000 YADKIN RIVER AT WILKESBORO, NC

LOCATION.--Lat 36°09'09", long 81°08'45", Wilkes County, Hydrologic Unit 03040101, on right bank 150 ft upstream from bridge on State Highways 18 and 268 between North Wilkesboro and Wilkesboro, 150 ft downstream of Reddies River, 0.5 mi northeast of Wilkesboro, and 382 mi upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--504 mi^2.

PERIOD OF RECORD.--April 1903 to June 1909, October 1920 to current year. Prior to October 1928, published as "Yadkin River at North Wilkesboro".

REVISED RECORDS.--WSP 1433: 1903-09, 1922, 1925-26(M), 1930, 1932, 1934, 1946-48(M), drainage area at former site. WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 942.35 ft above sea level. Apr. 10, 1903, to June 30, 1909, and Oct. 17, 1920, to Apr. 10, 1929, nonrecording gage at site 1.2 mi downstream at different datum. Apr. 11, 1929, to Jan. 9, 1930, nonrecording gage at present site and datum. U.S. Army Corps of Engineers telephone and satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since 1962 by W. Kerr Scott Reservoir (station 02111391) 5.5 mi upstream. Prior to regulation maximum discharge: 160,000 ft^3/s, Aug. 14, 1940, from rating curve extended above 20,000 ft^3/s on basis of slope-area measurement of peak flow; gage height: 37.6 ft, from floodmarks.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1916 reached a stage of 34.5 ft present site and datum, from floodmark; discharge, 116,000 ft^3/s, from rating curve extended as explained above.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1000	575	3460	811	943	1890	945	1910	1380	858	586	341
2	763	585	3030	790	879	1800	930	1350	1960	890	488	338
3	798	563	4810	757	878	2070	902	1350	1880	865	462	336
4	720	536	4260	755	989	2450	903	1270	e1800	804	439	350
5	687	497	2660	908	1330	2080	917	1110	1330	688	436	344
6	666	505	1470	865	1330	1650	984	1100	1080	666	427	348
7	659	540	1150	769	1080	1270	1210	1030	968	660	426	350
8	742	1760	1110	750	1120	1230	1260	976	933	656	425	347
9	931	2070	1050	900	1020	1100	1010	976	906	658	425	337
10	962	1880	960	1030	935	1150	914	951	863	657	426	439
11	733	1460	978	917	929	1090	910	875	822	653	423	490
12	635	1110	927	881	918	1010	1030	914	903	654	420	408
13	631	800	1260	797	882	970	1320	932	1160	617	439	344
14	647	731	1210	769	920	2140	1360	903	1190	577	423	337
15	659	762	1010	768	1510	2550	953	859	847	575	409	329
16	641	779	972	1110	1620	2360	1010	816	765	596	409	343
17	585	777	986	1210	1210	2290	1030	818	959	603	410	365
18	598	784	971	905	1040	1930	877	817	1020	578	400	356
19	633	819	994	773	985	1910	833	811	937	576	397	343
20	602	814	975	875	965	2120	916	817	853	577	393	345
21	569	748	877	969	1160	e1800	928	807	828	632	364	339
22	556	741	784	895	1460	e1900	1010	794	893	604	353	333
23	631	686	817	860	1450	e1800	1680	767	830	754	354	338
24	707	675	917	972	1290	e1600	1880	715	729	1040	357	558
25	605	664	992	1050	1130	e1500	1110	771	722	1140	360	732
26	554	846	850	918	1020	e1400	1050	864	724	712	333	702
27	560	931	771	916	993	e1200	1040	880	1030	634	335	348
28	597	824	828	997	1300	1060	1370	830	1050	545	344	359
29	619	713	854	1090	---	1150	3390	805	817	538	347	414
30	585	792	783	1050	---	1100	3200	830	764	546	358	491
31	574	---	817	979	---	1020	---	804	---	647	353	---
TOTAL	20849	25967	43533	28036	31286	50590	36872	29452	30943	21200	12521	11804
MEAN	673	866	1404	904	1117	1632	1229	950	1031	684	404	393
MAX	1000	2070	4810	1210	1620	2550	3390	1910	1960	1140	586	732
MIN	554	497	771	750	878	970	833	715	722	538	333	329
†	-3	+16	-16	0	+31	-32	+20	-13	0	-3	-10	+13
‡	670	882	1388	904	1148	1600	1249	937	1031	681	394	406

PEE DEE RIVER BASIN

02112000 YADKIN RIVER AT WILKESBORO, NC--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1997*, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	709	756	788	901	992	1221	1158	965	903	682	738	621
MAX	1834	2571	1619	1965	1832	2346	2868	1954	1963	1191	2239	1948
(WY)	1991	1978	1974	1995	1990	1993	1980	1973	1975	1989	1994	1979
MIN	191	258	268	349	446	441	435	410	293	234	194	209
(WY)	1989	1982	1982	1989	1989	1988	1986	1988	1988	1988	1988	1988

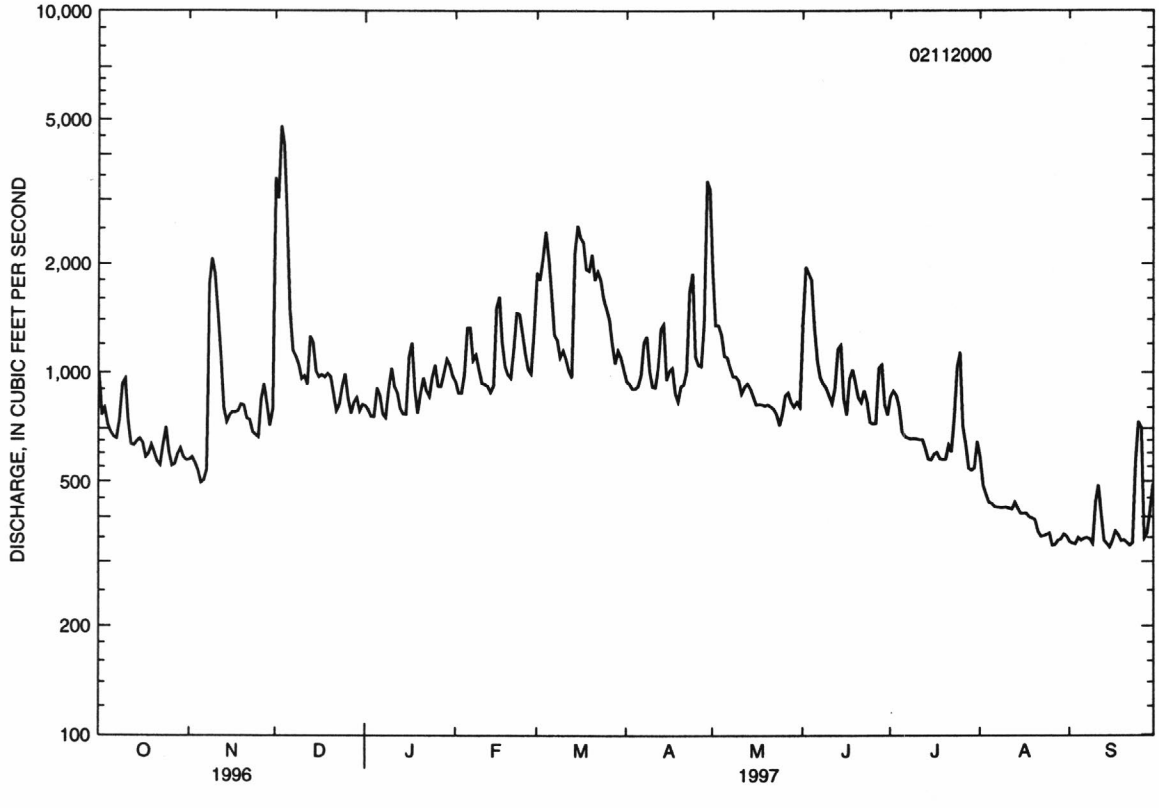
SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1963 - 1997*	
ANNUAL TOTAL	364145		343053			
ANNUAL MEAN	995	‡995	940	‡940	869	
HIGHEST ANNUAL MEAN					1220	1973
LOWEST ANNUAL MEAN					393	1988
HIGHEST DAILY MEAN	5120	Aug 14	4810	Dec 3	7990	Aug 10 1970
LOWEST DAILY MEAN	426	Jul 6	329	Sep 15	114	Dec 8 1970
ANNUAL SEVEN-DAY MINIMUM	464	Jul 19	344	Sep 1	166	Aug 17 1988
INSTANTANEOUS PEAK FLOW			6650	Dec 1	12800	Apr 10 1983
INSTANTANEOUS PEAK STAGE			8.94	Dec 1	16.22	Apr 10 1983
INSTANTANEOUS LOW FLOW			303	Sep 9	86	Dec 4 1965
10 PERCENT EXCEEDS	1490		1480		1450	
50 PERCENT EXCEEDS	792		854		669	
90 PERCENT EXCEEDS	567		405		386	

e Estimated.

† Change in contents, equivalent in cubic feet per second, in W. Kerr Scott Reservoir; provided by U.S. Army Corps of Engineers.

‡ Adjusted for change in W. Kerr Scott Reservoir.

* For regulated period only (1963-1997). See REMARKS.



PEE DEE RIVER BASIN

02112120 ROARING RIVER NEAR ROARING RIVER, NC

LOCATION.--Lat 36°14'59", long 81°02'39", Wilkes County, Hydrologic Unit 03040101, on left bank at downstream end of old bridge pier, 800 ft upstream from bridge on Secondary Road 1990, 3.8 mi northwest of Roaring River, and 4.1 mi upstream from mouth.

DRAINAGE AREA.--128 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements water years 1925, 1947, 1949-56, 1963. April 1964 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 964.85 ft above sea level. Prior to May 1, 1964, nonrecording gage on downstream side of bridge at same site and datum. Satellite telemetry at station.

REMARKS.--Records fair except those during period of ice effect, Jan. 17-21, and those for estimated daily discharges, which are poor. Maximum discharge for period of record, from rating curve extended above 2,400 ft^3/s on basis of slope-area measurement of peak flow at gage heights 22.54, 14.40, and 10.83 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1916 reached a stage of about 28 ft; estimated discharge, 45,000 ft^3/s. The flood of August 1940 reached a stage of about 24 ft; estimated discharge, 31,000 ft^3/s, from information by local residents and rating curve extended as explained above. A discharge of 24 ft^3/s was measured Sept. 18, 1956.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	235	136	2460	217	219	e490	e230	373	309	203	128	82
2	214	139	894	218	209	e410	e220	316	379	179	122	151
3	206	129	519	207	203	e900	e220	335	e465	157	118	108
4	185	128	416	203	248	e700	253	295	e328	147	118	81
5	179	129	377	264	251	e500	e230	275	276	145	115	76
6	174	130	362	226	229	e450	e550	263	245	144	110	74
7	175	136	354	210	220	e370	e500	248	236	142	110	74
8	215	1180	325	203	237	e340	e330	243	226	140	118	75
9	256	504	299	281	222	e320	e305	239	217	139	113	81
10	215	307	284	267	216	e310	e280	228	209	138	110	207
11	178	246	276	250	211	e290	e270	221	199	135	110	266
12	166	214	292	217	203	e275	e350	217	213	131	110	130
13	161	198	408	208	207	e270	e330	213	219	131	110	95
14	156	192	321	202	244	e1400	e260	206	227	128	113	88
15	150	181	299	198	452	e700	e240	202	209	126	104	87
16	147	174	285	380	324	e500	e230	192	187	153	100	82
17	146	171	292	e282	276	e420	e225	192	200	163	95	82
18	154	184	282	e265	251	e400	219	188	195	132	91	82
19	166	189	320	e249	240	e620	216	188	179	127	90	80
20	148	171	275	e237	230	e520	214	192	171	124	100	78
21	144	170	264	e221	380	e450	215	182	178	125	102	75
22	141	176	251	208	512	e410	240	176	177	128	90	73
23	159	162	250	225	339	e360	384	172	166	178	85	75
24	149	160	270	245	295	e335	285	173	161	155	83	210
25	141	158	266	272	274	e320	251	e176	161	169	83	154
26	141	218	246	238	261	e350	234	206	168	173	83	101
27	144	172	243	225	255	e320	247	290	172	136	83	89
28	141	166	234	263	e520	e300	422	e202	158	130	81	89
29	138	161	231	239	---	e310	1230	185	159	157	79	109
30	137	240	225	233	---	e300	471	198	154	176	77	85
31	132	---	224	230	---	e285	---	188	---	157	77	---
TOTAL	5193	6621	12044	7383	7728	13925	9651	6974	6543	4568	3108	3139
MEAN	168	221	389	238	276	449	322	225	218	147	100	105
MAX	256	1180	2460	380	520	1400	1230	373	465	203	128	266
MIN	132	128	224	198	203	270	214	172	154	124	77	73
CFSM	1.31	1.72	3.04	1.86	2.16	3.51	2.51	1.76	1.70	1.15	.78	.82
IN.	1.51	1.92	3.50	2.15	2.25	4.05	2.80	2.03	1.90	1.33	.90	.91

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

MEAN	158	165	179	204	226	270	259	217	199	161	154	146
MAX	422	426	389	406	413	610	637	430	432	349	461	446
(WY)	1977	1978	1997	1996	1990	1993	1980	1991	1975	1989	1994	1971
MIN	56.9	63.3	72.1	83.8	99.5	97.4	100	90.7	62.2	50.8	47.3	57.9
(WY)	1989	1982	1989	1981	1989	1988	1986	1988	1988	1986	1988	1988

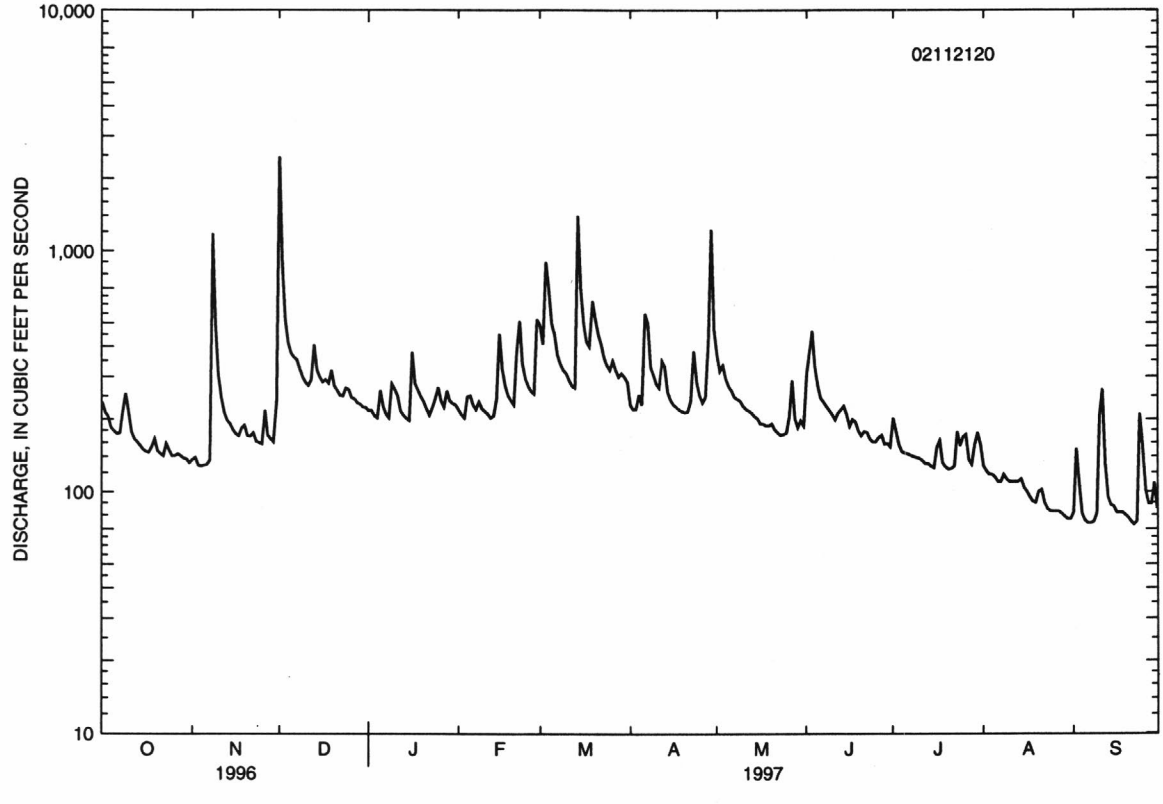
PEE DEE RIVER BASIN

02112120 ROARING RIVER NEAR ROARING RIVER, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997	
ANNUAL TOTAL	92676		86877			
ANNUAL MEAN	253		238		195	
HIGHEST ANNUAL MEAN					269	1993
LOWEST ANNUAL MEAN					98.5	1988
HIGHEST DAILY MEAN	3810	Aug 12	2460	Dec 1	7460	Aug 17 1994
LOWEST DAILY MEAN	91	Jul 24	73	Sep 22	32	Aug 27 1988
ANNUAL SEVEN-DAY MINIMUM	98	Jul 18	78	Sep 17	38	Aug 22 1988
INSTANTANEOUS PEAK FLOW			4960	Dec 1	26600*	Oct 17 1975
INSTANTANEOUS PEAK STAGE			8.85	Dec 1	22.54*	Oct 17 1975
INSTANTANEOUS LOW FLOW			70	Sep 9	31	Aug 27 1988
ANNUAL RUNOFF (CFSM)	1.98		1.86		1.53	
ANNUAL RUNOFF (INCHES)	26.93		25.25		20.73	
10 PERCENT EXCEEDS	367		375		313	
50 PERCENT EXCEEDS	181		209		148	
90 PERCENT EXCEEDS	124		101		84	

e Estimated.

* See REMARKS.



PEE DEE RIVER BASIN

02112250 YADKIN RIVER AT ELKIN, NC

LOCATION.--Lat 36°14'30", long 80°50'49", Yadkin County, Hydrologic Unit 03040101, on right bank at downstream side of bridge on U.S. Highway 21 at Elkin, 0.3 mi downstream of Elkin River, and 362 mi upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--869 mi^2.

PERIOD OF RECORD.--April 1964 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 866.03 ft above sea level. Prior to Aug. 28, 1964, nonrecording gage on upstream side of bridge at same datum. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Considerable regulation by W. Kerr Scott Reservoir (station 02111391). Maximum gage height for period of record, from graph based on hourly gage-height readings and floodmark.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1916 reached a stage of 36.0 ft, from information by North Carolina State Highway Commission. Flood of August 1940 reached a stage of 37.5 ft. A discharge of 172 ft^3/s was measured on Sept. 19, 1956.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2550	884	8200	e1200	e1350	e3100	e1550	2980	1670	1190	989	528
2	1980	900	5080	e1260	e1290	e2700	e1500	2120	2460	1260	809	524
3	2000	886	5350	e1270	e1280	e3250	e1470	2030	2960	1140	776	523
4	1990	859	5210	e1260	e1450	e4500	e1440	2010	e2300	1110	740	524
5	1880	834	3630	e1400	e1800	e3400	e1420	1720	e1950	982	739	524
6	1860	808	2300	e1280	e2150	e3700	e1600	1670	1600	932	724	520
7	1850	831	1790	e1150	e1500	e2950	e2000	1620	1430	915	715	517
8	e1900	4050	1730	e1100	e1750	e2500	e1650	1480	1360	903	720	515
9	e2200	3690	1560	e1360	e1570	e2200	e1620	1490	1310	916	e715	513
10	e1600	2530	1440	e1650	e1480	e2300	e1510	1470	1270	917	e712	e520
11	e1200	2010	1380	e1500	e1440	e2150	e1480	1350	1180	892	e705	e1150
12	1010	1590	1360	e1300	e1400	e1950	e1600	1330	1220	881	e701	e970
13	970	1230	e2010	e1200	e1360	e1700	e2200	1390	1550	870	594	e800
14	943	1110	e1900	e1100	e1500	e3500	e2000	1330	1730	806	594	e770
15	943	1090	e1590	e1050	e3400	e4100	e1800	1310	1590	795	583	e740
16	944	1070	e1460	e1500	e2800	e3150	e1680	1220	1130	847	578	e720
17	920	1050	e1450	e2000	e2350	e2600	1560	1220	1180	971	568	e690
18	915	1050	e1500	e1440	e1800	e2300	1410	1220	1550	833	561	e660
19	991	1130	e1580	e1250	e1650	e2550	1280	1200	1320	825	557	e650
20	950	e1220	e1510	e1240	e1500	e3150	1340	1210	1240	814	556	e620
21	913	e1150	e1450	e1230	e1600	e2750	1410	1200	1240	848	555	e610
22	883	e1100	e1370	e1210	e3000	e2300	1650	1170	1240	837	551	e585
23	898	e1050	e1250	e1200	e2250	e2150	e3000	1160	1210	1110	551	e580
24	1030	e1030	e1310	e1220	e2010	e1970	e3600	1100	1060	1080	540	e700
25	980	e1000	e1410	e1630	e1850	e1820	1770	1100	1030	1600	544	e1200
26	919	e1250	e1300	e1400	e1700	e2100	1630	1290	1030	1350	542	e900
27	890	e1340	e1260	e1210	e1600	e1960	1580	1470	1180	1000	540	e805
28	891	e1170	e1250	e1410	e1550	e1830	2100	1260	1480	909	537	e650
29	939	1080	e1250	e1590	---	e1700	6150	1200	1150	900	534	e670
30	916	1120	e1240	e1450	---	e1640	4500	1240	1050	945	531	e780
31	886	---	e1230	e1400	---	e1600	---	1200	---	981	532	---
TOTAL	39741	40112	66350	41460	50380	79570	59500	44760	43670	30359	19593	20458
MEAN	1282	1337	2140	1337	1799	2567	1983	1444	1456	979	632	682
MAX	2550	4050	8200	2000	3400	4500	6150	2980	2960	1600	989	1200
MIN	883	808	1230	1050	1280	1600	1280	1100	1030	795	531	513

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

MEAN	1172	1191	1278	1471	1640	1954	1883	1555	1432	1109	1186	1032
MAX	2911	3871	2591	3129	2978	3885	4510	2887	2942	1922	3323	2910
(WY)	1991	1978	1974	1978	1990	1975	1980	1973	1975	1989	1994	1979
MIN	372	428	532	617	752	745	737	729	507	433	361	416
(WY)	1989	1982	1989	1966	1989	1988	1986	1988	1988	1988	1988	1988

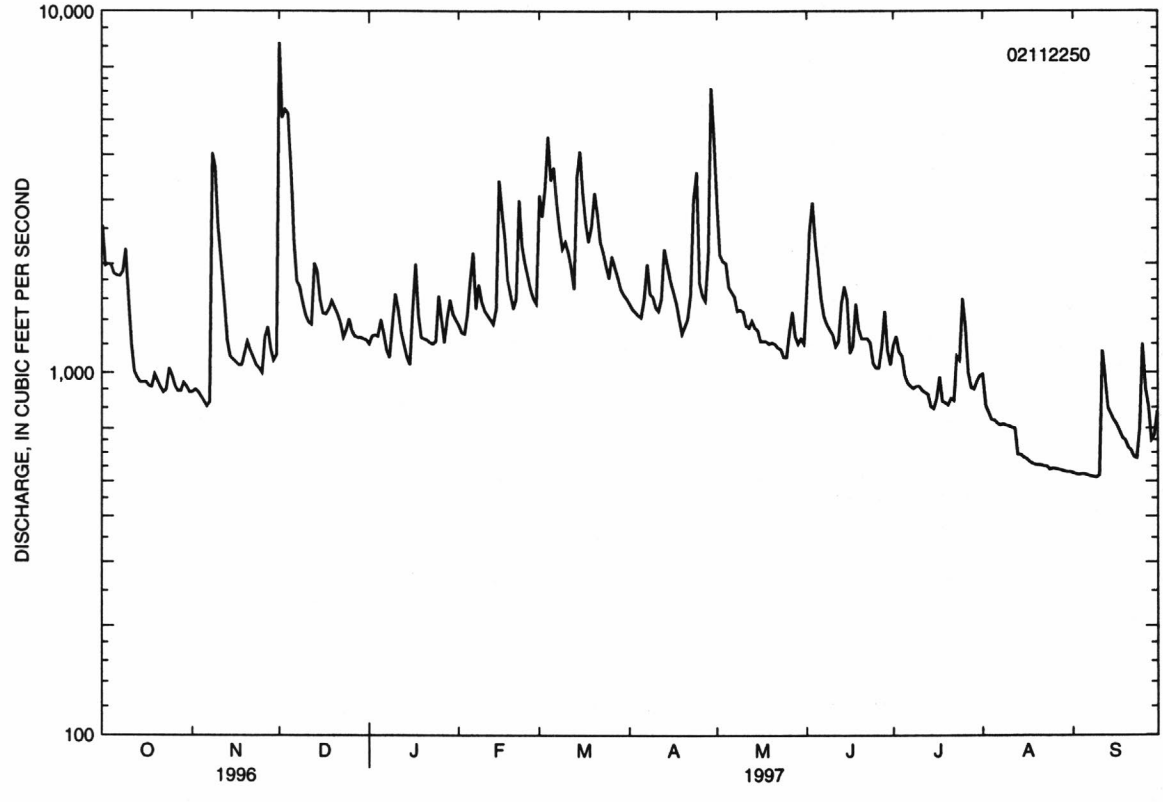
PEE DEE RIVER BASIN

02112250 YADKIN RIVER AT ELKIN, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997	
ANNUAL TOTAL	587552		535953			
ANNUAL MEAN	1605		1468		1413	
HIGHEST ANNUAL MEAN					1951	1973
LOWEST ANNUAL MEAN					698	1988
HIGHEST DAILY MEAN	11000	Aug 14	8200	Dec 1	21500	Aug 10 1970
LOWEST DAILY MEAN	649	Jul 14	513	Sep 9	246	Aug 31 1981
ANNUAL SEVEN-DAY MINIMUM	723	Jul 19	519	Sep 4	257	Aug 25 1981
INSTANTANEOUS PEAK FLOW			13400	Dec 1	29100	Aug 17 1994
INSTANTANEOUS PEAK STAGE			15.50	Dec 1	24.88*	Apr 10 1983
INSTANTANEOUS LOW FLOW			NOT DETERMINED		239	Aug 31 1981
10 PERCENT EXCEEDS	2460		2300		2330	
50 PERCENT EXCEEDS	1200		1260		1080	
90 PERCENT EXCEEDS	860		666		633	

e Estimated.

* See REMARKS.



PEE DEE RIVER BASIN

02112360 MITCHELL RIVER NEAR STATE ROAD, NC

LOCATION.--Lat 36°18'42", long 80°48'26", Surry County, Hydrologic Unit 03040101, on right bank 280 ft upstream from bridge on Secondary Road 1001, 1.8 mi upstream from Grass Creek, and 3.3 mi east of State Road.

DRAINAGE AREA.--78.8 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1952-58, 1963. April 1964 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 927.12 ft above sea level. Prior to Aug. 29, 1964, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Minimum discharge for current water year also occurred on Sept. 8.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1900, about 18 ft in August 1940, from information by local resident; estimated discharge, 9,000 ft^3/s. A discharge of 16 ft^3/s was measured on Sept. 19, 1956.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	99	1040	144	149	e300	189	194	149	98	69	56
2	135	102	447	139	142	e200	191	173	149	121	66	50
3	136	96	273	141	138	e150	191	177	228	94	63	57
4	122	95	225	143	146	e170	195	161	153	86	63	50
5	116	95	202	164	152	e350	202	152	133	85	64	45
6	114	95	204	145	139	e300	240	151	125	85	58	44
7	115	96	198	137	136	e270	255	147	121	83	60	43
8	146	702	190	131	145	e200	e230	143	118	81	58	43
9	169	288	176	170	142	e180	e220	143	116	79	57	48
10	145	186	165	174	141	e160	202	141	112	79	56	176
11	128	152	164	158	135	e150	206	137	109	77	56	189
12	120	132	167	142	133	e320	309	133	120	73	56	98
13	117	123	220	140	132	e300	306	130	143	73	58	76
14	113	117	175	137	153	e270	269	130	118	69	61	69
15	110	115	164	133	280	e220	261	130	140	68	56	67
16	109	116	160	216	201	194	254	125	111	69	54	62
17	107	114	161	160	172	198	249	121	108	79	52	62
18	112	116	159	146	163	212	242	121	115	67	49	62
19	114	122	183	157	168	209	238	118	110	65	47	61
20	105	114	163	150	152	200	238	119	101	64	52	61
21	103	113	153	137	205	215	237	116	151	62	56	58
22	103	118	151	135	300	211	246	110	127	64	49	55
23	106	110	150	141	e240	205	324	109	105	87	45	54
24	107	109	159	164	e180	204	267	111	99	85	46	119
25	101	107	161	179	e150	204	245	110	99	76	48	105
26	101	144	149	149	e140	210	237	133	100	75	50	79
27	104	118	148	148	e130	208	242	147	111	69	48	72
28	101	110	147	167	e400	227	303	121	97	73	49	68
29	100	109	149	154	---	219	527	114	97	73	48	81
30	100	135	145	148	---	202	265	117	93	92	44	68
31	101	---	144	148	---	196	---	116	---	85	44	---
TOTAL	3594	4248	6492	4697	4864	6854	7580	4150	3658	2436	1682	2178
MEAN	116	142	209	152	174	221	253	134	122	78.6	54.3	72.6
MAX	169	702	1040	216	400	350	527	194	228	121	69	189
MIN	100	95	144	131	130	150	189	109	93	62	44	43
CFSM	1.47	1.80	2.66	1.92	2.20	2.81	3.21	1.70	1.55	1.00	.69	.92
IN.	1.70	2.01	3.06	2.22	2.30	3.24	3.58	1.96	1.73	1.15	.79	1.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

MEAN	113	110	120	131	148	178	175	150	131	110	109	107
MAX	248	211	230	218	258	373	426	264	233	228	247	313
(WY)	1991	1980	1974	1978	1966	1993	1983	1973	1975	1989	1970	1979
MIN	40.1	48.7	47.0	48.3	64.9	72.8	69.1	69.4	50.0	35.9	32.1	54.3
(WY)	1989	1982	1989	1981	1989	1981	1981	1988	1988	1986	1981	1988

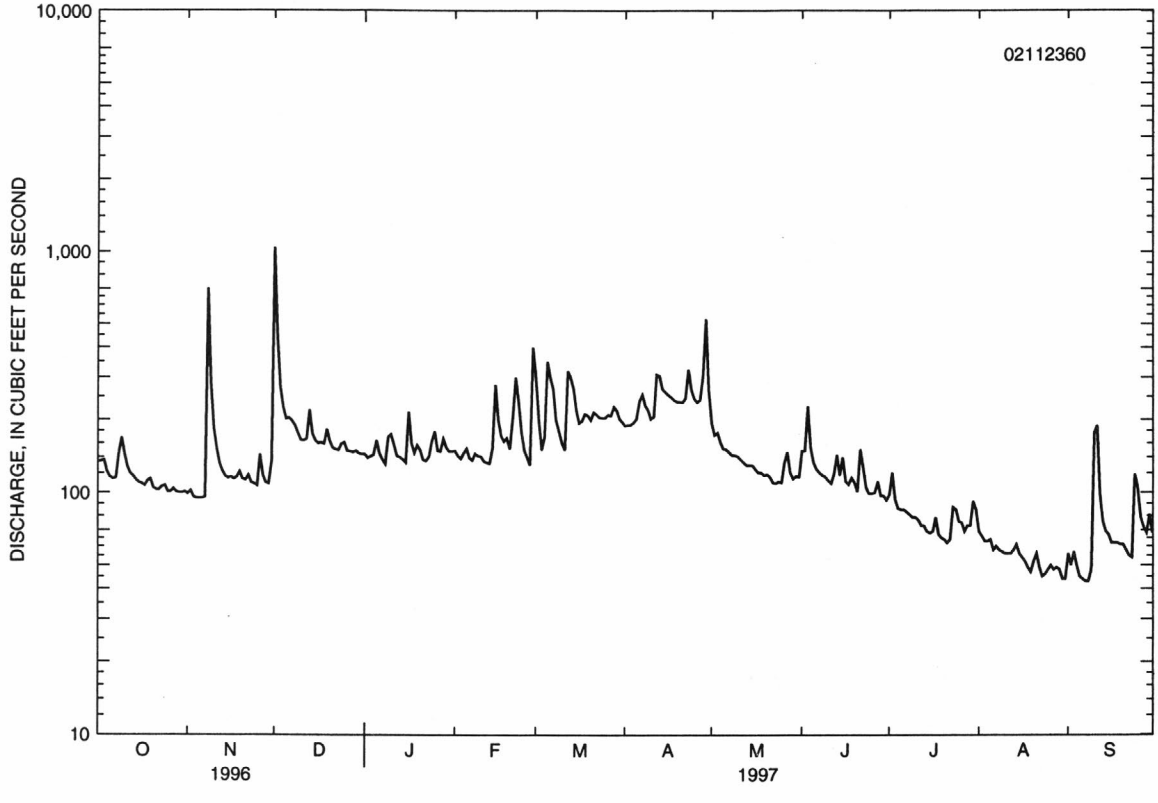
PEE DEE RIVER BASIN

02112360 MITCHELL RIVER NEAR STATE ROAD, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997	
ANNUAL TOTAL	54228		52433			
ANNUAL MEAN	148		144		132	
HIGHEST ANNUAL MEAN					178	1993
LOWEST ANNUAL MEAN					66.5	1981
HIGHEST DAILY MEAN	1740	Aug 12	1040	Dec 1	3260	Aug 10 1970
LOWEST DAILY MEAN	64	Jul 23	43	Sep 7	23	Aug 27 1988
ANNUAL SEVEN-DAY MINIMUM	68	Jul 18	47	Sep 3	25	Aug 25 1981
INSTANTANEOUS PEAK FLOW			2930	Nov 8	7470	Sep 22 1979
INSTANTANEOUS PEAK STAGE			6.89	Nov 8	16.42	Sep 22 1979
INSTANTANEOUS LOW FLOW			42*	Sep 7	16	Jul 22 1986
ANNUAL RUNOFF (CFSM)	1.88		1.82		1.67	
ANNUAL RUNOFF (INCHES)	25.60		24.75		22.71	
10 PERCENT EXCEEDS	200		237		206	
50 PERCENT EXCEEDS	119		133		105	
90 PERCENT EXCEEDS	87		59		59	

e Estimated.

* See REMARKS.



PEE DEE RIVER BASIN

02113000 FISHER RIVER NEAR COPELAND, NC

LOCATION.--Lat 36°21'26", long 80°41'10", Surry County, Hydrologic Unit 03040101, on left bank 500 ft upstream from bridge on State Highway 268, 1 mi upstream from Cody Creek, and 2 mi northwest of Copeland.

DRAINAGE AREA.--128 mi^2.

PERIOD OF RECORD.--October 1931 to current year.

REVISED RECORDS.--WSP 1303: 1933(M). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 913 ft above sea level, by barometer. Prior to Sept. 5, 1936, twice daily readings at same site and datum. Yadkin, Inc. satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some irrigation diversions at times in the growing season. Maximum discharge for period of record, from rating curve extended above 6,200 ft^3/s on basis of slope-area measurement of peak flow; gage height: 18.4 ft. Minimum discharge for current water year also occurred Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	120	2790	159	176	276	139	282	238	105	76	e40
2	195	125	908	159	e170	213	138	242	229	189	72	e38
3	223	117	403	156	e165	722	140	246	352	116	68	e46
4	161	115	302	154	e190	442	139	226	212	100	65	e50
5	146	116	260	187	e200	286	e150	211	182	95	64	e46
6	139	118	269	174	e185	327	e500	206	167	94	62	e42
7	136	123	271	157	e170	221	e400	197	165	91	69	e38
8	191	1710	261	151	e180	199	e330	188	157	87	69	37
9	e200	634	218	222	e170	185	e270	188	160	86	57	37
10	e210	296	200	232	e165	177	e220	e188	154	97	56	118
11	167	227	192	221	e160	167	e180	e180	147	85	56	306
12	154	197	188	178	e155	158	e400	186	153	79	53	111
13	148	181	296	167	e160	149	e280	183	e210	78	53	76
14	142	173	215	160	e190	862	e220	179	e170	74	55	66
15	137	163	195	157	e350	332	e210	179	e150	69	52	68
16	134	156	185	306	e260	228	e200	170	e140	83	48	62
17	132	154	188	212	e220	204	e210	170	e145	96	47	58
18	134	158	186	175	e190	193	199	168	151	72	43	58
19	156	169	235	187	e185	335	190	165	142	67	40	60
20	133	155	197	188	e180	298	190	169	131	67	50	57
21	129	152	178	164	e300	225	187	165	141	65	53	54
22	127	171	179	166	e410	204	208	155	134	79	46	51
23	128	151	178	175	e290	187	313	155	123	100	41	53
24	134	146	187	186	e240	177	251	152	118	121	40	103
25	125	144	198	253	e210	172	212	153	118	147	41	120
26	127	257	178	192	e200	187	196	171	121	90	e42	77
27	129	174	175	179	e190	165	200	181	132	80	e44	66
28	126	156	173	215	e480	159	326	162	111	78	e46	65
29	124	150	167	199	---	165	955	155	109	79	e48	89
30	124	186	161	186	---	155	359	163	101	89	e44	69
31	120	---	161	184	---	152	---	159	---	105	e42	---
TOTAL	4584	6894	9894	5801	6141	7922	7912	5694	4763	2863	1642	2161
MEAN	148	230	319	187	219	256	264	184	159	92.4	53.0	72.0
MAX	223	1710	2790	306	480	862	955	282	352	189	76	306
MIN	120	115	161	151	155	149	138	152	101	65	40	37
CFSM	1.16	1.80	2.49	1.46	1.71	2.00	2.06	1.43	1.24	.72	.41	.56
IN.	1.33	2.00	2.88	1.69	1.78	2.30	2.30	1.65	1.38	.83	.48	.63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1997, BY WATER YEAR (WY)

MEAN	150	152	171	201	219	253	246	198	179	150	154	144
MAX	580	344	365	526	539	667	746	387	491	397	510	735
(WY)	1938	1935	1974	1936	1960	1993	1983	1950	1947	1943	1940	1979
MIN	40.2	53.7	58.1	54.4	68.8	103	103	77.6	47.5	31.3	24.6	27.9
(WY)	1942	1932	1956	1956	1934	1981	1981	1941	1956	1986	1981	1954

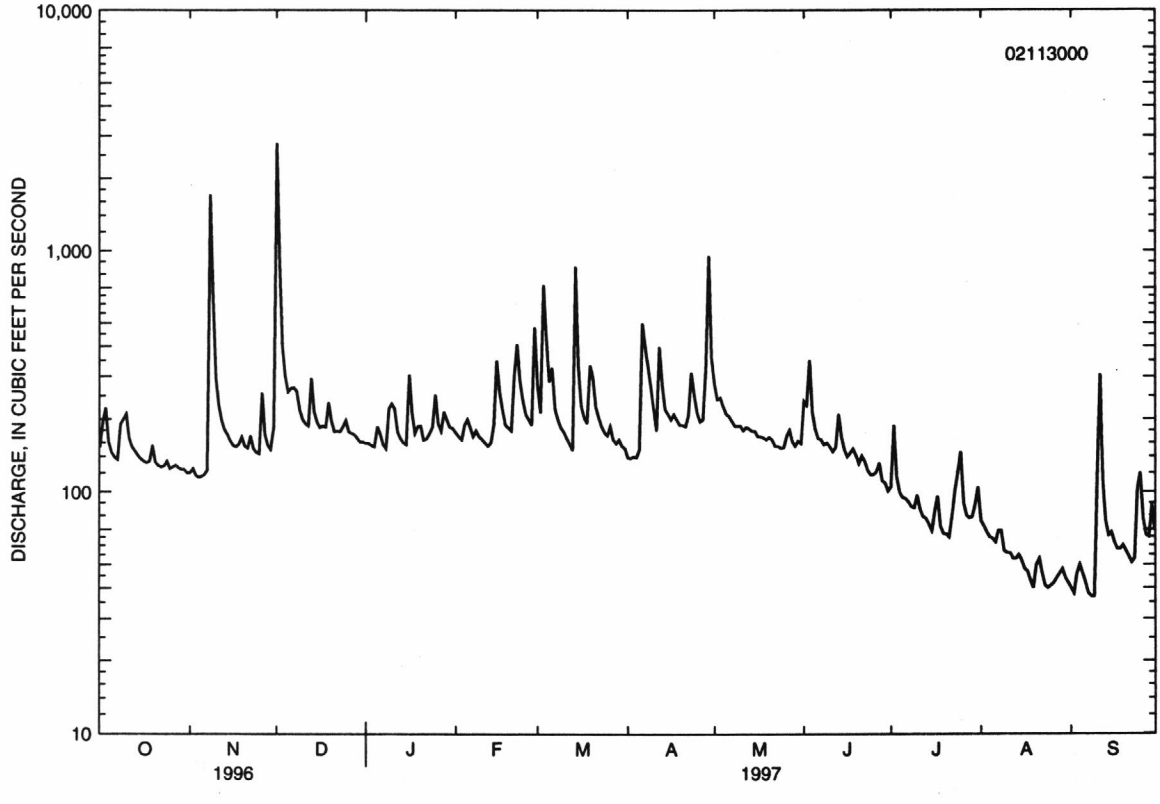
PEE DEE RIVER BASIN

02113000 FISHER RIVER NEAR COPELAND, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1932 - 1997	
ANNUAL TOTAL	84377		66271			
ANNUAL MEAN	231		182		185	
HIGHEST ANNUAL MEAN					281	1979
LOWEST ANNUAL MEAN					87.6	1956
HIGHEST DAILY MEAN	4400	Aug 12	2790	Dec 1	12100	Sep 22 1979
LOWEST DAILY MEAN	73	Jul 25	37	Sep 8	13	Aug 28 1981
ANNUAL SEVEN-DAY MINIMUM	78	Jul 19	42	Sep 3	15	Aug 25 1981
INSTANTANEOUS PEAK FLOW			5120	Nov 8	34200*	Sep 22 1979
INSTANTANEOUS PEAK STAGE			9.46	Nov 8	19.61	Sep 22 1979
INSTANTANEOUS LOW FLOW			35*	Sep 8	12	Aug 30 1981
ANNUAL RUNOFF (CFSM)	1.80		1.42		1.44	
ANNUAL RUNOFF (INCHES)	24.52		19.26		19.58	
10 PERCENT EXCEEDS	294		270		291	
50 PERCENT EXCEEDS	158		162		138	
90 PERCENT EXCEEDS	112		58		69	

e Estimated.

* See REMARKS.



PEE DEE RIVER BASIN

02113850 ARARAT RIVER AT ARARAT, NC

LOCATION.--Lat 36°24'16", long 80°33'43", Surry County, Hydrologic Unit 03040101, on right bank 265 ft upstream from bridge on Secondary Road 2019 at Ararat, and 300 ft downstream of Flat Shoal Creek.

DRAINAGE AREA.--231 mi^2.

PERIOD OF RECORD.--April 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 880.97 ft above sea level. Yadkin, Inc. satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minimum discharge for period of record also occurred Aug. 30, 1981. Minimum discharge for current water year also occurred Sept. 8, 9.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 14, 1947, reached a stage of 21.4 ft, result of failure of dams upstream; discharge, 26,000 ft^3/s, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	290	238	e3000	e325	363	e650	391	536	415	240	164	89
2	438	247	e1450	e320	346	e600	388	478	607	351	157	91
3	413	234	e734	315	335	e700	386	482	682	258	147	101
4	305	228	e560	307	e340	e1050	384	437	e430	224	143	98
5	277	227	e520	404	356	709	381	407	357	210	146	83
6	264	228	e510	362	330	727	421	396	326	207	138	82
7	257	238	e520	319	321	552	453	374	319	198	138	80
8	343	2250	e500	312	358	506	383	367	307	193	136	72
9	495	1040	e450	e400	345	477	372	369	298	188	135	75
10	418	522	e400	e500	e330	469	262	357	291	219	132	184
11	313	412	e390	420	327	443	360	346	276	191	130	391
12	284	361	e400	363	317	424	e625	342	303	183	129	226
13	274	336	e420	337	314	414	600	337	361	178	135	148
14	264	326	e550	327	e420	e1200	443	329	301	163	144	132
15	258	309	e450	322	e1100	700	409	325	292	159	139	136
16	249	299	e400	549	564	525	400	306	265	205	144	131
17	245	294	e390	390	443	487	395	307	261	227	136	115
18	253	295	e400	330	402	472	372	307	299	176	120	108
19	299	314	e450	360	386	750	368	302	298	161	108	99
20	263	289	e390	349	372	660	374	323	255	157	161	103
21	252	e295	e380	329	350	542	367	302	253	154	145	94
22	244	316	e370	e320	850	500	e400	295	246	194	137	83
23	247	281	e350	343	537	471	e410	289	236	255	125	86
24	258	274	370	330	461	444	430	284	225	288	109	175
25	244	276	405	e500	426	400	390	288	256	605	102	183
26	242	530	358	376	405	510	370	371	307	240	104	136
27	247	333	351	356	e400	443	387	428	332	183	108	117
28	245	290	340	e500	e500	440	592	315	246	199	108	107
29	242	285	340	422	---	442	1670	296	236	195	113	187
30	244	e300	332	380	---	420	655	311	221	213	91	130
31	236	---	334	380	---	420	---	300	---	204	86	---
TOTAL	8903	11867	16814	11547	11998	17547	13838	10906	9501	6818	4010	3842
MEAN	287	396	542	372	429	566	461	352	317	220	129	128
MAX	495	2250	3000	549	1100	1200	1670	536	682	605	164	391
MIN	236	227	332	307	314	400	262	284	221	154	86	72
CFSM	1.24	1.71	2.35	1.61	1.85	2.45	2.00	1.52	1.37	.95	.56	.55
IN.	1.43	1.91	2.71	1.86	1.93	2.83	2.23	1.76	1.53	1.10	.65	.62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

MEAN	249	259	294	341	376	451	447	369	330	262	248	234
MAX	587	537	584	743	691	992	1048	591	736	554	536	879
(WY)	1977	1993	1974	1978	1990	1993	1980	1973	1982	1989	1985	1979
MIN	104	111	124	120	187	172	170	167	110	81.9	45.4	98.2
(WY)	1987	1982	1989	1981	1989	1981	1967	1988	1988	1986	1981	1968

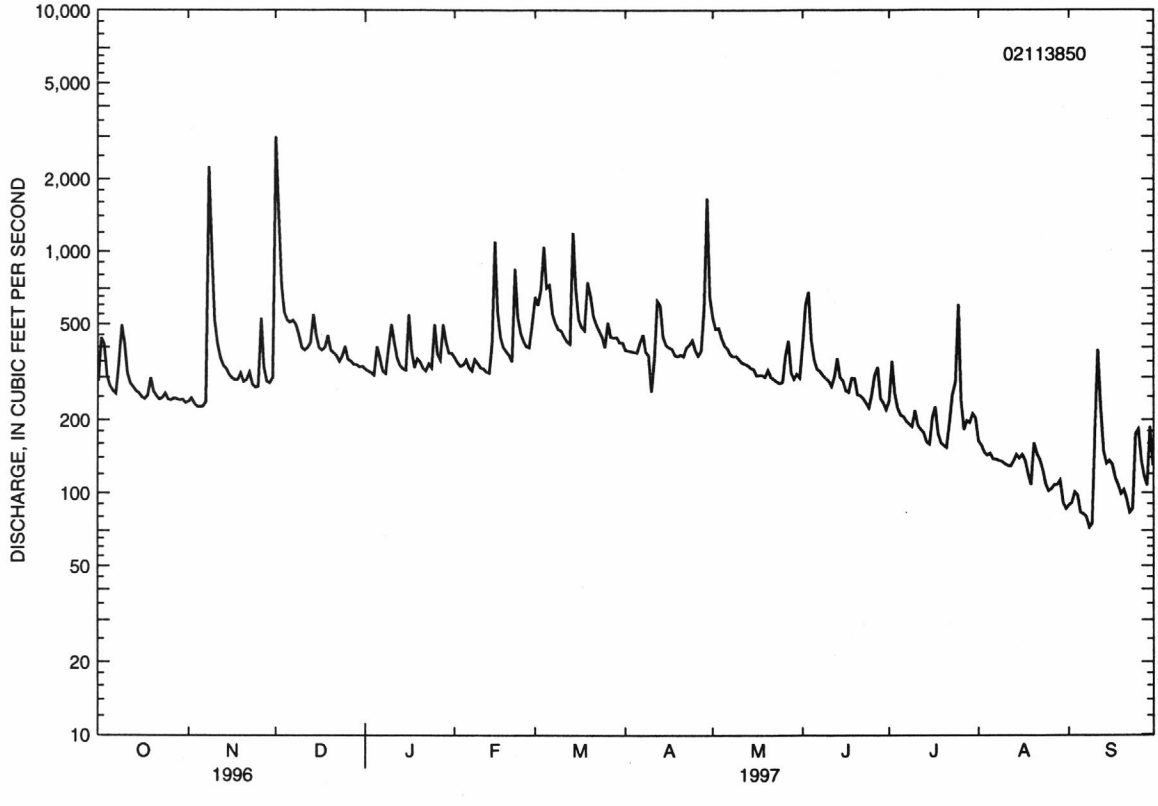
PEE DEE RIVER BASIN

02113850 ARARAT RIVER AT ARARAT, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997	
ANNUAL TOTAL	146564		127591			
ANNUAL MEAN	400		350		322	
HIGHEST ANNUAL MEAN					462	1979
LOWEST ANNUAL MEAN					150	1981
HIGHEST DAILY MEAN	3620	Jun 10	3000	Dec 1	13600	Sep 22 1979
LOWEST DAILY MEAN	179	Jul 22	72	Sep 8	21	Aug 29 1981
ANNUAL SEVEN-DAY MINIMUM	195	Jul 19	84	Sep 3	23	Aug 24 1981
INSTANTANEOUS PEAK FLOW			6030	Nov 8	35000	Sep 22 1979
INSTANTANEOUS PEAK STAGE			10.17	Nov 8	24.46	Sep 22 1979
INSTANTANEOUS LOW FLOW			72*	Sep 7	19*	Aug 29 1981
ANNUAL RUNOFF (CFSM)	1.73		1.51		1.39	
ANNUAL RUNOFF (INCHES)	23.60		20.55		18.92	
10 PERCENT EXCEEDS	529		521		516	
50 PERCENT EXCEEDS	314		323		247	
90 PERCENT EXCEEDS	222		135		132	

e Estimated.

* See REMARKS.



PEE DEE RIVER BASIN

02114450 LITTLE YADKIN RIVER AT DALTON, NC

LOCATION.--Lat 36°17'56", long 80°25'53", Stokes County, Hydrologic Unit 03040101, on left bank 1,200 ft downstream of bridge on U.S. Highway 52, 1.0 mi southwest of Dalton, 1.3 mi downstream of Southern Railway bridge, and 2.0 mi downstream of Danbury Creek.

DRAINAGE AREA.--42.8 mi^2.

PERIOD OF RECORD.--August 1960 to current year.

REVISED RECORDS.--WSP 2104: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 813.7 ft above sea level (North Carolina State Highway Commission bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are poor. A Natural Resources Conservation Service flood-control dam on upstream tributary, drainage area 4.7 mi^2 with flood storage of 695 acre-ft, was completed on June 21, 1977. Maximum discharge for period of record, from rating curve extended above 2,700 ft^3/s on basis of slope-area measurement at gage height 17.86 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	24	733	e34	40	125	41	81	29	20	18	13
2	92	30	295	e32	38	83	40	60	30	23	17	14
3	65	26	99	e30	36	384	40	61	89	20	16	9.7
4	32	25	57	e28	37	197	40	51	41	18	17	8.9
5	26	25	66	e26	38	114	39	46	34	17	19	8.3
6	24	25	113	e28	35	165	99	42	32	22	15	8.0
7	23	26	119	e30	34	82	83	38	32	19	15	8.2
8	39	146	97	e33	40	64	55	36	31	17	14	8.0
9	123	85	57	88	37	55	48	35	30	16	14	9.5
10	92	41	45	89	36	52	44	33	29	15	13	48
11	41	32	40	85	35	47	41	30	28	14	14	24
12	32	28	38	53	34	43	136	31	28	13	13	15
13	28	26	159	43	34	41	113	31	31	14	13	13
14	26	26	69	38	70	213	71	30	30	13	13	12
15	25	26	49	36	403	128	58	29	29	12	12	29
16	24	26	42	119	135	71	46	27	27	12	11	14
17	24	28	41	66	72	58	44	27	26	14	11	13
18	25	31	39	76	55	52	40	27	26	13	9.9	13
19	29	32	66	74	47	293	39	26	24	12	9.5	12
20	25	26	e43	39	43	162	39	29	23	11	12	12
21	25	25	e40	36	65	85	39	27	24	12	15	11
22	25	30	e43	36	123	66	70	25	23	14	11	10
23	25	26	e35	37	68	56	181	25	22	92	9.5	11
24	25	25	e33	43	51	50	88	24	21	31	8.9	37
25	25	25	e37	62	44	48	62	26	20	24	8.9	31
26	25	37	e44	44	42	108	57	34	20	30	8.9	18
27	26	30	e37	39	42	65	62	33	25	39	8.6	15
28	26	27	e34	85	161	55	386	27	22	24	8.2	14
29	25	26	e30	63	---	51	561	25	21	20	8.3	16
30	25	33	e38	48	---	46	128	26	20	23	7.8	14
31	25	---	e36	44	---	44	---	26	---	22	8.0	---
TOTAL	1130	1018	2674	1584	1895	3103	2790	1068	867	646	379.5	469.6
MEAN	36.5	33.9	86.3	51.1	67.7	100	93.0	34.5	28.9	20.8	12.2	15.7
MAX	123	146	733	119	403	384	561	81	89	92	19	48
MIN	23	24	30	26	34	41	39	24	20	11	7.8	8.0
CFSM	.85	.79	2.02	1.19	1.58	2.34	2.17	.80	.68	.49	.29	.37
IN.	.98	.88	2.32	1.38	1.65	2.70	2.42	.93	.75	.56	.33	.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1997, BY WATER YEAR (WY)

MEAN	38.6	33.7	48.2	60.7	67.3	83.6	60.6	46.0	41.2	33.4	31.3	27.6
MAX	171	102	113	136	163	250	217	154	155	128	120	172
(WY)	1991	1993	1974	1978	1990	1975	1987	1984	1962	1978	1970	1979
MIN	7.47	11.2	16.4	17.2	25.0	20.1	18.0	14.0	7.15	4.27	6.48	5.08
(WY)	1987	1968	1966	1981	1977	1967	1967	1986	1986	1986	1986	1968

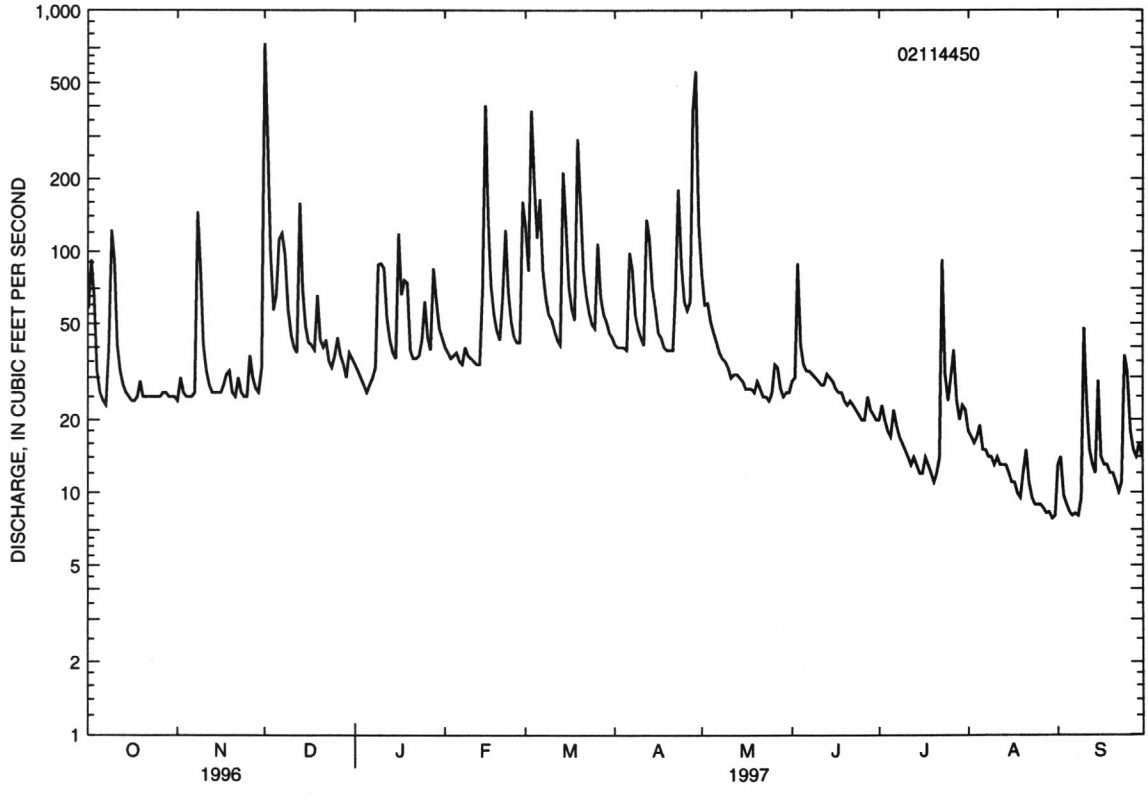
PEE DEE RIVER BASIN

02114450 LITTLE YADKIN RIVER AT DALTON, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1960 - 1997	
ANNUAL TOTAL	18689.5		17624.1			
ANNUAL MEAN	51.1		48.3		47.5	
HIGHEST ANNUAL MEAN					75.2	1990
LOWEST ANNUAL MEAN					22.1	1967
HIGHEST DAILY MEAN	733	Dec 1	733	Dec 1	3350	Jun 21 1972
LOWEST DAILY MEAN	9.0	Jul 22	7.8	Aug 30	1.6	Aug 2 1977
ANNUAL SEVEN-DAY MINIMUM	12	Jul 17	8.4	Aug 25	2.3	Jul 28 1986
INSTANTANEOUS PEAK FLOW			2120	Apr 29	9400*	Sep 22 1979
INSTANTANEOUS PEAK STAGE			6.25	Apr 29	20.29	Sep 22 1979
INSTANTANEOUS LOW FLOW			6.9	Aug 31	1.3	Aug 2 1977
ANNUAL RUNOFF (CFSM)	1.19		1.13		1.11	
ANNUAL RUNOFF (INCHES)	16.24		15.32		15.09	
10 PERCENT EXCEEDS	93		88		75	
50 PERCENT EXCEEDS	32		31		26	
90 PERCENT EXCEEDS	16		13		12	

e Estimated.

* See REMARKS.



PEE DEE RIVER BASIN

02115360 YADKIN RIVER AT ENON, NC

LOCATION.--Lat 36°07'55", long 80°26'39", Forsyth County, Hydrologic Unit 03040101, on left bank 50 ft upstream from bridge on Secondary Road 1525, 1.5 mi east of Enon, 4 mi upstream from Forbush Creek, and 324 mi upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--1,694 mi^2.

PERIOD OF RECORD.--July 1964 to current year.

REVISED RECORDS.--WDR NC-72-1: 1970 (M). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 701.71 ft above sea level. Prior to Nov. 6, 1968, nonrecording gage on downstream side of bridge at same site and datum. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records fair. Some regulation by W. Kerr Scott Reservoir (station 02111391). Minimum discharge for period of record also occurred Sept. 1, 1981. Minimum discharge for the current water year also occurred Sept. 9.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 15, 1940, reached a stage of 737.5 ft (35.8 ft above gage datum), from information by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2870	1470	15000	2180	2500	5540	e2830	5690	2190	1720	1530	779
2	2410	1480	18200	2180	2370	4820	2690	4160	3490	2220	1400	779
3	2570	1480	7570	2150	2270	5690	2660	3600	5070	2060	1240	802
4	2100	1430	7400	2110	2260	8480	2610	3640	4390	1810	1360	859
5	1840	1400	5940	2180	2650	5650	2590	3210	3550	1670	1260	773
6	1760	1380	4980	2660	2920	5750	2860	2980	2850	1550	1150	742
7	1710	1380	3750	2280	2720	4370	3690	2870	2530	1500	1090	741
8	1800	3980	3780	2090	2600	3730	3250	2730	2370	1460	1080	737
9	2600	10200	3200	e2510	2740	3470	3110	2670	2280	1440	1080	746
10	3640	4600	2860	3500	2490	3260	2710	2660	2210	1480	1070	1050
11	2420	3650	2700	3300	2390	3210	2580	2570	2110	1450	1060	2240
12	1960	2900	2600	2720	2340	3020	3050	2450	2130	1380	1030	1700
13	1790	2390	3780	2440	2290	2860	4660	2430	2840	1350	1030	1220
14	1730	2070	3560	2230	2500	5930	3660	2430	e3000	1310	1050	1000
15	1700	1970	3050	2160	6610	7190	3290	2400	e2700	1220	1080	974
16	1700	1890	2760	3210	5480	5230	2830	2290	2170	1200	1010	956
17	1670	1870	2660	3620	3930	e4730	2800	2210	1950	1670	982	897
18	1590	1850	2680	2800	3170	e4530	2760	2200	2300	1410	942	893
19	1660	1980	3090	2370	2890	5720	2540	2180	2290	1250	895	893
20	1700	1990	2990	e2340	2720	6680	2470	2150	2090	1240	893	886
21	1590	1900	2630	2340	2630	5030	2510	2170	2480	1230	1000	876
22	1540	1910	2420	2340	6040	4250	3090	2090	2190	1260	930	826
23	1520	1870	2300	2300	4430	3740	e4720	2050	2080	2080	854	817
24	1580	1800	2360	2280	3670	3410	4990	2000	1880	1900	832	987
25	1660	1780	2690	3120	3250	3300	3840	1940	1730	2580	814	2030
26	1560	2330	2550	2790	2990	3530	3060	2100	1770	3130	813	1580
27	1520	2520	2350	2440	2870	3470	2930	2590	1910	1900	828	1430
28	1520	2200	2250	2680	3700	3170	4440	2450	2120	1560	795	991
29	1510	2000	2250	3140	---	3120	14100	2140	2070	1550	795	1020
30	1520	1890	2270	e2780	---	3140	7470	2120	1780	1470	791	1160
31	1500	---	2190	2640	---	3020	---	2150	---	1680	787	---
TOTAL	58240	71560	128810	79880	89420	139040	110790	81320	74520	50730	31471	31384
MEAN	1879	2385	4155	2577	3194	4485	3693	2623	2484	1636	1015	1046
MAX	3640	10200	18200	3620	6610	8480	14100	5690	5070	3130	1530	2240
MIN	1500	1380	2190	2090	2260	2860	2470	1940	1730	1200	787	737

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

MEAN	2124	2135	2393	2827	3025	3650	3396	2851	2564	1981	2064	1828
MAX	5371	5128	4814	5725	5645	7862	7337	4989	5435	3485	5611	5810
(WY)	1991	1978	1974	1978	1990	1993	1980	1973	1972	1989	1970	1979
MIN	689	897	1107	1051	1560	1443	1390	1298	748	654	623	815
(WY)	1989	1982	1966	1981	1989	1981	1985	1988	1988	1986	1988	1988

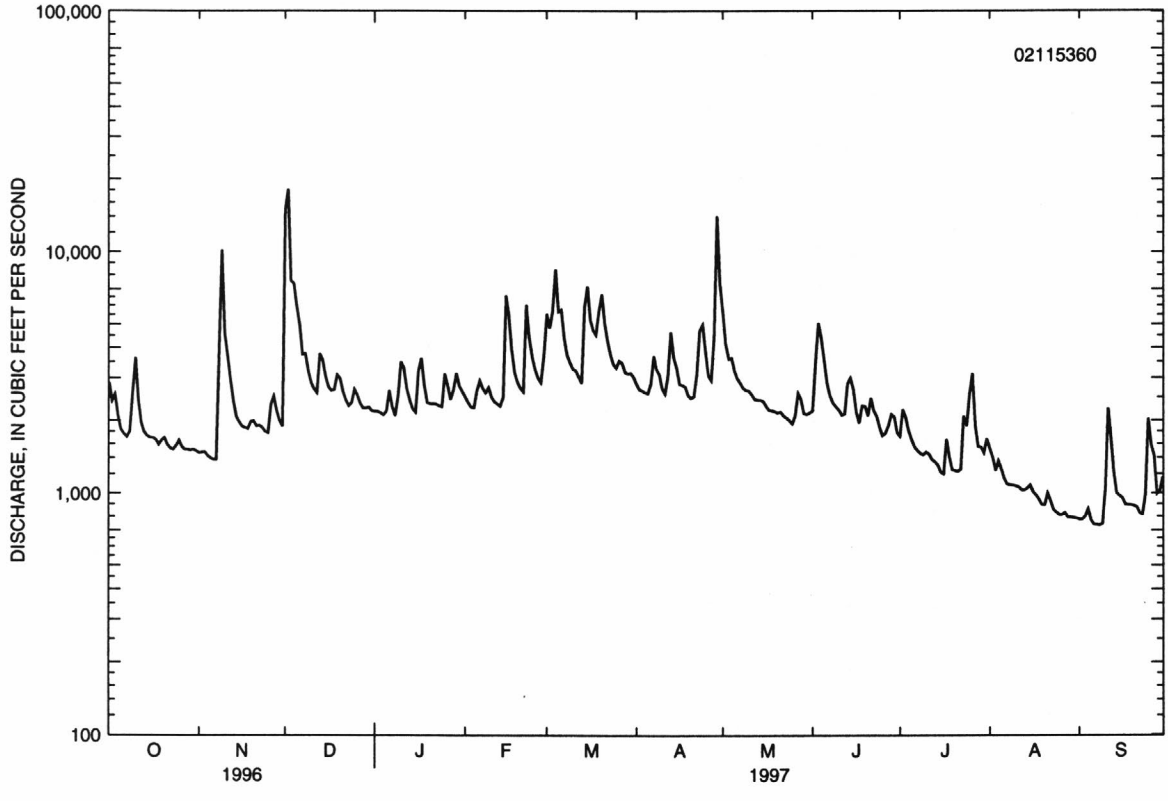
PEE DEE RIVER BASIN

02115360 YADKIN RIVER AT ENON, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997	
ANNUAL TOTAL	1061150		947165			
ANNUAL MEAN	2899		2595		2565	
HIGHEST ANNUAL MEAN					3605	1973
LOWEST ANNUAL MEAN					1332	1988
HIGHEST DAILY MEAN	32500	Aug 13	18200	Dec 2	48400	Sep 22 1979
LOWEST DAILY MEAN	1050	Jul 23	737	Sep 8	368	Sep 1 1981
ANNUAL SEVEN-DAY MINIMUM	1250	Jul 19	771	Sep 3	384	Aug 26 1981
INSTANTANEOUS PEAK FLOW			31200	Dec 2	73300	Jun 21 1972
INSTANTANEOUS PEAK STAGE			21.98	Dec 2	29.52	Sep 22 1979
INSTANTANEOUS LOW FLOW			734*	Sep 8	363*	Aug 31 1981
10 PERCENT EXCEEDS	4490		4300		4290	
50 PERCENT EXCEEDS	2160		2280		1960	
90 PERCENT EXCEEDS	1440		1010		1110	

e Estimated.

* See REMARKS.



PEE DEE RIVER BASIN

02116500 YADKIN RIVER AT YADKIN COLLEGE, NC

LOCATION.--Lat 35°51'23", long 80°23'14", Davie County, Hydrologic Unit 03040101, on right bank on downstream side of bridge on U.S. Highway 64, 1.5 mi south of Yadkin College, 6.2 mi downstream of Reedy Creek, and 295 mi upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--2,280 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1928 to current year.

REVISED RECORDS.--WSP 822: Drainage area. WSP 852: 1935-37(m).

GAGE.--Water-stage recorder. Datum of gage is 638.45 ft above sea level. Prior to July 26, 1957, at site on left bank 100 ft downstream at same datum. July 27, 1957, to Sept. 19, 1984, at site 20 ft downstream on bridge pier near left bank, at same datum. U.S. Army Corps of Engineers satellite telemetry and Yadkin, Inc. telephone telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Diurnal fluctuation and occasional regulation during low flow caused by small hydroelectric plant 10 mi upstream with little storage capacity. Since August 1962, some regulation by W. Kerr Scott Reservoir (station 02111391). Prior to regulation, maximum discharge: 80,200 ft^3/s, Aug. 15, 1940; gage height: 33.75 ft; minimum observed discharge: 177 ft^3/s, Oct. 12, 1954; gage height: -0.42 ft. Minimum discharge for period of record, result of regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1916, reached a stage of 36.3 ft, from floodmarks; discharge, 94,300 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3610	2170	9470	2640	3080	7560	e3000	8500	e3000	2060	2110	1070
2	3860	2300	25500	2630	2950	6270	e3000	5900	e3200	2370	1920	1020
3	2970	2280	14000	2610	2810	5590	3140	4800	e4500	2660	1710	1020
4	2670	2160	9030	2580	2750	10500	3190	4710	e6500	2190	1630	1110
5	2280	2010	7650	2650	2940	7130	3060	4180	4430	2140	2100	1080
6	2130	2040	7370	3140	3220	7090	3210	3780	3480	2090	1650	981
7	2050	2070	4870	2950	3330	5770	3520	3650	3110	1900	1550	917
8	e2450	2660	4730	2680	3210	4450	3070	3540	2890	1810	1490	851
9	e2790	12300	3990	3460	3450	4080	3070	3390	2780	1760	1490	947
10	e4280	5800	3460	4760	3180	3800	2640	3440	2700	1810	1470	1560
11	3180	4300	3210	4320	3020	e3750	2860	3240	2600	1810	1450	2000
12	2550	3570	3080	3600	2910	e3520	3480	3080	2520	1720	1400	2550
13	2260	2990	5220	3140	2820	3350	4770	3010	3980	1660	1400	1690
14	2190	2580	4800	2890	3290	4770	4690	3020	3660	1660	1410	1360
15	2140	2430	3770	2740	10400	10600	4600	2940	3400	1640	1460	1250
16	2140	2360	3290	3710	9640	6700	4730	2860	3120	1440	1360	1290
17	2090	2300	3160	4780	5520	5510	5000	2730	2550	1740	1320	1060
18	2140	2290	3150	3640	4170	5120	3960	2720	2560	1890	1260	1230
19	2450	2360	3430	3040	3590	7190	3090	2700	2910	1620	1190	1240
20	2220	2430	3700	2840	3380	10800	2950	2670	2610	1520	1370	1210
21	2080	2360	3250	2860	3170	6710	2980	2730	2810	1520	1570	1190
22	e2050	2350	3000	2860	5760	5330	3750	2640	2740	1590	1350	1150
23	e2100	2350	2810	2860	6040	4560	6960	2530	2690	2660	1220	1120
24	2230	2230	2800	2790	4390	4080	7750	2510	2380	2870	1150	1280
25	2380	e2400	3140	3420	3880	4060	5430	2470	2130	3050	1130	2340
26	2290	3060	3160	3590	3540	4770	3860	2590	2070	3910	1130	2190
27	2220	3220	2930	3090	3370	4580	3590	3190	2180	3010	1140	1940
28	2240	2700	2750	3200	4050	4550	5310	3230	2390	2210	1090	1540
29	2210	2520	2730	3890	---	4120	16000	2750	2540	2270	1110	1430
30	2260	2330	2800	3450	---	3530	18800	2610	2170	2110	1110	1520
31	2240	---	2680	3250	---	3370	---	e2800	---	2350	1070	---
TOTAL	76750	88920	158930	100060	113860	173210	145460	104910	90600	65040	43810	41136
MEAN	2476	2964	5127	3228	4066	5587	4849	3384	3020	2098	1413	1371
MAX	4280	12300	25500	4780	10400	10800	18800	8500	6500	3910	2110	2550
MIN	2050	2010	2680	2580	2750	3350	2640	2470	2070	1440	1070	851

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1997*, BY WATER YEAR (WY)

MEAN	2610	2606	2974	3558	3853	4743	4113	3454	3061	2394	2395	2173
MAX	7491	5844	5784	7580	7632	10380	9419	6277	7755	4622	7191	7314
(WY)	1991	1993	1974	1978	1990	1975	1987	1984	1972	1984	1970	1979
MIN	998	1091	1338	1354	2060	1798	1691	1565	1048	749	708	931
(WY)	1987	1982	1966	1981	1981	1981	1985	1986	1988	1986	1981	1968

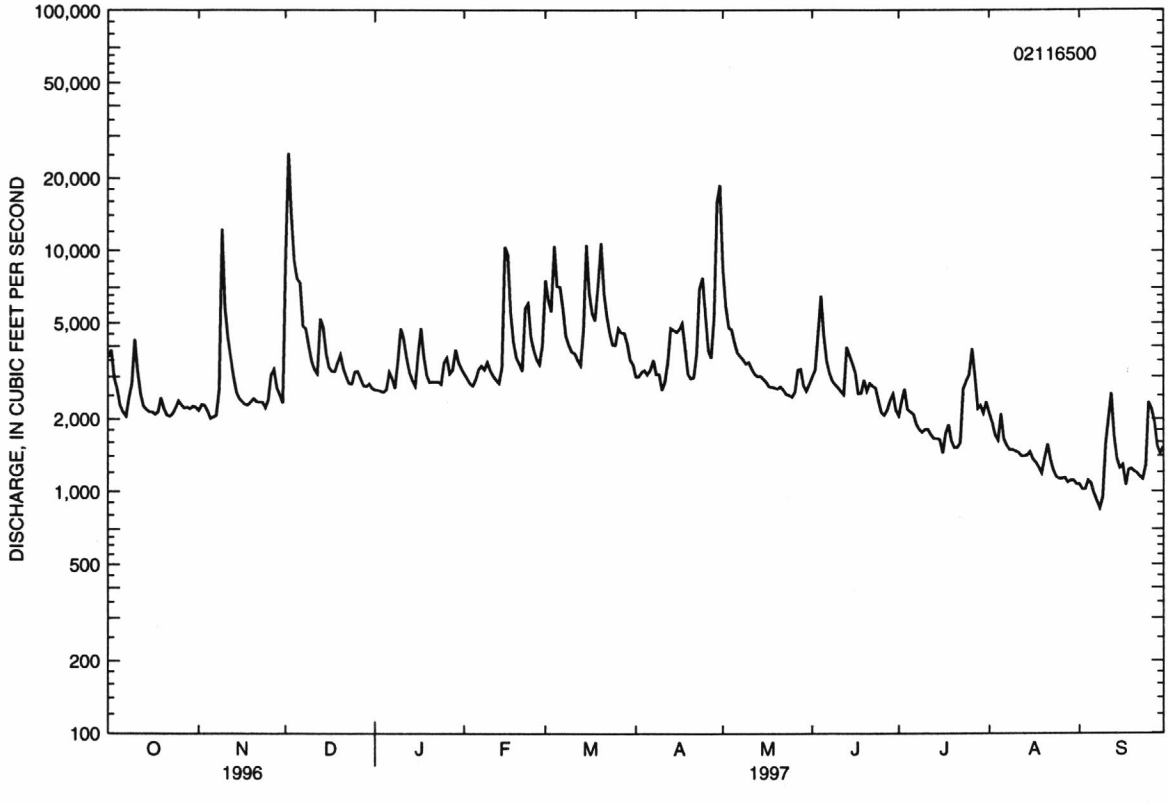
PEE DEE RIVER BASIN

02116500 YADKIN RIVER AT YADKIN COLLEGE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1963 - 1997*	
ANNUAL TOTAL	1322010		1202686			
ANNUAL MEAN	3612		3295		3158	
HIGHEST ANNUAL MEAN					4524	1973
LOWEST ANNUAL MEAN					1591	1981
HIGHEST DAILY MEAN	25500	Dec 2	25500	Dec 2	66000	Jun 22 1972
LOWEST DAILY MEAN	1260	Jul 22	851	Sep 8	350	Aug 28 1988
ANNUAL SEVEN-DAY MINIMUM	1550	Jul 18	987	Sep 3	414	Aug 25 1981
INSTANTANEOUS PEAK FLOW			28000	Dec 2	75200*	Jun 22 1972
INSTANTANEOUS PEAK STAGE			19.71	Dec 2	32.81*	Jun 22 1972
INSTANTANEOUS LOW FLOW			580	Sep 8	110*	Aug 28 1988
10 PERCENT EXCEEDS	5720		5260		5400	
50 PERCENT EXCEEDS	2800		2810		2360	
90 PERCENT EXCEEDS	1950		1400		1320	

e Estimated.

* Regulated period only (1963-1997). See REMARKS.



02116500 YADKIN RIVER AT YADKIN COLLEGE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1944, 1951 to 1995, 1997.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1964 to September 1967, October 1970 to September 1978, February 1979 to September 1989.

WATER TEMPERATURE: October 1943 to September 1944, October 1950 to September 1951, October 1955 to September 1967, October 1970 to September 1989.

SUSPENDED-SEDIMENT DISCHARGE: January 1951 to June 1995.

INSTRUMENTATION.--Water-quality monitor from October 1970 to September 1975.

REMARKS.--Station operated as part of NASQAN network from March 1979 to September 1992. Miscellaneous water-quality data published for water years 1947-49, 1955. Daily records of specific conductance for water years 1956-64 and specific conductance and water temperature for water years 1990 through 1995 are available in files of District office in Raleigh.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 815 microsiemens, Aug. 26, 1971; minimum recorded, 20 microsiemens, Nov. 2, 16, 28, Dec. 1, 6, 7, 1971.

WATER TEMPERATURE: Maximum daily, 35.0°C, July 20, 1986; minimum daily, 0.0°C, on many days during most winter months.

SEDIMENT CONCENTRATION: Maximum daily mean, 2,970 mg/L, May 26, 1952; minimum daily mean, 1 mg/L, Dec. 3, 1953.

SEDIMENT LOAD: Maximum daily, 182,000 tons, June 22, 1972; minimum daily, 3 tons, Dec. 3, 1953.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT				
11...	1135	3160	125	1070
19...	1645	2270	90.0	552
26...	1645	2300	7	43
NOV				
02...	1615	2480	9.00	60
09...	1645	13300	911	32700
16...	1645	2350	37.0	235
23...	1615	2350	43.0	273
DEC				
06...	1545	7240	93.0	1820
14...	1545	4440	145	1740
21...	1615	3210	269	2330
28...	1515	2730	51.0	376
JAN				
04...	1645	2600	30.0	211
11...	1615	4310	122	1420
18...	1315	3570	47.0	453
25...	1345	3540	69.0	660
FEB				
01...	1515	3060	27.0	223
08...	1615	3400	39.0	358
15...	1515	12500	1030	34800
22...	1515	7630	542	11200
MAR				
01...	1415	8200	301	6660
08...	1515	4400	215	2550
16...	1330	6450	494	8600
23...	1345	4810	176	2290
30...	1345	3750	97.0	982
APR				
06...	1015	3120	65.0	548
13...	1415	5400	498	7260
19...	1245	3090	36.0	300
26...	1415	3800	92.0	944
MAY				
03...	1610	4810	151	1960
11...	1315	3260	54.0	475
18...	1200	2720	31.0	228
25...	1345	2430	26.0	171
31...	1615	2800	36.0	272
JUN				
07...	1655	3060	64.0	529
15...	1315	3370	154	1400
21...	1515	3380	95.0	867
28...	1515	2250	55.0	334
JUL				
05...	1430	2180	43.0	253
12...	1615	1750	26.0	123
19...	1615	1610	25.0	109
26...	1600	4460	277	3340
AUG				
02...	1615	1900	40.0	205
09...	1315	1480	31.0	124
23...	1430	1160	32.0	100
30...	1345	1130	17.0	52
SEP				
06...	1515	1010	18.0	49
17...	1345	1250	38.0	128
20...	1230	1230	21.0	70
27...	1345	1970	42.0	223

PEE DEE RIVER BASIN

02118000 SOUTH YADKIN RIVER NEAR MOCKSVILLE, NC

LOCATION.--Lat 35°50'41", long 80°39'34", Rowan County, Hydrologic Unit 03040102, on right bank 90 ft downstream of bridge on Secondary Road 1972, 1 mi upstream from Little Creek, 4 mi downstream of Fifth Creek, 4.5 mi upstream from Hunting Creek, and 6.5 mi southwest of Mocksville.

DRAINAGE AREA.--306 mi^2.

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 663.62 ft above sea level. Yadkin Inc. satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. The City of Statesville diverted an average of 7.8 ft^3/s for water supply and waste treatment dilution. The Alexander Water Corporation withdrew an average of 2.1 ft^3/s for water supply. Maximum discharge for period of record also occurred Mar. 2, 1987. Minimum discharge for period of record also occurred July 24, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Oct. 3, 1929, reached a stage of 22.6 ft, from floodmark established by local resident (discharge, about 22,000 ft^3/s).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	358	171	1720	e290	345	1230	368	1530	299	249	204	e140
2	377	188	2670	e285	332	952	353	889	317	309	172	e135
3	281	198	1810	e280	325	703	371	790	324	265	162	e130
4	241	185	649	e270	329	746	348	792	326	228	163	e125
5	211	173	494	e380	383	640	338	604	286	236	156	e120
6	199	174	556	e350	356	597	384	527	269	305	147	e115
7	192	177	488	310	330	545	754	474	265	209	141	e115
8	222	296	544	278	359	465	560	438	266	195	140	e110
9	251	609	440	516	413	426	434	426	260	187	140	e200
10	378	385	390	760	382	404	388	408	256	285	137	e250
11	302	276	370	470	356	418	366	388	257	287	137	e190
12	236	238	365	459	337	373	464	373	249	206	141	e160
13	215	221	1250	388	325	357	805	427	377	183	160	e140
14	205	224	743	350	445	529	586	362	400	174	327	e130
15	197	209	532	330	1940	749	453	346	681	167	197	e120
16	189	199	423	513	1680	540	409	332	366	175	163	e120
17	183	197	396	575	795	439	394	322	285	198	140	e115
18	179	202	393	396	571	408	380	317	260	186	126	e120
19	172	231	501	345	475	733	356	311	e240	162	120	e120
20	171	229	388	373	467	1200	348	303	e245	154	122	e115
21	180	212	391	350	397	758	343	297	241	198	148	e115
22	178	228	350	348	464	579	402	287	363	200	129	e120
23	172	221	342	330	532	486	1650	280	323	400	114	e150
24	171	206	336	334	422	437	1510	277	251	440	110	e180
25	171	206	353	443	381	407	748	274	228	427	108	e200
26	171	386	330	406	365	499	554	295	219	292	163	e160
27	173	318	302	348	363	603	508	300	276	258	148	e140
28	175	270	296	390	630	458	958	302	272	217	126	e130
29	175	238	299	482	---	451	4080	283	233	190	e150	e125
30	173	235	307	404	---	426	4160	283	218	194	e190	e120
31	172	---	294	365	---	403	---	292	---	235	e160	---
TOTAL	6670	7302	18722	12118	14499	17961	23772	13529	8852	7411	4741	4210
MEAN	215	243	604	391	518	579	792	436	295	239	153	140
MAX	378	609	2670	760	1940	1230	4160	1530	681	440	327	250
MIN	171	171	294	270	325	357	338	274	218	154	108	110
CFSM	.70	.80	1.97	1.28	1.69	1.89	2.59	1.43	.96	.78	.50	.46
IN.	.81	.89	2.28	1.47	1.76	2.18	2.89	1.64	1.08	.90	.58	.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1997, BY WATER YEAR (WY)

MEAN	263	268	345	425	505	552	471	367	304	237	234	237
MAX	1246	791	738	1088	1458	1485	1110	885	774	628	706	880
(WY)	1965	1958	1962	1978	1960	1975	1958	1984	1972	1941	1970	1979
MIN	70.4	99.7	102	97.7	181	220	159	127	75.0	47.3	61.2	45.7
(WY)	1955	1956	1956	1956	1941	1955	1986	1986	1986	1986	1956	1954

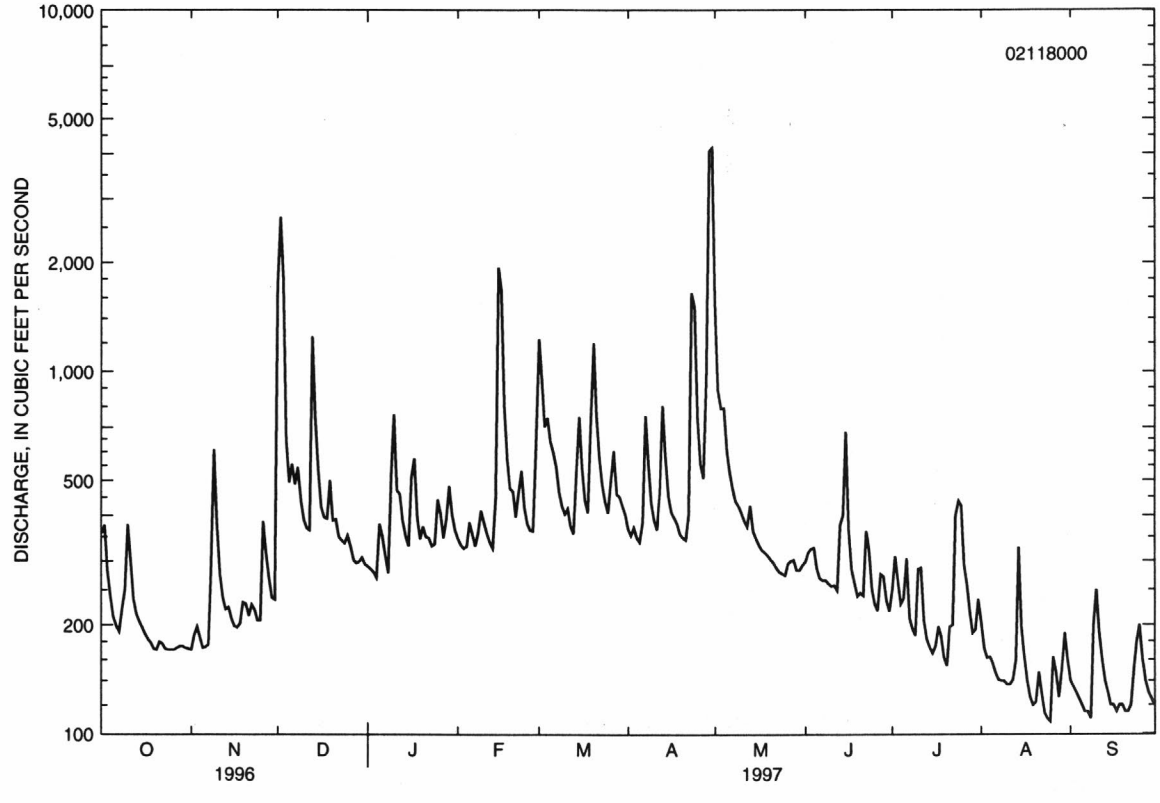
PEE DEE RIVER BASIN

02118000 SOUTH YADKIN RIVER NEAR MOCKSVILLE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1939 - 1997	
ANNUAL TOTAL	135645		139787			
ANNUAL MEAN	371		383		350	
HIGHEST ANNUAL MEAN					592	1960
LOWEST ANNUAL MEAN					171	1986
HIGHEST DAILY MEAN	3290	Jan 29	4160	Apr 30	9750	Mar 2 1987
LOWEST DAILY MEAN	107	Jul 23	108	Aug 25	22	Jul 22 1986
ANNUAL SEVEN-DAY MINIMUM	125	Jul 18	118	Sep 15	28	Jul 19 1986
INSTANTANEOUS PEAK FLOW			4750	Apr 29	11800*	Oct 17 1964
INSTANTANEOUS PEAK STAGE			13.25	Apr 29	18.88	Mar 2 1987
INSTANTANEOUS LOW FLOW			NOT DETERMINED		21*	Jul 22 1986
ANNUAL RUNOFF (CFSM)	1.21		1.25		1.14	
ANNUAL RUNOFF (INCHES)	16.49		16.99		15.54	
10 PERCENT EXCEEDS	578		599		595	
50 PERCENT EXCEEDS	287		305		243	
90 PERCENT EXCEEDS	162		141		124	

e Estimated.

* See REMARKS.



02118500 HUNTING CREEK NEAR HARMONY, NC

LOCATION.--Lat 36°00'00", long 80°44'44", Iredell County, Hydrologic Unit 03040102, on right bank 52 ft downstream of bridge on Secondary Road 2115, 0.8 mi downstream of Kennedy Creek, 1 mi east of Houstonville, 2 mi downstream of U.S. Highway 21, and 3.5 mi northeast of Harmony.

DRAINAGE AREA.--155 mi^2.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1723.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 734.78 ft above sea level. Prior to Apr. 5, 1951, nonrecording gage on upstream side of bridge at same datum. Yadkin, Inc. satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Maximum gage height for period of record, from high-water mark in gage house.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	59	e1800	164	200	493	234	e475	229	143	77	e24
2	171	75	e1000	163	188	397	229	391	205	193	63	e23
3	129	67	e400	163	181	533	229	393	325	127	57	e23
4	97	61	e180	156	191	603	225	354	e233	105	54	e23
5	83	60	e220	194	211	400	222	310	190	109	61	e23
6	77	61	e300	194	192	446	307	292	173	102	49	e23
7	74	63	e350	154	183	354	452	272	176	98	45	e23
8	114	339	e250	146	206	311	302	259	171	92	47	e23
9	154	e300	e230	280	205	284	266	257	163	88	47	e25
10	207	e250	e220	314	191	271	243	244	159	89	45	67
11	115	e180	199	300	189	255	233	234	148	82	45	122
12	99	e125	211	233	182	237	426	232	152	76	47	57
13	89	116	490	203	179	228	530	228	258	74	43	37
14	81	110	319	188	240	510	354	223	187	69	57	29
15	77	104	256	178	912	568	302	219	356	65	43	29
16	70	99	225	345	577	507	277	205	189	62	37	27
17	66	97	216	292	381	507	261	203	160	152	33	25
18	65	103	214	236	293	507	245	202	150	82	29	26
19	71	125	314	257	261	707	236	195	147	65	27	27
20	68	103	260	216	239	715	234	192	139	72	38	25
21	65	100	224	192	230	440	227	189	290	108	32	e24
22	64	110	208	187	389	364	315	177	258	68	26	e24
23	63	96	197	193	297	317	792	175	279	174	25	25
24	65	92	194	198	253	290	564	174	161	171	25	70
25	62	91	207	265	236	275	390	178	138	121	e24	174
26	62	186	185	220	225	384	324	197	129	138	e24	59
27	65	153	182	202	223	317	316	246	131	128	e24	39
28	64	121	175	251	340	288	731	199	127	91	e24	38
29	63	112	173	259	---	289	e2000	183	127	73	e24	111
30	61	121	169	223	---	262	e800	196	115	103	e24	57
31	59	---	166	211	---	251	---	189	---	126	e24	---
TOTAL	2804	3679	9734	6777	7594	12310	12266	7483	5665	3246	1220	1302
MEAN	90.5	123	314	219	271	397	409	241	189	105	39.4	43.4
MAX	207	339	1800	345	912	715	2000	475	356	193	77	174
MIN	59	59	166	146	179	228	222	174	115	62	24	23
CFSM	.58	.79	2.03	1.41	1.75	2.56	2.64	1.56	1.22	.68	.25	.28
IN.	.67	.88	2.34	1.63	1.82	2.95	2.94	1.80	1.36	.78	.29	.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1997, BY WATER YEAR (WY)

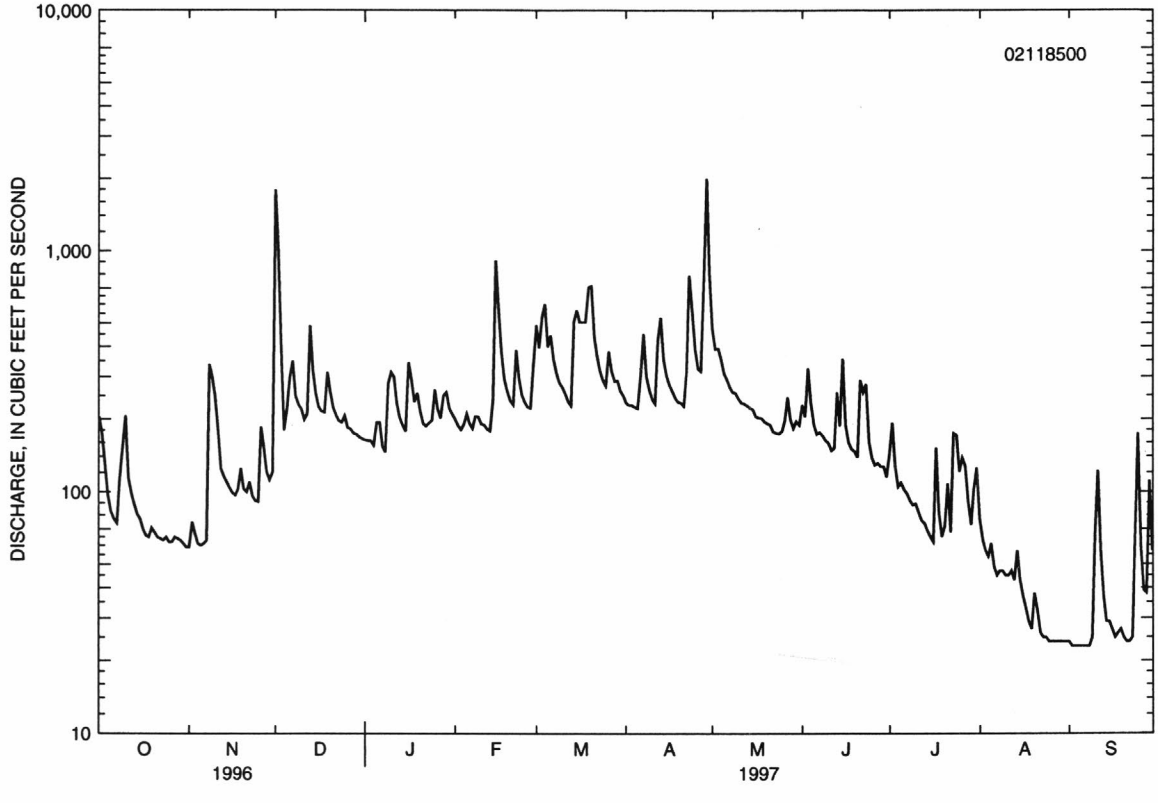
MEAN	159	160	200	232	275	327	300	225	195	145	144	144
MAX	654	508	373	585	752	959	713	527	636	355	383	615
(WY)	1965	1978	1974	1978	1960	1975	1987	1990	1972	1987	1970	1979
MIN	50.0	56.9	53.1	56.4	132	123	101	92.8	63.3	41.2	39.4	40.4
(WY)	1955	1956	1956	1956	1977	1956	1995	1981	1956	1986	1997	1954

PEE DEE RIVER BASIN

02118500 HUNTING CREEK NEAR HARMONY, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1951 - 1997	
ANNUAL TOTAL	59960		74080			
ANNUAL MEAN	164		203		209	
HIGHEST ANNUAL MEAN					346	1960
LOWEST ANNUAL MEAN					101	1956
HIGHEST DAILY MEAN	2530	Jan 27	e2000	Apr 29	10400	Sep 22 1979
LOWEST DAILY MEAN	45	Jul 22	23	Sep 2	22	Sep 16 1956
ANNUAL SEVEN-DAY MINIMUM	50	Jul 17	23	Sep 2	23	Sep 2 1997
INSTANTANEOUS PEAK FLOW			3190	Dec 1	14800	Sep 22 1979
INSTANTANEOUS PEAK STAGE			11.98	Dec 1	25.05*	Sep 22 1979
INSTANTANEOUS LOW FLOW			NOT DETERMINED		18	Oct 8 1954
ANNUAL RUNOFF (CFSM)	1.06		1.31		1.35	
ANNUAL RUNOFF (INCHES)	14.39		17.78		18.35	
10 PERCENT EXCEEDS	261		359		340	
50 PERCENT EXCEEDS	120		182		146	
90 PERCENT EXCEEDS	60		38		73	

e Estimated.



PEE DEE RIVER BASIN

02120780 SECOND CREEK NEAR BARBER, NC

LOCATION.--Lat 35°43'05", long 80°35'45", Rowan County, Hydrologic Unit 03040102, on right bank 70 ft upstream from bridge on U.S. Highway 70, 1.3 mi downstream of Withrow Creek, and 2.7 mi east of Barber.

DRAINAGE AREA.--118 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-57, 1961-63. April 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 642.31 ft above sea level. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Some diurnal fluctuation caused by industry 0.7 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	213	61	549	e76	166	957	e76	330	96	95	60	28
2	96	96	304	e76	159	284	e74	243	91	96	55	28
3	82	76	132	e74	150	193	e104	539	105	76	52	25
4	77	69	109	e74	e162	153	102	597	94	67	50	23
5	e70	68	130	e100	e140	120	97	239	87	70	53	21
6	e65	69	245	e95	e135	123	153	188	84	69	48	15
7	e60	71	189	e90	e130	101	182	159	87	66	47	14
8	120	133	198	e85	e220	93	115	142	83	62	45	13
9	87	121	125	e550	e180	86	109	136	81	60	45	13
10	71	83	108	e265	e170	83	104	123	80	62	45	36
11	64	78	106	e150	e150	79	104	116	76	58	47	55
12	56	71	107	e130	e130	72	177	112	110	56	43	33
13	55	72	438	e115	e120	70	158	108	1610	54	42	21
14	54	66	156	e110	e110	120	119	103	436	53	42	22
15	55	62	134	e125	e700	103	110	101	909	56	41	21
16	52	62	e120	e300	e200	81	106	96	217	99	39	21
17	57	63	e115	e150	e150	77	104	95	144	71	37	19
18	60	65	e110	e130	e120	75	101	94	123	46	34	22
19	70	76	e130	e120	e110	842	100	91	112	41	34	23
20	62	67	e115	e115	e105	489	96	89	100	39	33	22
21	61	67	e105	e115	e100	183	90	85	128	41	29	18
22	61	82	e100	e110	e95	136	109	83	92	39	23	23
23	61	69	e95	e120	e90	109	1030	82	90	149	20	27
24	61	66	e92	154	e85	96	337	83	82	128	21	57
25	62	68	e90	218	e80	92	175	88	79	116	21	89
26	64	80	e98	179	e78	120	140	100	75	69	33	44
27	64	71	e84	168	e78	95	164	95	79	62	24	38
28	62	66	e82	228	856	93	727	88	79	57	22	41
29	59	66	e80	199	---	120	2220	86	76	53	20	46
30	61	71	e78	178	---	93	982	86	72	132	21	35
31	60	---	e76	171	---	e82	---	87	---	82	28	---
TOTAL	2202	2235	4600	4770	4969	5420	8265	4664	5577	2224	1154	893
MEAN	71.0	74.5	148	154	177	175	276	150	186	71.7	37.2	29.8
MAX	213	133	549	550	856	957	2220	597	1610	149	60	89
MIN	52	61	76	74	78	70	74	82	72	39	20	13
CFSM	.60	.63	1.26	1.30	1.50	1.48	2.33	1.28	1.58	.61	.32	.25
IN.	.69	.70	1.45	1.50	1.57	1.71	2.61	1.47	1.76	.70	.36	.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1997, BY WATER YEAR (WY)

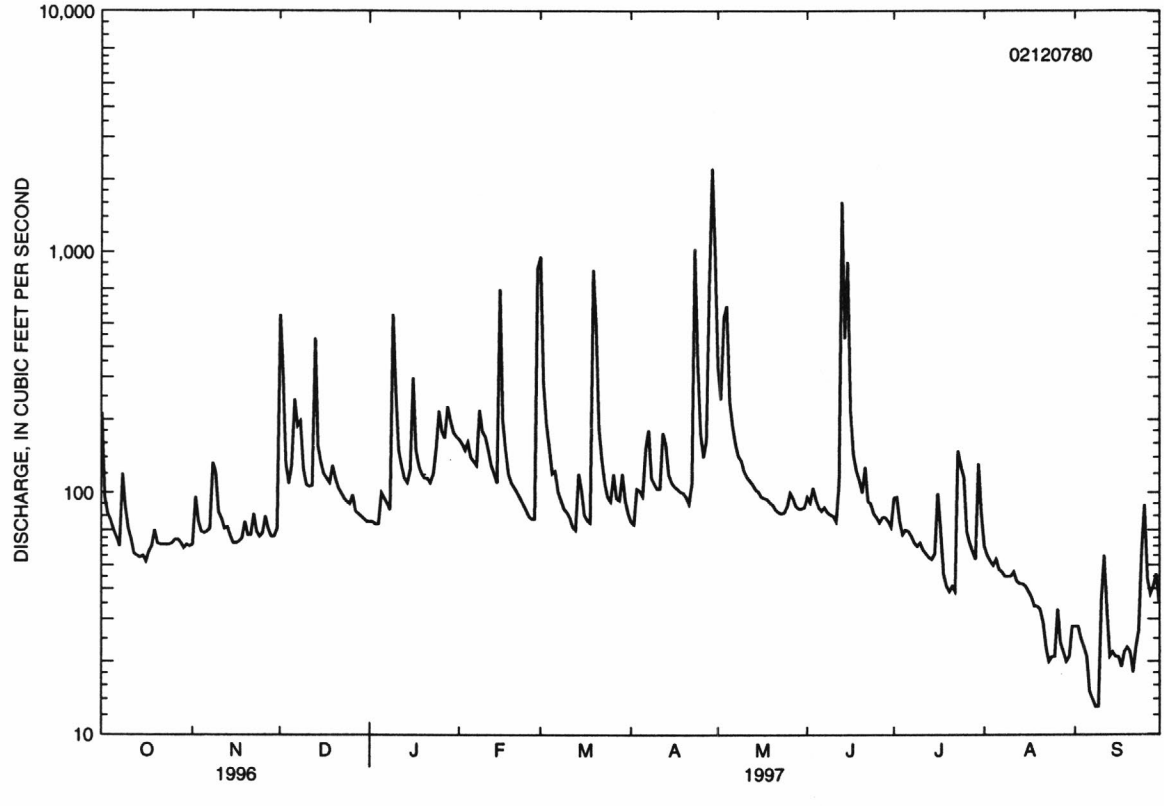
MEAN	100	100	105	147	181	206	149	92.7	98.1	58.4	66.7	62.2
MAX	419	262	222	292	301	476	390	178	243	98.3	304	196
(WY)	1991	1996	1984	1993	1990	1993	1987	1990	1992	1989	1995	1979
MIN	15.8	33.3	44.9	38.9	70.7	67.2	45.5	29.6	13.0	13.2	16.7	11.7
(WY)	1987	1982	1994	1981	1986	1981	1986	1986	1986	1986	1983	1986

PEE DEE RIVER BASIN

02120780 SECOND CREEK NEAR BARBER, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1979 - 1997	
ANNUAL TOTAL	41968		46973			
ANNUAL MEAN	115		129		112	
HIGHEST ANNUAL MEAN					171	1991
LOWEST ANNUAL MEAN					62.1	1981
HIGHEST DAILY MEAN	1640	Jan 27	2220	Apr 29	5280	Aug 28 1995
LOWEST DAILY MEAN	52	Oct 16	13	Sep 8	5.0	Oct 6 1986
ANNUAL SEVEN-DAY MINIMUM	54	Sep 19	18	Sep 3	5.6	Oct 3 1986
INSTANTANEOUS PEAK FLOW			2660	Apr 29	8560	Aug 28 1995
INSTANTANEOUS PEAK STAGE			13.96	Apr 29	17.28	Aug 28 1995
INSTANTANEOUS LOW FLOW			8.8	Sep 9	4.4	Oct 1 1986
ANNUAL RUNOFF (CFSM)	.97		1.09		.95	
ANNUAL RUNOFF (INCHES)	13.23		14.81		12.94	
10 PERCENT EXCEEDS	175		188		171	
50 PERCENT EXCEEDS	79		87		69	
90 PERCENT EXCEEDS	58		36		28	

e Estimated.



PEE DEE RIVER BASIN

02121500 ABBOTTS CREEK AT LEXINGTON, NC

LOCATION.--Lat 35°48'23", long 80°14'05", Davidson County, Hydrologic Unit 03040103, on right bank 150 ft upstream from bridge on Secondary Road 1243, 1.5 mi southeast of Lexington, and 4.5 mi downstream of Rich Fork Creek.

DRAINAGE AREA.--174 mi^2.

PERIOD OF RECORD.--March 1940 to December 1957. October 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 630 ft above sea level, from topographic map. March 1940 to December 1957 at site 100 ft upstream at different datum. Satellite telemetry and rain gage at station.

REMARKS.--Records poor. The City of Lexington diverted an average of 5.9 ft^3/s for water supply. The City of High Point diverted water from the Cape Fear River basin and discharged an average of 8.1 ft^3/s of treated sewage effluent into Rich Fork Creek, upstream from station. Maximum discharge at former site, 14,800 ft^3/s, from floodmark; minimum discharge at former site 0.4 ft^3/s. Minimum discharge for period of record also occurred Sept. 5, 1990.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	469	53	e400	e214	143	843	117	434	63	e30	e33	15
2	1620	108	e1270	e210	130	e470	102	331	86	e36	e25	14
3	439	116	e475	e195	119	e320	99	349	217	e42	e22	17
4	e165	71	e280	e185	116	329	97	390	e180	e34	e20	18
5	e100	64	e150	e250	126	245	94	239	94	e43	48	17
6	e85	61	e680	e220	124	304	154	153	81	e35	45	16
7	e80	e65	e465	e190	110	251	404	112	93	e36	32	15
8	398	e140	e510	e165	143	193	202	87	75	e32	25	15
9	481	e490	e300	e210	191	168	139	85	66	e96	25	e14
10	286	e215	e205	e300	e145	151	111	87	63	e135	22	e50
11	172	e135	e180	e250	e130	140	99	67	58	e40	22	e145
12	117	e110	e195	e210	e130	125	203	60	61	e26	19	e35
13	97	93	e140	e170	e125	116	363	59	230	e22	20	e30
14	87	88	e100	e150	e200	198	195	54	163	e19	20	e28
15	80	85	83	e140	e600	435	140	48	101	e18	27	e28
16	73	77	150	e120	e500	227	116	44	70	e20	20	e26
17	69	74	175	e90	e350	367	106	39	62	e25	18	e26
18	69	78	178	73	e250	146	97	38	57	e25	16	e25
19	104	119	107	122	e210	552	87	36	50	e20	15	e25
20	92	101	140	135	e190	1000	86	34	46	e17	26	e25
21	72	e115	191	145	e170	402	82	39	41	e71	37	e22
22	66	e170	205	153	e200	257	151	35	37	e52	29	e25
23	62	e125	209	142	e170	205	816	e45	35	e191	20	e26
24	59	e100	206	128	e150	164	1110	e60	35	e112	16	e28
25	57	e95	124	232	e140	140	340	e150	e66	e220	14	e30
26	56	e120	175	232	133	270	219	e120	e120	e71	14	e27
27	55	e140	192	166	151	252	187	e100	e90	e49	15	e24
28	59	e205	198	196	490	175	738	81	e60	e42	16	e23
29	59	e90	206	255	---	183	3290	66	e50	e33	16	e22
30	57	e80	207	185	---	147	2560	62	e35	e33	15	e21
31	55	---	212	159	---	138	---	61	---	e42	15	---
TOTAL	5740	3583	8308	5592	5636	8913	12504	3565	2485	1667	707	832
MEAN	185	119	268	180	201	288	417	115	82.8	53.8	22.8	27.7
MAX	1620	490	1270	300	600	1000	3290	434	230	220	48	145
MIN	55	53	83	73	110	116	82	34	35	17	14	14
CFSM	1.06	.69	1.54	1.04	1.16	1.65	2.40	.66	.48	.31	.13	.16
IN.	1.23	.77	1.78	1.20	1.20	1.91	2.67	.76	.53	.36	.15	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1997@, BY WATER YEAR (WY)

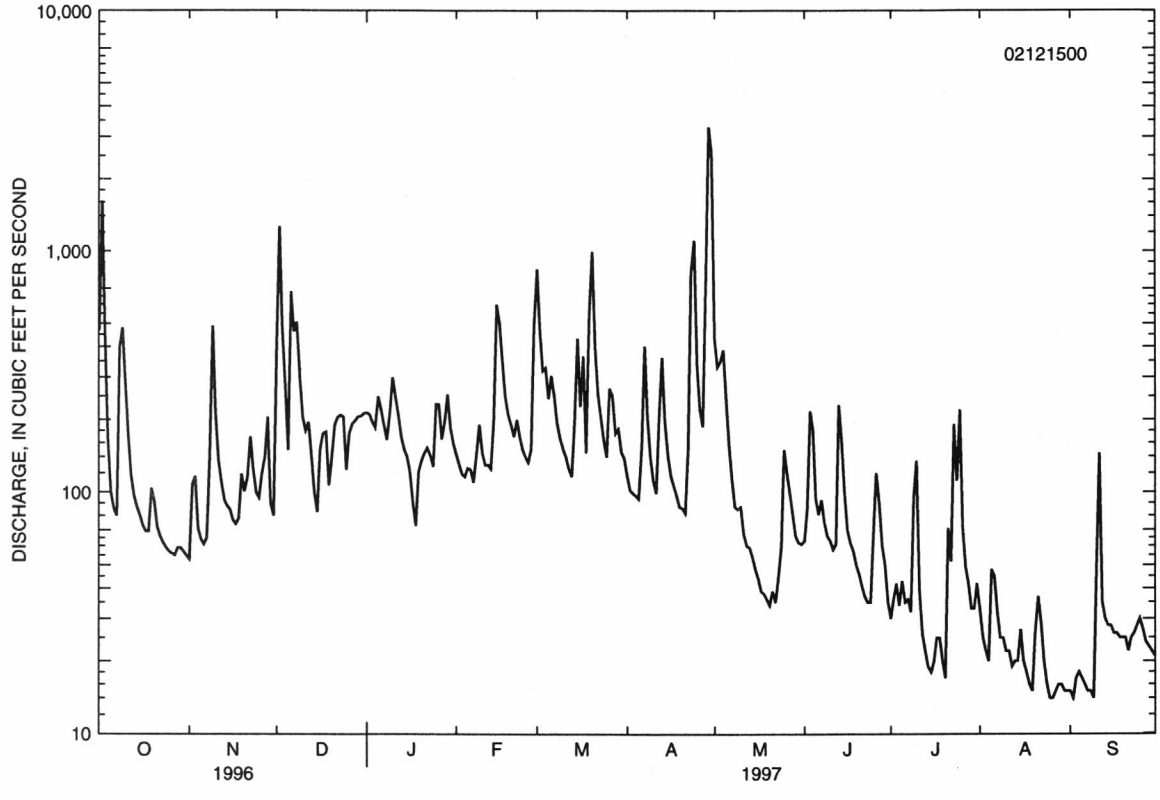
MEAN	225	142	152	283	320	422	283	183	94.2	56.7	58.5	92.2
MAX	731	282	319	500	753	781	506	515	182	115	102	397
(WY)	1990	1996	1990	1991	1990	1993	1993	1989	1989	1995	1989	1996
MIN	12.3	37.7	41.5	108	137	184	46.6	43.0	62.8	21.6	14.9	22.6
(WY)	1994	1994	1995	1989	1991	1992	1995	1995	1996	1996	1990	1990

PEE DEE RIVER BASIN

02121500 ABBOTTS CREEK AT LEXINGTON, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1988 - 1997@	
ANNUAL TOTAL	68969.1		59532			
ANNUAL MEAN	188		163		192	
HIGHEST ANNUAL MEAN					281	1990
LOWEST ANNUAL MEAN					113	1995
HIGHEST DAILY MEAN	4000	Sep 5	3290	Apr 29	7120	Oct 2 1989
LOWEST DAILY MEAN	5.1	Jul 22	14	Aug 25	2.7	Sep 4 1990
ANNUAL SEVEN-DAY MINIMUM	11	Jul 12	15	Aug 25	3.9	Sep 1 1990
INSTANTANEOUS PEAK FLOW			4330	Apr 29	8380	Oct 2 1989
INSTANTANEOUS PEAK STAGE			17.75	Apr 29	20.30	Apr 22 1992
INSTANTANEOUS LOW FLOW			NOT DETERMINED		2.4*	Sep 4 1990
ANNUAL RUNOFF (CFSM)	1.08		.94		1.10	
ANNUAL RUNOFF (INCHES)	14.75		12.73		15.00	
10 PERCENT EXCEEDS	339		324		360	
50 PERCENT EXCEEDS	99		101		85	
90 PERCENT EXCEEDS	29		22		21	

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



PEE DEE RIVER BASIN

02123567 DUTCHMANS CREEK NEAR UWHARRIE, NC

LOCATION.--Lat 35°22'05", long 80°01'49", Montgomery County, Hydrologic Unit 03040103, near midstream at upstream end of two 6-ft corrugated metal-pipe culverts on Secondary Road 1150, 1.0 mi upstream from mouth, and 3.0 mi southwest of Uwharrie.

DRAINAGE AREA.--3.44 mi^2.

PERIOD OF RECORD.--October 1981 to September 1983, October 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 340 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum gage height for period of record, from floodmark. Minimum discharge for period of record also occurred periodically in July and Oct. 1986. Minimum discharge for current water year also occurred Sept. 5, 6, 7, 8, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e45	e4.5	7.4	2.3	3.6	14	3.5	5.7	3.2	4.8	3.0	.61
2	e14	e9.0	5.9	2.3	3.5	6.8	3.4	4.9	2.7	3.1	2.5	.59
3	e5.2	e8.0	4.0	2.3	3.7	5.7	3.4	6.6	2.7	2.0	2.2	.55
4	5.0	e6.0	3.3	2.2	3.6	4.9	3.3	5.3	2.7	1.7	2.0	.50
5	4.5	e5.0	4.4	2.4	3.7	4.6	3.3	4.5	2.5	1.3	1.9	.44
6	4.2	e3.5	6.5	2.2	3.4	6.5	3.2	4.3	3.0	1.5	1.8	.43
7	3.9	e3.0	5.4	2.1	3.4	4.8	3.2	4.0	2.9	1.3	1.8	.43
8	33	e10	5.2	2.1	5.0	4.4	2.9	3.9	2.5	1.2	1.7	.43
9	7.3	e9.0	3.9	24	4.1	4.2	2.9	3.8	2.4	1.1	1.6	.44
10	4.5	e5.0	3.2	8.9	3.9	4.1	2.7	3.6	2.3	.98	1.5	2.5
11	3.8	e4.0	3.0	4.4	3.8	3.9	2.8	3.5	2.2	.96	1.6	5.5
12	3.6	e3.0	2.9	3.4	3.6	3.6	10	3.5	2.2	.78	1.5	1.2
13	3.5	e2.5	2.8	3.0	7.1	3.5	5.0	3.5	2.7	.74	1.4	.96
14	3.5	e2.0	2.5	2.7	31	10	3.7	3.2	4.2	.70	1.3	.94
15	3.4	e2.5	2.4	2.6	42	5.6	3.5	3.2	2.5	.67	1.3	.94
16	3.5	1.8	2.4	17	9.9	4.4	3.3	3.0	2.3	1.0	1.2	.93
17	3.5	1.8	2.6	5.4	6.5	4.2	3.2	3.0	2.2	1.4	1.0	.88
18	3.5	2.1	2.6	4.1	5.5	4.1	3.1	2.9	2.1	1.0	.96	.86
19	3.6	3.1	4.2	3.5	5.2	5.8	3.1	2.8	2.0	.77	.92	.88
20	3.5	2.1	2.8	3.3	4.7	5.6	3.0	2.8	1.9	.68	1.8	.85
21	3.4	3.3	2.5	3.0	4.8	4.6	2.9	2.6	1.8	.67	2.6	.72
22	3.4	4.6	2.5	2.9	5.4	4.2	7.0	2.6	1.8	.99	1.1	.66
23	3.4	2.8	2.5	2.8	4.4	3.9	16	2.6	1.7	59	.92	.71
24	3.4	2.5	2.7	2.9	4.3	3.6	5.5	2.6	1.6	131	.85	14
25	3.4	2.3	2.9	9.3	4.1	3.5	4.1	2.8	1.4	5.7	.81	6.6
26	3.3	4.4	2.5	4.5	4.1	3.8	3.7	2.9	1.4	3.4	.72	2.4
27	3.4	3.0	2.9	3.8	4.2	3.4	11	2.7	1.8	25	.71	1.9
28	e3.3	2.6	2.6	4.2	16	3.2	53	2.6	2.0	4.7	.68	2.3
29	e3.0	2.4	2.5	3.6	---	4.7	45	2.6	1.7	3.2	.66	2.1
30	e3.2	2.6	2.4	4.5	---	3.7	8.3	2.5	1.4	7.0	.60	1.4
31	e3.4	---	2.4	4.0	---	3.6	---	2.4	---	4.5	.61	---
TOTAL	198.6	118.4	105.8	145.7	204.5	152.9	229.0	106.9	67.8	272.84	43.24	53.65
MEAN	6.41	3.95	3.41	4.70	7.30	4.93	7.63	3.45	2.26	8.80	1.39	1.79
MAX	45	10	7.4	24	42	14	53	6.6	4.2	131	3.0	14
MIN	3.0	1.8	2.4	2.1	3.4	3.2	2.7	2.4	1.4	.67	.60	.43
CFSM	1.86	1.15	.99	1.37	2.12	1.43	2.22	1.00	.66	2.56	.41	.52
IN.	2.15	1.28	1.14	1.58	2.21	1.65	2.48	1.16	.73	2.95	.47	.58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1997@, BY WATER YEAR (WY)

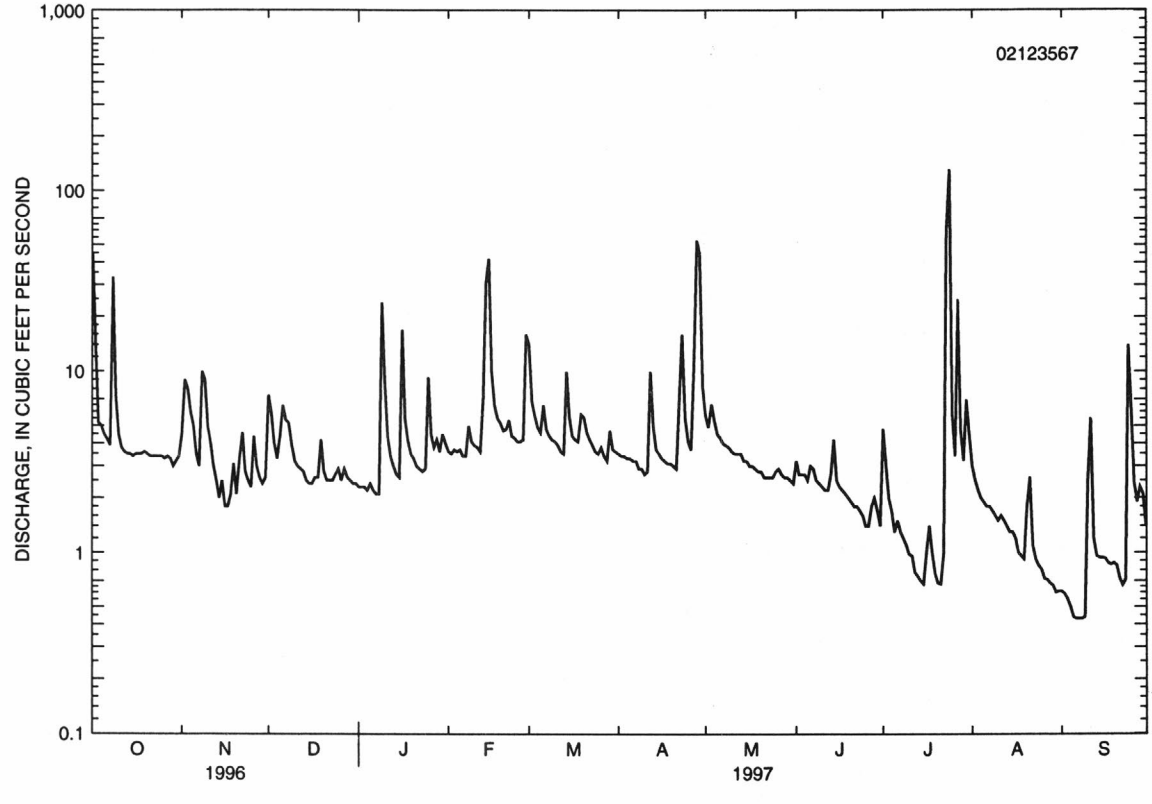
MEAN	3.22	2.85	2.76	5.06	5.89	7.21	5.37	3.00	1.99	1.75	2.10	1.53
MAX	11.9	8.69	4.81	10.3	9.62	17.8	10.2	6.49	5.28	8.80	11.2	7.81
(WY)	1991	1986	1991	1991	1990	1993	1992	1990	1994	1997	1996	1996
MIN	.19	.75	1.27	1.55	1.83	3.05	1.41	.82	.24	.26	.25	.20
(WY)	1987	1994	1992	1992	1986	1988	1986	1986	1986	1986	1993	1986

PEE DEE RIVER BASIN

02123567 DUTCHMANS CREEK NEAR UWHARRIE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1982 - 1997@	
ANNUAL TOTAL	1769.60		1699.33			
ANNUAL MEAN	4.83		4.66		3.55	
HIGHEST ANNUAL MEAN					5.13	1996
LOWEST ANNUAL MEAN					1.60	1988
HIGHEST DAILY MEAN	200	Aug 13	131	Jul 24	206	Apr 21 1992
LOWEST DAILY MEAN	.10	Aug 7	.43	Sep 6	.01	Jul 15 1986
ANNUAL SEVEN-DAY MINIMUM	.19	Aug 3	.46	Sep 3	.03	Jul 10 1986
INSTANTANEOUS PEAK FLOW			791	Jul 24	1560	Apr 21 1992
INSTANTANEOUS PEAK STAGE			10.98	Jul 24	11.96*	Apr 21 1992
INSTANTANEOUS LOW FLOW			.42*	Sep 4	.01*	Jul 15 1986
ANNUAL RUNOFF (CFSM)	1.41		1.35		1.03	
ANNUAL RUNOFF (INCHES)	19.14		18.38		14.02	
10 PERCENT EXCEEDS	6.7		6.5		5.7	
50 PERCENT EXCEEDS	2.9		3.1		1.8	
90 PERCENT EXCEEDS	1.1		.95		.38	

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



PEE DEE RIVER BASIN

0212414900 MALLARD CREEK BELOW STONY CREEK NEAR HARRISBURG, NC

LOCATION.--Lat 35°19'57", long 80°42'58", Mecklenburg County, Hydrologic Unit 03040105, on left bank on upstream side of bridge at Blockbuster Blvd, 0.1 mi downstream of Stony Creek, and 3.8 mi northwest of Harrisburg.

DRAINAGE AREA.--34.6 mi^2.

PERIOD OF RECORD.--December 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 580 ft above sea level, from topographic map. Telephone telemetry at station.

REMARKS.--Records fair except discharges below 3 ft^3/s, which are poor. Maximum gage height for current water year, 16.35 ft in gage well, 16.45 ft from outside gage. Maximum discharge for period of record from contracted opening measurement of peak flow; maximum gage height for period of record from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	386	18	135	14	22	325	17	40	6.7	9.8	10	2.2
2	32	41	51	14	20	76	15	30	34	7.6	9.0	2.2
3	19	14	26	12	17	50	14	203	19	4.2	7.6	2.0
4	14	9.5	20	12	34	36	14	57	9.3	3.6	24	1.9
5	13	8.4	66	41	34	41	14	33	7.6	2.9	25	2.5
6	11	10	78	23	21	106	37	26	20	5.6	8.0	2.8
7	10	10	37	17	17	37	25	22	14	3.2	6.8	3.6
8	285	188	32	17	64	29	16	20	8.8	2.6	4.9	4.2
9	38	40	22	462	31	26	14	19	7.6	6.2	4.5	4.6
10	24	19	17	101	28	25	12	17	6.0	9.5	8.2	9.7
11	17	16	16	46	27	23	12	15	5.5	3.2	11	9.6
12	15	14	30	31	21	21	120	15	16	2.3	5.4	2.3
13	13	12	180	25	130	20	34	14	46	2.2	3.9	2.0
14	11	10	36	22	459	242	20	13	42	1.9	3.2	2.3
15	9.3	10	25	21	553	60	15	12	13	4.6	3.3	2.0
16	8.6	10	21	196	99	33	15	11	9.0	3.9	3.4	4.2
17	8.1	10	23	46	49	29	14	11	6.2	3.1	3.5	3.5
18	10	21	26	30	37	28	13	10	4.8	3.0	3.4	2.4
19	15	32	63	25	33	86	12	9.0	4.9	3.4	5.1	3.3
20	12	16	25	23	28	55	12	8.6	4.7	7.1	2.7	4.5
21	9.4	43	21	22	29	32	11	7.5	10	9.6	3.8	6.0
22	9.5	36	19	20	37	27	89	7.1	5.4	21	4.1	6.2
23	10	18	18	20	24	22	289	6.9	3.9	2050	3.6	8.7
24	11	15	21	27	23	20	55	6.5	3.8	525	3.5	290
25	11	14	22	113	21	23	30	15	2.8	56	3.7	52
26	13	20	17	37	20	40	23	17	3.1	26	4.7	12
27	15	13	16	26	20	22	95	9.5	26	17	4.5	4.9
28	14	12	15	36	762	22	775	7.8	21	15	2.7	52
29	14	13	15	26	---	35	431	7.1	9.3	13	2.1	29
30	14	15	15	30	---	22	66	6.8	5.3	41	2.1	5.9
31	16	---	14	25	---	20	---	6.3	---	17	2.2	---
TOTAL	1087.9	707.9	1122	1560	2660	1633	2309	683.1	375.7	2880.5	189.9	538.5
MEAN	35.1	23.6	36.2	50.3	95.0	52.7	77.0	22.0	12.5	92.9	6.13	18.0
MAX	386	188	180	462	762	325	775	203	46	2050	25	290
MIN	8.1	8.4	14	12	17	20	11	6.3	2.8	1.9	2.1	1.9
CFSM	1.01	.68	1.05	1.45	2.75	1.52	2.22	.64	.36	2.69	.18	.52
IN.	1.17	.76	1.21	1.68	2.86	1.76	2.48	.73	.40	3.10	.20	.58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

MEAN	44.4	57.0	25.6	52.7	72.2	53.2	50.3	22.4	21.9	47.0	50.7	19.5
MAX	53.7	90.4	36.2	63.6	95.0	62.4	77.0	23.8	35.9	92.9	105	21.3
(WY)	1996	1996	1997	1996	1997	1996	1997	1995	1995	1997	1995	1995
MIN	35.1	23.6	16.2	44.2	54.1	44.4	11.2	21.5	12.5	9.24	6.13	18.0
(WY)	1997	1997	1995	1995	1996	1995	1995	1996	1997	1996	1997	1997

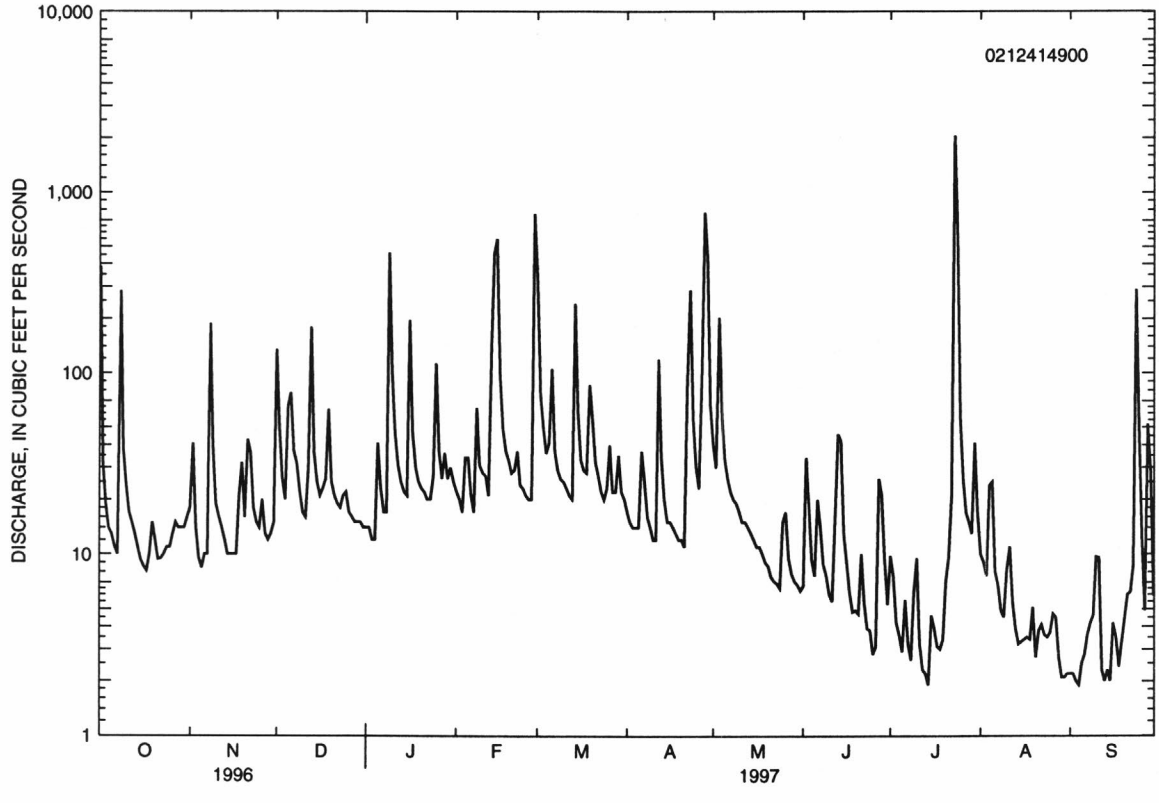
PEE DEE RIVER BASIN

0212414900 MALLARD CREEK BELOW STONY CREEK NEAR HARRISBURG, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1995 - 1997	
ANNUAL TOTAL	13604.0		15747.5			
ANNUAL MEAN	37.2		43.1		43.2	
HIGHEST ANNUAL MEAN					43.2	1996
LOWEST ANNUAL MEAN					43.1	1997
HIGHEST DAILY MEAN	560	Jan 27	2050	Jul 23	e2350	Aug 27 1995
LOWEST DAILY MEAN	3.2	Jul 23	1.9	Jul 14	1.9	Jul 14 1997
ANNUAL SEVEN-DAY MINIMUM	4.0	Jul 5	2.1	Aug 29	2.1	Aug 29 1997
INSTANTANEOUS PEAK FLOW			4970	Jul 23	6260*	Aug 27 1995
INSTANTANEOUS PEAK STAGE			16.45*	Jul 23	17.43*	Aug 27 1995
INSTANTANEOUS LOW FLOW			1.1	Jul 15	1.1	Jul 15 1997
ANNUAL RUNOFF (CFSM)	1.07		1.25		1.25	
ANNUAL RUNOFF (INCHES)	14.63		16.93		16.96	
10 PERCENT EXCEEDS	66		56		71	
50 PERCENT EXCEEDS	18		16		17	
90 PERCENT EXCEEDS	7.4		3.6		6.0	

e Estimated.

* See REMARKS.



PEE DEE RIVER BASIN

02125000 BIG BEAR CREEK NEAR RICHFIELD, NC

LOCATION.--Lat 35°20'02", long 80°20'09", Stanly County, Hydrologic Unit 03040105, on left bank 300 ft downstream of Little Creek, 400 ft upstream from bridge on Secondary Road 1134, and 10 mi southwest of Richfield.

DRAINAGE AREA.--55.6 mi^2.

PERIOD OF RECORD.--May 1954 to current year.

REVISED RECORDS.--WSP 1503: 1955, 1956(M). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 426.62 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. No flow occurs periodically. Minimum discharge for current water year also occurred Sept. 10.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1921 reached a stage of about 19 ft, information from State Highway Commission.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	5.2	145	22	47	513	22	104	5.3	2.5	26	.29
2	31	8.0	148	21	39	181	19	62	5.0	3.0	18	.26
3	17	12	65	20	33	120	18	124	4.6	2.8	16	.23
4	11	7.6	44	19	29	80	17	140	4.6	2.1	14	.20
5	7.8	6.4	37	22	31	63	16	66	4.3	1.9	13	.16
6	6.5	6.4	120	30	30	180	16	46	5.1	2.7	12	.13
7	6.1	6.9	70	22	26	85	17	34	6.0	2.2	11	.10
8	364	39	83	19	59	61	14	27	5.4	2.0	8.9	.07
9	110	77	53	648	66	50	12	24	4.6	1.8	9.9	.05
10	47	26	38	273	49	45	11	21	4.3	1.7	5.9	3.3
11	27	18	32	112	47	39	11	18	3.9	1.5	5.1	9.2
12	19	14	28	69	39	33	48	16	4.0	1.3	4.6	3.3
13	15	11	66	53	93	29	66	15	6.2	1.1	3.8	1.5
14	14	10	50	43	863	287	30	13	11	.87	3.1	.76
15	12	9.2	35	37	1060	149	21	12	7.4	.57	2.5	.46
16	10	8.5	28	395	262	70	18	10	5.5	.46	2.0	.36
17	9.1	8.0	27	143	131	52	16	9.2	4.5	.53	1.5	.32
18	8.8	8.4	28	75	86	44	14	8.5	4.0	.76	1.2	.29
19	8.1	15	113	53	68	122	13	7.6	3.5	.36	.89	.27
20	8.1	15	66	46	56	192	12	7.1	3.1	.48	.69	.25
21	7.9	14	44	41	50	91	11	6.5	5.8	.31	30	.23
22	7.0	48	35	36	58	64	88	6.0	6.0	.20	11	.19
23	6.4	27	31	35	43	47	291	5.7	3.9	3660	4.8	.16
24	6.1	20	29	32	35	37	122	5.4	3.1	1840	2.3	4.7
25	6.0	17	42	77	31	33	55	5.0	2.7	262	1.4	120
26	5.8	123	31	61	29	37	36	7.5	2.4	73	.93	23
27	5.6	62	28	44	32	32	121	16	2.7	39	.60	10
28	5.5	34	25	48	563	27	1630	7.6	2.9	22	.42	5.6
29	5.5	25	24	50	---	41	1010	6.3	2.5	18	.37	13
30	5.4	23	23	52	---	32	206	5.7	2.4	143	.34	14
31	5.2	---	22	55	---	27	---	5.4	---	62	.32	---
TOTAL	832.9	704.6	1610	2653	3955	2863	3981	841.5	136.7	6150.14	212.56	212.38
MEAN	26.9	23.5	51.9	85.6	141	92.4	133	27.1	4.56	198	6.86	7.08
MAX	364	123	148	648	1060	513	1630	140	11	3660	30	120
MIN	5.2	5.2	22	19	26	27	11	5.0	2.4	.20	.32	.05
CFSM	.48	.42	.93	1.54	2.54	1.66	2.39	.49	.08	3.57	.12	.13
IN.	.56	.47	1.08	1.78	2.65	1.92	2.66	.56	.09	4.11	.14	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1997, BY WATER YEAR (WY)

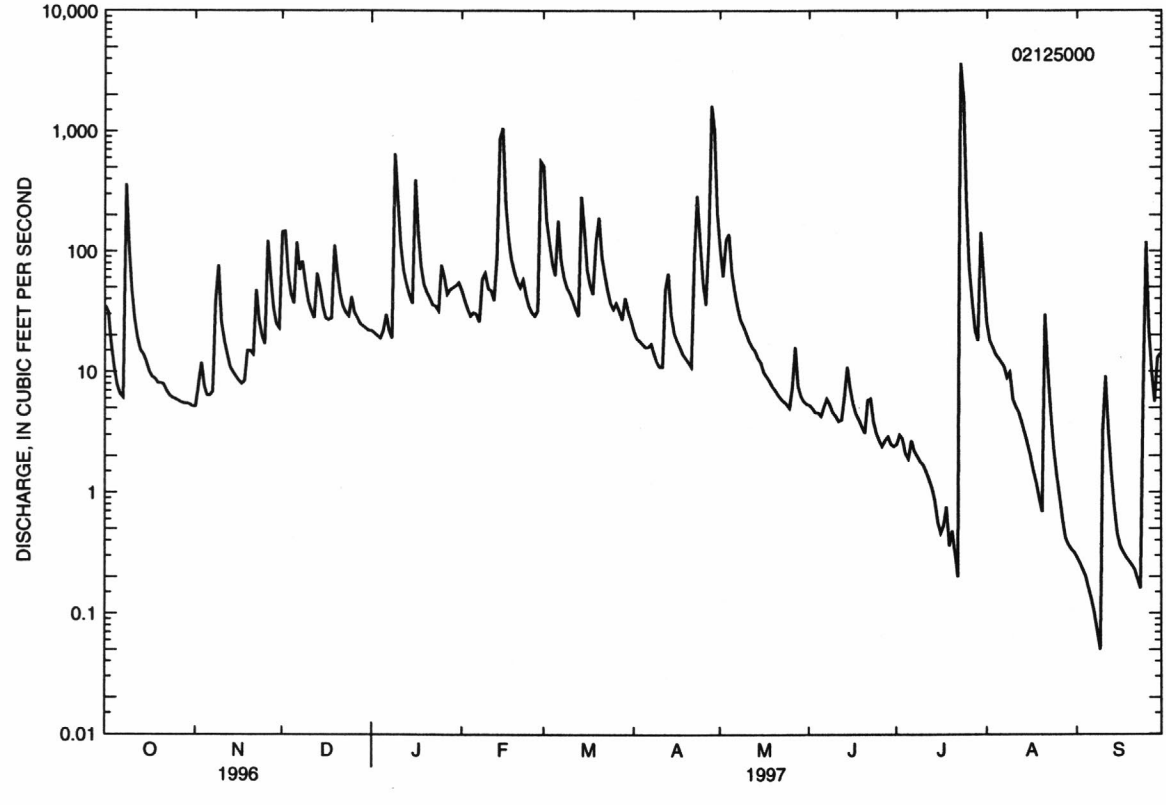
MEAN	40.7	31.9	55.4	107	136	125	74.2	38.5	29.9	33.5	25.3	19.6
MAX	355	212	186	293	284	345	247	234	140	220	223	125
(WY)	1991	1986	1977	1978	1984	1993	1958	1975	1957	1984	1967	1995
MIN	.006	.34	2.12	4.38	16.2	13.2	6.87	1.32	.24	.31	.002	0
(WY)	1962	1962	1966	1981	1986	1981	1967	1986	1986	1986	1980	1993

PEE DEE RIVER BASIN

02125000 BIG BEAR CREEK NEAR RICHFIELD, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1954 - 1997	
ANNUAL TOTAL	17875.45		24152.78			
ANNUAL MEAN	48.8		66.2		59.6	
HIGHEST ANNUAL MEAN					112	1984
LOWEST ANNUAL MEAN					27.3	1976
HIGHEST DAILY MEAN	1450	Jan 27	3660	Jul 23	5240	Oct 11 1990
LOWEST DAILY MEAN	.04	Jul 11	.05	Sep 9	0	Sep 12 1954
ANNUAL SEVEN-DAY MINIMUM	.26	Jul 6	.13	Sep 3	0	Sep 12 1954
INSTANTANEOUS PEAK FLOW			11400	Jul 23	11400	Jul 23 1997
INSTANTANEOUS PEAK STAGE			16.54	Jul 23	16.54	Jul 23 1997
INSTANTANEOUS LOW FLOW			.04*	Sep 9	0*	Sep 12 1954
ANNUAL RUNOFF (CFSM)	.88		1.19		1.07	
ANNUAL RUNOFF (INCHES)	11.96		16.16		14.57	
10 PERCENT EXCEEDS	109		112		120	
50 PERCENT EXCEEDS	19		17		12	
90 PERCENT EXCEEDS	1.3		1.0		.46	

* See REMARKS.



PEE DEE RIVER BASIN

02126000 ROCKY RIVER NEAR NORWOOD, NC

LOCATION.--Lat 35°08'54", long 80°10'33", Stanly County, Hydrologic Unit 03040105, on left bank 1,000 ft downstream of Lanes Creek, 1.5 mi upstream from bridge on Secondary Road 1935, 6 mi southwest of Norwood, and 11.2 mi upstream from mouth.

DRAINAGE AREA.--1,372 mi^2.

PERIOD OF RECORD.--October 1929 to current year.

REVISED RECORDS.--WSP 852: 1937. WSP 1052: 1936(M). WSP 1503: 1935, 1945. WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 212.91 ft above sea level (levels by U.S. Army Corps of Engineers). Satellite telemetry at station.

REMARKS.-- Records good except those for estimated daily discharges, which are fair. Maximum gage height for period of record, from floodmark.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1908 reached a stage of 35 ft, from information by local residents; discharge, 67,600 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e970	314	519	501	1100	14100	756	3810	208	171	e1230	108
2	e2340	337	e2120	484	898	6840	646	1740	255	181	e630	98
3	e790	462	e1480	477	747	2770	551	1590	212	187	e430	94
4	e410	529	e860	462	667	1960	509	3420	249	167	e330	96
5	e290	420	e650	441	665	1530	478	1790	245	142	e280	93
6	e240	374	e1240	494	743	2340	447	1160	224	148	e280	94
7	e215	352	e1600	563	673	2110	463	915	276	162	e250	94
8	6530	386	e2070	460	1130	1380	e624	764	318	159	e220	94
9	6240	e2280	e1370	e5930	2550	1130	e484	711	238	143	e200	93
10	1710	e1060	e880	e9480	1340	986	e411	652	206	135	e180	125
11	1080	e550	e680	e2830	1050	907	378	580	192	e190	e180	431
12	796	e410	e600	e1570	949	805	571	493	194	e220	e210	260
13	604	e350	e820	e1130	1100	710	1790	454	216	e180	e190	190
14	512	e320	1700	e930	e15900	3340	1180	430	565	e140	e170	146
15	476	e300	907	e810	e19000	5170	719	402	509	103	e170	122
16	451	e280	638	4390	e10500	1860	545	366	323	106	e160	113
17	427	e270	548	4550	e3500	1210	476	436	242	161	e160	138
18	411	e260	539	1820	e2180	992	430	593	206	186	e150	124
19	406	e300	1030	1200	e1740	945	411	1220	196	155	e150	120
20	391	e410	1580	983	1470	2710	373	405	185	131	e140	113
21	384	377	931	881	1320	1950	337	292	204	191	e170	108
22	369	2070	668	791	1880	1300	441	260	452	121	e220	103
23	359	1300	569	715	1760	1020	2710	234	260	21600	e160	98
24	346	710	535	668	1260	833	3710	223	186	48700	e130	102
25	333	519	581	3150	1090	719	1610	219	159	23600	e130	2780
26	328	538	627	3110	1010	898	991	237	146	2620	e128	1280
27	324	1070	778	1450	983	1270	866	268	145	1200	e128	518
28	314	671	776	1080	1880	892	23300	297	165	771	e126	308
29	314	488	618	1030	---	1110	18600	235	229	571	e124	361
30	329	425	555	1040	---	1580	12800	213	191	e1860	e140	575
31	319	---	529	1290	---	960	---	209	---	e3460	119	---
TOTAL	29008	18132	28998	54710	79085	66327	77607	24618	7396	107861	7285	8979
MEAN	936	604	935	1765	2824	2140	2587	794	247	3479	235	299
MAX	6530	2280	2120	9480	19000	14100	23300	3810	565	48700	1230	2780
MIN	215	260	519	441	665	710	337	209	145	103	119	93
CFSM	.68	.44	.68	1.29	2.06	1.56	1.89	.58	.18	2.54	.17	.22
IN.	.79	.49	.79	1.48	2.14	1.80	2.10	.67	.20	2.92	.20	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1997, BY WATER YEAR (WY)

MEAN	906	801	1296	2441	2783	2757	1756	838	692	788	763	653
MAX	6837	4763	4564	7263	7922	7674	7097	3998	3017	3479	2917	8262
(WY)	1991	1949	1933	1936	1960	1993	1936	1975	1982	1997	1967	1945
MIN	45.9	54.1	105	152	321	412	234	142	88.5	95.6	82.4	41.0
(WY)	1931	1942	1934	1934	1938	1981	1967	1981	1986	1986	1957	1954

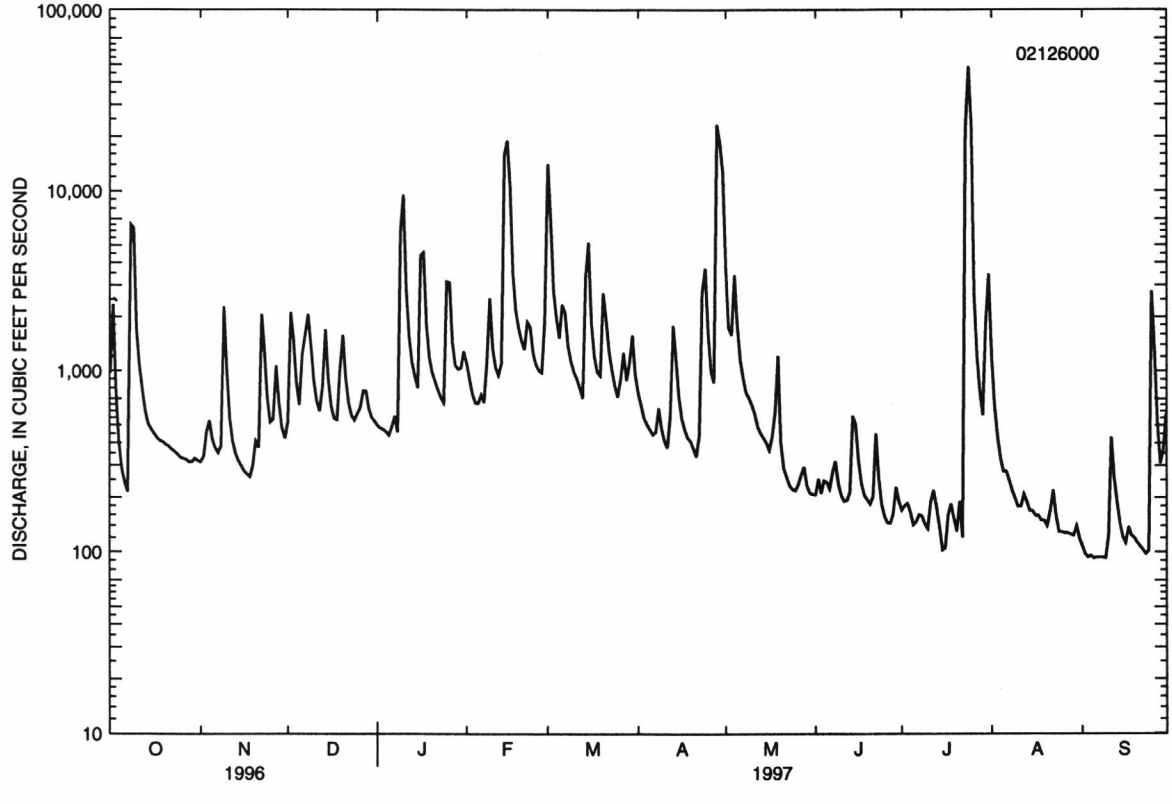
PEE DEE RIVER BASIN

02126000 ROCKY RIVER NEAR NORWOOD, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1930 - 1997	
ANNUAL TOTAL	431167		510006			
ANNUAL MEAN	1178		1397		1367	
HIGHEST ANNUAL MEAN					2492	1975
LOWEST ANNUAL MEAN					449	1951
HIGHEST DAILY MEAN	23400	Feb 3	48700	Jul 24	85600	Sep 18 1945
LOWEST DAILY MEAN	103	Jul 8	93	Sep 5	19	Oct 28 1931
ANNUAL SEVEN-DAY MINIMUM	112	Jul 6	94	Sep 3	26	Oct 7 1954
INSTANTANEOUS PEAK FLOW			58900	Jul 24	105000	Sep 18 1945
INSTANTANEOUS PEAK STAGE			31.70	Jul 24	46.37*	Sep 18 1945
INSTANTANEOUS LOW FLOW			88	Sep 9	17	Oct 8 1954
ANNUAL RUNOFF (CFSM)	.86		1.02		1.00	
ANNUAL RUNOFF (INCHES)	11.69		13.83		13.53	
10 PERCENT EXCEEDS	2130		2220		2980	
50 PERCENT EXCEEDS	558		509		409	
90 PERCENT EXCEEDS	179		143		105	

e Estimated.

* See REMARKS.



PEE DEE RIVER BASIN

02128000 LITTLE RIVER NEAR STAR, NC

LOCATION.--Lat 35°23'11", long 79°49'56", Montgomery County, Hydrologic Unit 03040104, on left bank 9 ft downstream of bridge on Secondary Road 1340, 50 ft upstream from Black Rock Branch, 0.2 mi upstream from Norfolk Southern Railway bridge, 0.3 mi downstream of West Fork Little River, and 3 mi west of Star.

DRAINAGE AREA.--106 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-54. April 1954 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 409.00 ft above sea level. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Minimum discharge for period of record also occurred Oct. 5, 1968, as a result of upstream withdrawals for water supply. Minimum discharge for the current water year also occurred July 16.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1945 reached a stage of about 20 ft, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222	35	182	62	118	398	75	251	99	24	e110	15
2	1120	54	357	61	99	184	68	216	118	61	42	15
3	172	73	132	61	87	146	64	330	97	43	38	14
4	90	51	87	60	80	129	64	453	72	27	35	12
5	59	41	75	58	79	111	62	197	58	22	32	11
6	49	41	262	65	77	182	62	149	57	19	31	10
7	46	41	155	65	73	152	63	127	77	20	29	9.6
8	743	86	171	56	93	112	60	113	69	16	28	9.2
9	338	147	121	584	142	101	56	108	55	14	27	8.9
10	137	76	86	550	100	97	53	99	48	12	27	46
11	89	52	75	200	89	93	52	92	44	11	e27	473
12	66	43	71	130	83	86	214	88	41	10	e31	95
13	57	40	68	104	88	81	331	85	192	10	28	38
14	52	38	78	88	909	254	123	78	135	9.1	24	26
15	49	37	67	79	1730	352	86	74	68	8.4	22	21
16	47	36	60	449	501	150	73	71	50	9.9	22	19
17	45	35	60	259	217	117	69	67	43	18	20	17
18	44	37	60	132	154	106	64	66	38	16	19	16
19	47	50	92	101	132	296	60	63	36	e13	18	15
20	55	52	119	90	119	587	61	61	33	e12	182	15
21	42	51	74	85	113	208	58	58	32	e16	307	13
22	39	173	61	79	139	151	333	57	43	e410	61	12
23	37	97	60	80	118	123	898	55	34	9800	e41	12
24	36	62	60	76	98	105	355	54	30	5690	e26	172
25	36	53	87	203	91	95	168	53	27	662	e22	942
26	36	61	92	188	89	99	123	88	25	186	e20	130
27	35	98	88	110	94	97	151	100	25	108	20	60
28	35	62	77	103	135	89	3450	72	27	79	19	43
29	37	51	71	133	---	125	3660	58	25	65	18	60
30	36	50	67	125	---	117	511	55	23	e190	17	59
31	35	---	64	149	---	89	---	53	---	e340	15	---
TOTAL	3931	1823	3179	4585	5847	5032	11467	3491	1721	17921.4	1358	2388.7
MEAN	127	60.8	103	148	209	162	382	113	57.4	578	43.8	79.6
MAX	1120	173	357	584	1730	587	3660	453	192	9800	307	942
MIN	35	35	60	56	73	81	52	53	23	8.4	15	8.9
CFSM	1.20	.57	.97	1.40	1.97	1.53	3.61	1.06	.54	5.45	.41	.75
IN.	1.38	.64	1.12	1.61	2.05	1.77	4.02	1.23	.60	6.29	.48	.84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1997, BY WATER YEAR (WY)

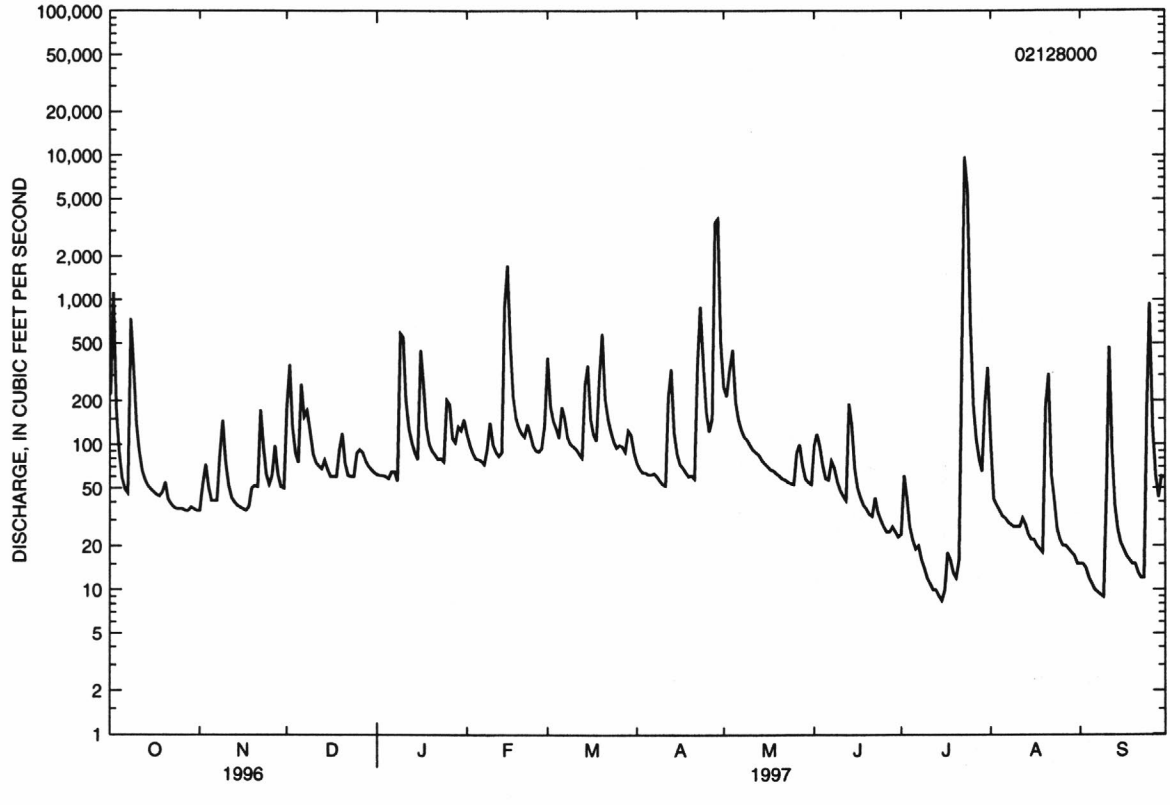
MEAN	71.0	67.6	97.7	166	214	218	174	101	74.2	71.2	53.7	47.1
MAX	337	366	361	463	467	516	430	296	273	578	249	261
(WY)	1991	1986	1973	1978	1960	1993	1958	1990	1972	1997	1985	1979
MIN	4.03	10.7	18.7	26.7	56.1	47.0	38.0	30.3	12.8	6.37	4.80	.76
(WY)	1987	1962	1966	1981	1986	1967	1967	1981	1967	1977	1983	1968

PEE DEE RIVER BASIN

02128000 LITTLE RIVER NEAR STAR, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1954 - 1997	
ANNUAL TOTAL	40311.0		62744.1			
ANNUAL MEAN	110		172		113	
HIGHEST ANNUAL MEAN					209	1975
LOWEST ANNUAL MEAN					42.4	1967
HIGHEST DAILY MEAN	4980	Sep 6	9800	Jul 23	9800	Jul 23 1997
LOWEST DAILY MEAN	4.3	Jul 11	8.4	Jul 15	.27	Oct 4 1968
ANNUAL SEVEN-DAY MINIMUM	5.4	Jul 5	10	Jul 10	.30	Sep 28 1968
INSTANTANEOUS PEAK FLOW			15400	Jul 23	15400	Jul 23 1997
INSTANTANEOUS PEAK STAGE			18.60	Jul 23	18.60	Jul 23 1997
INSTANTANEOUS LOW FLOW			7.8*	Jul 15	.24*	Oct 4 1968
ANNUAL RUNOFF (CFSM)	1.04		1.62		1.06	
ANNUAL RUNOFF (INCHES)	14.15		22.02		14.46	
10 PERCENT EXCEEDS	187		219		194	
50 PERCENT EXCEEDS	61		67		51	
90 PERCENT EXCEEDS	15		19		9.9	

e Estimated.
* See REMARKS.



PEE DEE RIVER BASIN

02129000 PEE DEE RIVER NEAR ROCKINGHAM, NC

LOCATION.--Lat 34°56'46", long 79°52'11", Richmond County, Hydrologic Unit 03040201, on left bank at bridge on U.S. Highway 74, 2.5 mi upstream from Falling Creek, 3.3 mi downstream of Blewett Falls hydroelectric plant, 6 mi west of Rockingham, and 192 mi upstream from mouth in Winyah Bay.

DRAINAGE AREA.--6,863 mi^2.

PERIOD OF RECORD.--August 1906 to January 1912, October 1927 to current year. August 1906 to January 1912 published as "Yadkin River near Pee Dee, NC".

REVISED RECORDS.--WSP 1203: 1928-37. WSP 1303: 1928-42 (monthly and yearly runoff), 1943-46 (adjusted monthly runoff). WSP 1503: 1906-12, 1928-32(m). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 120.68 ft above sea level (levels by U.S. Army Corps of Engineers). August 1906 to January 1912 nonrecording gage at site 3.3 mi upstream at different datum. Sept. 1927 to Sept. 30, 1931, water-stage recorder at present site at 121.68 ft. Telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records good except those below 1000 ft^3/s, which are poor. Flow regulated since 1928 by Blewett Falls Lake and five other reservoirs upstream. Prior to regulation, maximum discharge: 276,000 ft^3/s, Aug. 27, 1908; gage height: 31.28 ft, present site and datum, from records of State Highway Commission. Prior to regulation, minimum discharge: 2,210 ft^3/s, Sept. 3, 1907. Minimum discharge for period of record also occurred Dec. 2, 3, 1951; minimum daily discharge for period of record: 58 ft^3/s, Dec 2, 1951, a result of abnormally low flow during shutdown of Blewett Falls hydroelectric plant to produce steady flow for current-meter measurements at this gaging station. Minimum discharge from normal regulations: 96 ft^3/s, Oct. 25, 1943; minimum daily discharge: 120 ft^3/s, Oct. 8, 1961.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5350	9290	2950	2730	11000	19600	11700	58100	2670	3490	8300	563
2	15300	9330	7700	5660	10000	27200	11400	27500	2240	2850	1370	2690
3	13800	5490	11700	3710	10100	17200	9970	17900	4580	2180	1540	3890
4	10900	6310	15200	1110	9620	13100	9550	18700	7660	2100	3550	1980
5	8990	7780	13700	2700	9540	14100	6740	16500	7600	1240	3460	2290
6	694	4570	14900	4360	9530	14100	1830	13500	7830	925	1460	1480
7	5950	2540	17500	5480	9630	13200	1300	12400	7940	1710	2190	938
8	11800	5280	15300	6370	9670	13000	5440	12000	7810	4920	3310	1490
9	22800	1810	13000	6820	10000	12500	8010	12000	6940	5210	2180	1080
10	12800	1480	12300	25000	10600	12000	6520	11000	4960	4610	1120	2170
11	10900	3160	11200	16100	10500	12500	7410	8680	5250	3910	2410	5830
12	9870	3080	11600	11800	9900	11500	2390	6460	4880	2140	2120	3800
13	8340	2990	12100	9980	10100	11200	5480	8790	7180	836	3100	1740
14	1140	5010	14100	9950	25600	13300	9720	8220	6640	2640	3560	672
15	5920	5680	14700	7040	45700	19000	9740	8950	7620	3580	3790	2860
16	5570	2880	12500	7020	41800	15900	8020	5050	7830	3570	1580	3510
17	6410	711	11900	15300	22600	12900	9680	3420	7700	3930	654	3930
18	5640	4930	11100	12100	16400	11900	9630	5390	7490	3860	2850	3450
19	1190	6160	11100	7630	14100	12500	8350	4430	5280	2530	2640	3760
20	320	6150	12900	6670	12400	15900	5150	4740	3040	2320	3330	1520
21	4770	7340	13200	7970	12600	16400	6810	4220	5060	2550	3460	1120
22	3700	8090	10900	9690	13400	13900	7580	4830	2150	2480	3130	1670
23	6070	8070	10800	9570	12200	12600	9620	4600	2460	16200	1930	2490
24	5630	4820	10000	9590	11700	12200	18200	486	4030	80000	1190	3320
25	4150	5330	10900	9660	10700	12200	16700	1050	4310	89500	2420	6790
26	7150	7170	11100	14400	8800	12500	12100	2490	5270	29100	3070	6980
27	330	9400	12200	12300	7840	11800	12800	5300	3750	13700	2690	3940
28	5440	5120	11400	10600	9270	12900	39700	3030	4360	11100	2610	774
29	7670	4930	9960	10500	---	12500	66200	3940	2930	9840	1160	1260
30	8290	5240	9720	9690	---	11900	76200	3130	3800	6840	684	2820
31	8830	---	7730	10300	---	13800	---	3580	---	9780	564	---
TOTAL	225714	160141	365360	281800	395300	435300	413940	300386	161260	329641	77422	80807
MEAN	7281	5338	11790	9090	14120	14040	13800	9690	5375	10630	2497	2694
MAX	22800	9400	17500	25000	45700	27200	76200	58100	7940	89500	8300	6980
MIN	320	711	2950	1110	7840	11200	1300	486	2150	836	564	563
†	-1124	+252	-818	+1210	+433	+161	+1205	-815	-270	-206	-155	-416

PEE DEE RIVER BASIN

02129000 PEE DEE RIVER NEAR ROCKINGHAM, NC--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1997*, BY WATER YEAR (WY)

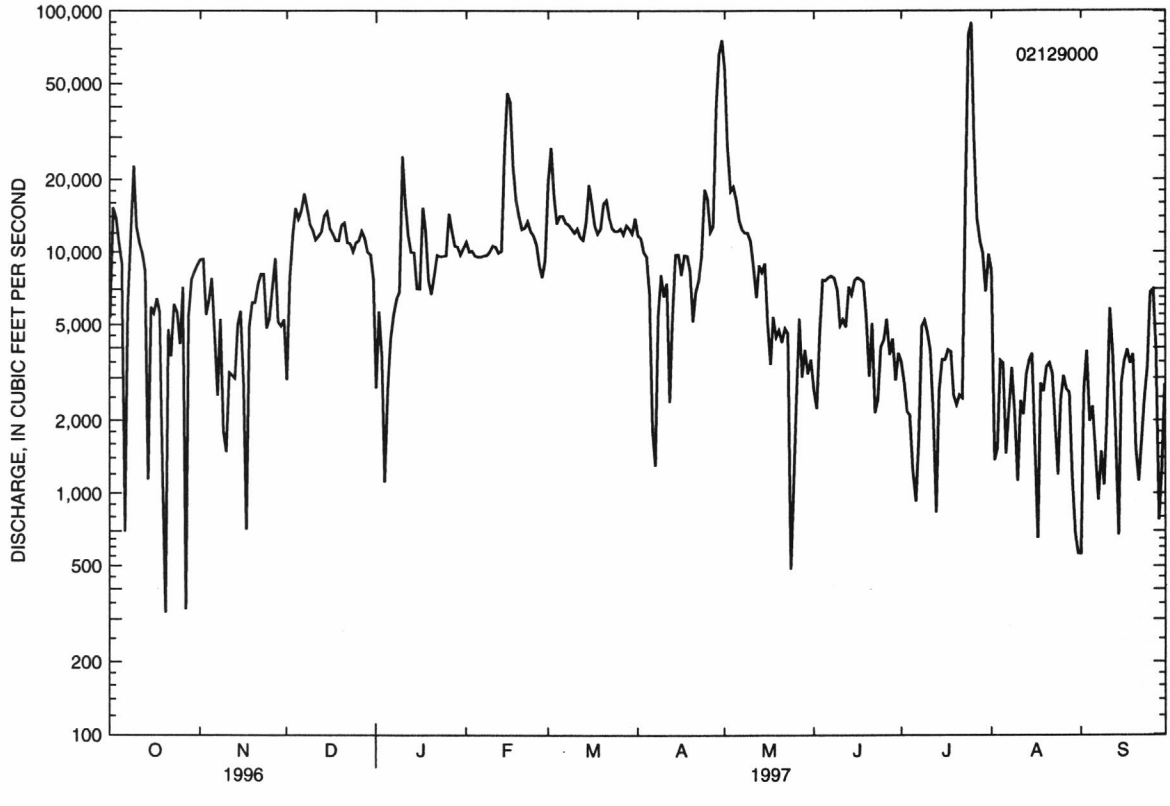
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6098	5667	7639	11020	12660	13610	10900	7321	6028	5410	5550	5463
MAX	25850	16120	20300	31270	36040	34480	31340	15630	15210	16790	19180	35690
(WY)	1991	1958	1933	1937	1960	1993	1936	1958	1972	1975	1928	1928
MIN	1293	1607	2640	2475	3704	4117	2692	2026	1853	1692	1456	1008
(WY)	1954	1954	1940	1956	1934	1981	1981	1986	1986	1986	1954	1954

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1928 - 1997*	
ANNUAL TOTAL	3132565		3227071			
ANNUAL MEAN	8559		8841	‡8789	8091	(UNADJUSTED)
HIGHEST ANNUAL MEAN					13000	1975
LOWEST ANNUAL MEAN					3944	1981
HIGHEST DAILY MEAN	63000	Jan 28	89500	Jul 25	242000	Sep 18 1945
LOWEST DAILY MEAN	221	Jul 14	320	Oct 20	58*	Dec 2 1951
ANNUAL SEVEN-DAY MINIMUM	1870	Jul 9	1570	Aug 27	185	Sep 28 1985
INSTANTANEOUS PEAK FLOW			104000	Jul 25	270000*	Sep 18 1945
INSTANTANEOUS PEAK STAGE			15.67	Jul 25	30.80*	Sep 18 1945
INSTANTANEOUS LOW FLOW			185	Jun 23	50*	Dec 2 1951
10 PERCENT EXCEEDS	14800		14500		14500	
50 PERCENT EXCEEDS	7540		7170		5700	
90 PERCENT EXCEEDS	2230		1730		1800	

† Change in contents, equivalent in cubic feet per second, in W. Kerr Scott Reservoir, provided by U.S. Army Corps of Engineers; High Rock Lake, Tuckertown Reservoir, and Badin Lake, provided by Yadkin Inc.; Lake Tillery and Blewett Falls Lake, provided by Carolina Power and Light Co.

‡ Adjusted for change in contents.

* Regulated period only (1928-1997). See REMARKS.



02132320 BIG SHOE HEEL CREEK NEAR LAURINBURG, NC

LOCATION.--Lat 34°45'01", long 79°23'12", Scotland County, Hydrologic Unit 03040204, at downstream side of bridge near center of span on U.S. Highway 74, 2.5 mi downstream of Jordan Creek, and 4.5 mi southeast of Laurinburg.

DRAINAGE AREA.-- 83.3 mi^2.

PERIOD OF RECORD.--Occasional discharge measurements, water years 1949-54, 1959, 1962, 1968-69. June 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 170 ft above sea level.

REMARKS.--No estimated daily discharges. Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	90	117	113	146	215	197	227	35	34	114	30
2	99	102	130	114	133	231	169	204	47	50	105	39
3	108	118	145	117	126	263	129	159	49	58	78	39
4	114	134	162	119	120	272	115	133	46	55	62	40
5	102	151	163	118	123	252	108	132	44	46	55	39
6	89	162	161	115	131	214	104	127	53	45	50	36
7	85	155	154	112	113	187	102	104	84	42	45	34
8	165	145	159	109	112	169	95	84	99	36	41	31
9	318	140	160	131	117	144	89	74	92	32	38	30
10	459	132	159	155	122	133	85	68	72	31	37	30
11	435	132	150	184	123	128	83	63	62	33	53	50
12	343	130	139	221	119	118	97	60	57	42	61	58
13	256	122	131	240	121	111	125	53	53	35	52	56
14	172	113	125	205	145	138	149	49	48	28	44	54
15	132	107	118	171	199	172	165	46	43	24	40	58
16	110	103	113	165	315	200	152	44	41	22	35	60
17	104	100	110	166	370	220	127	42	39	34	32	56
18	110	99	109	178	332	228	108	40	40	35	31	50
19	134	105	127	193	277	198	98	38	41	33	32	45
20	148	109	138	178	205	175	93	41	41	33	29	42
21	152	113	156	148	168	168	88	45	38	36	30	36
22	142	126	165	114	160	166	89	43	36	31	28	32
23	116	131	156	105	158	148	114	37	37	28	26	31
24	105	140	140	103	162	136	134	33	38	82	24	31
25	101	144	131	107	158	126	146	33	37	124	23	37
26	98	140	124	114	148	140	139	39	34	156	22	52
27	96	132	121	124	142	182	120	54	32	189	22	55
28	94	125	119	131	151	265	138	54	37	205	21	50
29	94	121	119	138	---	325	196	47	36	186	21	49
30	94	116	117	142	---	273	245	40	34	140	22	46
31	92	---	115	143	---	221	---	37	---	115	29	---
TOTAL	4763	3737	4233	4473	4696	5918	3799	2250	1445	2040	1302	1296
MEAN	154	125	137	144	168	191	127	72.6	48.2	65.8	42.0	43.2
MAX	459	162	165	240	370	325	245	227	99	205	114	60
MIN	85	90	109	103	112	111	83	33	32	22	21	30
CFSM	1.84	1.50	1.64	1.73	2.01	2.29	1.52	.87	.58	.79	.50	.52
IN.	2.13	1.67	1.89	2.00	2.10	2.64	1.70	1.00	.65	.91	.58	.58

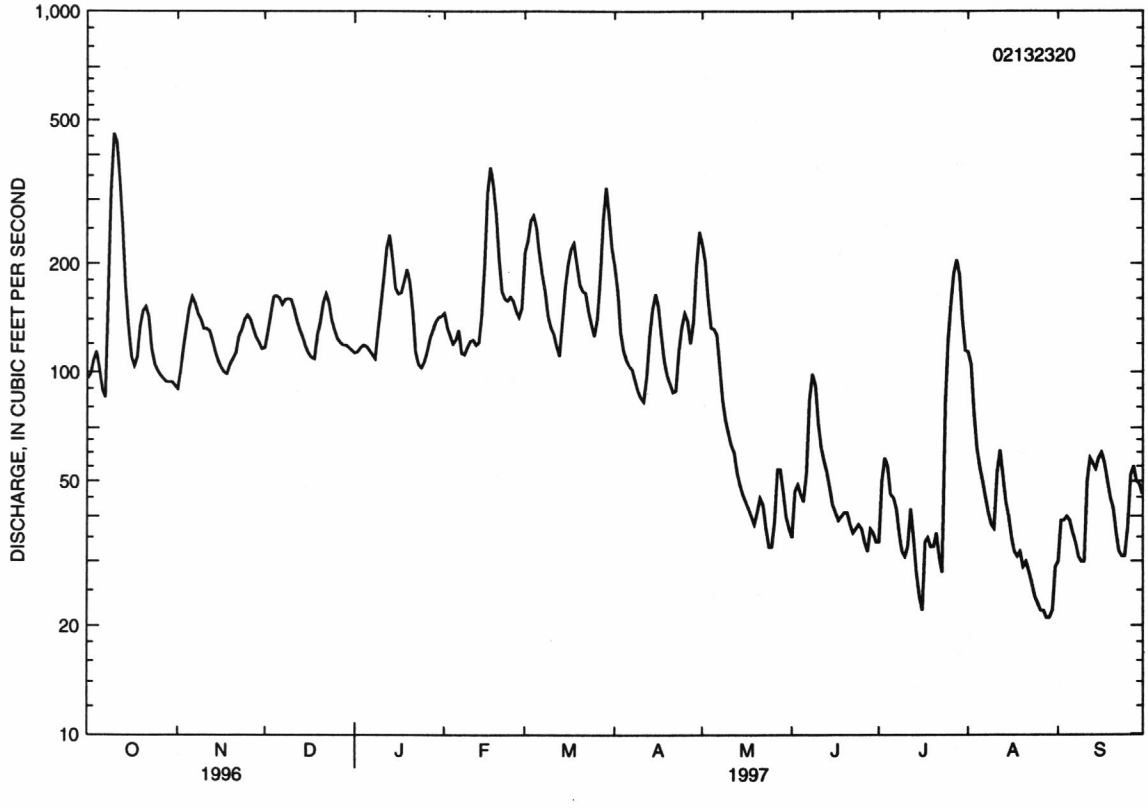
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1997, BY WATER YEAR (WY)

MEAN	80.3	88.0	95.5	129	118	142	103	67.9	66.0	65.5	70.2	67.1
MAX	154	143	141	223	212	204	179	157	122	175	171	161
(WY)	1997	1996	1990	1993	1995	1995	1993	1989	1995	1989	1991	1996
MIN	41.3	54.1	50.2	69.3	62.0	72.0	61.9	38.5	28.3	15.6	26.8	20.3
(WY)	1988	1995	1989	1989	1989	1988	1995	1995	1990	1990	1988	1990

PEE DEE RIVER BASIN

02132320 BIG SHOE HEEL CREEK NEAR LAURINBURG, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1987 - 1997	
ANNUAL TOTAL	39414		39952			
ANNUAL MEAN	108		109		91.2	
HIGHEST ANNUAL MEAN					109	1997
LOWEST ANNUAL MEAN					63.6	1988
HIGHEST DAILY MEAN	490	Sep 19	459	Oct 10	508	May 4 1989
LOWEST DAILY MEAN	22	Jul 9	21	Aug 28	4.7	Aug 1 1990
ANNUAL SEVEN-DAY MINIMUM	25	Jul 6	22	Aug 24	5.9	Jul 30 1990
INSTANTANEOUS PEAK FLOW			484	Oct 10	606	May 3 1989
INSTANTANEOUS PEAK STAGE			4.31	Oct 10	4.63	May 3 1989
INSTANTANEOUS LOW FLOW			20	Aug 29	3.9	Aug 1 1990
ANNUAL RUNOFF (CFSM)	1.29		1.31		1.09	
ANNUAL RUNOFF (INCHES)	17.60		17.84		14.87	
10 PERCENT EXCEEDS	182		188		165	
50 PERCENT EXCEEDS	97		110		72	
90 PERCENT EXCEEDS	35		34		30	



PEE DEE RIVER BASIN

02133500 DROWNING CREEK NEAR HOFFMAN, NC

LOCATION.--Lat 35°03'38", long 79°29'39", Richmond County, Hydrologic Unit 03040203, on right bank 10 ft downstream of bridge on U.S. Highway 1, 1 mi upstream from Seaboard Coast Line Railroad bridge, 0.8 mi downstream of Deep Creek, and 4 mi northeast of Hoffman.

DRAINAGE AREA.--183 mi^2.

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 972: 1941(M). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 270 ft above sea level, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Since 1984, the town of Southern Pines has withdrawn water for public supply 0.5 mi upstream from the gage. These withdrawals cause some diurnal fluctuation at low to medium flow and may affect yearly minimums. A daily average of 3.8 ft^3/s was diverted during the year. Minimum discharge for period of record also occurred Aug. 18, 1988.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	263	222	263	270	372	363	266	553	119	74	727	96
2	375	246	330	276	353	447	231	454	166	175	568	96
3	495	325	406	284	316	480	206	366	222	243	385	85
4	499	414	392	281	286	439	196	331	215	169	259	74
5	407	388	351	269	274	364	187	325	163	96	185	65
6	298	317	326	270	267	350	184	306	145	88	158	60
7	255	272	348	254	258	382	209	257	186	106	142	56
8	404	271	375	246	266	358	218	216	205	102	130	55
9	882	325	395	291	314	325	198	215	165	99	120	55
10	1080	412	370	414	348	297	175	220	133	102	118	65
11	779	417	337	510	327	280	166	197	112	236	150	145
12	536	365	299	510	288	270	187	174	101	221	152	197
13	433	299	279	441	277	261	273	171	101	101	126	139
14	378	270	269	346	378	272	341	165	101	78	111	102
15	342	256	258	303	604	333	316	153	105	68	102	101
16	321	246	254	317	788	424	242	141	104	103	92	107
17	304	239	250	394	766	437	199	127	91	174	86	95
18	298	241	250	449	596	366	182	118	81	135	84	86
19	310	263	281	426	474	309	170	115	83	89	83	82
20	339	302	329	357	412	323	163	108	79	76	82	78
21	343	314	334	314	380	360	167	123	67	99	111	74
22	316	328	299	298	387	346	176	118	61	98	148	72
23	281	386	266	290	424	311	255	104	74	109	118	70
24	265	408	259	285	425	273	365	94	68	431	91	83
25	254	366	266	300	387	252	396	95	61	1120	85	208
26	240	315	276	349	336	261	345	134	61	1340	81	332
27	232	291	302	411	318	294	259	157	59	696	77	312
28	233	266	332	397	315	302	316	142	82	454	73	201
29	233	247	333	331	---	296	478	119	95	323	70	175
30	232	242	315	311	---	282	602	109	78	288	67	154
31	228	---	283	339	---	280	---	97	---	457	68	---
TOTAL	11855	9253	9627	10533	10936	10337	7668	6004	3383	7950	4849	3520
MEAN	382	308	311	340	391	333	256	194	113	256	156	117
MAX	1080	417	406	510	788	480	602	553	222	1340	727	332
MIN	228	222	250	246	258	252	163	94	59	68	67	55
CFSM	2.09	1.69	1.70	1.86	2.13	1.82	1.40	1.06	.62	1.40	.85	.64
IN.	2.41	1.88	1.96	2.14	2.22	2.10	1.56	1.22	.69	1.62	.99	.72

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

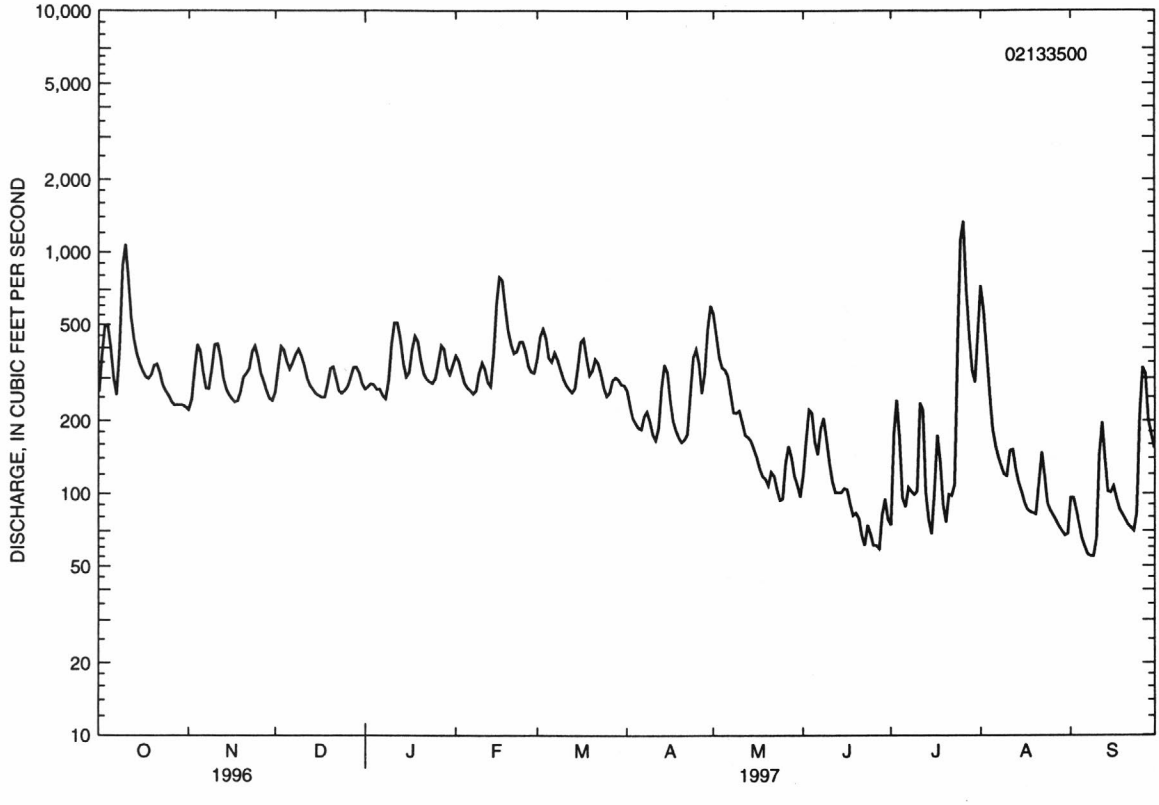
MEAN	198	232	264	323	356	378	323	228	173	198	189	181
MAX	595	499	530	501	687	619	842	465	421	624	497	932
(WY)	1965	1980	1973	1978	1960	1952	1973	1958	1976	1944	1985	1945
MIN	48.5	93.4	135	151	147	173	111	84.5	34.5	32.9	43.4	28.8
(WY)	1941	1942	1989	1942	1992	1981	1986	1988	1988	1986	1968	1968

PEE DEE RIVER BASIN

02133500 DROWNING CREEK NEAR HOFFMAN, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1940 - 1997	
ANNUAL TOTAL	100188		95915			
ANNUAL MEAN	274		263		253	
HIGHEST ANNUAL MEAN					397	1984
LOWEST ANNUAL MEAN					129	1992
HIGHEST DAILY MEAN	1690	Sep 7	1340	Jul 26	8530	Sep 18 1945
LOWEST DAILY MEAN	30	Jun 30	55	Sep 8	20	Jul 9 1988
ANNUAL SEVEN-DAY MINIMUM	35	Jul 5	61	Sep 4	24	Jul 4 1988
INSTANTANEOUS PEAK FLOW			1540	Jul 26	10900	Sep 18 1945
INSTANTANEOUS PEAK STAGE			6.85	Jul 26	10.29	Sep 18 1945
INSTANTANEOUS LOW FLOW			51	Jun 27	19*	Aug 11 1988
ANNUAL RUNOFF (CFSM)	1.50		1.44		1.38	
ANNUAL RUNOFF (INCHES)	20.37		19.50		18.79	
10 PERCENT EXCEEDS	438		420		477	
50 PERCENT EXCEEDS	266		263		205	
90 PERCENT EXCEEDS	66		83		80	

* See REMARKS.



PEE DEE RIVER BASIN

02133624 LUMBER RIVER NEAR MAXTON, NC

LOCATION.--Lat 34°46'22", long 79°19'55", Robeson County, Hydrologic Unit 03040203, at downstream side of bridge, near right center of span, on State Highway 71, 2.6 mi north of Maxton, and 7.5 mi upstream from Gum Swamp.

DRAINAGE AREA.--365 mi^2.

PERIOD OF RECORD.--Occasional discharge measurements, water years 1974, 1980-85. June 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 180 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Minimum discharge for the current water year also occurred Sept. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	451	437	545	545	634	771	551	747	262	194	654	170
2	458	460	544	551	611	746	519	828	254	202	629	187
3	462	487	555	535	591	747	496	884	266	219	743	201
4	483	521	606	517	589	736	477	841	293	258	869	207
5	548	571	617	499	584	759	453	748	320	284	772	191
6	626	580	678	489	553	783	424	666	358	296	599	174
7	678	611	703	483	510	749	405	579	382	241	463	163
8	834	652	706	475	490	687	393	523	364	208	363	154
9	833	654	677	517	483	641	392	486	362	207	301	148
10	901	601	651	565	483	636	392	451	359	204	277	147
11	1060	586	643	637	490	625	390	413	347	204	266	172
12	1360	584	637	721	505	584	396	393	307	234	265	210
13	1330	595	626	756	545	541	410	378	264	283	276	254
14	1090	625	594	801	628	564	434	355	241	326	280	292
15	887	611	559	789	719	619	473	334	236	301	264	306
16	768	569	521	768	830	634	491	321	226	219	242	286
17	705	516	487	700	952	616	515	307	221	223	228	254
18	658	478	471	667	1110	606	511	290	218	237	211	238
19	686	464	501	661	1200	651	463	271	210	279	201	220
20	670	456	514	662	1120	697	405	255	201	304	196	206
21	687	465	545	692	978	691	370	249	198	260	192	196
22	658	497	570	675	863	652	350	242	189	219	195	186
23	621	532	568	632	771	612	362	246	184	229	220	176
24	601	597	577	575	732	604	383	243	184	300	235	172
25	585	616	562	547	711	588	426	233	190	380	225	183
26	558	628	525	538	701	610	475	233	181	675	198	229
27	523	647	493	552	703	664	538	265	171	1310	186	284
28	494	641	480	566	704	671	634	312	173	1710	179	338
29	474	613	483	569	---	632	688	335	186	1440	174	385
30	456	564	496	619	---	595	698	324	199	1000	170	434
31	443	---	523	648	---	575	---	287	---	784	176	---
TOTAL	21588	16858	17657	18951	19790	20286	13914	13039	7546	13230	10249	6763
MEAN	696	562	570	611	707	654	464	421	252	427	331	225
MAX	1360	654	706	801	1200	783	698	884	382	1710	869	434
MIN	443	437	471	475	483	541	350	233	171	194	170	147
CFSM	1.91	1.54	1.56	1.67	1.94	1.79	1.27	1.15	.69	1.17	.91	.62
IN.	2.20	1.72	1.80	1.93	2.02	2.07	1.42	1.33	.77	1.35	1.04	.69

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1997, BY WATER YEAR (WY)

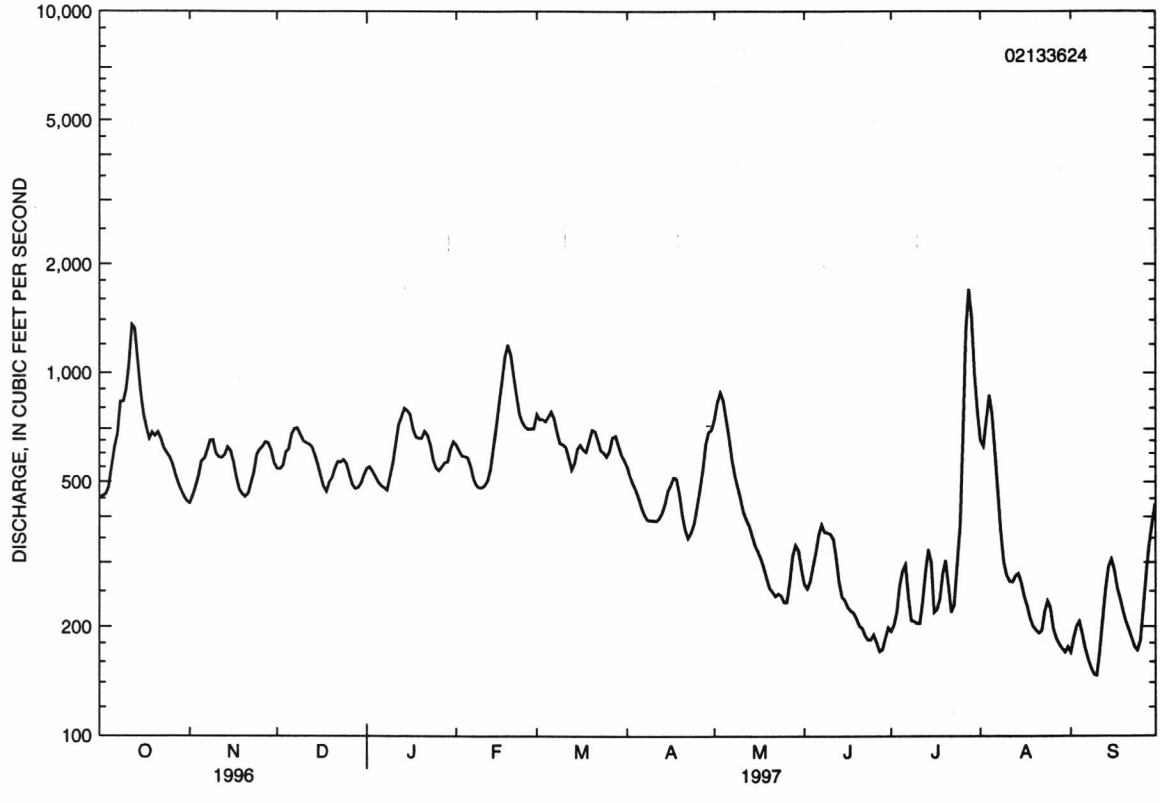
MEAN	386	435	453	578	561	646	545	362	300	321	309	334
MAX	696	661	650	801	998	905	1086	769	575	690	577	915
(WY)	1997	1996	1990	1993	1995	1995	1993	1989	1995	1995	1989	1996
MIN	184	267	282	364	300	363	303	202	135	147	154	130
(WY)	1988	1992	1992	1992	1992	1992	1992	1994	1988	1990	1988	1990

PEE DEE RIVER BASIN

02133624 LUMBER RIVER NEAR MAXTON, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1987 - 1997	
ANNUAL TOTAL	185746		179871			
ANNUAL MEAN	508		493		436	
HIGHEST ANNUAL MEAN					539	1989
LOWEST ANNUAL MEAN					283	1992
HIGHEST DAILY MEAN	2650	Sep 10	1710	Jul 28	2650	Sep 10 1996
LOWEST DAILY MEAN	99	Jul 9	147	Sep 10	86	Aug 6 1990
ANNUAL SEVEN-DAY MINIMUM	108	Jul 6	164	Sep 5	91	Jul 31 1990
INSTANTANEOUS PEAK FLOW			1750	Jul 28	2800	Sep 10 1996
INSTANTANEOUS PEAK STAGE			12.12	Jul 28	13.02	Sep 10 1996
INSTANTANEOUS LOW FLOW			144*	Sep 9	83	Aug 6 1990
ANNUAL RUNOFF (CFSM)	1.39		1.35		1.20	
ANNUAL RUNOFF (INCHES)	18.93		18.33		16.25	
10 PERCENT EXCEEDS	709		747		741	
50 PERCENT EXCEEDS	511		496		387	
90 PERCENT EXCEEDS	181		201		159	

* See REMARKS.



PEE DEE RIVER BASIN

02134480 BIG SWAMP NEAR TARHEEL, NC

LOCATION.--Lat 34°42'37", long 78°50'14", Robeson County, Hydrologic Unit 03040203, on left bank at downstream side of bridge on Secondary Road 1004, and 2.8 mi southwest of Tarheel.

DRAINAGE AREA.--229 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-54, 1957-58, 1962-68. October 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 105 ft above sea level, from topographic map.

REMARKS.--Records fair except those below 4.0 ft^3/s, which are poor. Minimum discharge for period of record, no flow, also occurred Sept. 1-4, 1993.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	455	306	331	339	385	505	373	416	19	3.4	210	3.3
2	437	295	355	340	399	626	367	425	24	7.0	263	4.0
3	427	288	364	338	409	698	351	409	22	8.8	282	5.0
4	423	282	370	335	408	655	328	398	19	13	257	5.7
5	418	280	386	333	400	598	302	371	18	9.0	213	7.2
6	412	293	407	331	387	548	277	345	20	8.9	170	9.5
7	403	323	412	327	374	501	253	318	53	11	139	5.9
8	666	352	416	321	373	467	230	290	81	8.0	109	3.3
9	1490	376	415	335	382	436	208	256	83	6.4	69	2.5
10	2380	378	417	364	385	408	188	220	67	5.4	41	1.8
11	2650	378	418	403	392	382	169	186	49	12	26	2.6
12	2120	378	407	451	394	360	161	158	35	14	17	3.5
13	1440	383	394	474	391	340	168	134	26	7.7	12	3.1
14	1070	383	378	467	426	360	178	111	19	4.2	8.4	4.3
15	858	375	363	447	546	419	194	90	15	2.6	5.9	8.6
16	725	362	351	446	744	454	205	72	12	2.1	4.8	8.2
17	637	347	340	455	866	534	199	59	9.3	4.7	10	8.0
18	576	334	330	459	834	622	181	48	8.0	7.0	7.9	7.7
19	536	328	351	456	772	619	159	42	8.9	9.5	6.1	6.9
20	497	319	377	443	699	587	140	35	9.5	27	4.6	6.0
21	467	311	408	428	640	550	125	29	8.0	64	4.8	5.5
22	445	324	441	411	602	511	116	22	6.4	89	3.8	5.0
23	431	335	454	398	558	480	131	18	5.3	94	2.8	5.7
24	423	342	445	386	520	452	151	16	4.7	68	2.3	7.0
25	414	352	426	388	499	422	171	14	4.1	78	2.8	10
26	402	365	406	380	481	394	191	19	3.8	92	3.0	12
27	386	363	390	373	461	372	201	22	4.5	84	3.0	13
28	370	352	375	370	444	359	245	22	3.5	53	3.1	14
29	355	340	363	370	---	356	298	22	3.3	46	3.4	15
30	340	329	354	376	---	360	360	20	3.4	112	3.3	15
31	323	---	345	381	---	369	---	17	---	157	3.7	---
TOTAL	22976	10173	11989	12125	14171	14744	6620	4604	644.7	1108.7	1891.7	209.3
MEAN	741	339	387	391	506	476	221	149	21.5	35.8	61.0	6.98
MAX	2650	383	454	474	866	698	373	425	83	157	282	15
MIN	323	280	330	321	373	340	116	14	3.3	2.1	2.3	1.8
CFSM	3.24	1.48	1.69	1.71	2.21	2.08	.96	.65	.09	.16	.27	.03
IN.	3.73	1.65	1.95	1.97	2.30	2.40	1.08	.75	.10	.18	.31	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1997, BY WATER YEAR (WY)

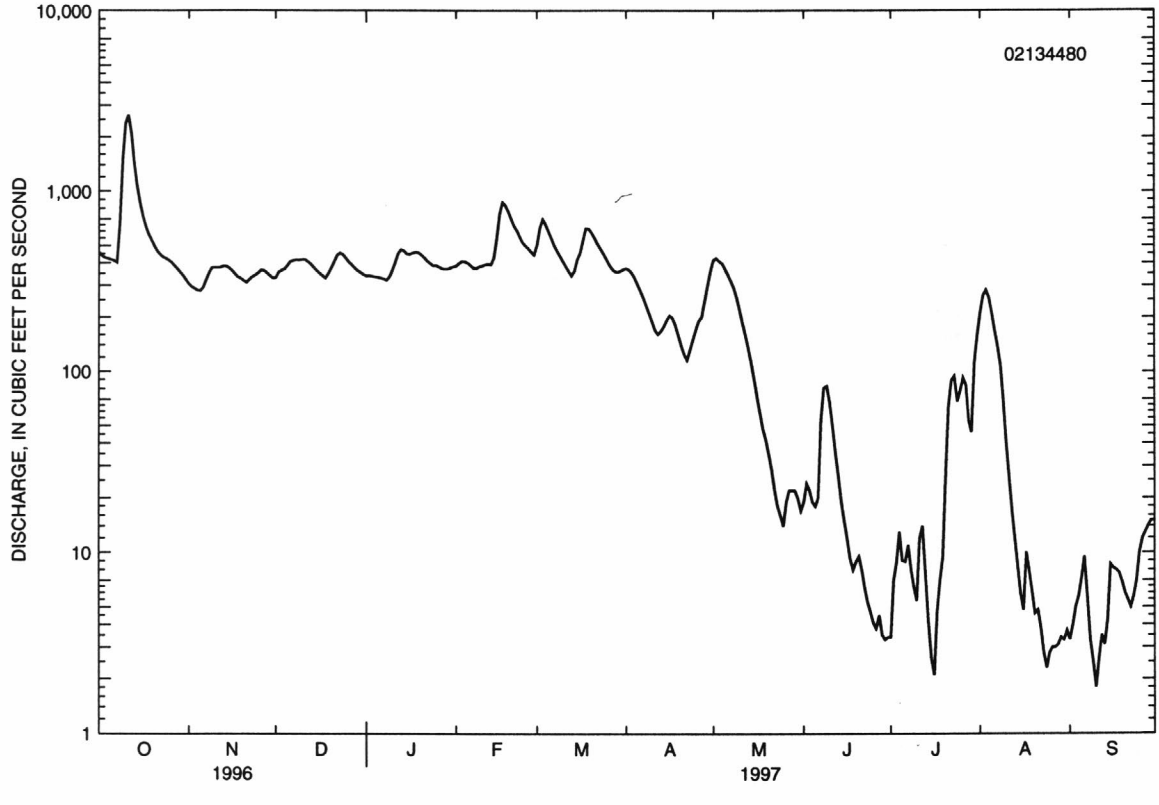
MEAN	159	170	235	410	329	406	262	109	103	105	148	179
MAX	741	382	396	1001	858	856	571	358	475	407	358	836
(WY)	1997	1993	1990	1993	1995	1987	1993	1989	1995	1995	1991	1996
MIN	5.05	33.5	68.8	92.9	127	138	66.8	17.1	15.0	18.1	17.6	6.98
(WY)	1988	1988	1988	1986	1986	1988	1986	1986	1986	1986	1987	1997

PEE DEE RIVER BASIN

02134480 BIG SWAMP NEAR TARHEEL, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1986 - 1997	
ANNUAL TOTAL	124058.9		101256.4			
ANNUAL MEAN	339		277		217	
HIGHEST ANNUAL MEAN					343	1995
LOWEST ANNUAL MEAN					101	1986
HIGHEST DAILY MEAN	2650	Oct 11	2650	Oct 11	2810	Jan 10 1993
LOWEST DAILY MEAN	2.2	Jul 9	1.8	Sep 10	0	Aug 31 1993
ANNUAL SEVEN-DAY MINIMUM	5.6	Jul 5	2.9	Aug 23	.01	Aug 29 1993
INSTANTANEOUS PEAK FLOW			2680	Oct 11	2840	Jan 9 1993
INSTANTANEOUS PEAK STAGE			12.81	Oct 11	13.34	Jan 9 1993
INSTANTANEOUS LOW FLOW			1.4	Sep 10	0*	Aug 31 1993
ANNUAL RUNOFF (CFSM)	1.48		1.21		.95	
ANNUAL RUNOFF (INCHES)	20.15		16.45		12.90	
10 PERCENT EXCEEDS	541		498		481	
50 PERCENT EXCEEDS	285		323		136	
90 PERCENT EXCEEDS	78		5.2		17	

* See REMARKS.



PEE DEE RIVER BASIN

02134500 LUMBER RIVER AT BOARDMAN, NC

LOCATION.--Lat 34°26'32", long 78°57'38", Robeson County, Hydrologic Unit 03040203, on right bank 50 ft downstream of bridge on U.S. Highway 74, 1 mi downstream of Seaboard Coast Line Railroad bridge at Boardman, 1.5 mi downstream of Big Swamp, and 40.5 mi upstream from mouth.

DRAINAGE AREA.--1,228 mi^2.

PERIOD OF RECORD.--September 1929 to current year.

REVISED RECORDS.--WSP 1303: 1932(M). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 72.05 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Sept. 30, 1936, nonrecording gage at site 100 ft downstream at same datum. Sept. 30, 1936, to June 8, 1943, nonrecording gage at present site and datum. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of September 1928 reached a stage of 11.8 ft, from floodmark witnessed by local resident; discharge, 25,000 ft^3/s. Flood of July 22, 1901, the highest during the period 1896-1913, reached a stage of 10.8 ft, from observations by Butters Lumber Co.; discharge, 14,800 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3170	1750	1750	2190	2140	2840	1800	e1600	369	247	851	205
2	3170	1670	1840	2120	2120	2810	1770	e1700	388	282	1240	201
3	3240	1600	1900	2040	2140	3050	1750	e1800	407	293	1480	199
4	3120	1530	1990	1970	2170	3440	1720	e1600	438	286	1540	197
5	2910	1470	2060	1930	2180	3600	e1660	e1500	436	273	1420	192
6	2720	1410	2110	1890	2150	3560	e1600	e1400	451	281	1340	189
7	2550	1360	2160	1880	2090	3410	e1500	e1300	497	298	1180	193
8	3380	1360	2310	1860	2050	3250	e1400	e1250	507	e320	1100	198
9	4740	1410	2360	1970	2030	3070	e1300	e1200	518	e310	1070	199
10	6210	1450	2440	2130	2010	2880	e1250	e1100	531	e320	1080	192
11	6980	1490	2520	2250	2020	2690	e1200	e1000	551	344	1050	192
12	7610	1550	2550	2430	2030	2490	1180	e950	573	313	943	189
13	7520	1590	2550	2570	2030	2300	1170	e900	587	285	812	244
14	6990	1630	2500	2630	2200	2250	1120	e850	579	273	670	254
15	6360	1650	2430	2650	2560	2460	1080	e800	558	259	504	241
16	5820	1650	2340	2750	3290	2620	e1020	e750	519	252	443	290
17	5380	1640	2270	2900	3600	2850	e1040	e700	477	284	375	384
18	4960	1620	2190	3040	3970	3140	e1050	e650	433	391	341	450
19	4570	1640	2280	3130	4150	3310	e1020	e600	389	558	330	462
20	4130	1650	2360	3110	4190	3350	e900	e580	367	572	320	448
21	3730	1650	2420	3020	4150	3220	e800	e560	350	484	305	425
22	3350	1670	2520	2890	4140	3110	e750	e540	322	451	295	382
23	3000	1680	2560	2750	4050	3020	e700	e500	303	548	271	329
24	2700	1680	2560	2620	3920	2920	e780	464	289	572	250	290
25	2480	1690	2540	2530	3730	2810	e800	433	279	527	237	397
26	2300	1710	2480	2450	3480	2670	e900	416	264	495	228	405
27	2160	1690	2430	2390	3220	2490	e1000	425	248	471	226	413
28	2060	1680	2390	2350	2970	2300	e1050	421	244	451	227	415
29	1980	1670	2360	2280	---	2130	e1200	403	248	449	227	408
30	1900	1690	2310	2240	---	1980	e1400	383	250	478	220	409
31	1820	---	2250	2190	---	1880	---	367	---	604	212	---
TOTAL	123010	47930	71730	75150	80780	87900	35910	27142	12372	11971	20787	8992
MEAN	3968	1598	2314	2424	2885	2835	1197	876	412	386	671	300
MAX	7610	1750	2560	3130	4190	3600	1800	1800	587	604	1540	462
MIN	1820	1360	1750	1860	2010	1880	700	367	244	247	212	189
CFSM	3.23	1.30	1.88	1.97	2.35	2.31	.97	.71	.34	.31	.55	.24
IN.	3.73	1.45	2.17	2.28	2.45	2.66	1.09	.82	.37	.36	.63	.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1997, BY WATER YEAR (WY)

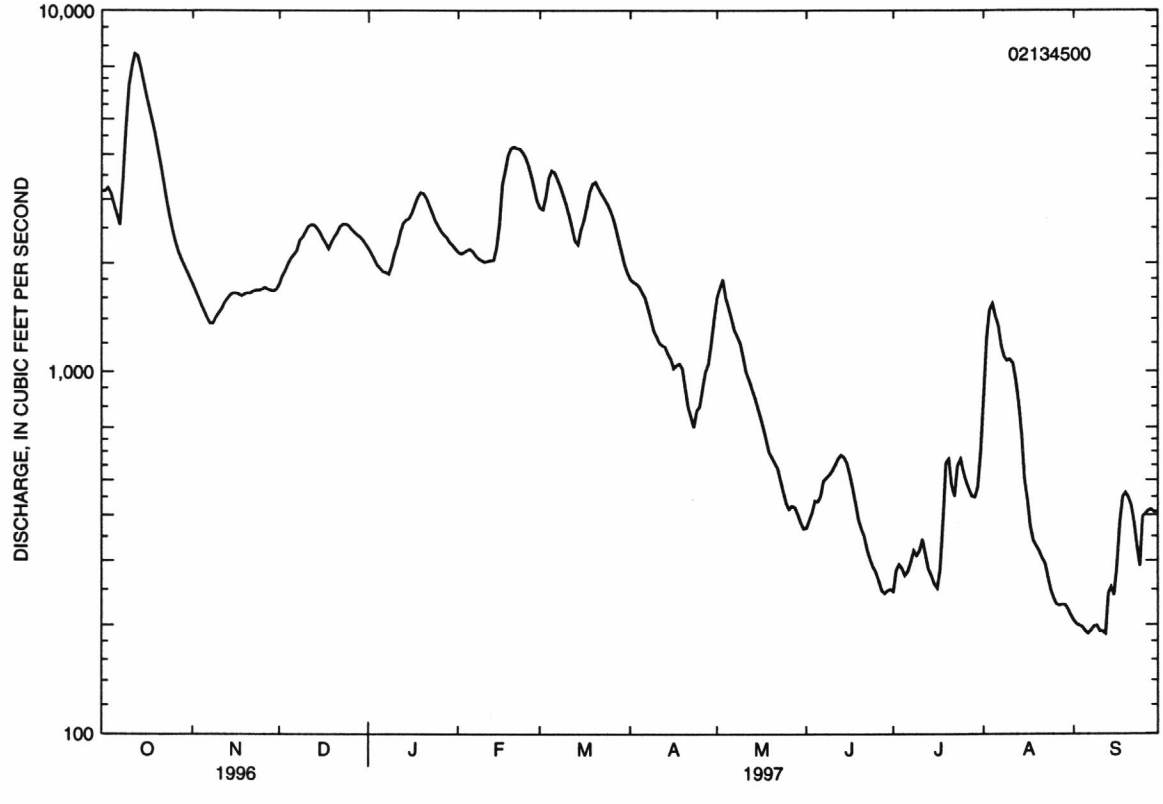
MEAN	843	894	1316	1852	2187	2343	1866	988	766	816	951	1013
MAX	4721	4142	3977	4575	5486	5259	5688	3430	2587	2808	3741	4787
(WY)	1965	1948	1949	1993	1973	1983	1936	1978	1969	1943	1974	1945
MIN	141	211	237	262	429	611	420	276	215	174	138	92.2
(WY)	1941	1934	1934	1934	1934	1934	1981	1986	1941	1990	1954	1968

PEE DEE RIVER BASIN

02134500 LUMBER RIVER AT BOARDMAN, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1930 - 1997	
ANNUAL TOTAL	679280		603674			
ANNUAL MEAN	1856		1654		1315	
HIGHEST ANNUAL MEAN					2391	1965
LOWEST ANNUAL MEAN					524	1934
HIGHEST DAILY MEAN	7860	Sep 15	7610	Oct 12	13400	Sep 24 1945
LOWEST DAILY MEAN	188	Jul 11	189	Sep 6	68	Oct 1 1968
ANNUAL SEVEN-DAY MINIMUM	195	Jul 6	193	Sep 6	72	Oct 3 1968
INSTANTANEOUS PEAK FLOW			7670	Oct 12	13400	Sep 24 1945
INSTANTANEOUS PEAK STAGE			9.29	Oct 12	10.64	Sep 24 1945
INSTANTANEOUS LOW FLOW			186	Sep 13	66	Oct 9 1968
ANNUAL RUNOFF (CFSM)	1.51		1.35		1.07	
ANNUAL RUNOFF (INCHES)	20.58		18.29		14.55	
10 PERCENT EXCEEDS	3340		3190		2800	
50 PERCENT EXCEEDS	1570		1590		963	
90 PERCENT EXCEEDS	502		282		295	

e Estimated.



SANTEE RIVER BASIN

02137727 CATAWBA RIVER NEAR PLEASANT GARDENS, NC

LOCATION.--Lat 35°41'09", long 82°03'40", McDowell County, Hydrologic Unit 03050101, on right bank 18 ft downstream of bridge on Secondary Road 1221, 0.8 mi upstream from Buck Creek, 0.8 mi southeast of Pleasant Gardens, and at mile 297.

DRAINAGE AREA.--126 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1963, 1970-73, 1975. October 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,230 ft above sea level, from topographic map. Telephone telemetry at station.

REMARKS.--Records good except those during period of ice effect, Jan. 17-21, which are poor. Maximum discharge for period of record from rating curve extended above 9,100 ft^3/s on basis of contracted-opening measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222	107	1860	174	216	746	253	406	319	189	137	89
2	188	115	857	172	202	513	246	355	261	180	123	89
3	175	106	465	166	192	563	240	518	263	156	116	82
4	159	104	345	160	362	490	235	420	251	150	111	79
5	149	104	293	191	369	411	229	371	223	180	110	74
6	144	105	267	174	306	393	381	340	202	144	107	72
7	140	118	246	167	269	337	344	312	194	137	104	70
8	165	559	226	162	329	311	287	294	201	133	105	68
9	155	276	209	247	290	289	267	285	194	132	102	70
10	140	193	198	216	270	279	251	265	190	148	100	102
11	134	167	192	212	253	262	243	251	177	216	101	124
12	131	153	226	189	235	245	369	245	184	161	100	95
13	126	145	281	178	236	277	321	238	211	146	100	80
14	124	140	223	171	248	1960	281	229	246	142	101	76
15	122	134	206	168	383	727	266	223	260	133	99	75
16	120	131	198	294	334	513	252	212	202	145	108	73
17	118	128	217	e215	293	426	243	206	189	167	93	72
18	118	136	201	e190	270	383	233	200	177	134	90	71
19	114	142	204	e180	255	693	229	194	167	124	90	70
20	113	130	183	e174	241	596	224	194	161	120	93	68
21	112	136	174	e172	273	475	218	185	184	145	91	65
22	112	157	172	175	335	408	249	179	228	128	84	66
23	116	135	172	182	274	362	875	176	183	139	78	67
24	112	130	181	255	254	332	515	171	167	168	76	533
25	109	133	177	320	242	318	390	174	160	131	81	285
26	109	278	168	262	241	321	339	174	155	123	83	147
27	115	178	173	235	238	290	342	176	175	119	78	115
28	112	161	167	282	790	299	473	180	167	153	78	162
29	112	153	203	253	---	319	655	175	178	162	75	222
30	109	283	188	239	---	284	485	200	163	192	72	129
31	108	---	179	227	---	269	---	189	---	172	149	---
TOTAL	4083	4937	9051	6402	8200	14091	9935	7737	6032	4669	3035	3390
MEAN	132	165	292	207	293	455	331	250	201	151	97.9	113
MAX	222	559	1860	320	790	1960	875	518	319	216	149	533
MIN	108	104	167	160	192	245	218	171	155	119	72	65
CFSM	1.04	1.30	2.30	1.63	2.31	3.58	2.61	1.97	1.58	1.19	.77	.89
IN.	1.20	1.45	2.65	1.88	2.40	4.13	2.91	2.27	1.77	1.37	.89	.99

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1997, BY WATER YEAR (WY)

MEAN	210	230	251	286	342	367	326	255	224	172	215	181
MAX	550	606	573	620	629	622	688	444	652	339	513	435
(WY)	1996	1986	1984	1995	1990	1990	1983	1984	1992	1991	1995	1989
MIN	67.5	69.0	77.6	107	159	130	138	109	70.7	57.9	50.5	71.5
(WY)	1994	1982	1989	1981	1988	1988	1986	1988	1988	1988	1988	1988

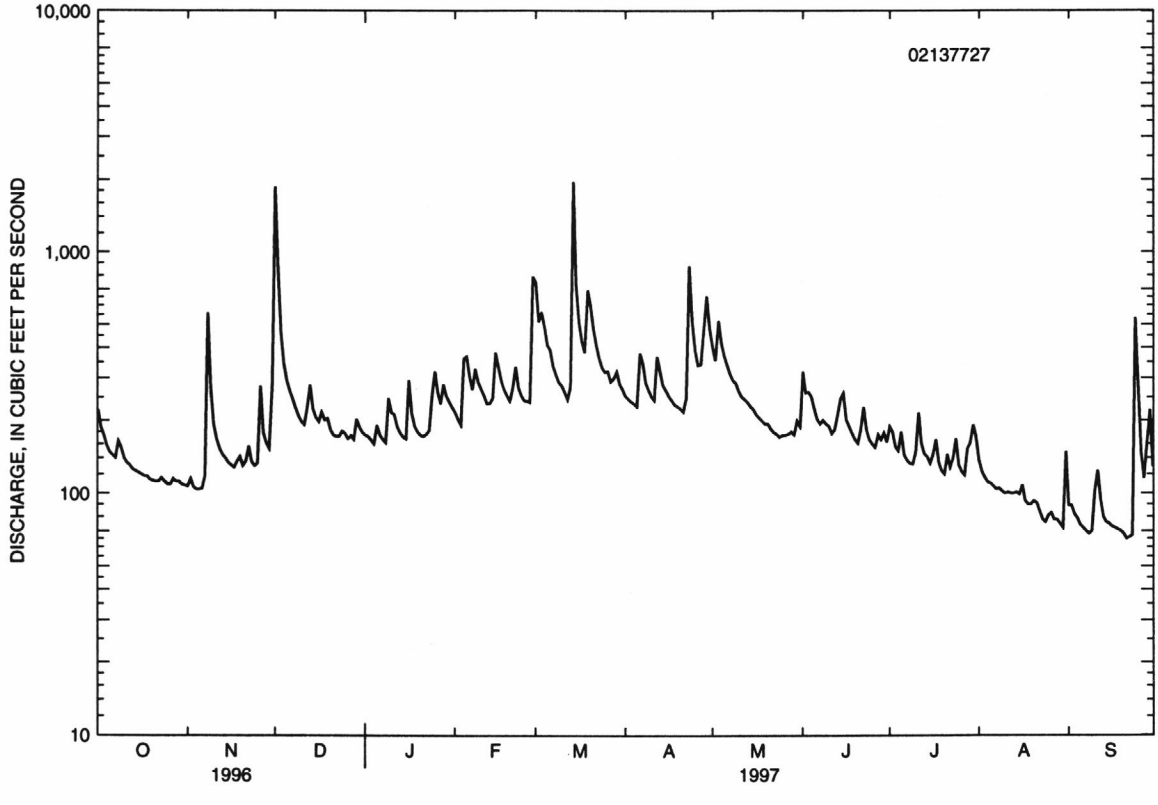
SANTEE RIVER BASIN

02137727 CATAWBA RIVER NEAR PLEASANT GARDENS, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1981 - 1997	
ANNUAL TOTAL	89093		81562			
ANNUAL MEAN	243		223		254	
HIGHEST ANNUAL MEAN					351	1984
LOWEST ANNUAL MEAN					126	1988
HIGHEST DAILY MEAN	3050	Jan 19	1960	Mar 14	7250	Aug 17 1994
LOWEST DAILY MEAN	83	Jul 27	65	Sep 21	33	Aug 19 1988
ANNUAL SEVEN-DAY MINIMUM	88	Jul 21	68	Sep 17	42	Jul 18 1986
INSTANTANEOUS PEAK FLOW			3650	Mar 14	13700*	Aug 17 1994
INSTANTANEOUS PEAK STAGE			7.45	Mar 14	15.22	Aug 17 1994
INSTANTANEOUS LOW FLOW			46	Sep 1	32	Aug 28 1988
ANNUAL RUNOFF (CFSM)	1.92		1.76		2.00	
ANNUAL RUNOFF (INCHES)	26.10		23.89		27.21	
10 PERCENT EXCEEDS	401		362		433	
50 PERCENT EXCEEDS	186		182		188	
90 PERCENT EXCEEDS	109		100		92	

e Estimated.

* See REMARKS.



SANTEE RIVER BASIN

02138500 LINVILLE RIVER NEAR NEBO, NC

LOCATION.--Lat 35°47'41", long 81°53'25", Burke County, Hydrologic Unit 03050101, in Pisgah National Forest on right bank 370 ft upstream from bridge on State Highway 126, 0.2 mi downstream of Shooks Creek, 0.5 mi upstream from Lake James, 2.0 mi northeast of Longtown, and 6.0 mi northeast of Nebo.

DRAINAGE AREA.--66.7 mi^2.

PERIOD OF RECORD.--May 1907 to August 1908 (fragmentary). June 1922 to current year. Prior to 1908 published as "Linville River at Fonta Flora" and as "Linville River at Branch" 1923-70. Records for October to December 1908 "Linville River at Fonta Flora" published in WSP 242 have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 892: 1929, 1935, 1937. WSP 1503: 1923(M), 1924-28, 1930, 1932-33(M), 1938(M), 1939(P). WDR NC-80-1: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 1,203.87 ft above sea level. May 1907 to August 1908, nonrecording gage about 1.2 mi downstream at different datum. June 1922 to Aug. 27, 1937, nonrecording gage and Aug. 28, 1937, to Sept. 30, 1970, water-stage recorder at site on right bank 20 ft downstream of bridge on State Highway 126 at 1,204.87 ft. Oct. 1, 1970, to Sept. 30, 1973, at present site at 1,204.87 ft. Oct. 1, 1973, to Aug. 25, 1981, at present site at 1,204.87 ft.

REMARKS.--Records good except those during periods of ice effect, Dec. 20-23, and Jan. 12-22, which are poor. Maximum discharge for period of record, site and datum then in use, from rating curve extended above 6,400 ft^3/s on basis of slope area measurement of peak flow. Minimum discharge for period of record, result of freezeup. Minimum discharge for current water year also occurred Sept. 23.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1916 reached a stage of about 11 ft at former site and datum; discharge, 34,600 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	193	67	1960	105	132	444	167	289	417	93	87	25
2	163	69	1030	103	125	338	151	234	464	106	67	30
3	185	67	480	100	118	436	145	246	389	105	57	27
4	148	66	336	96	192	484	144	233	267	99	53	31
5	124	65	269	113	267	350	138	193	215	89	50	34
6	112	64	233	117	230	318	163	174	179	76	52	24
7	106	70	205	110	200	265	193	159	161	69	48	21
8	108	1010	192	103	195	232	156	148	153	66	48	19
9	115	468	169	115	193	209	141	141	143	63	45	19
10	101	251	153	121	175	196	130	132	132	67	44	43
11	91	190	147	116	159	173	124	122	121	77	44	53
12	86	161	148	e86	140	145	161	115	121	94	55	50
13	81	144	226	e74	132	141	175	110	157	80	52	48
14	77	132	184	e72	133	1600	155	104	158	68	50	40
15	75	119	164	e80	184	686	140	100	216	68	44	29
16	74	108	154	e138	192	419	126	95	161	85	45	25
17	72	100	161	e108	173	329	118	90	140	124	38	23
18	70	99	166	e98	160	288	112	87	124	93	35	21
19	70	114	152	e98	146	415	109	84	109	79	34	20
20	68	105	e136	e100	146	463	107	87	99	71	33	18
21	65	96	e130	e100	174	346	102	83	132	99	34	17
22	63	106	e128	e100	373	295	115	76	110	92	34	16
23	63	102	e126	109	263	253	216	72	98	88	32	16
24	62	95	125	119	218	224	226	70	87	88	28	87
25	61	92	131	139	198	205	180	71	84	93	27	185
26	58	242	119	143	184	216	157	77	224	75	27	76
27	62	193	116	131	174	198	148	89	142	59	25	55
28	64	159	113	148	351	200	204	100	113	60	25	43
29	64	145	110	171	---	241	640	91	102	60	25	43
30	64	179	109	151	---	195	392	88	91	105	23	48
31	66	---	106	141	---	177	---	87	---	109	24	---
TOTAL	2811	4878	7978	3505	5327	10481	5235	3847	5109	2600	1285	1186
MEAN	90.7	163	257	113	190	338	175	124	170	83.9	41.5	39.5
MAX	193	1010	1960	171	373	1600	640	289	464	124	87	185
MIN	58	64	106	72	118	141	102	70	84	59	23	16
CFSM	1.36	2.44	3.86	1.70	2.85	5.07	2.62	1.86	2.55	1.26	.62	.59
IN.	1.57	2.72	4.45	1.95	2.97	5.85	2.92	2.15	2.85	1.45	.72	.66

SANTEE RIVER BASIN

02138500 LINVILLE RIVER NEAR NEBO, NC--Continued

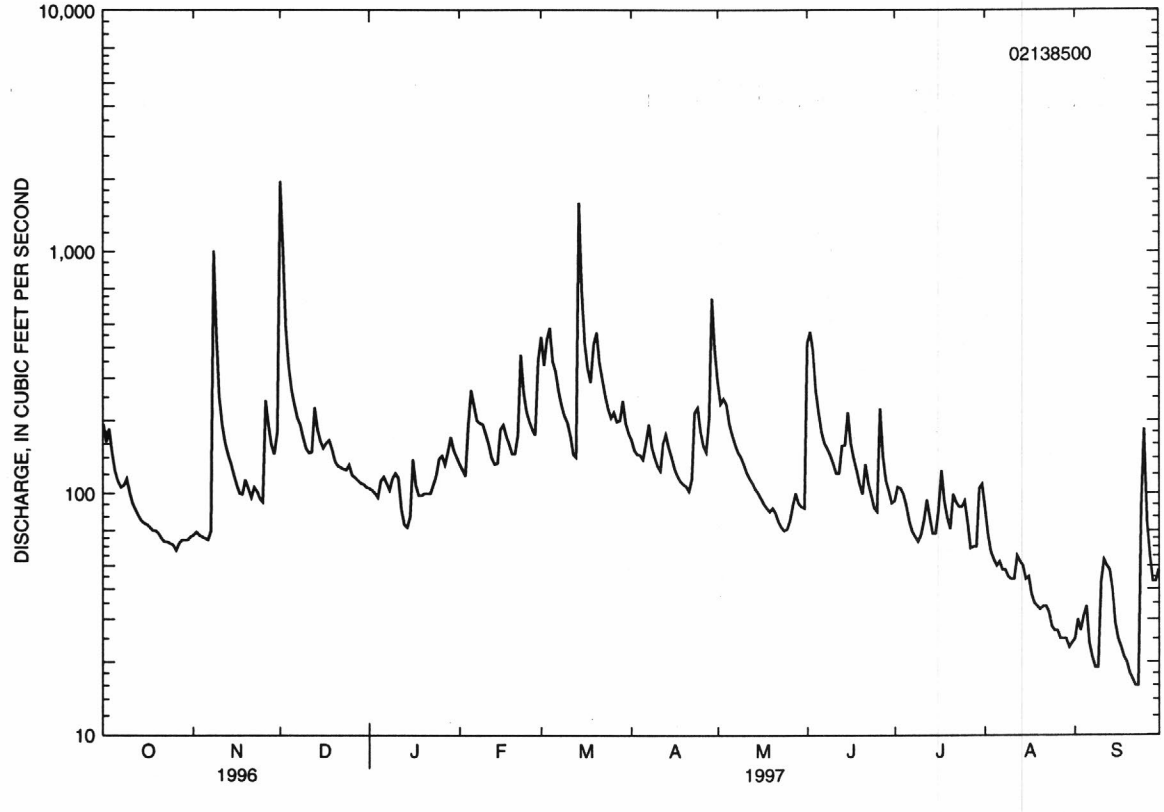
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	128	139	141	175	190	233	201	151	132	98.6	122	114
MAX	433	678	349	664	454	632	479	369	598	449	1084	606
(WY)	1937	1978	1984	1995	1983	1979	1983	1976	1972	1989	1940	1979
MIN	18.9	27.8	30.9	31.8	60.8	74.3	62.0	48.9	33.7	23.0	15.5	13.8
(WY)	1955	1932	1940	1940	1941	1988	1986	1941	1941	1930	1925	1925

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1922 - 1997	
ANNUAL TOTAL	60515		54242			
ANNUAL MEAN	165		149		152	
HIGHEST ANNUAL MEAN					246	1979
LOWEST ANNUAL MEAN					77.6	1988
HIGHEST DAILY MEAN	4240	Jan 19	1960	Dec 1	14000	Aug 13 1940
LOWEST DAILY MEAN	30	Jul 24	16	Sep 22	8.0	Sep 7 1925
ANNUAL SEVEN-DAY MINIMUM	35	Jul 27	19	Sep 17	10	Aug 22 1925
INSTANTANEOUS PEAK FLOW			3250	Dec 1	39500*	Aug 13 1940
INSTANTANEOUS PEAK STAGE			4.56	Dec 1	11.40	Aug 13 1940
INSTANTANEOUS LOW FLOW			15*	Sep 22	2.0*	Jan 9 1956
ANNUAL RUNOFF (CFSM)	2.48		2.23		2.28	
ANNUAL RUNOFF (INCHES)	33.75		30.25		30.94	
10 PERCENT EXCEEDS	245		248		267	
50 PERCENT EXCEEDS	113		113		100	
90 PERCENT EXCEEDS	60		43		38	

e Estimated.

* See REMARKS.



SANTEE RIVER BASIN

0213903612 CATAWBA RIVER AT CALVIN, NC

LOCATION.--Lat 35°44'23", long 81°43'44", Burke County, Hydrologic Unit 03050101, on right bank at City of Morganton's water intake, 0.5 mi upstream from Canoe Creek, and 0.5 mi north of Calvin.

DRAINAGE AREA.--508 mi^2.

PERIOD OF RECORD.--July 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,002.40 ft above sea level (levels by City of Morganton).

REMARKS.--No estimated daily discharges. Records good. City of Morganton diverted about 18.4 ft^3/s from Catawba River for municipal water supply. Considerable regulation, at times, caused by Lake James (station 02138519), 6.5 mi upstream. Minimum discharge for all water years affected by regulation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1610	366	2580	536	768	733	1940	1450	407	691	546	289
2	1810	227	1270	540	931	518	2000	1510	767	755	403	323
3	1630	329	2660	507	1150	1380	1980	1110	1250	1140	377	232
4	874	661	2530	401	946	1610	1940	1060	773	794	652	242
5	703	643	2510	620	1270	1550	1700	1460	969	838	336	247
6	646	316	2450	990	1330	1820	1770	1640	1170	604	365	203
7	1050	208	1960	854	866	1500	1990	1520	570	979	393	303
8	468	837	1840	921	766	1220	1460	1360	479	812	332	364
9	481	624	1980	1290	949	1100	1440	1520	674	802	297	384
10	399	1140	1990	747	1160	1370	1390	1120	588	535	254	270
11	467	1080	1860	896	1460	1150	1030	1060	993	736	396	386
12	377	1230	1840	686	1240	1510	1140	1060	1360	348	751	389
13	287	1200	1400	1060	836	768	1160	1180	1470	439	643	285
14	324	1090	945	921	630	1660	1130	1370	1210	1020	403	229
15	394	1080	824	1020	784	1520	1020	949	1200	868	258	517
16	589	568	1300	1020	928	1530	867	1090	1290	507	296	656
17	743	697	1300	1750	943	1950	810	960	1220	535	223	657
18	565	551	1900	764	1010	2000	738	973	1150	844	595	580
19	299	540	1140	680	1180	2160	442	1150	847	719	301	671
20	327	444	1760	671	893	2530	570	581	930	605	343	279
21	368	514	1110	705	686	2420	557	451	415	640	432	209
22	719	562	853	607	908	2000	615	437	592	616	311	243
23	604	864	478	708	714	1850	864	554	675	562	302	794
24	635	577	527	791	1140	1910	901	516	1230	719	258	883
25	419	449	590	812	1460	1990	870	462	1380	503	206	1280
26	290	739	939	926	1310	2040	1110	423	837	485	255	1170
27	246	1360	636	1210	963	1980	1090	761	857	459	259	1140
28	297	577	960	1350	639	2070	1410	472	570	866	274	971
29	329	634	720	1500	---	1830	1420	487	570	673	289	646
30	351	669	912	1570	---	1240	1080	488	662	572	305	696
31	200	---	878	1560	---	1790	---	610	---	562	221	---
TOTAL	18501	20776	44642	28613	27860	50699	36434	29784	27105	21228	11276	15538
MEAN	597	693	1440	923	995	1635	1214	961	904	685	364	518
MAX	1810	1360	2660	1750	1460	2530	2000	1640	1470	1140	751	1280
MIN	200	208	478	401	630	518	442	423	407	348	206	203
†	-100	+31	-138	-124	+224	+170	+95	-51	+21	-71	-20	-113

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1997, BY WATER YEAR (WY)

MEAN	821	811	1037	1487	1293	1417	1103	935	1008	647	930	704
MAX	1943	1615	1700	2438	1844	2093	1855	1597	2103	785	2078	1146
(WY)	1996	1993	1993	1995	1996	1993	1993	1993	1992	1995	1994	1995
MIN	228	379	575	923	799	1141	689	470	428	460	364	331
(WY)	1994	1994	1994	1997	1992	1992	1995	1996	1994	1993	1997	1993

SANTEE RIVER BASIN

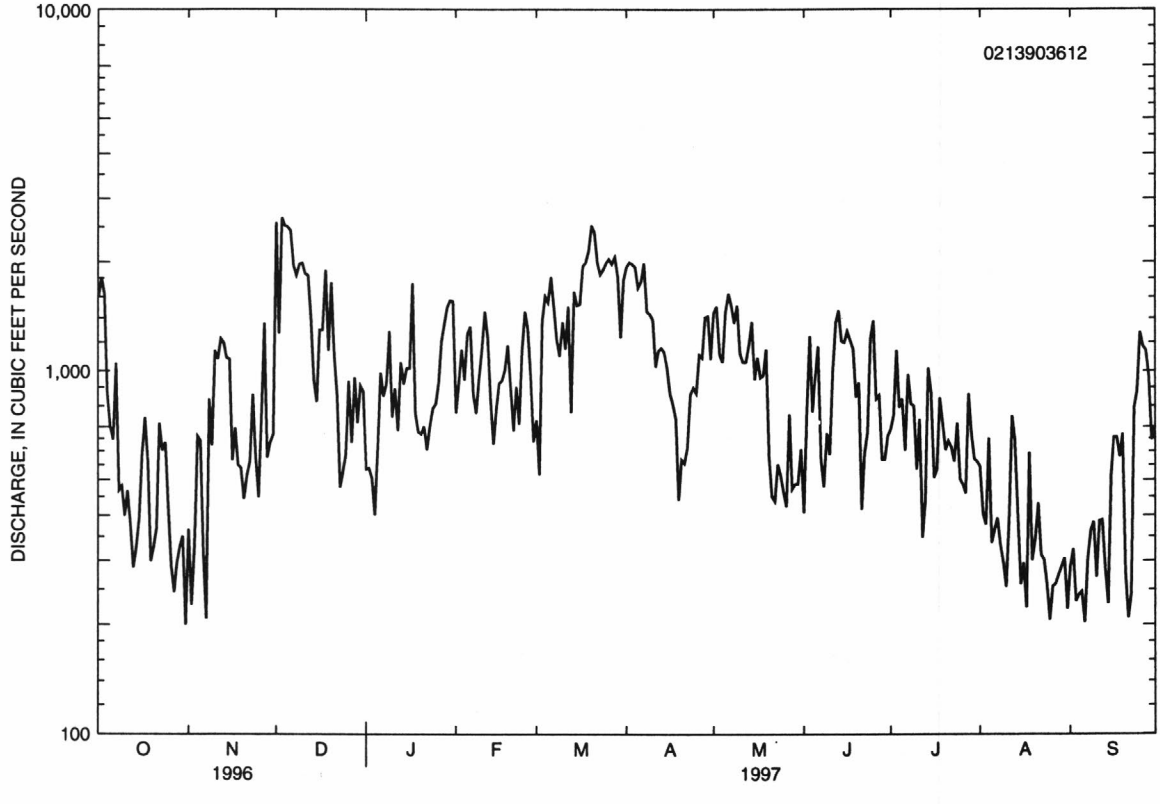
0213903612 CATAWBA RIVER AT CALVIN, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1991 - 1997	
ANNUAL TOTAL	344975		332456			
ANNUAL MEAN	943	‡943	911	‡903	1016	
HIGHEST ANNUAL MEAN					1230	1993
LOWEST ANNUAL MEAN					855	1994
HIGHEST DAILY MEAN	4800	Jan 27	2660	Dec 3	12300	Aug 18 1994
LOWEST DAILY MEAN	200	Jul 5	200	Oct 31	86	Oct 12 1993
ANNUAL SEVEN-DAY MINIMUM	276	Jun 1	251	Aug 31	112	Oct 10 1993
INSTANTANEOUS PEAK FLOW			5370	Dec 1	12300	Aug 18 1994
INSTANTANEOUS PEAK STAGE			6.09	Dec 1	16.40	Aug 18 1994
INSTANTANEOUS LOW FLOW			113*	Jul 25	75*	Oct 6 1993
10 PERCENT EXCEEDS	1890		1720		1900	
50 PERCENT EXCEEDS	707		794		809	
90 PERCENT EXCEEDS	312		314		308	

* See REMARKS.

† Change in contents, equivalent in cubic feet per second, in Lake James, provided by Duke Power Company.

‡ Adjusted for change in contents.



SANTEE RIVER BASIN

02140991 JOHNS RIVER AT ARNEYS STORE, NC

LOCATION.--Lat 35°50'01", long 81°42'43", Burke County, Hydrologic Unit 03050101, on right bank 12 ft downstream of bridge on Secondary Road 1438, 0.2 mi downstream of Sims Branch, and 0.8 mi northeast of Arneys Store.

DRAINAGE AREA.--201 mi^2.

PERIOD OF RECORD.--Occasional discharge measurements, water years 1974-84. May 1985 to current year.

REVISED RECORDS.--WDR NC-87-1: 1985-86 (P).

GAGE.--Water-stage recorder. Datum of gage is 1,001.74 ft above sea level. Telephone telemetry at station.

REMARKS.--Records good except those during period of ice effect, Jan. 18-20, and those above 3,000 ft^3/s, which are fair. Maximum discharge for period of record from rating curve extended above 11,000 ft^3/s on basis of slope-area measurement; maximum gage height from high-water mark in gage house. Minimum discharge for period of record also occurred Aug. 20, 1988. Mimimum discharge for current water year also occurred Sept. 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	364	183	3260	308	330	869	442	670	652	274	228	100
2	328	187	2530	306	317	731	420	551	736	305	197	103
3	325	178	1050	299	306	926	411	575	630	322	183	102
4	293	175	762	293	569	1020	404	536	509	276	175	104
5	275	175	639	340	657	772	395	476	444	247	177	99
6	264	175	582	336	543	704	518	451	395	236	170	93
7	259	186	533	301	473	602	552	430	377	225	163	90
8	282	2100	486	288	489	553	436	411	372	222	162	89
9	285	849	443	368	457	520	403	401	364	219	160	87
10	252	483	412	359	424	503	381	395	341	246	153	119
11	234	381	396	337	406	477	371	384	316	260	152	223
12	225	328	409	308	379	448	564	368	321	244	154	169
13	220	299	574	297	372	431	611	358	381	219	150	129
14	216	283	458	286	392	3420	486	340	405	213	165	108
15	208	266	418	287	588	1810	445	333	576	209	150	101
16	205	250	396	464	547	1020	419	317	363	224	144	98
17	205	244	425	371	475	801	399	311	325	267	137	95
18	205	262	405	e325	435	710	382	309	311	220	128	97
19	213	287	416	e320	416	883	370	302	296	205	123	99
20	201	252	375	e311	401	944	364	305	283	198	120	97
21	198	245	355	310	446	777	352	293	331	202	125	94
22	197	262	348	305	776	702	392	278	287	205	120	91
23	206	239	345	314	564	633	782	274	268	293	112	90
24	203	233	350	330	497	582	663	271	257	304	107	295
25	194	229	351	378	456	547	536	274	251	231	105	323
26	192	572	327	338	432	568	478	300	349	247	103	163
27	199	405	325	320	423	519	457	328	308	197	103	131
28	195	336	319	384	735	514	620	310	282	203	102	121
29	193	309	331	375	---	549	1750	283	276	192	100	157
30	190	368	320	350	---	489	926	300	271	390	100	138
31	183	---	312	342	---	471	---	294	---	328	98	---
TOTAL	7209	10741	18652	10250	13305	24495	15729	11428	11277	7623	4366	3805
MEAN	233	358	602	331	475	790	524	369	376	246	141	127
MAX	364	2100	3260	464	776	3420	1750	670	736	390	228	323
MIN	183	175	312	286	306	431	352	271	251	192	98	87
CFSM	1.16	1.78	2.99	1.65	2.36	3.93	2.61	1.83	1.87	1.22	.70	.63
IN.	1.33	1.99	3.45	1.90	2.46	4.53	2.91	2.12	2.09	1.41	.81	.70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1997, BY WATER YEAR (WY)

MEAN	320	377	351	481	427	595	478	364	361	255	336	253
MAX	890	938	602	1388	838	1151	883	595	963	570	1070	808
(WY)	1991	1993	1997	1995	1990	1993	1987	1993	1992	1989	1994	1989
MIN	85.7	148	113	180	206	179	206	166	96.9	75.5	65.5	99.5
(WY)	1989	1994	1989	1989	1988	1988	1986	1988	1988	1988	1988	1988

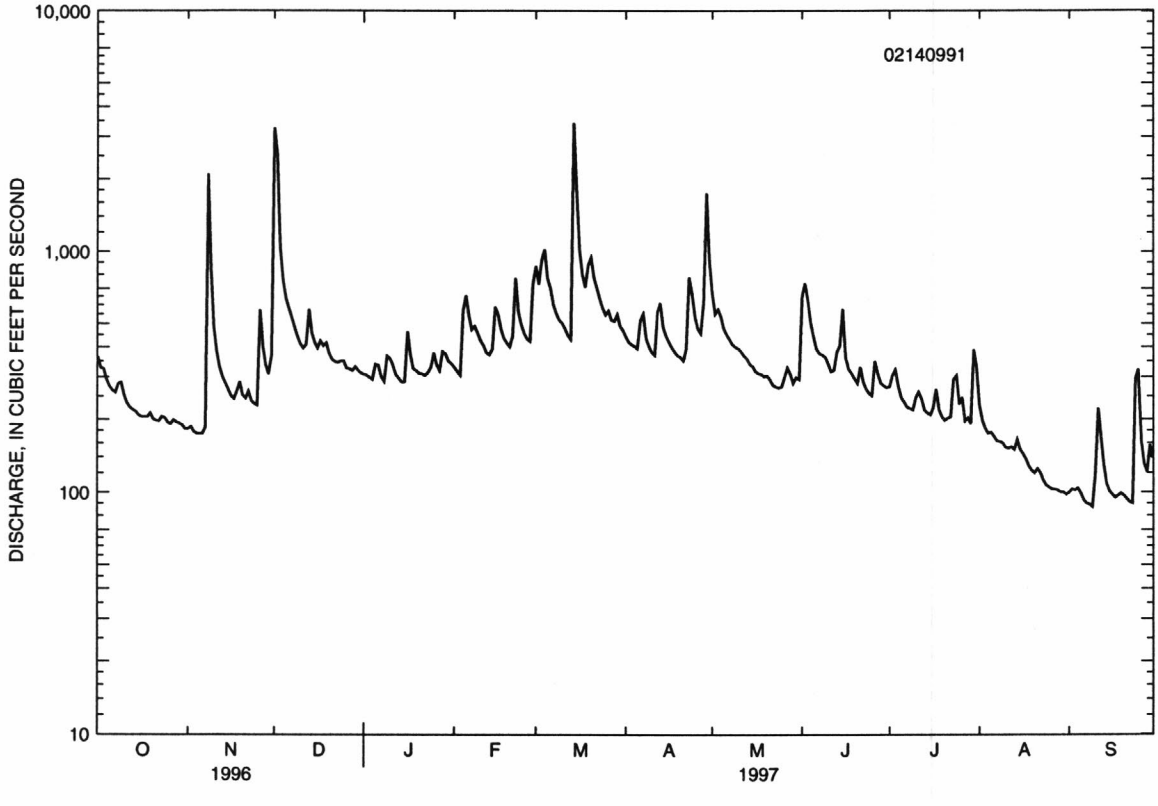
SANTEE RIVER BASIN

02140991 JOHNS RIVER AT ARNEYS STORE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1985 - 1997	
ANNUAL TOTAL	153689		138880			
ANNUAL MEAN	420		380		385	
HIGHEST ANNUAL MEAN					502	1993
LOWEST ANNUAL MEAN					169	1988
HIGHEST DAILY MEAN	8120	Aug 12	3420	Mar 14	16100	Jan 15 1995
LOWEST DAILY MEAN	130	Jul 24	87	Sep 9	35	Aug 19 1988
ANNUAL SEVEN-DAY MINIMUM	139	Jul 19	95	Sep 17	45	Aug 14 1988
INSTANTANEOUS PEAK FLOW			5480	Dec 1	42300*	Aug 17 1994
INSTANTANEOUS PEAK STAGE			12.73	Dec 1	25.23*	Aug 17 1994
INSTANTANEOUS LOW FLOW			86*	Sep 9	33*	Aug 19 1988
ANNUAL RUNOFF (CFSM)	2.09		1.89		1.92	
ANNUAL RUNOFF (INCHES)	28.44		25.70		26.04	
10 PERCENT EXCEEDS	606		606		652	
50 PERCENT EXCEEDS	308		320		271	
90 PERCENT EXCEEDS	183		130		121	

e Estimated.

* See REMARKS.



SANTEE RIVER BASIN

0214253830 NORWOOD CREEK NEAR TROUTMAN, NC

LOCATION.--Lat 35°40'48", long 80°56'44", Iredell County, Hydrologic Unit 03040102, on left upstream wingwall of culvert on Secondary Road 1328, 0.4 mi upstream from Lake Norman, 0.7 mi downstream of Powder Spring Branch, 1.0 mi northeast of East Monbo, and 3.7 mi southwest of Troutman.

DRAINAGE AREA.--7.18 mi^2.

PERIOD OF RECORD.--December 1983 to current year.

GAGE.--Water-stage recorder. Datum of gage is 761.09 ft above sea level.

REMARKS.--Records poor. Maximum discharge for period of record, from rating curve extended above 400 ft^3/s by logarithmic plotting. Minimum discharge for current water year also occurred Sept. 5, 6, 7, 8, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	e4.5	169	6.6	7.1	33	5.7	20	7.5	5.6	4.3	3.3
2	7.0	6.0	31	6.5	6.8	13	5.9	16	8.6	5.4	4.1	3.3
3	5.7	4.8	14	6.4	6.7	12	5.8	18	8.0	4.9	4.0	3.3
4	5.1	4.7	9.6	6.2	7.7	9.8	5.7	15	7.4	4.7	4.0	3.2
5	4.9	4.6	9.3	7.5	7.6	8.3	5.7	12	7.1	5.4	4.2	3.1
6	4.7	4.6	9.8	6.9	7.3	8.0	8.4	11	7.1	6.1	3.9	3.1
7	4.8	4.6	10	6.6	7.0	7.1	7.3	10	7.1	4.9	3.9	3.1
8	6.4	9.9	10	6.5	8.4	6.7	6.4	9.7	7.0	4.7	3.9	3.1
9	5.4	6.8	8.7	20	7.8	6.4	6.2	9.9	6.9	4.7	3.9	3.1
10	5.2	5.5	8.2	15	7.6	6.2	5.8	9.4	6.8	4.9	3.9	4.6
11	4.8	5.1	7.8	11	7.4	6.0	5.8	9.2	6.6	4.5	3.9	4.2
12	4.6	4.9	7.8	9.0	7.1	5.9	10	9.0	12	4.4	3.8	3.6
13	4.4	4.8	19	8.2	7.4	5.8	7.9	8.8	21	4.4	3.7	3.5
14	4.4	4.8	10	7.8	15	13	6.6	8.7	8.1	4.3	5.0	3.5
15	4.3	4.7	8.8	7.4	92	8.7	6.1	8.6	6.9	4.3	3.8	3.4
16	4.3	4.9	8.2	14	20	7.3	6.0	8.4	6.2	4.3	3.7	3.4
17	4.4	4.6	8.3	9.6	10	6.5	5.8	8.4	5.9	4.4	3.7	3.4
18	4.4	4.9	8.1	9.9	7.8	6.3	5.6	8.3	5.9	4.3	3.6	3.5
19	4.5	5.0	11	9.4	7.1	65	5.7	8.1	5.7	4.1	3.5	3.5
20	4.5	4.7	8.9	7.3	6.6	20	5.6	8.0	5.6	4.2	3.6	3.4
21	4.6	5.0	8.2	7.1	6.5	10	5.7	7.9	5.4	4.8	3.7	3.3
22	e4.5	5.0	8.1	7.0	6.5	8.3	7.5	7.8	5.2	4.3	3.5	3.3
23	e4.5	4.7	7.8	6.9	6.1	7.5	67	7.7	5.1	6.1	3.4	3.3
24	e4.5	4.6	7.9	7.5	5.9	7.3	15	7.6	5.0	5.6	3.4	5.9
25	e4.5	4.6	7.7	8.8	5.7	7.2	8.9	7.8	4.9	4.6	3.7	4.5
26	e4.5	17	7.5	7.9	5.9	6.8	7.1	7.9	4.9	4.5	3.8	3.8
27	e4.5	8.0	7.4	7.4	5.8	6.3	8.0	8.1	5.2	4.4	3.6	3.7
28	e4.5	6.3	7.1	9.4	102	6.2	174	7.9	5.1	4.3	3.4	4.0
29	e4.5	5.7	7.0	8.4	---	6.2	275	7.8	5.0	4.2	3.3	3.9
30	e4.5	6.1	6.7	7.9	---	5.8	29	8.0	4.8	5.7	3.3	3.6
31	e4.5	---	6.7	7.4	---	5.7	---	7.8	---	4.7	3.3	---
TOTAL	162.4	171.4	459.6	267.5	398.8	332.3	725.2	302.8	208.0	147.7	116.8	107.9
MEAN	5.24	5.71	14.8	8.63	14.2	10.7	24.2	9.77	6.93	4.76	3.77	3.60
MAX	19	17	169	20	102	65	275	20	21	6.1	5.0	5.9
MIN	4.3	4.5	6.7	6.2	5.7	5.7	5.6	7.6	4.8	4.1	3.3	3.1
CFSM	.73	.80	2.06	1.20	1.98	1.49	3.37	1.36	.97	.66	.52	.50
IN.	.84	.89	2.38	1.39	2.07	1.72	3.76	1.57	1.08	.77	.61	.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1997, BY WATER YEAR (WY)

MEAN	10.3	8.33	9.21	11.5	14.6	14.9	11.8	7.77	6.97	6.16	6.02	4.92
MAX	36.1	16.9	15.8	21.0	25.1	35.2	24.2	15.2	24.4	22.1	13.0	10.5
(WY)	1991	1993	1984	1993	1990	1993	1997	1990	1992	1989	1994	1989
MIN	3.01	3.88	4.23	4.97	5.14	6.23	3.60	2.86	1.61	1.90	2.62	2.43
(WY)	1987	1994	1989	1986	1986	1985	1986	1986	1986	1986	1987	1986

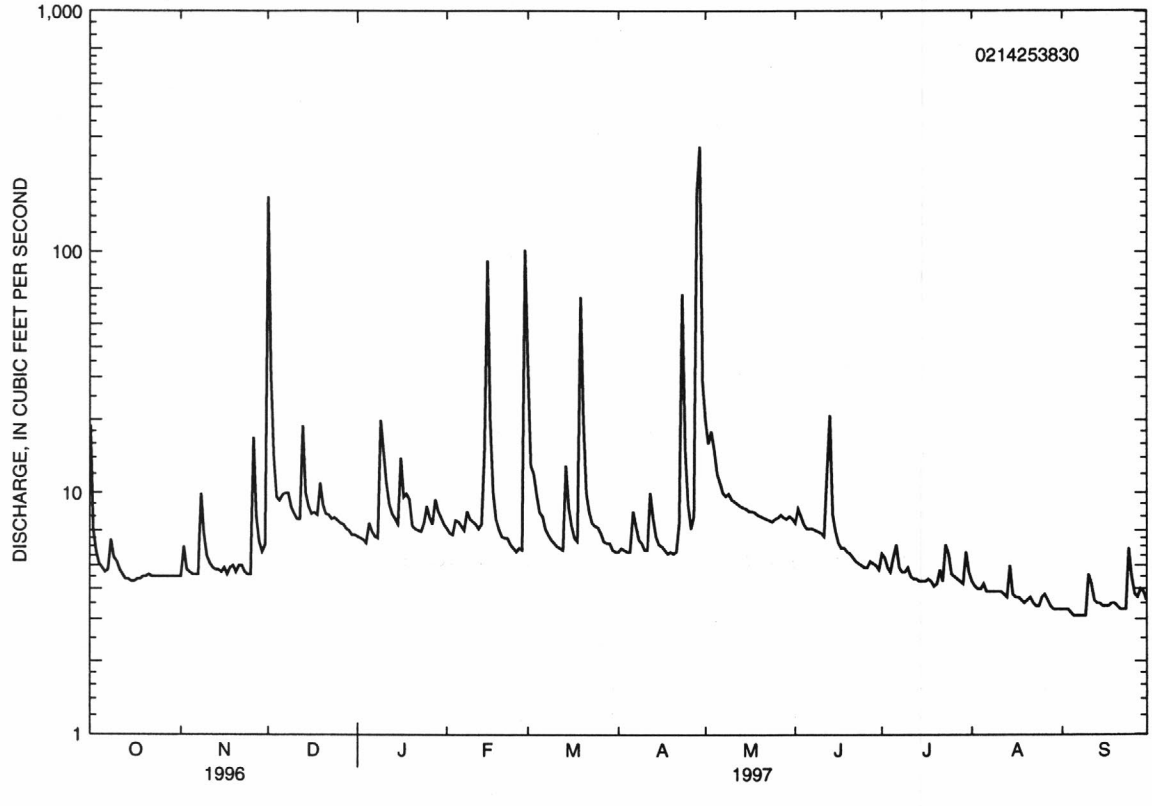
SANTEE RIVER BASIN

0214253830 NORWOOD CREEK NEAR TROUTMAN, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1984 - 1997	
ANNUAL TOTAL	3097.0		3400.4			
ANNUAL MEAN	8.46		9.32		9.16	
HIGHEST ANNUAL MEAN					13.1	1991
LOWEST ANNUAL MEAN					4.73	1986
HIGHEST DAILY MEAN	169	Dec 1	275	Apr 29	387	Oct 1 1989
LOWEST DAILY MEAN	3.2	Jul 22	3.1	Sep 5	.82	Aug 2 1986
ANNUAL SEVEN-DAY MINIMUM	3.3	Jul 19	3.1	Sep 3	.99	Jul 29 1986
INSTANTANEOUS PEAK FLOW			1480*	Apr 28	1480*	Apr 28 1997
INSTANTANEOUS PEAK STAGE			9.20	Apr 28	9.20	Apr 28 1997
INSTANTANEOUS LOW FLOW			2.9*	Sep 4	.67	Aug 2 1986
ANNUAL RUNOFF (CFSM)	1.18		1.30		1.28	
ANNUAL RUNOFF (INCHES)	16.05		17.62		17.34	
10 PERCENT EXCEEDS	10		10		13	
50 PERCENT EXCEEDS	6.0		6.1		5.8	
90 PERCENT EXCEEDS	3.8		3.7		3.3	

e Estimated.

* See REMARKS.



SANTEE RIVER BASIN

0214269560 KILLIAN CREEK NEAR MARIPOSA, NC

LOCATION.--Lat 35°26'03", long 81°01'49", Lincoln County, Hydrologic Unit 03050305, on right bank, 1,000 ft upstream from Forney Creek, 1.5 mi northwest of Lowesville, 1.7 mi upstream from bridge on Secondary Road 1511, and 2.4 mi northeast of Mariposa.

DRAINAGE AREA.--36.4 mi^2.

PERIOD OF RECORD.-- October 1990 to June 1993, December 1994 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 643.085 ft above sea level (levels by Duke Power Co). Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Station was established to study low-flow conditions for Duke Power Co., no structure exists near the site for measuring high-stage flow; therefore, a peak flow was not determined to coincide with the peak stage for the year. Missing values on the daily values table are days when the flow exceeded the rating. Minimum discharges may be affected by diversions by Duke Power. Minimum discharge for current water year also occurred Sept 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

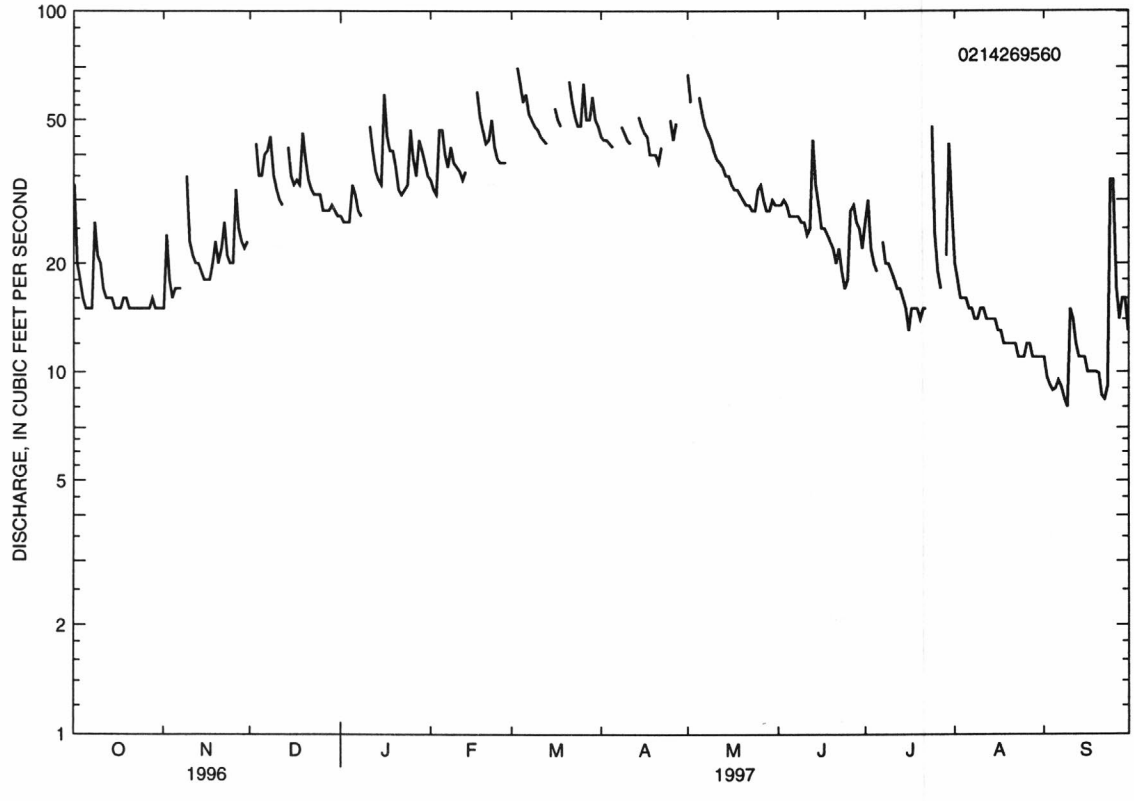
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	15	---	27	34	---	45	67	29	26	20	11
2	20	24	---	26	32	---	44	56	29	30	18	9.7
3	18	18	43	26	31	70	44	---	30	22	16	9.2
4	16	16	35	26	47	63	43	---	e29	20	16	8.9
5	15	17	35	33	47	56	42	58	27	19	16	9.0
6	15	17	40	31	40	59	---	52	27	---	15	9.5
7	15	17	41	28	37	52	---	48	27	23	15	9.1
8	26	---	45	27	42	50	48	46	27	20	14	8.4
9	21	35	35	---	38	48	46	44	26	20	14	8.0
10	20	23	32	---	37	47	44	41	26	19	15	15
11	17	21	30	48	36	45	43	39	24	18	15	14
12	16	20	29	41	34	44	---	38	25	17	14	12
13	16	20	---	36	36	43	---	37	44	17	14	11
14	16	19	42	34	---	---	51	35	33	16	14	11
15	15	18	35	33	---	---	48	35	29	15	14	11
16	15	18	33	59	---	54	e46	33	25	13	13	10
17	15	18	34	45	60	50	e45	32	25	15	13	10
18	16	20	33	41	51	48	e40	32	24	15	12	10
19	16	23	46	41	47	---	e40	31	23	15	12	10
20	15	20	39	37	43	---	e40	30	22	14	12	9.9
21	15	22	34	32	44	64	e38	29	20	15	12	8.6
22	15	26	32	31	50	56	42	29	22	15	12	8.4
23	15	21	31	32	42	51	---	28	19	---	11	9.1
24	15	20	31	33	39	48	---	28	17	48	11	34
25	15	20	31	47	38	48	50	32	18	24	11	34
26	15	32	28	39	38	63	44	33	28	19	12	17
27	15	25	28	35	38	50	49	30	29	17	12	14
28	16	23	28	44	---	50	---	28	26	---	11	16
29	15	22	29	41	---	58	---	28	25	21	11	16
30	15	23	28	38	---	50	---	30	22	43	11	13
31	15	---	27	35	---	48	---	29	---	29	11	---

SANTEE RIVER BASIN

0214269560 KILLIAN CREEK NEAR MARIPOSA, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1991 - 1997@	
LOWEST DAILY MEAN	13	Jul 18	8.0	Sep 9	8.0	Sep 9 1997
INSTANTANEOUS PEAK STAGE			15.25	Apr 29	15.25	Apr 29 1997
INSTANTANEOUS LOW FLOW			7.8*	Sep 8	7.8*	Sep 8 1997

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



SANTEE RIVER BASIN

02142900 LONG CREEK NEAR PAW CREEK, NC

LOCATION.--Lat 35°19'42", long 80°54'35", Mecklenburg County, Hydrologic Unit 03050101, on right bank at upstream side of bridge on Secondary Road 2042, 600 ft downstream of McIntyre Creek, 1.2 mi upstream from Gutter Branch, and 3.6 mi north of Paw Creek.

DRAINAGE AREA.--16.4 mi^2.

PERIOD OF RECORD.--June 1965 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 648.7 ft above sea level. Telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records poor. Frequent diversions during summer months for irrigation by upstream golf course. Minimum discharge for period of record also occurred Oct. 2, 3, 1986, and Sept. 3, 1987. Maximum discharge for current water year from rating curve extended above 3,040 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	417	5.6	103	7.9	12	137	11	21	4.4	4.8	6.5	1.8
2	21	19	26	7.6	11	40	11	15	28	6.8	5.6	1.7
3	14	8.7	13	7.5	10	29	11	65	14	4.0	4.8	2.1
4	16	5.8	9.7	7.1	26	21	10	25	8.2	3.5	7.8	1.5
5	9.8	5.9	21	20	23	27	10	16	6.3	3.2	15	1.4
6	6.9	6.3	30	12	16	59	28	14	8.8	11	4.7	1.7
7	6.3	8.0	21	8.7	13	22	18	12	7.5	4.8	4.2	1.6
8	106	66	21	7.8	29	19	12	11	5.6	3.6	4.0	1.7
9	23	18	12	250	18	17	11	10	4.7	3.2	4.0	2.0
10	16	11	9.5	40	16	16	10	9.8	4.5	3.0	9.8	4.1
11	12	8.6	8.7	21	18	15	10	9.2	4.3	2.7	11	3.2
12	9.8	6.8	9.7	15	13	14	62	9.1	8.0	2.7	4.3	2.0
13	8.7	5.9	96	12	49	13	23	8.9	18	2.5	4.2	1.8
14	7.8	5.8	20	11	227	72	14	8.1	26	2.3	3.4	1.8
15	7.0	5.3	13	10	279	25	13	8.1	9.0	2.2	3.2	1.7
16	6.2	4.8	11	79	41	17	12	6.6	5.8	2.2	3.2	1.5
17	6.1	4.7	13	20	27	16	11	6.8	5.0	2.2	2.9	1.4
18	6.0	7.7	12	14	21	15	11	6.3	4.7	2.2	2.8	1.7
19	7.5	18	35	12	18	36	10	5.8	4.5	2.2	2.5	1.8
20	6.2	8.1	15	11	16	27	9.7	5.4	5.5	2.3	2.5	1.6
21	6.3	10	11	11	18	19	9.7	5.1	7.0	3.2	2.6	1.5
22	6.4	22	9.7	10	27	16	36	4.7	4.0	2.3	2.4	1.4
23	5.9	8.3	9.4	10	15	14	136	4.6	3.8	1390	2.3	1.4
24	6.5	6.2	9.5	16	13	13	26	4.5	3.4	240	2.3	218
25	6.5	5.7	12	50	13	13	16	6.1	3.4	25	2.4	30
26	6.2	9.9	8.9	19	13	18	13	10	3.3	16	2.7	9.1
27	6.2	5.9	8.3	14	13	14	49	6.5	39	12	2.2	4.7
28	6.5	5.1	8.0	19	591	14	340	5.0	15	10	2.0	23
29	6.7	4.8	8.7	15	---	22	277	4.6	8.1	11	2.1	18
30	5.7	5.7	8.3	16	---	14	31	4.5	4.9	19	2.0	5.4
31	5.1	---	8.0	14	---	13	---	4.5	---	11	2.1	---
TOTAL	781.3	313.6	601.4	767.6	1586	807	1241.4	333.2	274.7	1810.9	131.5	350.6
MEAN	25.2	10.5	19.4	24.8	56.6	26.0	41.4	10.7	9.16	58.4	4.24	11.7
MAX	417	66	103	250	591	137	340	65	39	1390	15	218
MIN	5.1	4.7	8.0	7.1	10	13	9.7	4.5	3.3	2.2	2.0	1.4
CFSM	1.54	.64	1.18	1.51	3.45	1.59	2.52	.66	.56	3.56	.26	.71
IN.	1.77	.71	1.36	1.74	3.60	1.83	2.82	.76	.62	4.11	.30	.80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1997, BY WATER YEAR (WY)

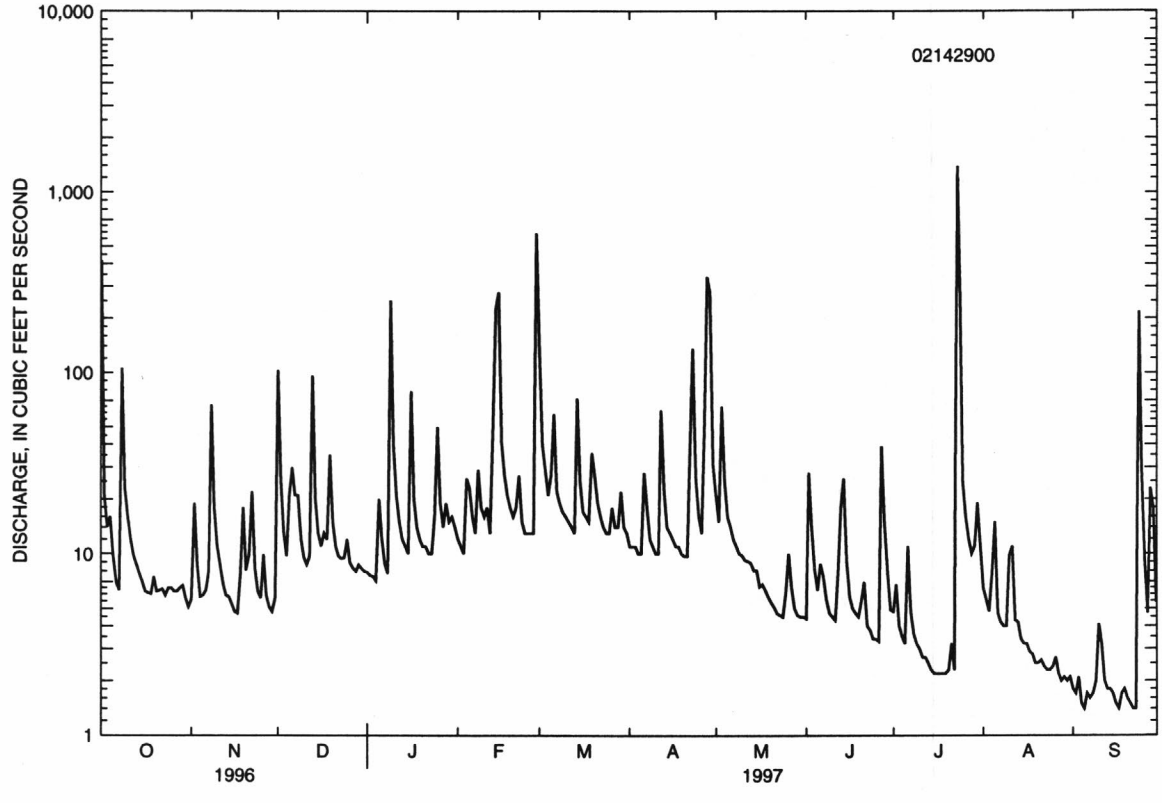
MEAN	14.9	15.2	19.3	30.0	34.7	35.7	20.0	16.9	12.2	8.63	9.93	8.19
MAX	70.8	91.3	59.5	74.4	78.4	86.8	44.3	101	66.5	58.4	59.0	66.2
(WY)	1991	1986	1984	1993	1979	1993	1987	1975	1982	1997	1967	1975
MIN	1.48	2.42	2.53	4.04	8.92	8.80	4.38	3.60	1.68	1.08	1.44	1.27
(WY)	1984	1982	1966	1981	1968	1967	1967	1981	1986	1986	1987	1986

SANTEE RIVER BASIN

02142900 LONG CREEK NEAR PAW CREEK, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1965 - 1997	
ANNUAL TOTAL	7605.8		8999.2			
ANNUAL MEAN	20.8		24.7		18.9	
HIGHEST ANNUAL MEAN					36.2	1975
LOWEST ANNUAL MEAN					6.79	1981
HIGHEST DAILY MEAN	417	Oct 1	1390	Jul 23	1600	Oct 9 1976
LOWEST DAILY MEAN	2.5	Jul 11	1.4	Sep 5	.43	Oct 3 1986
ANNUAL SEVEN-DAY MINIMUM	3.0	Jul 6	1.5	Sep 17	.49	Oct 2 1986
INSTANTANEOUS PEAK FLOW			3350*	Jul 23	4300	Jun 18 1982
INSTANTANEOUS PEAK STAGE			13.45	Jul 23	13.45	Jul 23 1997
INSTANTANEOUS LOW FLOW			.68	Jul 18	.35*	Sep 26 1986
ANNUAL RUNOFF (CFSM)	1.27		1.50		1.15	
ANNUAL RUNOFF (INCHES)	17.25		20.41		15.63	
10 PERCENT EXCEEDS	30		28		30	
50 PERCENT EXCEEDS	9.8		9.7		6.8	
90 PERCENT EXCEEDS	4.1		2.4		1.9	

* See REMARKS.



SANTEE RIVER BASIN

0214295600 PAW CREEK AT WILKINSON BOULEVARD NEAR CHARLOTTE, NC

LOCATION.--Lat 35°14'24", long 80°58'29", Mecklenburg County, Hydrologic Unit 03050103, near right bank on downstream side of culvert at U.S. Highway 74, 0.7 mi downstream of Interstate Highway 85, and 2.5 mi northwest of airport in Charlotte.

DRAINAGE AREA.--10.8 mi^2.

PERIOD OF RECORD.--October 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 570 ft above sea level, from topographic map. Telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records poor except those above 500 ft^3/s, which are fair. Minimum discharge for period of record and current water year also occurred Sept. 21-23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	2.3	51	3.1	4.8	59	5.9	7.6	2.3	2.8	3.9	.92
2	4.3	11	12	3.1	4.2	23	5.8	4.5	30	2.8	3.5	.89
3	2.8	2.9	5.4	2.9	3.7	16	5.4	63	7.0	2.6	3.3	.83
4	2.1	2.4	4.2	2.9	17	11	5.3	15	4.4	2.5	3.6	.79
5	1.9	2.4	15	10	12	22	5.0	7.1	3.9	2.3	6.3	.98
6	1.9	2.5	14	4.8	6.6	43	14	4.7	5.3	2.2	3.6	1.2
7	2.3	2.3	9.2	3.4	4.8	15	5.1	3.4	4.5	2.1	2.6	1.2
8	49	33	7.0	3.2	20	12	4.2	2.7	4.0	2.0	2.5	1.2
9	5.3	6.1	5.2	128	7.9	11	4.0	2.7	3.6	1.9	2.3	1.5
10	3.2	3.3	4.7	22	7.0	10	3.8	2.1	3.2	1.8	5.6	2.0
11	2.9	3.0	4.6	12	7.0	10	3.6	1.9	3.1	1.6	3.1	2.8
12	2.6	2.3	13	8.9	4.8	10	35	1.8	5.8	1.4	2.1	1.2
13	2.5	2.2	50	7.4	40	10	10	1.7	43	1.2	1.8	1.0
14	2.4	2.1	8.9	6.5	141	39	5.8	1.7	58	1.2	1.8	.94
15	2.3	2.1	6.1	5.9	146	13	4.5	1.9	9.3	1.2	1.8	1.0
16	2.2	2.0	5.1	41	25	10	4.2	2.7	3.8	1.1	1.7	.94
17	2.2	2.1	5.8	12	13	10	3.7	3.4	3.3	2.2	1.4	.91
18	2.1	5.7	5.8	9.3	9.6	9.7	3.5	3.0	2.8	2.1	1.5	.89
19	2.4	8.2	16	7.1	7.8	17	3.3	2.4	2.5	1.4	1.5	.97
20	2.0	2.8	6.4	6.2	6.3	11	3.0	2.4	2.1	1.6	1.3	.95
21	2.2	15	4.5	5.6	8.8	9.4	2.7	2.3	1.9	2.1	1.3	.77
22	2.2	8.9	4.1	5.2	9.2	9.2	15	2.2	1.8	1.4	1.2	.70
23	2.1	3.5	4.1	5.1	5.3	9.0	64	2.1	1.7	835	1.1	.74
24	2.0	2.7	3.9	10	4.9	9.0	13	2.3	1.6	155	1.1	47
25	2.1	2.4	4.9	42	4.7	8.7	7.7	4.1	1.5	19	1.4	12
26	2.1	4.8	3.6	11	4.6	8.5	5.8	6.3	1.5	10	2.1	3.8
27	2.3	2.7	3.5	7.7	4.5	7.8	35	3.0	63	7.4	1.1	2.4
28	2.4	2.5	3.4	9.9	163	7.0	230	2.9	8.1	6.9	1.0	12
29	2.4	2.3	3.6	6.2	---	7.8	93	2.5	3.5	5.4	1.0	6.8
30	2.3	2.4	3.2	7.7	---	6.3	16	2.5	3.1	5.4	1.1	2.5
31	2.2	---	3.2	5.7	---	6.2	---	2.4	---	5.0	.95	---
TOTAL	184.7	147.9	291.4	415.8	693.5	450.6	617.3	168.3	289.6	1090.6	68.55	111.82
MEAN	5.96	4.93	9.40	13.4	24.8	14.5	20.6	5.43	9.65	35.2	2.21	3.73
MAX	64	33	51	128	163	59	230	63	63	835	6.3	47
MIN	1.9	2.0	3.2	2.9	3.7	6.2	2.7	1.7	1.5	1.1	.95	.70
CFSM	.55	.46	.87	1.24	2.29	1.35	1.91	.50	.89	3.26	.20	.35
IN.	.64	.51	1.00	1.43	2.39	1.55	2.13	.58	1.00	3.76	.24	.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

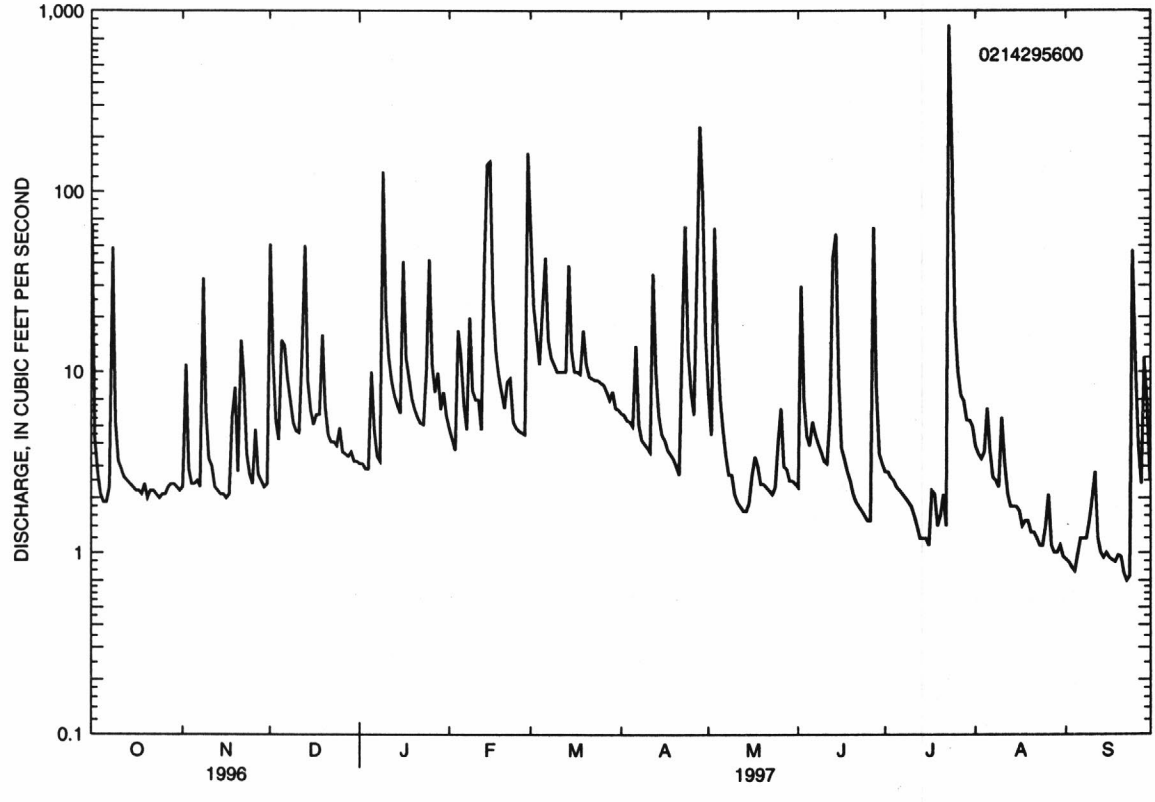
MEAN	11.5	12.0	7.12	17.5	25.5	15.7	14.8	8.56	9.86	14.2	6.02	4.81
MAX	23.0	26.1	9.40	20.0	33.4	18.2	20.6	13.2	11.6	35.2	9.92	5.68
(WY)	1996	1996	1997	1996	1995	1996	1997	1995	1995	1997	1995	1996
MIN	5.65	4.93	3.63	13.4	18.5	14.3	5.18	5.43	8.33	3.69	2.21	3.73
(WY)	1995	1997	1995	1997	1996	1995	1995	1997	1996	1996	1997	1997

SANTEE RIVER BASIN

0214295600 PAW CREEK AT WILKINSON BOULEVARD NEAR CHARLOTTE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1995 - 1997	
ANNUAL TOTAL	3836.4		4530.07			
ANNUAL MEAN	10.5		12.4		12.2	
HIGHEST ANNUAL MEAN					13.6	1996
LOWEST ANNUAL MEAN					10.7	1995
HIGHEST DAILY MEAN	260	Jan 27	835	Jul 23	835	Jul 23 1997
LOWEST DAILY MEAN	1.4	Jul 11	.70	Sep 22	.70	Sep 22 1997
ANNUAL SEVEN-DAY MINIMUM	1.6	Jul 6	.85	Sep 17	.85	Sep 17 1997
INSTANTANEOUS PEAK FLOW			2740	Jul 23	2740	Jul 23 1997
INSTANTANEOUS PEAK STAGE			9.77	Jul 23	9.77	Jul 23 1997
INSTANTANEOUS LOW FLOW			.69*	Sep 5	.69*	Sep 5 1997
ANNUAL RUNOFF (CFSM)	.97		1.15		1.13	
ANNUAL RUNOFF (INCHES)	13.21		15.60		15.37	
10 PERCENT EXCEEDS	16		16		20	
50 PERCENT EXCEEDS	4.6		3.8		4.4	
90 PERCENT EXCEEDS	2.2		1.4		1.7	

* See REMARKS.



SANTEE RIVER BASIN

02143000 HENRY FORK NEAR HENRY RIVER, NC

LOCATION.--Lat 35°41'03", long 81°24'10", Catawba County, Hydrologic Unit 03050102, on left bank 325 ft downstream of bridge on Secondary Road 1124, at site of Old Link Ford, 1.2 mi downstream of Burke-Catawba County line, and 2 mi southeast of Henry River.

DRAINAGE AREA.--83.2 mi^2.

PERIOD OF RECORD.--July 1925 to November 1931, December 1941 to current year.

REVISED RECORDS.--WSP 952: 1928, 1930. WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 891.0 ft above sea level. July 1925 to November 1931, at site 450 ft upstream at same datum.

REMARKS.--Records good except those during period of ice effect, Jan. 18-20, which are fair. Maximum discharge for period of record, from rating curve extended above 2,300 ft^3/s on basis of computation of peak flow over dam at Henry River; gage height: 29.2 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known: 29.2 ft, Aug. 13, 1940, at former site, from floodmarks; discharge: 31,300 ft^3/s. The flood of July 16, 1916, reached a stage of about 23 ft at former site; discharge: 20,700 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	49	2050	83	119	539	169	243	137	133	163	48
2	96	52	605	81	110	316	161	208	497	138	146	46
3	91	55	223	80	104	253	158	245	209	138	118	45
4	82	53	156	79	227	219	154	223	168	132	81	45
5	68	51	132	94	322	197	151	198	160	120	77	43
6	60	50	129	106	213	194	200	187	151	110	75	43
7	57	52	115	94	170	170	222	178	142	98	73	42
8	64	437	106	88	184	159	181	174	134	89	72	42
9	70	245	96	136	173	152	166	169	125	86	71	43
10	66	132	90	143	158	150	156	167	118	87	69	59
11	60	117	87	144	146	144	151	163	111	85	70	78
12	54	109	97	119	133	136	249	158	109	83	68	76
13	52	98	227	105	129	133	283	155	112	80	67	65
14	51	85	163	97	157	493	202	151	116	78	83	53
15	50	71	126	92	521	352	177	147	144	76	78	50
16	49	60	109	196	341	222	165	142	162	77	67	48
17	48	58	111	175	221	187	159	137	153	87	64	48
18	49	59	106	e140	180	173	153	133	143	85	61	48
19	47	64	127	e122	164	404	150	128	130	76	58	48
20	46	64	112	e109	152	401	149	125	116	75	57	47
21	47	61	102	101	157	265	144	122	149	97	58	45
22	47	62	95	97	203	220	156	118	124	88	54	44
23	47	60	92	101	170	192	1120	115	115	83	51	44
24	48	58	92	126	153	176	419	113	106	94	51	63
25	48	55	92	219	144	169	256	111	99	97	51	108
26	48	68	85	170	140	391	208	115	95	151	58	105
27	49	71	84	136	139	279	211	113	133	148	53	89
28	50	72	83	158	314	223	303	113	149	126	51	71
29	49	69	86	155	---	217	475	111	146	95	50	64
30	49	70	88	139	---	195	313	113	138	294	48	57
31	49	---	84	128	---	183	---	114	---	199	47	---
TOTAL	1787	2607	5950	3813	5344	7504	7161	4689	4391	3405	2190	1707
MEAN	57.6	86.9	192	123	191	242	239	151	146	110	70.6	56.9
MAX	96	437	2050	219	521	539	1120	245	497	294	163	108
MIN	46	49	83	79	104	133	144	111	95	75	47	42
CFSM	.69	1.04	2.31	1.48	2.29	2.91	2.87	1.82	1.76	1.32	.85	.68
IN.	.80	1.17	2.66	1.70	2.39	3.36	3.20	2.10	1.96	1.52	.98	.76

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1997@, BY WATER YEAR (WY)

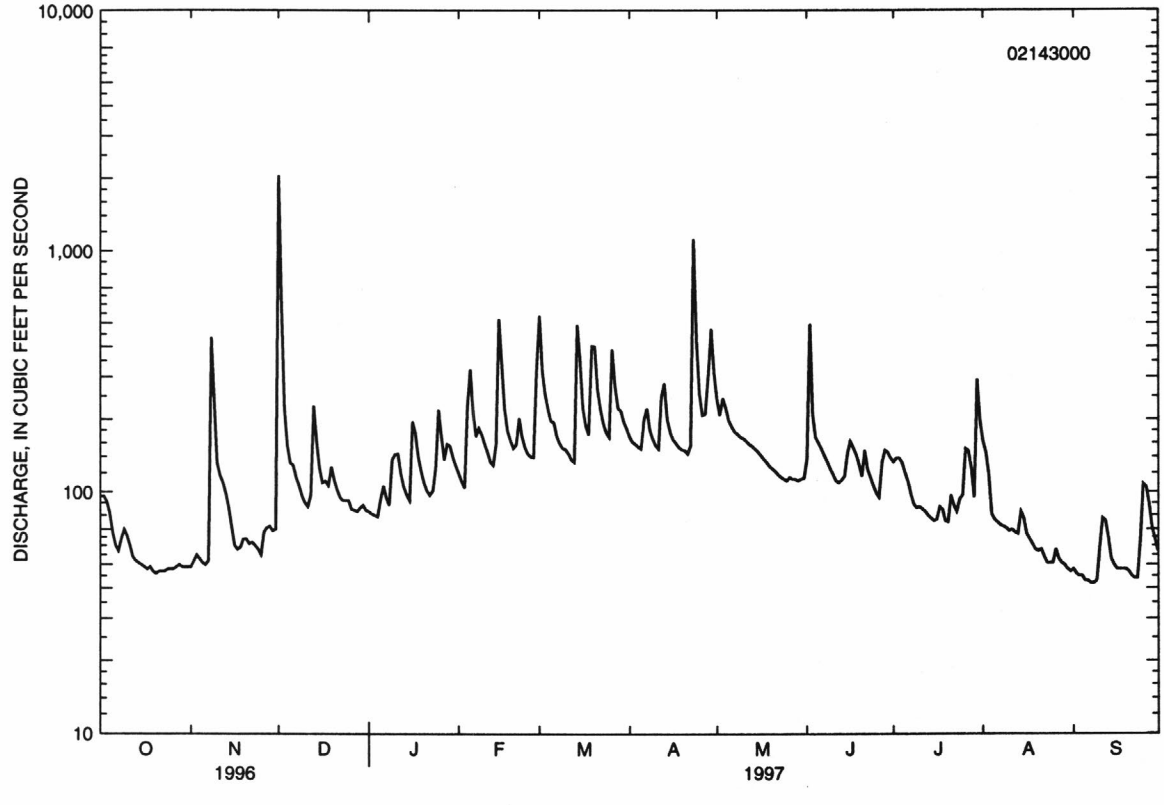
MEAN	110	106	129	155	188	207	186	139	119	90.7	101	94.9
MAX	562	392	276	380	473	583	471	322	392	203	554	594
(WY)	1930	1978	1984	1996	1960	1975	1983	1984	1947	1949	1928	1945
MIN	25.6	34.8	31.1	32.3	50.0	69.7	61.6	44.8	34.4	34.9	39.4	25.4
(WY)	1927	1932	1956	1956	1931	1985	1967	1927	1926	1986	1988	1954

SANTEE RIVER BASIN

02143000 HENRY FORK NEAR HENRY RIVER, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1926 - 1997@	
ANNUAL TOTAL	50956		50548			
ANNUAL MEAN	139		138		136	
HIGHEST ANNUAL MEAN					221	1993
LOWEST ANNUAL MEAN					59.7	1927
HIGHEST DAILY MEAN	3800	Jan 27	2050	Dec 1	10100	Oct 2 1929
LOWEST DAILY MEAN	45	Aug 3	42	Sep 7	4.0	Nov 15 1942
ANNUAL SEVEN-DAY MINIMUM	47	Oct 19	43	Sep 3	14	Jul 18 1926
INSTANTANEOUS PEAK FLOW			3890	Dec 1	15300*	Oct 2 1929
INSTANTANEOUS PEAK STAGE			8.88	Dec 1	18.71	Oct 12 1990
INSTANTANEOUS LOW FLOW			40	Sep 9	3.0	Dec 20 1942
ANNUAL RUNOFF (CFSM)	1.67		1.66		1.63	
ANNUAL RUNOFF (INCHES)	22.78		22.60		22.20	
10 PERCENT EXCEEDS	199		222		221	
50 PERCENT EXCEEDS	93		113		94	
90 PERCENT EXCEEDS	51		50		45	

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



SANTEE RIVER BASIN

02143040 JACOB FORK AT RAMSEY, NC

LOCATION.--Lat 35°35'26", long 81°34'02", Burke County, Hydrologic Unit 03050102, on left bank 16 ft downstream of bridge on Secondary Road 1924, 0.6 mi downstream of Queens Creek, and 0.6 mi north of Ramsey.

DRAINAGE AREA.--25.7 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1960-61. October 1961 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 1,103.00 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Maximum discharge for period of record, from rating curve extended above 3,400 ft^3/s on basis of contracted-opening measurement of peak flow. Minimum discharge for current water year also occurred Sept. 8, 9.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1940 reached a stage of about 39 ft, from information by local resident. Flood of July 1916 reached a stage of about 19 ft, from information by North Carolina State Highway Commission.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	15	756	26	46	264	55	98	86	38	40	13
2	39	24	215	26	40	144	51	80	131	37	31	13
3	29	17	95	25	36	109	49	105	74	33	27	13
4	23	15	62	24	139	90	47	98	51	30	25	12
5	20	15	51	48	145	77	45	80	42	31	23	12
6	18	15	48	47	95	73	81	72	37	29	22	12
7	18	19	42	38	72	60	87	64	37	28	22	12
8	26	381	37	32	80	55	63	61	35	26	21	11
9	24	111	33	50	75	50	54	64	34	26	21	12
10	21	50	30	46	66	49	48	56	32	26	21	25
11	18	34	29	48	57	46	46	52	31	31	20	29
12	17	28	43	38	50	42	146	51	38	26	20	16
13	16	24	130	34	49	43	140	50	54	24	19	15
14	16	23	73	31	68	198	84	47	79	23	19	14
15	15	21	50	30	224	119	66	45	199	22	18	14
16	15	20	41	91	144	76	57	42	75	27	18	13
17	15	19	42	74	94	61	54	42	55	28	17	13
18	15	21	39	61	75	56	51	40	46	23	16	13
19	15	22	44	49	68	194	48	39	41	21	16	13
20	14	20	37	39	61	170	45	39	38	21	16	13
21	14	20	32	34	64	104	43	36	41	21	16	12
22	14	21	31	34	80	83	64	34	44	22	14	12
23	15	19	30	40	64	65	368	34	37	28	14	12
24	15	18	32	59	55	56	162	33	34	36	14	63
25	14	19	30	116	51	53	103	36	33	25	14	38
26	14	42	28	79	51	209	81	36	38	57	14	21
27	15	29	28	56	52	119	87	34	64	28	14	17
28	15	25	27	75	236	91	136	33	47	25	14	18
29	15	23	30	75	---	82	182	32	45	25	13	18
30	15	30	28	61	---	70	125	37	39	161	13	15
31	14	---	28	52	---	63	---	34	---	76	13	---
TOTAL	578	1140	2221	1538	2337	2971	2668	1604	1637	1054	585	514
MEAN	18.6	38.0	71.6	49.6	83.5	95.8	88.9	51.7	54.6	34.0	18.9	17.1
MAX	44	381	756	116	236	264	368	105	199	161	40	63
MIN	14	15	27	24	36	42	43	32	31	21	13	11
CFSM	.73	1.48	2.79	1.93	3.25	3.73	3.46	2.01	2.12	1.32	.73	.67
IN.	.84	1.65	3.21	2.23	3.38	4.30	3.86	2.32	2.37	1.53	.85	.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1997, BY WATER YEAR (WY)

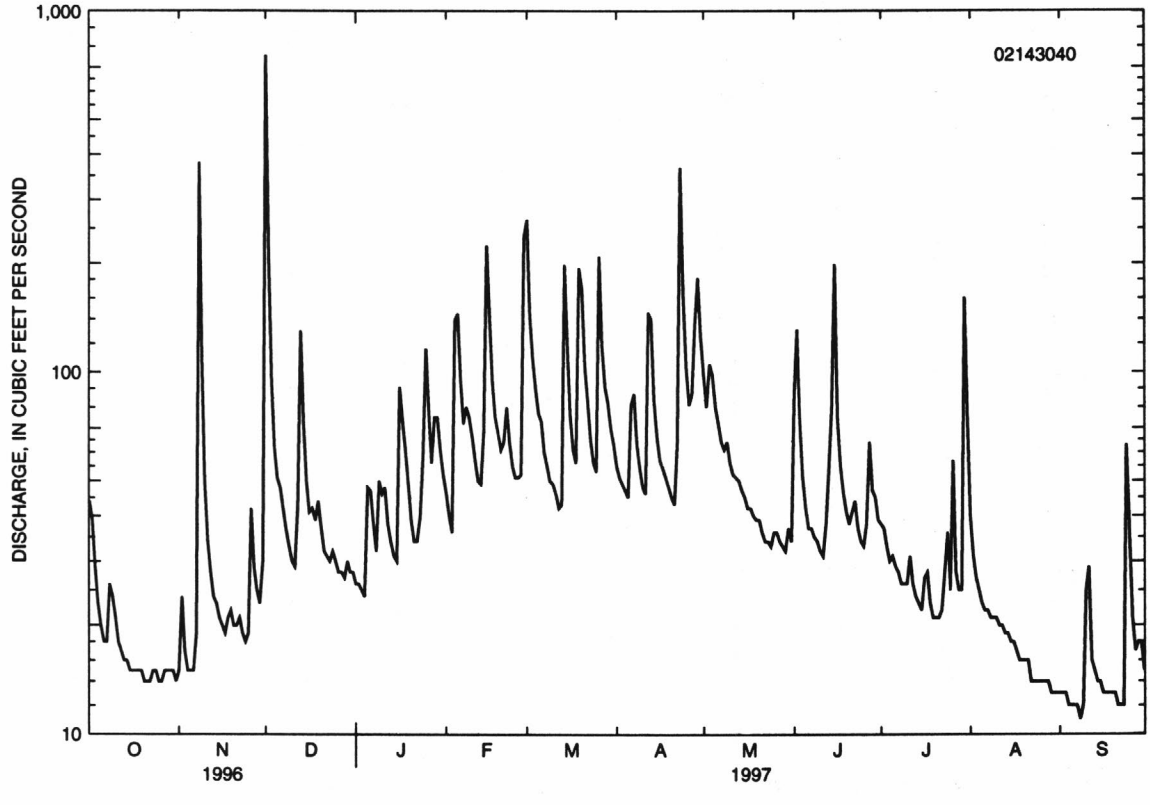
MEAN	43.2	43.7	49.4	60.7	68.0	79.0	69.0	54.3	43.5	35.4	34.7	29.5
MAX	154	130	92.6	131	134	177	157	109	82.3	72.7	152	102
(WY)	1965	1978	1984	1993	1966	1975	1983	1984	1972	1985	1970	1989
MIN	11.2	12.7	14.8	20.9	27.9	27.4	22.6	19.9	11.9	9.23	8.81	13.1
(WY)	1994	1982	1989	1981	1986	1988	1967	1988	1988	1988	1988	1993

SANTEE RIVER BASIN

02143040 JACOB FORK AT RAMSEY, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1962 - 1997	
ANNUAL TOTAL	15882		18847			
ANNUAL MEAN	43.4		51.6		50.8	
HIGHEST ANNUAL MEAN					80.8	1993
LOWEST ANNUAL MEAN					23.8	1988
HIGHEST DAILY MEAN	756	Dec 1	756	Dec 1	1730	Nov 6 1977
LOWEST DAILY MEAN	11	Jul 23	11	Sep 8	4.7	Aug 27 1988
ANNUAL SEVEN-DAY MINIMUM	12	Jul 18	12	Sep 3	5.7	Aug 15 1988
INSTANTANEOUS PEAK FLOW			1420	Dec 1	7220*	Oct 17 1975
INSTANTANEOUS PEAK STAGE			8.02	Dec 1	19.74	Oct 17 1975
INSTANTANEOUS LOW FLOW			11*	Sep 7	4.4	Aug 28 1988
ANNUAL RUNOFF (CFSM)	1.69		2.01		1.98	
ANNUAL RUNOFF (INCHES)	22.99		27.28		26.84	
10 PERCENT EXCEEDS	78		95		87	
50 PERCENT EXCEEDS	30		37		34	
90 PERCENT EXCEEDS	14		15		16	

* See REMARKS.



02143040 JACOB FORK AT RAMSEY, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1996 to current year.

REMARKS.--Data collected by U.S. Geological Survey, WRD, South Carolina District as part of the Santee NAWQA (National Water Quality Aassessment) Program.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
OCT 1995										
25...	1300	27	19.0	6.6	13.5	730	9.5	91	56	69
NOV										
27...	1400	31	18.0	6.8	8.5	730	11	93	--	--
DEC										
12...	1415	27	16.0	6.3	3.0	740	13	96	55	19
JAN 1996										
17...	1000	74	15.0	6.8	5.0	750	12	97	50	53
FEB										
08...	1230	88	15.0	6.9	4.0	740	13	98	--	--
MAR										
13...	1145	41	15.0	6.6	4.0	740	13	97	7.0	11
APR										
10...	0745	43	16.0	5.8	5.0	735	11	89	--	--
MAY										
13...	1045	29	17.6	6.2	14.0	740	9.5	95	31	310
JUN										
09...	1000	100	19.0	6.2	17.5	730	8.6	90	--	--
17...	1030	26	20.0	6.4	20.0	740	8.7	95	230	520
JUL										
22...	1030	12	23.0	5.8	22.5	740	7.9	90	280	970
AUG										
28...	0745	38	18.0	6.7	19.0	740	8.6	92	480	1900
SEP										
23...	1015	13	21.0	6.9	15.0	740	8.9	89	--	--
OCT										
28...	1045	15	23.0	6.5	14.5	740	10	100	--	--
NOV										
18...	1100	20	19.0	6.5	7.5	740	11	95	--	--
DEC										
09...	1130	33	16.0	6.0	4.0	740	13	97	--	--
JAN 1997										
14...	1200	32	19.0	7.1	1.5	770	14	99	--	--
FEB										
19...	1300	68	14.0	6.7	8.5	740	12	99	--	--
MAR										
14...	1145	260	14.0	5.9	12.0	730	10	97	--	--
25...	1130	53	15.0	6.7	8.0	750	12	100	--	--
APR										
17...	1400	54	15.0	6.4	13.5	730	10	98	--	--
MAY										
22...	1145	35	18.0	6.2	15.0	750	10	99	--	--
JUN										
25...	1000	33	19.0	6.4	19.5	750	8.7	95	--	--
JUL										
07...	1030	29	20.0	6.5	19.0	740	9.2	100	--	--
AUG										
11...	1030	20	20.0	6.2	19.5	740	9.5	100	--	--
SEP										
03...	0945	13	22.0	7.0	20.0	740	8.7	96	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
OCT 1995										
25...	6	1.2	.63	1.4	31	.3	.90	10	8.0	.90
NOV										
27...	5	1.1	.56	1.3	32	.3	.70	9.0	7.0	1.2
DEC										
12...	5	1.1	.59	1.3	32	.2	.70	8.0	7.0	1.4
JAN 1996										
17...	5	.90	.55	1.2	33	.2	.70	5.0	4.0	2.0
FEB										
08...	4	.91	.54	1.1	31	.2	.70	6.0	5.0	1.3
MAR										
13...	5	.94	.53	1.2	33	.2	.60	4.0	4.0	1.6
APR										
10...	5	1.1	.59	1.2	30	.2	.80	6.0	5.0	1.9
MAY										
13...	5	1.2	.60	1.4	32	.3	.80	10	8.0	1.5
JUN										
09...	6	1.2	.61	1.3	28	.2	1.4	6.0	5.0	1.9
17...	6	1.2	.61	1.3	29	.2	1.0	16	13	1.1
JUL										
22...	7	1.5	.71	1.7	32	.3	1.0	10	8.0	1.2
AUG										
28...	5	1.2	.60	1.2	28	.2	1.0	6.0	5.0	1.9
SEP										
23...	6	1.4	.67	1.6	32	.3	1.0	10	8.0	1.3
OCT										
28...	7	1.5	.69	1.6	30	.3	1.2	12	10	1.5
NOV										
18...	6	1.3	.61	1.5	32	.3	.90	8.0	7.0	1.7
DEC										
09...	5	1.1	.61	1.3	31	.2	.70	9.0	8.0	1.9
JAN 1997										
14...	5	1.1	.59	1.3	32	.2	.70	6.0	5.0	1.8
FEB										
19...	4	.89	.50	1.1	32	.2	.70	7.0	6.0	1.9
MAR										
14...	4	.73	.52	.90	29	.2	.70	3.0	2.0	2.5
25...	5	1.0	.53	1.2	32	.2	.70	9.0	8.0	1.7
APR										
17...	5	.96	.54	1.2	32	.2	.7	6.0	5.0	1.8
MAY										
22...	5	1.1	.60	1.4	33	.3	.7	12	10	1.2
JUN										
25...	6	1.2	.65	1.4	31	.3	.8	7.0	6.0	1.2
JUL										
07...	6	1.2	.62	1.4	31	.3	.9	9.0	8.0	1.1
AUG										
11...	6	1.4	.64	1.5	31	.3	1	8.0	6.0	.6
SEP										
03...	7	1.5	.69	1.6	31	.3	1	9.0	7.0	.4

02143040 JACOB FORK AT RAMSEY, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT 1995										
25...	1.2	.20	9.2	18	.020	.060	<.015	<.20	<.20	--
NOV										
27...	1.1	<.10	8.8	15	<.010	.050	<.015	<.20	<.20	--
DEC										
12...	1.1	.20	8.6	16	<.010	<.050	<.015	<.20	<.20	--
JAN 1996										
17...	1.3	.10	7.2	20	<.010	.050	<.015	<.20	<.20	--
FEB										
08...	1.1	<.10	6.9	16	<.010	.110	<.015	<.20	<.20	--
MAR										
13...	1.0	<.10	7.6	13	.010	.060	<.015	<.20	<.20	--
APR										
10...	1.2	<.10	8.2	21	<.010	.060	<.015	<.20	<.20	--
MAY										
13...	1.1	<.10	8.9	25	<.010	.090	.040	<.20	<.20	--
JUN										
09...	.90	<.10	7.4	17	<.010	.130	<.015	.30	<.20	.43
17...	1.2	<.10	8.5	17	<.010	.090	.030	<.20	<.20	--
JUL										
22...	1.2	<.10	11	22	.010	.150	.060	<.20	<.20	--
AUG										
28...	.90	<.10	7.6	24	<.010	.120	.030	<.20	<.20	--
SEP										
23...	1.2	<.10	9.7	41	.020	.110	<.015	<.20	<.20	--
OCT										
28...	1.3	<.10	9.8	6	.030	<.050	.020	<.20	<.20	--
NOV										
18...	1.2	<.10	8.9	24	<.010	.090	<.015	<.20	<.20	--
DEC										
09...	1.2	<.10	7.9	18	<.010	.090	.020	<.20	<.20	--
JAN 1997										
14...	1.2	<.10	8.1	22	.010	.110	<.015	<.20	<.20	--
FEB										
19...	1.1	<.10	6.8	17	.020	.070	<.015	<.20	<.20	--
MAR										
14...	1.0	<.10	5.4	18	<.010	.060	<.015	<.20	<.20	--
25...	1.0	<.10	7.4	36	<.010	.070	<.015	<.20	<.20	--
APR										
17...	1	<.1	7.7	19	<.010	.050	<.015	<.20	<.20	--
MAY										
22...	1.2	<.1	9.0	21	<.01	.06	<.02	<.2	<.2	--
JUN										
25...	1.2	<.1	9.1	20	<.01	.12	<.02	<.2	<.2	--
JUL										
07...	1.2	<.1	9.2	22	<.01	.09	<.02	<.2	<.2	--
AUG										
11...	.9	<.1	9.7	28	<.01	.12	<.02	<.2	<.2	--
SEP										
03...	1	<.1	10	21	<.01	.10	<.02	<.2	<.2	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1995										
25...	<.010	<.010	<.010	64	6	1.0	.2	6.0	.44	63
NOV										
27...	<.010	<.010	<.010	47	6	.7	.2	1.0	.08	50
DEC										
12...	<.010	<.010	<.010	43	6	.7	.1	1.0	.07	50
JAN 1996										
17...	<.010	<.010	<.010	36	3	.8	.2	1.0	.20	60
FEB										
08...	<.010	<.010	<.010	54	5	1.0	.20	6.0	1.4	91
MAR										
13...	.010	<.010	.010	31	4	.50	.20	2.0	.22	67
APR										
10...	<.010	<.010	<.010	36	5	.60	.20	3.0	.35	53
MAY										
13...	.020	.020	<.010	57	5	.80	.20	3.0	.23	42
JUN										
09...	.080	.010	.010	210	8	2.7	2.0	35	9.4	90
17...	<.010	<.010	.010	87	7	.90	.30	5.0	.35	86
JUL										
22...	<.010	<.010	.030	200	10	1.5	--	2.0	.06	82
AUG										
28...	<.010	<.010	.010	95	6	2.3	<.10	11	1.1	66
SEP										
23...	<.010	<.010	<.010	77	6	.90	.30	4.0	.14	71
OCT										
28...	<.010	<.010	<.010	120	5	1.7	.30	4.0	--	92
NOV										
18...	<.010	<.010	<.010	57	10	.90	.20	1.0	--	63
DEC										
09...	<.010	<.010	.010	44	7	.80	.20	1.0	--	56
JAN 1997										
14...	<.010	<.010	<.010	38	6	.50	.10	1.0	--	44
FEB										
19...	<.010	<.010	<.010	22	4	.60	.10	.00	--	33
MAR										
14...	.010	<.010	<.010	57	4	1.9	.6	27	--	56
25...	.020	<.010	<.010	40	1	.5	.2	1.0	--	44
APR										
17...	<.010	<.010	<.010	26	4	.8	.2	4	--	63
MAY										
22...	<.01	<.01	<.01	27	4	.7	.2	2	--	86
JUN										
25...	<.01	<.01	<.01	47	5	.9	.2	2	--	79
JUL										
07...	<.01	<.01	<.01	40	6	.9	.2	3	--	74
AUG										
11...	<.01	<.01	<.01	39	5	.8	.4	3	--	65
SEP										
03...	<.01	<.01	<.01	61	5	.9	.3	3	--	84

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DATE	TIME	ALUMINUM BOT MAT <63U WS FIELD PERCENT (34790)	ANTIMONY BOT MAT <63U WS FIELD (UG/G) (34795)	ARSENIC BOT MAT <63U WS FIELD (UG/G) (34800)	BARIUM BOT MAT <63U WS FIELD (UG/G) (34805)	BERYLLIUM BOT MAT <63U WS FIELD (UG/G) (34810)	BISMUTH BOT MAT <180UWS FIELD (UG/G) (34816)	CADMIUM BOT MAT <63U WS FIELD (UG/G) (34825)	CALCIUM BOT MAT <63U WS FIELD PERCENT (34830)	CERIUM BOT MAT <63U WS FIELD (UG/G) (34835)	CHROMIUM BOT MAT <63U WS FIELD (UG/G) (34840)
OCT 1995											
18...	1600	13	.400	6	480	4	<10	.200	.31	280	150
OCT											
18-18	1600	13	.400	6	480	4	<10	.200	.31	280	150

DATE	COBALT BOT MAT <63U WS FIELD (UG/G) (34845)	COPPER BOT MAT <63U WS FIELD (UG/G) (34850)	EUROPIUM BOT MAT <63U WS FIELD (UG/G) (34855)	GALLIUM BOT MAT <63U WS FIELD (UG/G) (34860)	GOLD BOT MAT <63U WS FIELD (UG/G) (34870)	HOLMIUM BOT MAT <63U WS FIELD (UG/G) (34875)	IRON BOT MAT <63U WS FIELD PERCENT (34880)	LANTHANUM BOT MAT <63U WS FIELD (UG/G) (34885)	LEAD BOT MAT <63U WS FIELD (UG/G) (34890)	LITHIUM BOT MAT <63U WS FIELD (UG/G) (34895)	MAGNESIUM BOT MAT <63U WS FIELD PERCENT (34900)
OCT 1995											
18...	29	40	2	30	<8	<4	5.9	120	45	80	.67
OCT											
18-18	29	40	2	30	<8	<4	5.9	120	45	80	.67

DATE	MANGANESE BOT MAT <63U WS FIELD (UG/G) (34905)	MERCURY BOT MAT <63U WS FIELD (UG/G) (34910)	MOLYBDENUM BOT MAT <63U WS FIELD (UG/G) (34915)	NEODYMIUM BOT MAT <63U WS FIELD (UG/G) (34920)	NICKEL BOT MAT <63U WS FIELD (UG/G) (34925)	NIOBIUM BOT MAT <63U WS FIELD (UG/G) (34930)	PHOSPHORUS BOT MAT <63U WS FIELD PERCENT (34935)	POTASSIUM BOT MAT <63U WS FIELD PERCENT (34940)	SCANDIUM BOT MAT <63U WS FIELD (UG/G) (34945)	SELENIUM BOT MAT <63U WS FIELD (UG/G) (34950)	SILVER BOT MAT <63U WS FIELD (UG/G) (34955)
OCT 1995											
18...	660	.080	3	100	78	30	.11	1.4	20	1	.200
OCT											
18-18	660	.080	3	100	78	30	.11	1.4	20	1	.200

DATE	SODIUM BOT MAT <63U WS FIELD PERCENT (34960)	STRONTIUM BOT MAT <63U WS FIELD (UG/G) (34965)	SULFUR BOT MAT <63U WS FIELD (UG/G) (34970)	TANTALUM BOT MAT <63U WS FIELD (UG/G) (34975)	THORIUM BOT MAT <63U WS FIELD (UG/G) (34980)	TIN BOT MAT <63U WS FIELD (UG/G) (34985)	URANIUM BOT MAT <63U WS FIELD (UG/G) (35000)	VANADIUM BOT MAT <63U WS FIELD (UG/G) (35005)	YTTRIUM BOT MAT <63U WS FIELD (UG/G) (35010)	YTTERBIUM BOT MAT <63U WS FIELD (UG/G) (35015)	ZINC BOT MAT <63U WS FIELD (UG/G) (35020)
OCT 1995											
18...	.20	63	<.050	<40	61	<5.0	17	140	39	3	130
OCT											
18-18	.20	63	<.050	<40	61	<5.0	17	140	39	3	130

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DATE	TIME	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	P,P' DDE DISSOLV (UG/L) (34653)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	LINDANE DIS-SOLVED (UG/L) (39341)
FEB 1996												
08...	1230	<.0070	<.0020	<.0050	<.018	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040	<.004
MAY												
13...	1045	<.0070	E.0030	.087	E.013	E.0080	<.0040	<.0030	<.0020	<.0060	.0070	<.004
AUG												
28...	0745	<.0070	<.0020	<.0050	<.018	<.0020	<.0040	<.0030	<.0020	<.0060	<.0040	<.004

DATE	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	MALA-THION, DIS-SOLVED (UG/L) (39532)	PARA-THION, DIS-SOLVED (UG/L) (39542)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)
FEB 1996												
08...	<.001	<.002	<.005	<.004	<.002	<.001	<.002	<.0020	<.004	<.0030	<.0020	<.013
MAY												
13...	<.001	.004	.018	<.004	.015	.160	<.002	<.0020	<.004	<.0030	<.0020	<.013
AUG												
28...	<.001	<.002	<.005	<.004	<.002	<.001	<.002	<.0020	<.004	<.0030	<.0020	<.013

DATE	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)
FEB 1996												
08...	<.0030	<.017	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050
MAY												
13...	.0070	<.017	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050
AUG												
28...	<.0030	<.017	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050

SANTEE RIVER BASIN

02143500 INDIAN CREEK NEAR LABORATORY, NC

LOCATION.--Lat 35°25'20", long 81°15'52", Lincoln County, Hydrologic Unit 03050102, on left bank 250 ft upstream from remains of Rudisill Mill dam, 0.5 mi upstream from bridge on Secondary Road 1252, 1.5 mi south of Laboratory, 1.5 mi upstream from mouth, and 3.5 mi south of Lincolnton.

DRAINAGE AREA.--69.2 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1951 to current year.

REVISED RECORDS.--WDR NC-71-1: 1970(M). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 736 ft above sea level, by barometer. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Minimum discharge for current water year also occurred Sept. 22.

EXTREMES OUTSIDE PERIOD OF RECORD.--Peak discharge of flood in October 1929 was 9,920 ft^3/s; flood in July 1916, 7,840 ft^3/s; flood in August 1940, 6,000 ft^3/s. Discharge based on computation of peak flow over dam 1 mi downstream, using floodmarks and information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	31	636	61	86	694	92	192	89	45	30	14
2	46	48	563	61	82	250	90	151	124	51	24	12
3	37	37	162	61	79	225	89	370	125	40	22	12
4	30	32	109	59	188	183	87	216	98	37	23	11
5	29	32	88	75	186	146	86	150	75	38	26	11
6	31	32	99	71	135	167	124	130	66	46	23	12
7	30	33	107	63	109	134	182	115	66	33	22	13
8	46	141	107	60	125	121	115	109	63	33	22	11
9	38	96	84	279	116	117	100	107	64	32	22	9.5
10	39	54	73	206	105	112	92	98	62	34	23	15
11	33	42	69	135	102	107	90	93	57	30	24	25
12	30	39	69	105	93	99	157	90	57	31	21	17
13	29	37	201	89	95	96	148	88	160	28	20	16
14	31	37	117	82	175	159	111	83	135	27	19	16
15	29	36	93	77	990	127	106	81	90	26	19	14
16	30	37	80	148	417	104	99	75	68	27	17	12
17	30	35	82	113	198	99	95	75	60	42	17	13
18	28	39	78	92	153	100	88	73	56	31	16	15
19	31	47	123	81	131	339	87	71	54	25	15	13
20	29	39	97	79	118	265	84	67	50	24	14	14
21	30	41	81	76	118	168	82	64	49	25	15	12
22	29	53	74	76	139	139	106	62	50	24	14	11
23	29	41	70	79	111	117	468	63	50	35	14	11
24	30	37	71	90	99	109	208	61	44	52	13	52
25	30	39	73	163	99	107	147	65	43	32	14	70
26	29	96	66	113	94	127	118	75	41	28	17	31
27	28	58	65	95	100	106	140	66	59	27	17	22
28	30	47	64	131	549	110	501	64	55	27	14	21
29	31	41	66	124	---	135	1200	62	51	25	14	25
30	31	44	65	106	---	108	320	71	43	41	13	19
31	30	---	63	92	---	101	---	68	---	44	13	---
TOTAL	1018	1421	3795	3142	4992	4971	5412	3155	2104	1040	577	549.5
MEAN	32.8	47.4	122	101	178	160	180	102	70.1	33.5	18.6	18.3
MAX	65	141	636	279	990	694	1200	370	160	52	30	70
MIN	28	31	63	59	79	96	82	61	41	24	13	9.5
CFSM	.47	.68	1.77	1.46	2.58	2.32	2.61	1.47	1.01	.48	.27	.26
IN.	.55	.76	2.04	1.69	2.68	2.67	2.91	1.70	1.13	.56	.31	.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1997, BY WATER YEAR (WY)

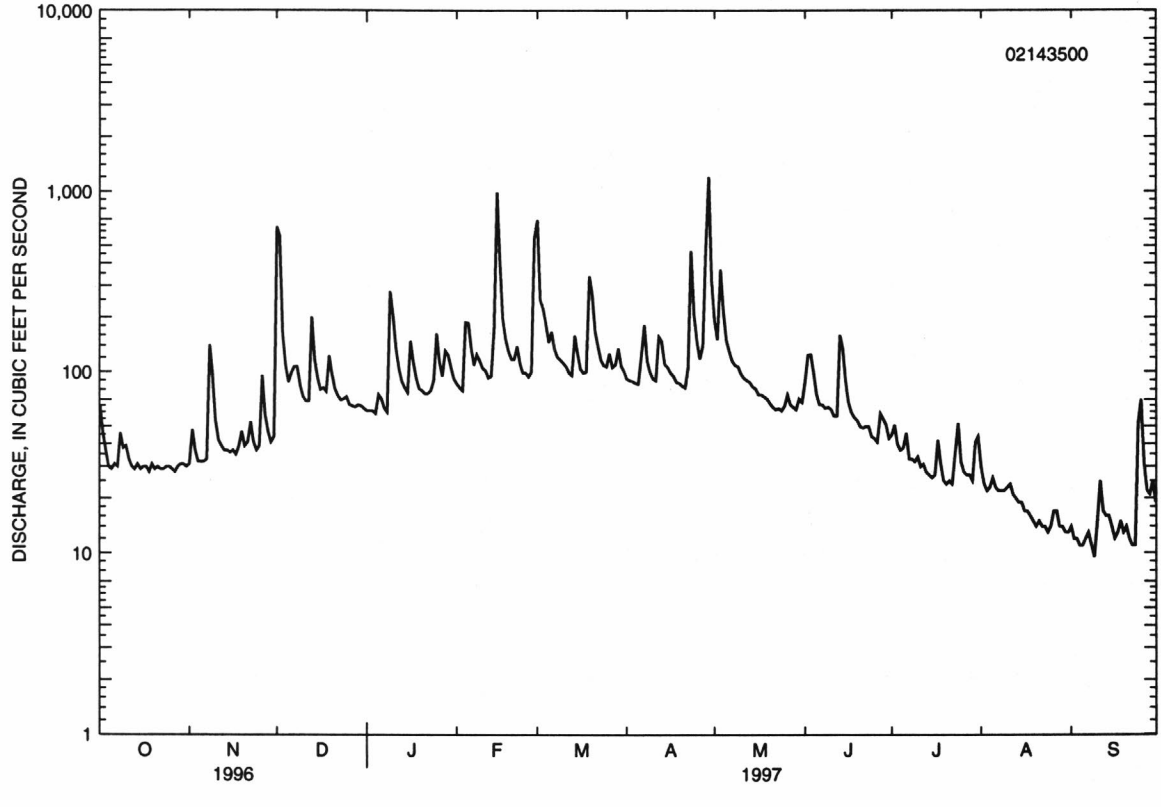
MEAN	70.6	68.3	92.4	119	140	155	118	88.9	75.1	52.9	55.9	45.6
MAX	324	272	236	313	309	424	301	250	165	130	275	155
(WY)	1965	1958	1968	1978	1960	1952	1958	1984	1962	1964	1970	1959
MIN	8.30	19.2	26.0	25.8	44.0	59.8	38.1	27.6	11.8	12.7	13.7	8.62
(WY)	1955	1955	1956	1956	1986	1986	1986	1986	1986	1986	1988	1954

SANTEE RIVER BASIN

02143500 INDIAN CREEK NEAR LABORATORY, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1951 - 1997	
ANNUAL TOTAL	33509		32176.5			
ANNUAL MEAN	91.6		88.2		90.0	
HIGHEST ANNUAL MEAN					145	1993
LOWEST ANNUAL MEAN					40.4	1988
HIGHEST DAILY MEAN	1250	Jan 19	1200	Apr 29	4350	Aug 10 1970
LOWEST DAILY MEAN	22	Jul 21	9.5	Sep 9	2.1	Jul 20 1986
ANNUAL SEVEN-DAY MINIMUM	26	Jul 19	11	Sep 3	3.1	Jul 16 1986
INSTANTANEOUS PEAK FLOW			1610	Apr 28	8450	Aug 10 1970
INSTANTANEOUS PEAK STAGE			4.88	Apr 28	10.61	Aug 10 1970
INSTANTANEOUS LOW FLOW			8.2*	Sep 8	1.7	Jul 21 1986
ANNUAL RUNOFF (CFSM)	1.32		1.27		1.30	
ANNUAL RUNOFF (INCHES)	18.01		17.30		17.66	
10 PERCENT EXCEEDS	153		150		149	
50 PERCENT EXCEEDS	64		65		58	
90 PERCENT EXCEEDS	30		17		25	

* See REMARKS.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1996 to current year.

REMARKS.--Data collected by U.S. Geological Survey, WRD, South Carolina District as part of the Santee NAWQA (National Water Quality Assessment) Program.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1995											
26...	0930	57	117	6.6	12.5	740	8.9	84	800	380	20
NOV											
28...	1030	81	86.0	6.8	11.0	740	9.5	88	--	--	18
DEC											
13...	1030	78	106	6.0	5.0	750	12	92	440	1000	18
JAN 1996											
17...	1530	150	87.0	7.0	6.0	750	12	97	700	7000	18
FEB											
07...	1300	140	80.0	6.8	4.0	750	12	92	72	120	16
13...	1215	110	80.0	6.5	4.5	750	13	100	--	--	17
21...	1100	140	86.0	6.0	9.0	750	11	95	--	--	17
26...	1115	95	78.0	6.7	10.5	750	11	96	--	--	15
MAR											
04...	1115	83	86.0	6.4	7.0	760	14	120	210	140	16
13...	0830	65	93.0	6.8	6.0	750	12	94	--	--	17
20...	1230	240	67.0	6.7	8.0	730	11	92	--	--	15
26...	1100	89	83.0	7.0	11.0	750	11	100	--	--	16
APR											
09...	1330	110	99.0	7.1	11.0	750	11	100	--	--	18
MAY											
13...	1430	60	98.0	7.1	15.5	740	9.0	95	31	120	18
JUN											
09...	1230	690	76.0	6.4	19.5	740	7.7	83	--	--	13
17...	1300	55	112	6.8	22.0	740	8.3	95	820	480	18
JUL											
22...	1430	22	195	6.9	25.0	740	7.2	86	350	560	19
AUG											
28...	1115	33	80.0	7.1	21.5	750	7.8	89	22000	2400	17
SEP											
23...	1345	29	143	7.4	17.0	740	8.8	91	--	--	17
OCT											
28...	1415	30	139	7.0	17.0	740	9.7	100	--	--	18
NOV											
18...	1415	38	152	7.0	8.5	750	11	95	--	--	18
DEC											
09...	1345	83	74.0	6.8	5.5	750	12	98	--	--	18
JAN 1997											
14...	1445	81	112	7.1	3.0	760	13	98	--	--	17
FEB											
19...	1600	130	83.0	6.4	9.0	750	11	98	--	--	16
MAR											
25...	1415	105	99.0	7.0	10.5	750	11	100	--	--	17
APR											
17...	1145	95	134	6.7	13.5	740	10	96	--	--	17
28...	1030	226	83.0	6.4	12.5	740	9.8	92	--	--	17
MAY											
22...	1400	62	119	6.9	16.5	750	9.4	96	--	--	17
JUN											
13...	1100	207	65.0	6.4	19.0	750	7.8	85	--	--	11
25...	1130	42	200	7.0	22.5	760	7.6	88	--	--	18
JUL											
07...	1245	33	74.0	6.8	21.5	760	8.4	95	--	--	17
AUG											
11...	1345	26	138	6.7	26.5	740	9.7	100	--	--	17
SEP											
03...	1200	12	165	7.1	22.5	750	8.1	93	--	--	18

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
OCT 1995											
26...	4.7	2.1	15	58	1	2.8	32	26	17	4.4	.20
NOV											
28...	4.2	1.9	8.3	46	.8	2.2	33	27	8.4	4.2	<.10
DEC											
13...	4.1	2.0	13	57	1	2.1	26	21	15	4.2	.20
JAN 1996											
17...	3.9	2.0	6.6	40	.7	2.7	20	16	7.4	4.2	.10
FEB											
07...	3.6	1.7	8.4	50	.9	2.0	18	14	11	3.6	<.10
13...	3.7	1.8	9.4	52	1	1.9	20	17	13	3.7	<.10
21...	3.7	1.8	8.7	49	.9	2.3	21	17	10	3.7	<.10
26...	3.4	1.7	7.5	48	.8	1.8	22	18	9.2	3.6	<.10
MAR											
04...	3.6	1.8	9.2	51	1	2.1	23	19	9.9	3.6	<.10
13...	3.7	1.8	10	53	1	1.9	27	22	13	3.6	<.10
20...	3.3	1.6	5.8	41	.7	2.5	14	11	9.6	3.1	<.10
26...	3.6	1.7	9.8	53	1	2.0	20	16	13	3.7	<.10
APR											
09...	3.9	1.9	11	54	1	1.9	22	18	16	3.9	.10
MAY											
13...	3.9	1.9	11	54	1	2.4	25	21	14	3.5	<.10
JUN											
09...	3.0	1.4	6.0	41	.7	4.4	19	16	10	2.9	<.10
17...	4.0	1.9	13	57	1	2.6	27	22	16	3.9	<.10
JUL											
22...	4.3	2.1	29	72	3	3.6	38	31	39	5.1	.20
AUG											
28...	3.9	1.8	7.1	42	.7	3.3	23	18	8.2	3.8	.10
SEP											
23...	3.7	1.8	20	68	2	3.0	28	23	27	4.7	.10
OCT											
28...	4.0	2.0	17	62	2	3.4	33	27	23	4.3	.10
NOV											
18...	4.0	1.9	21	68	2	3.1	32	26	33	4.2	.10
DEC											
09...	4.0	1.9	6.1	39	.6	2.4	22	18	9.0	4.1	<.10
JAN 1997											
14...	3.9	1.8	13	59	1	2.2	27	22	20	4.0	<.10
FEB											
19...	3.6	1.6	8.3	50	.9	2.1	27	23	12	3.8	<.10
MAR											
25...	3.9	1.8	13	59	1	2.1	32	26	17	4.0	<.10
APR											
17...	3.8	1.8	18	67	2	2.3	24	20	34	9.6	<.1
28...	3.9	1.8	7.8	46	.8	2.3	20	16	13	3.4	<.1
MAY											
22...	3.9	1.9	15	62	2	2.1	26	21	21	4.0	<.1
JUN											
13...	2.5	1.2	5.9	46	.8	2.7	13	11	7.9	3.3	<.1
25...	3.9	2.0	31	76	3	2.6	38	32	43	4.6	.1
JUL											
07...	3.8	1.8	5.1	36	.5	2.5	23	18	3.9	4.0	<.1
AUG											
11...	3.7	1.8	17	65	2	2.8	27	22	22	4.2	.1
SEP											
03...	4.0	2.1	22	67	2	3.6	33	27	25	6.1	.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)
OCT 1995											
26...	15	78	.030	.940	.030	.17	--	.20	<.20	1.1	--
NOV											
28...	14	55	<.010	.870	.020	.18	.18	.20	.20	1.1	1.1
DEC											
13...	14	66	<.010	1.10	.020	.18	--	.20	<.20	1.3	--
JAN 1996											
17...	11	56	<.010	.860	.040	.36	.26	.40	.30	1.3	1.2
FEB											
07...	12	60	<.010	.870	.050	--	--	<.20	<.20	--	--
13...	13	62	<.010	1.00	.030	--	--	<.20	<.20	--	--
21...	11	61	.020	.850	.090	.21	.21	.30	.30	1.1	1.1
26...	11	64	<.010	.850	<.015	--	--	<.20	<.20	--	--
MAR											
04...	12	71	<.010	.860	<.015	--	--	<.20	<.20	--	--
13...	12	60	.020	.880	.030	.27	.17	.30	.20	1.2	1.1
20...	9.8	48	.010	.630	.060	.54	.24	.60	.30	1.2	.93
26...	12	61	<.010	.960	.020	--	--	<.20	<.20	--	--
APR											
09...	12	68	<.010	.940	.030	.37	--	.40	<.20	1.3	--
MAY											
13...	14	79	.020	.850	.070	.23	--	.30	<.20	1.1	--
JUN											
09...	6.6	45	.020	1.60	.180	2.6	.42	2.8	.60	4.4	2.2
17...	14	69	.010	.940	.050	.35	.25	.40	.30	1.3	1.2
JUL											
22...	16	123	.020	.960	.070	.33	.33	.40	.40	1.4	1.4
AUG											
28...	14	62	.020	1.00	.070	.43	.33	.50	.40	1.5	1.4
SEP											
23...	14	119	.010	1.30	.030	.27	.17	.30	.20	1.6	1.5
OCT											
28...	14	89	.030	.600	.020	.28	.18	.30	.20	.90	.80
NOV											
18...	14	107	<.010	.800	.060	.24	.14	.30	.20	1.1	1.0
DEC											
09...	13	55	.010	.820	.060	--	--	<.20	<.20	--	--
JAN 1997											
14...	13	81	.020	.780	.040	--	--	<.20	<.20	--	--
FEB											
19...	11	57	.020	.800	<.015	--	--	.20	<.20	1.0	--
MAR											
25...	12	87	<.010	.960	<.015	--	--	.20	<.20	1.2	--
APR											
17...	12	94	<.010	.770	.040	.16	--	.20	<.20	.97	--
28...	10	61	.01	.73	.05	.58	.24	.6	.3	1.4	1.0
MAY											
22...	14	85	<.01	.77	.04	.18	--	.2	<.2	.99	--
JUN											
13...	8.9	49	<.01	.68	.04	.86	.19	.9	.2	1.6	.91
25...	15	138	.02	1.1	.09	.35	.26	.4	.3	1.5	1.4
JUL											
07...	14	58	.02	1.2	.03	.37	.21	.4	.2	1.6	1.5
AUG											
11...	14	97	.01	1.2	.02	.33	.20	.3	.2	1.6	1.4
SEP											
03...	13	106	.02	2.0	<.02	--	--	.4	.2	2.3	2.2

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1995										
26...	.080	.050	.060	230	77	1.6	.3	9.0	1.4	89
NOV										
28...	.080	.030	.020	220	69	1.4	.5	7.0	1.5	90
DEC										
13...	.070	.030	.030	220	83	1.4	.4	6.0	1.3	80
JAN 1996										
17...	.090	.010	.010	82	54	1.9	1.4	24	9.7	95
FEB										
07...	.020	<.010	.020	220	51	1.3	.70	14	5.3	93
13...	.020	.020	<.010	160	51	1.2	1.3	6.0	1.8	87
21...	.070	.050	.040	100	39	3.1	1.0	30	11	80
26...	.060	.060	.040	220	39	1.3	.40	9.0	2.3	94
MAR										
04...	.060	.030	.030	170	49	1.1	.40	3.0	.67	89
13...	.090	.030	.040	280	49	1.3	.60	11	1.9	85
20...	.160	.030	.020	400	32	2.7	2.2	66	43	91
26...	.070	.050	.050	230	37	11	.50	8.0	1.9	83
APR										
09...	.090	.050	.040	220	48	1.4	.90	8.0	2.3	95
MAY										
13...	.080	.070	.050	320	61	1.4	.60	10	1.6	89
JUN										
09...	1.10	.050	.040	83	66	4.8	>4.5	1200	2300	88
17...	.070	.050	.040	220	42	1.8	.50	19	2.8	98
JUL										
22...	.190	.140	.180	530	65	2.7	.40	16	.95	71
AUG										
28...	.080	.050	.050	96	42	2.8	.70	34	3.0	70
SEP										
23...	.190	.150	.170	120	38	2.1	.40	8.0	.63	96
OCT										
28...	.110	.080	.090	200	27	2.5	.20	6.0	--	90
NOV										
18...	.140	.110	.100	440	45	1.8	.30	5.0	--	88
DEC										
09...	.040	.020	.030	380	55	1.7	.70	11	--	88
JAN 1997										
14...	.060	.020	.030	280	52	1.3	.30	39	--	14
FEB										
19...	.050	<.010	<.010	120	34	1.3	.60	20	--	70
MAR										
25...	.110	.050	.050	260	30	1.3	.3	12	--	63
APR										
17...	.110	.060	.070	190	31	1.8	.5	7	--	88
28...	.14	.03	.03	350	33	3.3	>5	80	--	59
MAY										
22...	.07	.04	.04	180	42	1.7	.3	7	--	96
JUN										
13...	.29	.03	.02	190	17	3.5	>5	242	--	78
25...	.09	.06	.06	270	48	2.4	.4	12	--	89
JUL										
07...	.11	.07	.06	240	49	1.8	.7	21	--	80
AUG										
11...	.17	.11	.12	370	48	2	.7	10	--	82
SEP										
03...	.26	.21	.20	380	48	2.8	.4	5	--	93

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DATE	TIME	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	P,P' DDE DISSOLV (UG/L) (34653)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	LINDANE DIS-SOLVED (UG/L) (39341)
FEB 1996												
07...	1300	<.0070	<.0020	<.0050	<.018	E.0080	<.0040	<.0030	<.0020	<.0060	<.0040	<.004
13...	1215	<.0070	<.0020	<.0050	<.018	E.0050	<.0040	<.0030	<.0020	E.0000	<.0040	<.004
21...	1100	<.0070	<.0020	E.0030	.019	E.0060	<.0040	<.0030	<.0020	<.0060	<.0040	<.004
26...	1115	<.0070	<.0020	<.0050	<.018	E.0060	<.0040	<.0030	<.0020	<.0060	<.0040	<.004
MAR												
13...	0830	<.0070	<.0020	<.0050	<.018	E.0050	<.0040	<.0030	<.0020	<.0060	<.0040	<.004
20...	1230	<.0070	<.0020	.0060	.025	E.0050	<.0040	<.0030	<.0020	<.0060	<.0040	<.004
26...	1100	<.0070	<.0020	<.0050	E.0080	E.0080	<.0040	<.0030	<.0020	<.0060	<.0040	<.004
APR												
09...	1330	<.0070	<.0020	.0060	E.015	E.010	<.0040	<.0030	<.0020	<.0060	<.0040	<.004
MAY												
13...	1430	<.0070	<.0020	<.0050	<.018	E.0070	<.0040	<.0030	<.0020	<.0060	<.0040	<.004
JUN												
17...	1300	<.0070	<.0020	.015	E.0040	E.0030	<.0040	<.0030	<.0020	<.0060	<.0040	<.004
JUL												
22...	1430	<.0070	<.0020	<.0050	<.018	E.0030	<.0040	<.0030	<.0020	<.0060	<.0040	<.004
AUG												
28...	1115	<.0070	<.0020	E.0035	E.0051	E.0057	<.0040	<.0030	<.0020	<.0060	<.0040	<.004
SEP												
23...	1345	<.0070	<.0020	<.0050	E.0048	E.0063	<.0040	<.0030	<.0020	<.0060	<.0040	<.004
OCT												
28...	1415	<.0070	<.0020	<.0050	<.018	E.013	<.0040	<.0030	<.0020	<.0060	<.0040	<.004

DATE	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	MALA-THION, DIS-SOLVED (UG/L) (39532)	PARA-THION, DIS-SOLVED (UG/L) (39542)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)
FEB 1996												
07...	<.001	E.002	<.005	<.004	<.002	.005	<.002	<.0020	<.004	<.0030	<.0020	<.013
13...	E.002	E.002	<.005	<.004	<.002	.005	<.002	<.0020	<.004	<.0030	<.0020	<.013
21...	<.001	E.003	<.005	<.004	.004	.006	<.002	<.0020	<.004	<.0030	<.0020	<.013
26...	<.001	E.003	<.005	<.004	<.002	.005	<.002	<.0020	<.004	<.0030	<.0020	<.013
MAR												
13...	<.001	E.003	<.005	<.004	<.002	.006	<.002	<.0020	<.004	<.0030	<.0020	<.013
20...	<.001	.004	<.005	<.004	E.003	.008	<.002	<.0020	<.004	<.0030	<.0020	<.013
26...	<.001	E.004	<.005	<.004	<.002	.007	<.002	<.0020	<.004	<.0030	<.0020	<.013
APR												
09...	<.001	.006	<.005	<.004	<.002	.008	<.002	<.0020	<.004	<.0030	<.0020	<.013
MAY												
13...	<.001	.010	<.005	<.004	<.002	.013	<.002	<.0020	<.004	<.0030	<.0020	<.013
JUN												
17...	<.001	.028	<.005	<.004	<.002	.033	<.002	<.0020	<.004	<.0030	<.0020	<.013
JUL												
22...	<.001	.005	.015	<.004	<.002	.007	<.002	<.0020	<.004	<.0030	<.0020	<.013
AUG												
28...	<.001	.006	<.005	<.004	.008	.009	<.002	<.0020	<.004	<.0030	<.0020	<.013
SEP												
23...	<.001	<.002	<.005	<.004	<.002	.004	<.002	<.0020	<.004	<.0030	<.0020	<.013
OCT												
28...	<.001	<.002	<.005	<.004	<.002	E.004	<.002	<.0020	<.004	<.0030	<.0020	<.013

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DATE	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)
FEB 1996												
07...	<.0030	<.017	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050
13...	<.0030	<.017	<.0010	<.0040	E.0060	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050
21...	<.0030	<.017	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050
26...	<.0030	<.017	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050
MAR												
13...	<.0030	<.017	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050
20...	<.0030	<.017	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050
26...	<.0030	<.017	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050
APR												
09...	<.0030	<.017	<.0050	<.0040	<.0050	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050
MAY												
13...	<.0030	<.017	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050
JUN												
17...	<.0030	<.017	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050
JUL												
22...	<.0030	<.017	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050
AUG												
28...	<.0030	<.017	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050
SEP												
23...	<.0030	<.017	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050
OCT												
28...	<.0030	<.017	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050

SANTEE RIVER BASIN

0214399575 LONG CREEK TRIBUTARY AT HEADWATERS NEAR BESSEMER CITY, NC

LOCATION.--Lat 35°18'12", long 81°16'42", Gaston County, Hydrologic Unit 03050102, on left bank at headwaters, 1.4 mi north of Bessemer City, NC.

DRAINAGE AREA.--0.16 mi^2.

PERIOD OF RECORD.--October 1993 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Elevation of gage is 830 ft above sea level, from topographic map.

REMARKS.--Records poor. Maximum gage height for current water year and period of record from floodmark inside of stilling well. Minimum discharge for period of record occurred each year. Minimum discharge for current water year also occurred Sept. 7, 20 and may have been less than 0.01 ft^3/s.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 19, 1993 reached a stage of 3.11 ft, from floodmark; discharge, 120 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.50	.03	1.3	.04	.08	e.11	.06	.06	.04	.05	.04	.01
2	e.05	.07	.15	.04	.08	e.08	.06	.05	.20	.04	.03	.01
3	e.05	.03	.07	.04	.08	e.12	.06	.79	.05	.04	.03	.01
4	e.04	.03	.06	.04	.81	e.08	.07	.09	.04	.03	.03	.01
5	e.04	.04	.09	.25	.27	e.10	.07	.08	.04	.08	.03	.01
6	.04	.03	.05	.09	.09	e.09	.20	.08	.04	.11	.03	.01
7	.06	.04	.28	.07	.07	.06	.08	.07	.04	.04	.03	.01
8	.26	.42	.08	.08	.28	.06	.07	.07	.04	.04	.03	.01
9	.05	.05	.06	2.1	.13	.06	.07	.07	.04	.08	.03	.01
10	.04	.04	.07	.11	.11	.06	.07	.06	.04	.04	.03	.04
11	.04	.04	.07	.08	.08	.06	.07	.06	.04	.03	.03	.02
12	.04	.04	.28	.08	.06	.06	.31	.06	.05	.03	.02	.01
13	.04	.04	.19	.08	.66	.08	.08	.06	1.6	.03	.02	.01
14	.04	.04	.07	.07	2.1	.86	.07	.06	.12	.03	.02	.01
15	.03	.04	.07	.04	1.4	.07	.06	.05	.07	.03	.02	.01
16	.03	.04	.06	.29	.20	.05	.06	.05	.05	.04	.02	.01
17	.03	.04	.10	.09	.16	.05	.06	.05	.05	.03	.02	.01
18	.04	.09	.15	.07	.15	.04	.06	.05	.05	.03	.02	.01
19	.03	.04	.15	.07	.14	.12	.06	.05	.04	.03	.02	.01
20	.03	.04	.07	.06	.13	.07	.07	.05	.04	.03	.02	.01
21	.03	.07	.07	.06	.21	.07	.07	.05	.03	.02	.02	.01
22	.03	.04	.06	.06	.14	.07	.26	.05	.04	.02	.02	.01
23	.04	.04	.05	.06	.10	.07	.42	.04	.03	1.0	.01	.01
24	.04	.04	.05	.15	.10	.08	.06	.04	.03	.11	.01	1.2
25	.03	.04	.04	.28	.09	.07	.05	.05	.03	.04	.02	.09
26	.03	.11	.04	.08	.10	.14	.06	.05	.03	.04	.02	.04
27	.03	.04	.04	.08	.26	.08	.12	.04	.13	.04	.01	.03
28	.03	.04	.04	.16	e4.0	.21	1.7	.04	.05	.03	.03	.04
29	.03	.05	.04	.09	---	.13	.23	.04	.05	.04	.02	.03
30	.05	.06	.04	.08	---	.07	.09	.05	.04	.05	.02	.03
31	.03	---	.04	.08	---	.07	---	.04	---	.04	.02	---
TOTAL	1.85	1.76	3.93	4.97	12.08	3.34	4.77	2.45	3.14	2.29	0.72	1.73
MEAN	.060	.059	.13	.16	.43	.11	.16	.079	.10	.074	.023	.058
MAX	.50	.42	1.3	2.1	4.0	.86	1.7	.79	1.6	1.0	.04	1.2
MIN	.03	.03	.04	.04	.06	.04	.05	.04	.03	.02	.01	.01
CFSM	.37	.37	.79	1.00	2.70	.67	.99	.49	.65	.46	.15	.36
IN.	.43	.41	.91	1.16	2.81	.78	1.11	.57	.73	.53	.17	.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1997, BY WATER YEAR (WY)

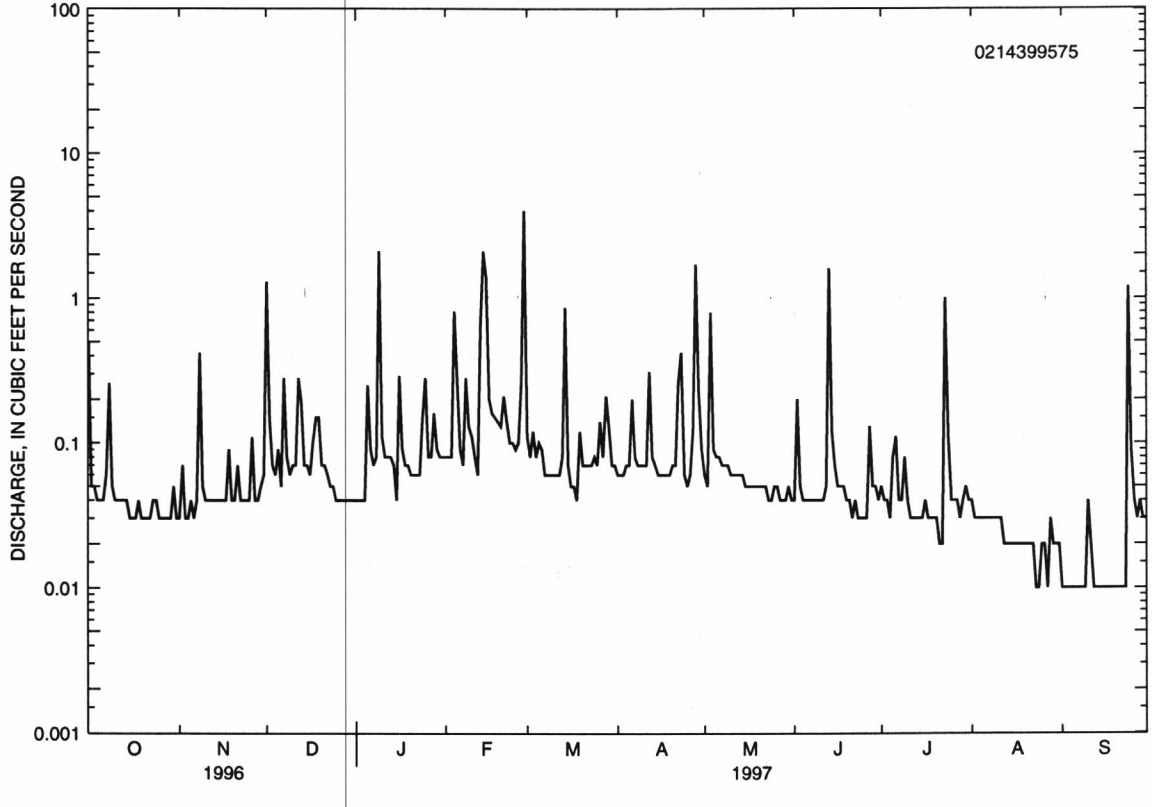
MEAN	.14	.15	.099	.29	.31	.17	.11	.078	.18	.078	.17	.062
MAX	.38	.42	.13	.48	.43	.25	.16	.12	.43	.096	.34	.087
(WY)	1996	1996	1997	1995	1997	1996	1997	1995	1995	1994	1995	1995
MIN	.025	.051	.079	.14	.15	.11	.052	.046	.082	.070	.023	.035
(WY)	1994	1995	1994	1994	1994	1997	1995	1994	1996	1996	1997	1994

SANTEE RIVER BASIN

0214399575 LONG CREEK TRIBUTARY AT HEADWATERS NEAR BESSEMER CITY, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1994 - 1997	
ANNUAL TOTAL	50.72		43.03			
ANNUAL MEAN	.14		.12		.15	
HIGHEST ANNUAL MEAN					.19	1996
LOWEST ANNUAL MEAN					.11	1994
HIGHEST DAILY MEAN	4.7	Feb 2	4.0	Feb 28	9.0	Aug 27 1995
LOWEST DAILY MEAN	.02	Jul 20	.01	Aug 23	.01	Oct 2 1993
ANNUAL SEVEN-DAY MINIMUM	.03	Oct 15	.01	Sep 1	.01	Oct 5 1993
INSTANTANEOUS PEAK FLOW			119	Apr 28	119	Apr 28 1997
INSTANTANEOUS PEAK STAGE			3.10*	Apr 28	3.10*	Apr 28 1997
INSTANTANEOUS LOW FLOW			.01*	Jul 15	.01*	Oct 1 1993
ANNUAL RUNOFF (CFSM)	.87		.74		.95	
ANNUAL RUNOFF (INCHES)	11.79		10.00		12.90	
10 PERCENT EXCEEDS	.22		.15		.21	
50 PERCENT EXCEEDS	.06		.05		.06	
90 PERCENT EXCEEDS	.04		.02		.02	

e Estimated.
* See REMARKS.



SANTEE RIVER BASIN

0214399580 LONG CREEK TRIBUTARY BELOW HEADWATERS NEAR BESSEMER CITY, NC

LOCATION.--Lat 35°18'20", long 81°16'32", Gaston County, Hydrologic Unit 03050102, on left bank downstream end of culvert, 0.3 mi below headwaters and 1.6 mi north of Bessemer City, NC.

DRAINAGE AREA.--0.22 mi^2.

PERIOD OF RECORD.--October 1993 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 805 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records poor. Maximum gage height for current water year from high-water mark in gage well. Maximum flow for current water year from rating curve extended above 549 ft^3/s. Minimum discharge for current water year also occurred July 22 and August 13-September 9. Minimum discharge for period of record has occurred several days each water year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 19, 1993 reached a stage of 5.29 ft, from floodmark; discharge, 549 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.66	.04	2.5	.06	.09	.26	.08	.08	.06	.06	.04	.03
2	.05	.08	.16	.06	.09	.10	.08	.08	.27	.06	.04	.03
3	.05	.04	.08	.06	.08	.29	.08	1.2	.06	.05	.04	.03
4	.05	.04	.07	.06	1.5	.09	.08	.09	.06	.05	.04	.03
5	.04	.04	.12	.40	.36	.12	.08	.08	.06	.11	.04	.03
6	.04	.05	.08	.08	.11	.10	.25	.08	.05	.19	.03	.03
7	.05	.05	.46	.08	.09	.08	.09	.08	.06	.05	.03	.03
8	.33	.88	.09	.15	.39	.08	.09	.08	.05	.05	.03	.03
9	.05	.06	.08	4.3	.10	.07	.08	.08	.05	.13	.03	.03
10	.05	.05	.08	.19	.16	.08	.08	.07	.05	.05	.03	.06
11	.05	.05	.06	.11	.14	.08	.09	.07	.05	.05	.03	.04
12	.05	.05	.46	.09	.10	.07	.47	.07	.07	.04	.03	.03
13	.05	.05	.22	.08	1.3	.07	.09	.07	1.6	.04	.03	.03
14	.05	.05	.08	.08	4.1	2.0	.09	.07	.13	.04	.03	.03
15	.05	.05	.08	.08	2.6	.08	.08	.07	.07	.04	.03	.03
16	.04	.05	.08	.71	.24	.07	.08	.06	.06	.05	.03	.04
17	.05	.05	.12	.09	.18	.06	.08	.06	.06	.04	.03	.03
18	.05	.09	.27	.08	.16	.07	.08	.06	.06	.04	.02	.04
19	.04	.06	.17	.08	.14	.22	.09	.06	.06	.04	.02	.04
20	.04	.05	.08	.08	.15	.08	.08	.06	.06	.04	.03	.03
21	.04	.08	.08	.08	.29	.08	.09	.06	.05	.03	.03	.03
22	.04	.05	.08	.08	.19	.08	.42	.06	.05	.03	.02	.04
23	.04	.05	.08	.08	.16	.08	.73	.06	.05	1.8	.02	.04
24	.04	.05	.08	.22	.16	.09	.09	.06	.05	.11	.02	3.2
25	.04	.05	.07	.44	.18	.09	.08	.07	.05	.05	.03	.09
26	.04	.13	.06	.09	.18	.16	.08	.06	.05	.04	.03	.04
27	.04	.05	.06	.09	.49	.08	.56	.06	.22	.04	.03	.04
28	.04	.05	.06	.18	7.0	.28	19	.06	.07	.04	.04	.05
29	.04	.05	.08	.09	---	.13	.66	.06	.06	.04	.03	.04
30	.04	.06	.07	.09	---	.08	.10	.06	.05	.06	.02	.04
31	.04	---	.06	.09	---	.08	---	.06	---	.04	.03	---
TOTAL	2.28	2.50	6.12	8.45	20.73	5.30	24.03	3.24	3.69	3.50	0.93	4.28
MEAN	.074	.083	.20	.27	.74	.17	.80	.10	.12	.11	.030	.14
MAX	.66	.88	2.5	4.3	7.0	2.0	19	1.2	1.6	1.8	.04	3.2
MIN	.04	.04	.06	.06	.08	.06	.08	.06	.05	.03	.02	.03
CFSM	.33	.38	.90	1.24	3.37	.78	3.64	.48	.56	.51	.14	.65
IN.	.39	.42	1.03	1.43	3.51	.90	4.06	.55	.62	.59	.16	.72

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1997, BY WATER YEAR (WY)

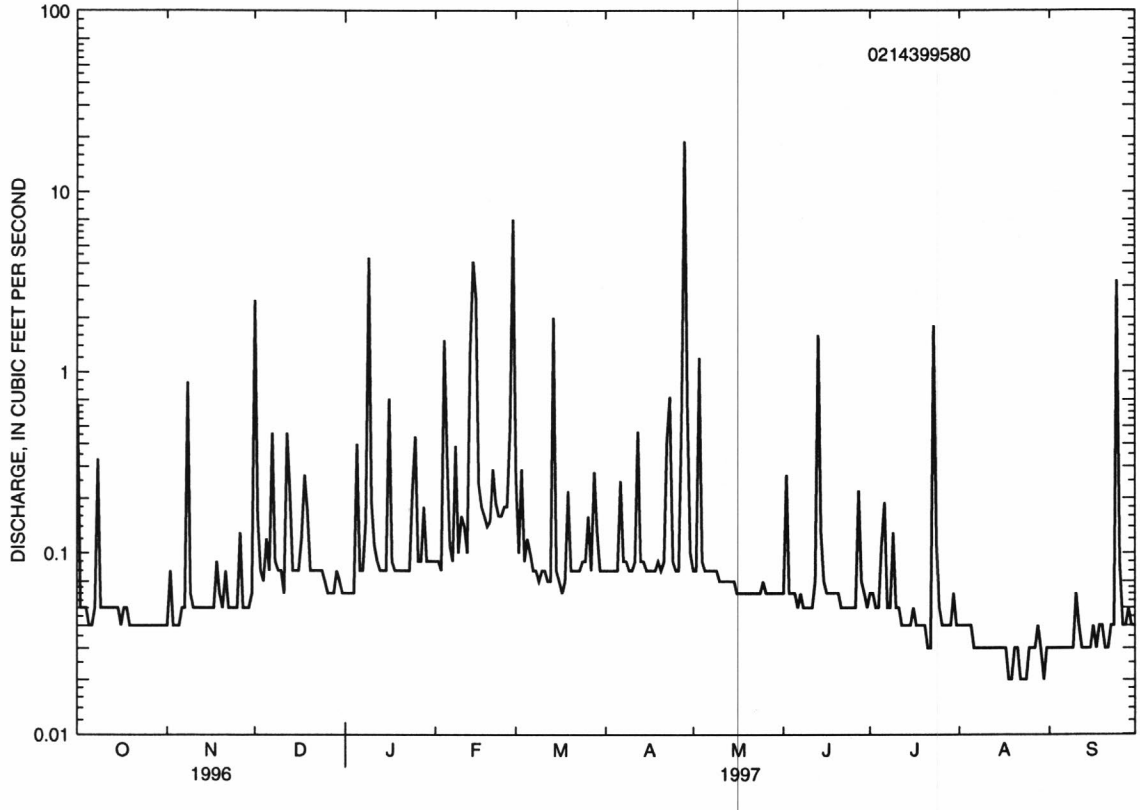
MEAN	.28	.31	.17	.51	.52	.28	.32	.15	.32	.16	.35	.14
MAX	.80	.91	.20	.77	.74	.39	.80	.29	.83	.24	.70	.25
(WY)	1996	1996	1997	1995	1997	1996	1997	1995	1995	1994	1994	1995
MIN	.070	.083	.14	.27	.29	.17	.070	.075	.11	.11	.030	.084
(WY)	1994	1997	1996	1997	1994	1997	1995	1996	1996	1997	1997	1996

SANTEE RIVER BASIN

0214399580 LONG CREEK TRIBUTARY BELOW HEADWATERS NEAR BESSEMER CITY, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1994 - 1997	
ANNUAL TOTAL	73.52		85.05			
ANNUAL MEAN	.20		.23		.29	
HIGHEST ANNUAL MEAN					.35	1995
LOWEST ANNUAL MEAN					.23	1997
HIGHEST DAILY MEAN	7.2	Feb 2	19	Apr 28	19	Apr 28 1997
LOWEST DAILY MEAN	.03	Jul 10	.02	Aug 18	.02	Aug 18 1997
ANNUAL SEVEN-DAY MINIMUM	.04	Jul 6	.02	Aug 18	.02	Aug 18 1997
INSTANTANEOUS PEAK FLOW			557	Apr 28	557*	Apr 28 1997
INSTANTANEOUS PEAK STAGE			5.40	Apr 28	5.40*	Apr 28 1997
INSTANTANEOUS LOW FLOW			.02*	Jul 21	.02*	Oct 1 1993
ANNUAL RUNOFF (CFSM)	.91		1.06		1.32	
ANNUAL RUNOFF (INCHES)	12.43		14.38		17.92	
10 PERCENT EXCEEDS	.36		.24		.38	
50 PERCENT EXCEEDS	.08		.06		.09	
90 PERCENT EXCEEDS	.04		.03		.04	

* See REMARKS.



SANTEE RIVER BASIN

02144000 LONG CREEK NEAR BESSEMER CITY, NC

LOCATION.--Lat 35°18'23", long 81°14'05", Gaston County, Hydrologic Unit 03050102, on right bank 700 ft upstream from bridge on Secondary Road 1456, 3.3 mi northeast of Bessemer City, and 8.2 mi upstream from mouth.

DRAINAGE AREA.--31.8 mi^2.

PERIOD OF RECORD.--October 1952 to current year. Monthly discharge only for some periods, published in WSP 1723.

REVISED RECORDS.--WSP 1723: 1959-60 (M). WSP 1904: 1959-60. WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 706.1 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Bessemer City diverts water upstream from gaging station for water supply and returns treated effluent to South Fork Catawba River downstream of mouth of Long Creek causing some diurnal fluctuation; a daily average of 1.86 ft^3/s was diverted during the year. Minimum discharge for current water year also occurred Sept. 22, 23.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1916 reached a stage of 26 ft, from high-water mark on left bank 1,500 ft upstream, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	8.4	138	23	31	249	37	69	27	14	9.8	2.8
2	14	14	70	22	29	84	34	54	31	16	7.2	2.6
3	12	10	37	21	29	77	34	136	25	12	6.6	2.5
4	9.7	11	28	20	77	64	32	79	23	10	6.2	2.2
5	8.2	9.7	27	34	59	55	31	53	21	9.5	5.8	1.9
6	8.0	10	30	30	46	57	46	46	19	23	5.5	2.0
7	9.1	10	43	25	41	49	46	42	22	13	5.4	2.4
8	27	46	41	24	52	44	35	39	19	11	5.3	2.2
9	18	28	33	207	44	42	33	39	18	11	4.9	2.8
10	14	17	26	84	41	41	30	34	17	16	4.9	7.0
11	10	14	25	46	40	41	30	32	16	11	5.2	7.6
12	8.7	12	25	38	36	37	60	32	16	9.2	4.8	3.3
13	9.4	11	66	35	47	39	46	30	48	8.8	4.4	4.5
14	10	12	33	30	171	124	36	29	89	8.2	7.4	4.2
15	9.6	11	27	31	352	61	34	29	35	7.6	7.3	4.1
16	9.1	10	27	60	95	50	32	27	25	10	6.9	2.5
17	9.0	10	30	40	62	46	32	24	20	10	6.4	2.3
18	8.9	13	31	32	51	44	29	23	17	8.9	6.5	2.3
19	8.4	20	46	31	46	52	29	23	16	7.3	5.3	2.5
20	7.7	14	31	30	46	53	28	22	15	6.6	5.1	3.3
21	9.1	15	26	28	44	44	28	21	14	6.3	4.8	2.2
22	8.7	17	25	28	46	41	43	20	13	6.0	4.1	1.9
23	8.4	12	26	32	40	38	118	21	13	49	4.4	3.1
24	8.1	13	24	36	39	37	55	19	12	39	3.2	101
25	8.3	14	26	60	35	36	41	21	12	17	3.1	37
26	7.8	21	24	41	34	48	36	23	13	11	3.8	12
27	7.6	15	24	38	37	38	43	23	27	9.2	3.0	8.5
28	8.3	13	22	41	374	40	386	19	24	8.6	2.7	10
29	9.0	13	26	38	---	63	1050	19	18	7.8	5.4	9.5
30	8.7	13	26	36	---	45	104	21	14	11	3.2	5.0
31	8.7	---	24	33	---	40	---	21	---	11	2.8	---
TOTAL	338.5	437.1	1087	1274	2044	1779	2618	1090	679	399.0	161.4	255.2
MEAN	10.9	14.6	35.1	41.1	73.0	57.4	87.3	35.2	22.6	12.9	5.21	8.51
MAX	35	46	138	207	374	249	1050	136	89	49	9.8	101
MIN	7.6	8.4	22	20	29	36	28	19	12	6.0	2.7	1.9
CFSM	.34	.46	1.10	1.29	2.30	1.80	2.74	1.11	.71	.40	.16	.27
IN.	.40	.51	1.27	1.49	2.39	2.08	3.06	1.28	.79	.47	.19	.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1997, BY WATER YEAR (WY)

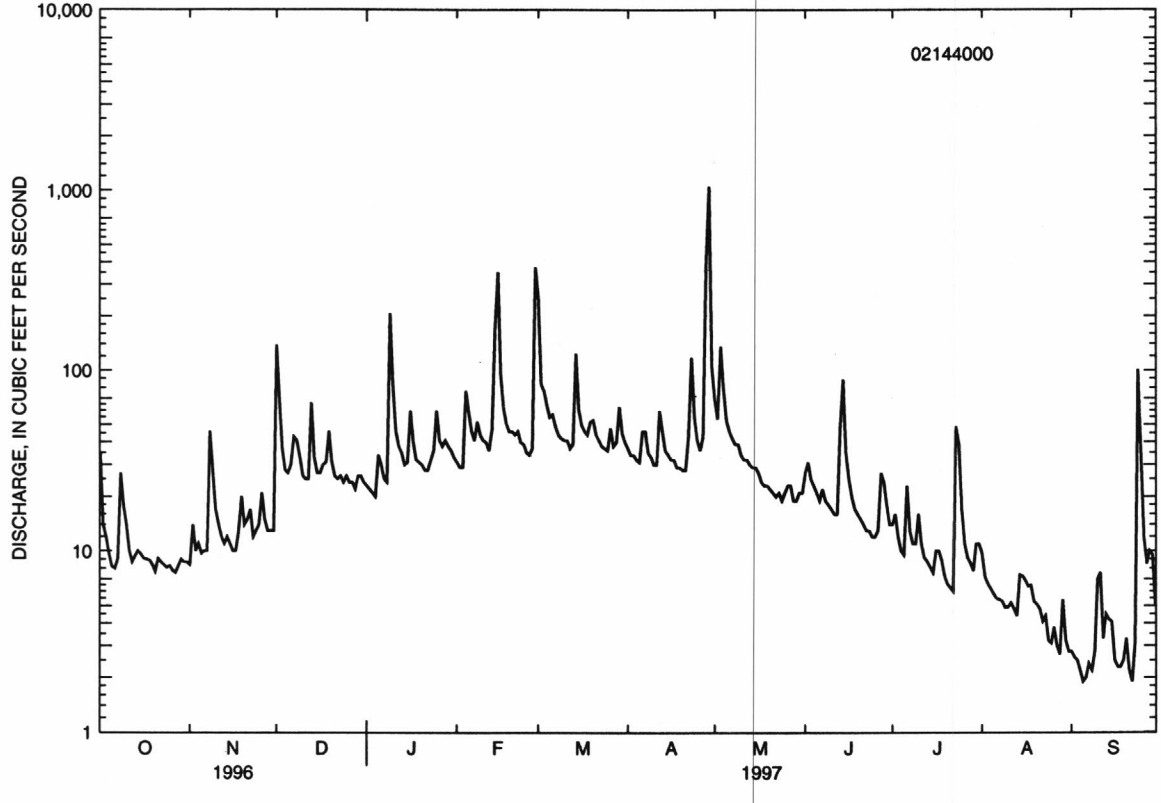
MEAN	26.7	27.2	34.5	50.0	59.5	62.3	48.7	32.9	26.0	18.7	20.6	16.1
MAX	147	128	85.2	135	137	146	142	89.2	72.5	65.9	81.7	59.3
(WY)	1972	1958	1977	1993	1960	1993	1958	1975	1962	1975	1985	1971
MIN	2.37	7.09	7.37	8.17	22.5	22.8	14.3	10.0	3.74	2.41	4.14	1.99
(WY)	1955	1954	1956	1956	1986	1955	1967	1986	1986	1986	1987	1954

SANTEE RIVER BASIN

02144000 LONG CREEK NEAR BESSEMER CITY, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1953 - 1997	
ANNUAL TOTAL	12078.9		12162.2			
ANNUAL MEAN	33.0		33.3		35.2	
HIGHEST ANNUAL MEAN					58.6	1993
LOWEST ANNUAL MEAN					16.7	1988
HIGHEST DAILY MEAN	478	Jan 27	1050	Apr 29	2940	Oct 16 1971
LOWEST DAILY MEAN	5.2	Jul 21	1.9	Sep 5	.55	Jul 14 1986
ANNUAL SEVEN-DAY MINIMUM	6.3	Jul 6	2.3	Sep 2	.76	Jul 9 1986
INSTANTANEOUS PEAK FLOW			2070	Apr 29	6500	Oct 16 1971
INSTANTANEOUS PEAK STAGE			7.25	Apr 29	9.10	Oct 16 1971
INSTANTANEOUS LOW FLOW			1.8*	Sep 5	.40	Oct 7 1954
ANNUAL RUNOFF (CFSM)	1.04		1.05		1.11	
ANNUAL RUNOFF (INCHES)	14.13		14.23		15.05	
10 PERCENT EXCEEDS	56		53		57	
50 PERCENT EXCEEDS	25		23		21	
90 PERCENT EXCEEDS	7.9		5.1		6.9	

* See REMARKS.



SANTEE RIVER BASIN

02145000 SOUTH FORK CATAWBA RIVER AT LOWELL, NC

LOCATION.--Lat 35°17'10", long 81°06'00", Gaston County, Hydrologic Unit 03050102, on right bank 50 ft north of private mill road, 120 ft downstream of Housers Creek, 1.0 mi north of Lowell, 2.5 mi upstream from bridge on Interstate Highway 85, and 3.0 mi downstream of Long Creek.

DRAINAGE AREA.--628 mi^2.

PERIOD OF RECORD.--January 1942 to September 1971, October 1983 to current year.

REVISED RECORDS.--WSP 1002: 1943(M). WSP 1303: 1950(M).

GAGE.--Water-stage recorder. Datum of gage is 603.10 ft above sea level. Telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Considerable diurnal fluctuation and slight regulation for short periods at low flow caused by power plant upstream from station. For diversion by Town of Bessemer City, see Long Creek near Bessemer City (station 02144000). Minimum discharge for all water years affected by regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 15, 1940, reached a stage of 21.33 ft, from floodmarks; discharge, 34,000 ft^3/s. Depth of flow over dam during the July 1916 flood at High Shoals, 11 mi upstream, was about 1 ft higher than that for August 1940, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	701	349	2040	612	817	4730	957	2020	727	572	968	271
2	611	428	4130	601	766	2830	909	1430	868	750	668	252
3	517	453	3680	594	713	1930	874	1910	1820	579	581	241
4	461	387	1930	574	1110	1620	859	1860	1280	540	518	258
5	428	380	1030	650	1600	1290	843	1340	838	486	465	249
6	410	386	1020	732	1460	1310	891	1170	761	598	453	223
7	407	383	964	675	1160	1150	1510	1090	730	504	425	223
8	500	703	998	627	1080	1030	1170	1020	704	459	422	238
9	536	1440	793	1680	1100	969	1000	1010	693	447	412	256
10	507	1050	704	1760	986	931	904	955	664	448	402	274
11	462	637	693	1150	958	902	845	880	634	430	371	448
12	424	551	653	935	884	859	1060	888	615	417	400	365
13	404	534	1410	820	880	847	1440	848	1660	389	380	359
14	396	492	1240	743	1380	1380	1300	820	1590	362	372	317
15	386	469	974	719	4700	1590	1060	805	917	376	385	264
16	341	449	810	1070	3450	1350	965	778	895	376	381	286
17	384	415	772	1090	1940	1090	914	744	739	466	369	220
18	331	432	770	955	1400	979	858	726	668	428	350	272
19	359	510	999	827	1160	1510	859	710	623	391	323	262
20	357	483	929	764	1030	3010	840	694	584	347	317	259
21	363	458	767	723	975	1960	820	677	557	496	305	241
22	355	531	703	701	1090	1450	938	655	748	519	316	235
23	347	504	699	708	1030	1210	2450	625	752	1260	299	207
24	364	467	692	712	929	1080	2920	628	558	973	244	762
25	422	451	712	1160	878	1030	2250	634	510	636	290	1110
26	350	610	663	1070	842	1090	1420	695	496	518	277	598
27	364	627	639	948	844	1290	1240	672	698	638	307	454
28	355	519	621	963	2470	1270	2660	663	683	563	304	399
29	395	475	611	1110	---	1310	10800	635	626	552	282	412
30	349	466	653	960	---	1150	4540	646	570	967	295	367
31	365	---	620	872	---	1040	---	668	---	1820	253	---
TOTAL	12951	16039	33919	27505	37632	45187	50096	28896	24208	18307	12134	10322
MEAN	418	535	1094	887	1344	1458	1670	932	807	591	391	344
MAX	701	1440	4130	1760	4700	4730	10800	2020	1820	1820	968	1110
MIN	331	349	611	574	713	847	820	625	496	347	244	207
CFSM	.67	.85	1.74	1.41	2.14	2.32	2.66	1.48	1.28	.94	.62	.55
IN.	.77	.95	2.01	1.63	2.23	2.68	2.97	1.71	1.43	1.08	.72	.61

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1997@, BY WATER YEAR (WY)

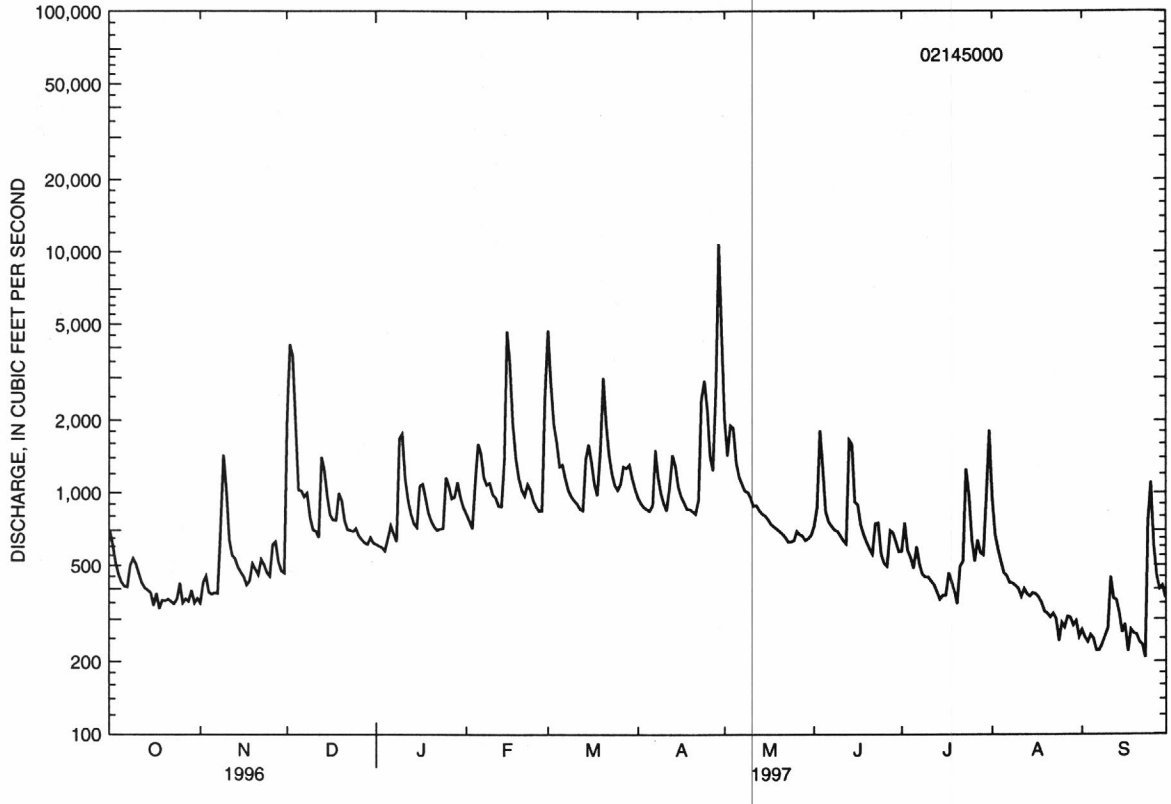
MEAN	654	645	802	1011	1239	1315	1064	753	642	546	595	508
MAX	2862	2034	1748	2468	3204	3511	2676	1759	1424	1361	2266	2460
(WY)	1965	1958	1968	1993	1960	1952	1958	1984	1962	1943	1970	1945
MIN	104	215	235	242	499	561	390	337	196	162	182	110
(WY)	1955	1955	1956	1956	1986	1955	1967	1986	1986	1986	1956	1954

SANTEE RIVER BASIN

02145000 SOUTH FORK CATAWBA RIVER AT LOWELL, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1942 - 1997@	
ANNUAL TOTAL	312931		317196			
ANNUAL MEAN	855		869		814	
HIGHEST ANNUAL MEAN					1341	1993
LOWEST ANNUAL MEAN					418	1955
HIGHEST DAILY MEAN	7270	Feb 3	10800	Apr 29	21700	Aug 11 1970
LOWEST DAILY MEAN	306	Sep 26	207	Sep 23	31	Oct 8 1954
ANNUAL SEVEN-DAY MINIMUM	352	Sep 22	241	Sep 2	73	Oct 8 1954
INSTANTANEOUS PEAK FLOW			13000	Apr 29	24800	Aug 11 1970
INSTANTANEOUS PEAK STAGE			12.98	Apr 29	17.38	Aug 11 1970
INSTANTANEOUS LOW FLOW			119*	Aug 24	13*	Aug 22 1988
ANNUAL RUNOFF (CFSM)	1.36		1.38		1.30	
ANNUAL RUNOFF (INCHES)	18.54		18.79		17.61	
10 PERCENT EXCEEDS	1390		1440		1400	
50 PERCENT EXCEEDS	668		695		573	
90 PERCENT EXCEEDS	375		347		282	

* See REMARKS.
@ See PERIOD OF RECORD.



02145112 SOUTH FORK CATAWBA RIVER AT MCADENVILLE, NC

LOCATION.--Lat 35°15'35", long 81°04'28", Gaston County, Hydrologic Unit 03050102, at bridge on State Highway 7, and 0.3 mi northeast of McAdenville; and 3.1 miles downstream from House Creek.

DRAINAGE AREA.-- 632 mi^2.

PERIOD OF RECORD.--Water years 1996 to current year.

REMARKS.--Data collected by U.S. Geological Survey, WRD, South Carolina District as part of the Santee NAWQA (National Water Quality Assessment) Program.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1995											
26...	1400	620	182	7.0	15.0	750	9.3	92	320	130	23
NOV											
28...	1430	720	117	7.2	10.0	750	11	96	--	--	22
DEC											
13...	1500	650	135	7.3	5.0	750	13	100	570	270	22
JAN 1996											
16...	1430	640	146	6.8	4.5	750	13	99	2100	20000	24
FEB											
09...	1130	1500	115	7.2	6.0	750	12	100	--	--	20
MAR											
12...	1200	960	115	7.4	6.0	750	12	99	100	1400	20
APR											
09...	1030	950	120	6.7	11.0	750	11	95	--	--	20
MAY											
12...	0900	710	134	6.7	20.0	750	8.3	93	--	--	20
14...	0845	633	142	6.7	17.0	740	8.6	93	250	110	21
JUN											
18...	0800	560	157	6.8	23.5	750	7.1	82	280	190	21
JUL											
23...	0745	310	219	6.6	26.5	750	6.7	90	--	190	22
AUG											
27...	1115	760	167	7.3	23.0	750	7.8	92	630	700	22
SEP											
24...	0730	370	232	7.4	18.5	750	8.1	86	110	120	23
OCT											
29...	0915	397	262	6.9	16.5	760	8.5	86	--	--	26
NOV											
19...	0930	512	215	6.8	8.0	750	11	95	--	--	24
DEC											
10...	1000	736	129	7.0	5.0	760	12	98	--	--	22
JAN 1997											
15...	0900	727	147	6.3	2.5	760	12	89	--	--	21
FEB											
20...	0845	1050	114	6.6	8.0	750	12	98	--	--	18
MAR											
26...	0815	987	125	6.4	12.5	750	11	100	--	--	19
APR											
17...	1000	930	128	6.8	14.0	750	10	97	--	--	18
29...	1015	12800	44.0	6.0	14.0	750	10	99	--	--	11
MAY											
23...	0730	656	160	7.1	18.0	760	8.6	92	--	--	20
JUN											
13...	1045	812	170	7.0	20.0	750	8.9	98	--	--	21
25...	1315	504	149	6.9	24.5	760	7.6	90	--	--	19
JUL											
08...	0830	459	121	7.1	23.0	760	8.0	93	--	--	21
AUG											
12...	0800	417	267	6.7	23.5	760	7.6	90	--	--	27
SEP											
02...	1145	277	244	7.2	25.0	760	8.1	99	--	--	24

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
OCT 1995											
26...	5.6	2.2	23	63	2	4.6	38	31	16	19	.20
NOV											
28...	5.4	2.0	11	48	1	3.1	27	22	7.5	12	<.10
DEC											
13...	5.3	2.2	17	58	2	3.1	31	25	11	14	.20
JAN 1996											
16...	5.8	2.2	17	57	2	3.6	28	23	16	19	.20
FEB											
09...	4.7	1.9	13	55	1	2.8	23	19	9.0	13	<.10
MAR											
12...	4.8	1.9	12	52	1	3.2	26	21	9.1	12	<.10
APR											
09...	4.8	1.9	13	54	1	3.1	25	20	9.0	13	.10
MAY											
12...	4.9	1.8	16	60	2	2.5	27	22	12	14	.10
14...	5.2	1.9	17	60	2	3.3	30	25	12	15	.10
JUN											
18...	5.1	1.9	19	61	2	4.8	34	28	14	16	.10
JUL											
23...	5.6	1.9	34	72	3	5.4	40	33	24	27	.20
AUG											
27...	5.4	2.0	20	62	2	4.1	29	24	14	19	.10
SEP											
24...	5.5	2.2	29	68	3	5.1	39	32	21	26	.20
OCT											
29...	6.6	2.3	37	70	3	6.8	44	36	25	31	.20
NOV											
19...	6.0	2.1	28	66	3	6.4	38	32	21	23	.20
DEC											
10...	5.4	2.1	14	52	1	4.3	29	24	13	13	<.10
JAN 1997											
15...	5.1	2.0	17	58	2	4.5	30	24	15	15	<.10
FEB											
20...	4.5	1.7	12	54	1	3.4	32	26	11	11	<.10
MAR											
26...	4.7	1.8	13	54	1	3.5	36	30	11	11	<.10
APR											
17...	4.5	1.8	15	59	2	3.5	27	22	16	19	.1
29...	2.6	1.1	2.3	26	.3	3.0	9.0	8.0	5.4	2.3	<.1
MAY											
23...	4.9	1.9	19	63	2	3.8	32	26	15	16	<.1
JUN											
13...	5.2	2.0	23	64	2	5.5	34	28	19	18	.1
25...	4.6	1.9	18	60	2	4.7	28	23	16	12	.1
JUL											
08...	5.2	2.0	9.8	43	.9	5.8	26	22	7.9	11	<.1
AUG											
12...	7.0	2.3	37	68	3	8.5	40	32	23	32	.1
SEP											
02...	6.0	2.1	34	71	3	4.3	40	33	22	29	.2

02145112 SOUTH FORK CATAWBA RIVER AT MCADENVILLE, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)
OCT 1995											
26...	15	113	.030	.910	.100	.40	.30	.50	.40	1.4	1.3
NOV											
28...	14	73	.030	.980	.070	.33	.23	.40	.30	1.4	1.3
DEC											
13...	15	86	.050	.840	.080	.22	.22	.30	.30	1.1	1.1
JAN 1996											
16...	13	95	.020	.720	.080	.42	.22	.50	.30	1.2	1.0
FEB											
09...	12	80	.020	.710	.120	.38	.18	.50	.30	1.2	1.0
MAR											
12...	12	71	.030	.880	.050	.25	.25	.30	.30	1.2	1.2
APR											
09...	13	77	.020	.800	.040	.26	.16	.30	.20	1.1	1.0
MAY											
12...	14	90	.020	.720	.080	.32	.22	.40	.30	1.1	1.0
14...	15	99	.020	.930	.040	.36	.26	.40	.30	1.3	1.2
JUN											
18...	14	89	.020	.870	.060	.44	.34	.50	.40	1.4	1.3
JUL											
23...	15	154	.030	1.00	.080	.52	.42	.60	.50	1.6	1.5
AUG											
27...	14	95	.020	.890	.070	.43	.23	.50	.30	1.4	1.2
SEP											
24...	15	151	.030	1.10	.070	.53	.53	.60	.60	1.7	1.7
OCT											
29...	15	148	.040	1.10	.040	.76	.66	.80	.70	1.9	1.8
NOV											
19...	14	134	.040	1.10	.110	.49	.49	.60	.60	1.7	1.7
DEC											
10...	13	85	.020	.910	.070	.23	.23	.30	.30	1.2	1.2
JAN 1997											
15...	13	99	.020	.920	.070	.23	.23	.30	.30	1.2	1.2
FEB											
20...	12	71	.030	.710	.040	.36	--	.40	<.20	1.1	--
MAR											
26...	12	99	<.010	.830	.060	.24	.14	.30	.20	1.1	1.0
APR											
17...	12	85	.01	.71	.06	.27	.15	.3	.2	1.0	.93
29...	4.4	41	<.01	.47	.09	1.9	.31	2.0	.4	2.5	.86
MAY											
23...	14	102	.02	.78	.07	.24	.25	.3	.3	1.1	1.1
JUN											
13...	14	112	.02	.95	.06	.48	.24	.5	.3	1.5	1.3
25...	13	105	.02	.98	.07	.35	.24	.4	.3	1.4	1.3
JUL											
08...	13	83	.02	1.2	<.02	--	--	.5	.3	1.7	1.5
AUG											
12...	15	169	.06	1.4	.03	.56	.53	.6	.6	2.0	1.9
SEP											
02...	13	144	.02	1.1	.04	.37	.30	.4	.3	1.5	1.4

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1995										
26...	.180	.100	.110	270	44	3.5	.4	12	20	88
NOV										
28...	.120	.080	.070	250	49	2.6	.4	5.0	9.7	91
DEC										
13...	.090	.080	.070	300	55	2.1	.4	11	19	84
JAN 1996										
16...	.140	.060	.050	250	53	2.2	1.2	18	31	97
FEB										
09...	.110	.040	.040	250	33	2.0	.20	32	126	90
MAR										
12...	.120	.070	.070	280	32	2.1	.40	10	26	90
APR										
09...	.100	.080	.070	290	36	2.0	.40	13	33	90
MAY										
12...	.140	.100	.070	380	47	2.2	--	20	38	86
14...	.170	.130	.110	440	53	2.6	.70	22	38	98
JUN										
18...	.200	.120	.110	280	41	3.2	.70	41	62	98
JUL										
23...	.190	.150	.150	410	65	4.7	.60	21	17	87
AUG										
27...	.180	.080	.100	380	33	3.8	.50	66	136	96
SEP										
24...	.200	.200	.230	460	48	4.2	.60	14	14	89
OCT										
29...	.270	.250	.240	300	37	5.9	.50	7.0	--	91
NOV										
19...	.240	.200	.190	420	54	3.9	.50	9.0	--	95
DEC										
10...	.110	.080	.070	310	48	2.7	.80	15	--	92
JAN 1997										
15...	.120	.070	.080	290	41	2.2	.30	10	--	95
FEB										
20...	.100	.040	.030	150	28	1.8	.60	20	--	94
MAR										
26...	.140	.090	.070	240	28	1.7	.4	18	--	94
APR										
17...	.10	.07	.08	190	25	2.3	1.5	17	--	89
29...	.77	.02	.01	150	120	6.9	>5	638	--	79
MAY										
23...	.11	.10	.09	170	24	2.4	.3	9	--	95
JUN										
13...	.26	.15	.14	270	29	3.7	1.3	113	--	66
25...	.13	.08	.08	100	23	3.3	.8	31	--	97
JUL										
08...	.14	.09	.08	130	29	3.3	.7	17	--	86
AUG										
12...	.22	.19	.19	320	44	4.7	.5	15	--	89
SEP										
02...	.16	.14	.14	370	35	3.3	.4	8	--	93

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DATE	TIME	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	P,P' DDE DISSOLV (UG/L) (34653)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	LINDANE DIS-SOLVED (UG/L) (39341)
FEB 1996												
09...	1130	<.0070	<.0020	E.0040	E.0060	E.0040	<.0040	<.0030	<.0020	<.0060	.0060	<.004
MAY												
14...	0845	<.0070	<.0020	.0070	E.0050	E.0050	<.0040	<.0030	<.0020	<.0060	<.0040	<.004
AUG												
27...	1115	<.0070	<.0020	<.0050	E.0089	E.0038	<.0040	<.0030	<.0020	<.0060	<.0040	<.004

DATE	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	MALA-THION, DIS-SOLVED (UG/L) (39532)	PARA-THION, DIS-SOLVED (UG/L) (39542)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)
FEB 1996												
09...	<.001	E.002	<.005	<.004	<.002	.006	<.002	<.0020	<.004	<.0030	<.0020	<.013
MAY												
14...	<.001	.006	<.005	<.004	<.002	.012	<.002	<.0020	<.004	<.0030	<.0020	<.013
AUG												
27...	<.001	.008	<.005	<.004	<.002	.006	<.002	<.0020	<.004	<.0030	<.0020	<.013

DATE	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)
FEB 1996												
09...	<.0030	<.017	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050
MAY												
14...	<.0030	<.017	<.0010	<.0040	E.0070	<.0020	E.0020	<.0040	<.0030	<.013	<.0010	<.0050
AUG												
27...	<.0030	<.017	<.0010	<.0040	<.0030	<.0020	<.0020	<.0040	<.0030	<.013	<.0010	<.0050

SANTEE RIVER BASIN

02146300 IRWIN CREEK NEAR CHARLOTTE, NC

LOCATION.--Lat 35°11'50", long 80°54'18", Mecklenburg County, Hydrologic Unit 03050103, on left bank at sewage-disposal plant of city of Charlotte, 2,200 ft upstream from Southern Railway bridge, 0.7 mi upstream from Taggart Creek, and 4.2 mi southwest of City Hall, Charlotte.

DRAINAGE AREA.--30.7 mi^2.

PERIOD OF RECORD.--May 1962 to current year. Prior to October 1963, published as "Sugar (Irwin) Creek at Charlotte".

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 591.53 ft above sea level (levels by City of Charlotte). Telephone telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum discharge for period of record and current water year from rating curve extended above 7,500 ft^3/s on basis of step-backwater computation. Minimum discharge for period of record also occurred July 14, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 6, 1936, reached a stage of about 17.3 ft at site 400 ft downstream, from information by plant employee. Peak may have been affected by failure of Lakewood Dam, 5 mi upstream. Flood of Jan. 6, 1962, reached a stage of 14.32 ft, from floodmarks; discharge, 4,120 ft^3/s. Flood of April 11, 1962, reached a stage of 15.18 ft, from floodmarks; discharge, 4,740 ft^3/s, on basis of slope-area measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	820	12	155	14	22	131	18	33	15	19	e28	9.9
2	27	66	36	15	18	59	17	27	191	16	e24	11
3	18	12	20	14	17	46	17	228	30	13	e21	10
4	15	12	15	13	65	33	19	49	17	13	e25	11
5	14	12	76	52	40	63	18	30	16	14	e34	9.8
6	13	11	47	19	23	91	70	25	45	25	e26	9.3
7	16	27	37	16	21	32	25	22	16	12	e24	9.3
8	268	224	22	16	90	28	18	21	15	12	e21	10
9	29	27	18	386	28	25	17	33	13	12	e18	9.4
10	17	14	17	55	33	22	16	18	15	12	e14	16
11	15	12	16	33	31	23	15	17	30	11	e31	20
12	12	13	78	22	22	19	174	18	61	11	e23	11
13	12	12	135	19	201	19	31	17	260	12	e20	8.9
14	11	11	25	17	337	188	19	15	336	12	e18	9.1
15	11	8.9	18	17	362	36	17	25	42	13	e17	8.5
16	13	11	17	159	64	25	17	15	17	12	e16	8.6
17	11	10	24	27	40	22	18	17	16	119	e15	8.2
18	14	46	33	21	32	23	15	15	16	12	e15	15
19	14	34	54	18	30	78	15	17	14	14	e14	9.7
20	11	15	18	18	28	36	17	17	15	29	e13	8.1
21	8.9	75	16	17	35	25	16	15	15	17	e13	9.5
22	11	34	15	17	29	22	87	17	13	12	10	9.6
23	12	15	14	20	21	20	187	16	13	5010	11	10
24	11	12	26	49	20	20	32	15	15	920	12	257
25	12	13	20	115	19	27	22	41	13	50	12	62
26	10	21	14	26	20	62	19	33	12	33	14	17
27	9.3	12	14	21	24	21	135	24	220	27	11	13
28	9.7	11	14	38	680	46	740	13	31	25	13	107
29	12	12	17	21	---	57	200	17	16	25	13	33
30	9.1	15	15	38	---	21	46	15	16	e120	9.6	14
31	11	---	13	22	---	24	---	15	---	e41	10	---
TOTAL	1477.0	809.9	1039	1335	2352	1344	2057	880	1544	6673	545.6	744.9
MEAN	47.6	27.0	33.5	43.1	84.0	43.4	68.6	28.4	51.5	215	17.6	24.8
MAX	820	224	155	386	680	188	740	228	336	5010	34	257
MIN	8.9	8.9	13	13	17	19	15	13	12	11	9.6	8.1
CFSM	1.55	.88	1.09	1.40	2.74	1.41	2.23	.92	1.68	7.01	.57	.81
IN.	1.79	.98	1.26	1.62	2.85	1.63	2.49	1.07	1.87	8.09	.66	.90

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1997, BY WATER YEAR (WY)

MEAN	38.7	37.4	41.3	58.9	66.0	71.5	42.4	41.7	36.8	35.1	34.3	32.9
MAX	157	137	107	123	124	161	82.6	204	123	215	118	135
(WY)	1991	1986	1984	1993	1979	1993	1996	1975	1982	1997	1995	1975
MIN	9.00	9.32	10.2	13.4	20.7	18.5	14.9	14.0	6.95	6.67	7.97	6.00
(WY)	1992	1982	1966	1981	1968	1985	1981	1986	1986	1986	1987	1983

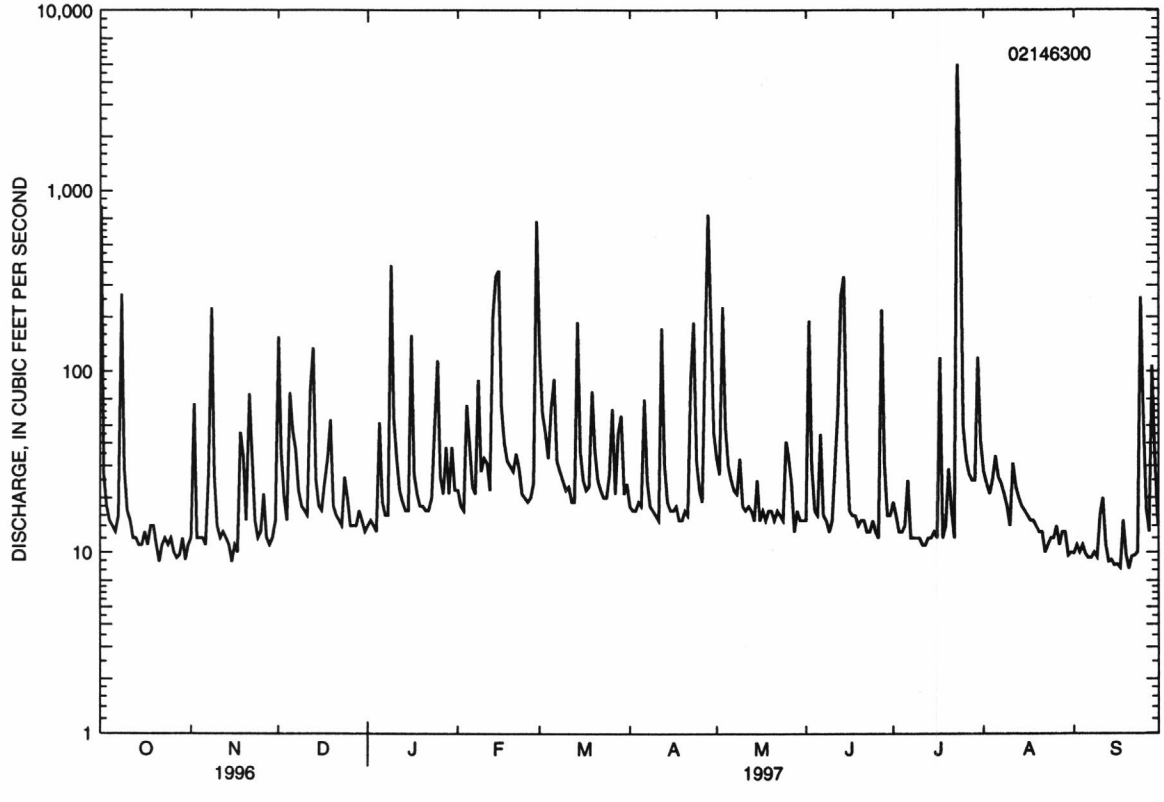
SANTEE RIVER BASIN

02146300 IRWIN CREEK NEAR CHARLOTTE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1962 - 1997	
ANNUAL TOTAL	17373.0		20801.4			
ANNUAL MEAN	47.5		57.0		44.9	
HIGHEST ANNUAL MEAN					78.6	1975
LOWEST ANNUAL MEAN					24.0	1981
HIGHEST DAILY MEAN	1030	Jan 27	5010	Jul 23	5010	Jul 23 1997
LOWEST DAILY MEAN	7.7	Sep 23	8.1	Sep 20	3.1	Sep 25 1983
ANNUAL SEVEN-DAY MINIMUM	8.9	Sep 20	9.6	Sep 14	3.5	Oct 5 1993
INSTANTANEOUS PEAK FLOW			11600*	Jul 23	11600*	Jul 23 1997
INSTANTANEOUS PEAK STAGE			20.38	Jul 23	20.38	Jul 23 1997
INSTANTANEOUS LOW FLOW			5.4	Sep 20	2.8*	Jul 13 1986
ANNUAL RUNOFF (CFSM)	1.55		1.86		1.46	
ANNUAL RUNOFF (INCHES)	21.05		25.21		19.85	
10 PERCENT EXCEEDS	70		75		80	
50 PERCENT EXCEEDS	21		18		18	
90 PERCENT EXCEEDS	11		11		8.5	

e Estimated.

* See REMARKS.



SANTEE RIVER BASIN

02146381 SUGAR CREEK AT NC 51 NEAR PINEVILLE, NC

LOCATION.--Lat 35°05'20", long 80°54'00", Mecklenburg County, Hydrologic Unit 03050103, on right bank on upstream side of bridge at N.C. Highway 51, 0.3 mi upstream from McCullough Branch, and 0.6 mi northwest of City Hall in Pineville.

DRAINAGE AREA.--65.3 mi^2.

PERIOD OF RECORD.-- Occasional discharge measurements, water years 1978-94. October 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 525 ft above sea level, from topographic map. Telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Maximum discharge for period of record and current water year from rating curve extended above 9,710 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1060	29	263	71	53	842	49	90	39	80	35	21
2	90	110	113	72	47	155	45	73	295	58	32	21
3	57	43	55	66	46	122	45	377	124	43	30	24
4	46	32	47	64	120	94	44	134	54	40	36	25
5	42	34	70	109	90	81	46	77	47	38	62	21
6	39	33	164	85	64	237	89	65	78	54	50	22
7	40	33	70	71	53	90	83	58	59	38	31	20
8	553	401	76	69	166	74	46	56	43	40	27	20
9	78	103	50	749	84	66	43	93	40	37	26	21
10	46	52	47	153	65	61	41	53	41	38	21	28
11	38	45	44	88	88	60	39	47	39	36	41	51
12	35	45	47	66	60	57	272	46	103	34	31	26
13	33	43	395	59	227	55	96	46	223	35	28	24
14	32	42	103	53	845	332	54	44	1130	35	29	22
15	31	40	82	53	962	107	47	53	155	36	31	22
16	32	39	76	286	167	70	46	44	74	35	29	21
17	32	39	85	95	102	60	46	43	57	85	29	21
18	31	48	82	68	82	61	44	41	50	74	26	25
19	37	119	161	55	71	109	44	42	51	36	26	28
20	31	48	85	53	67	123	45	41	49	36	27	23
21	29	85	76	53	75	66	45	38	46	51	26	22
22	29	142	72	51	92	57	111	39	44	35	21	24
23	31	50	71	52	59	52	316	39	42	4790	24	27
24	30	43	74	75	57	51	87	37	43	2970	19	370
25	31	41	88	238	54	51	56	40	42	298	21	205
26	30	75	67	82	54	119	48	81	41	170	26	59
27	28	45	67	60	55	60	166	44	308	121	22	41
28	27	41	73	74	805	56	1650	37	129	94	29	114
29	30	39	75	64	---	214	561	41	55	79	32	158
30	30	41	74	77	---	70	133	39	46	182	28	40
31	29	---	70	61	---	58	---	39	---	73	21	---
TOTAL	2707	1980	2922	3272	4710	3710	4437	1997	3547	9771	916	1546
MEAN	87.3	66.0	94.3	106	168	120	148	64.4	118	315	29.5	51.5
MAX	1060	401	395	749	962	842	1650	377	1130	4790	62	370
MIN	27	29	44	51	46	51	39	37	39	34	19	20
CFSM	1.34	1.01	1.44	1.62	2.58	1.83	2.26	.99	1.81	4.83	.45	.79
IN.	1.54	1.13	1.66	1.86	2.68	2.11	2.53	1.14	2.02	5.57	.52	.88

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

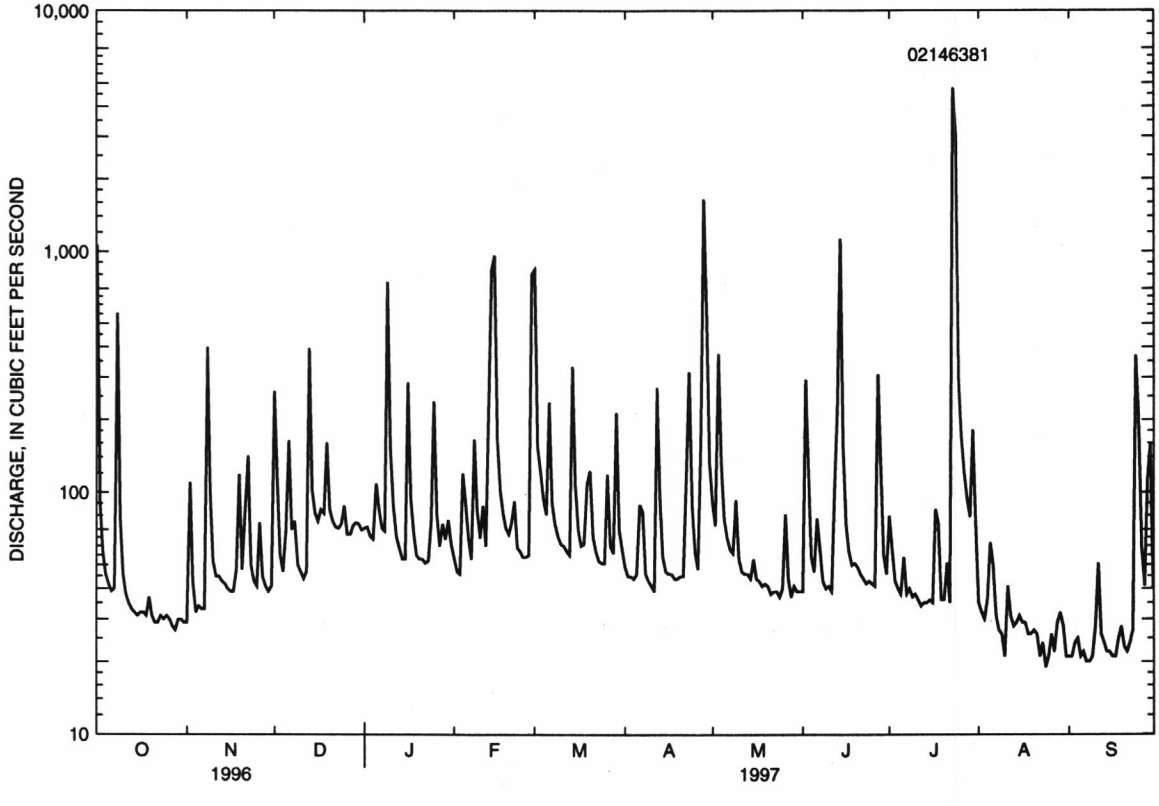
MEAN	107	103	69.2	133	182	121	114	80.1	95.7	146	90.6	68.2
MAX	154	183	94.3	147	232	151	151	99.9	118	315	171	99.2
(WY)	1996	1996	1997	1995	1995	1996	1996	1995	1997	1997	1995	1995
MIN	78.7	60.2	56.3	106	148	93.2	44.0	64.4	65.0	46.2	29.5	51.5
(WY)	1995	1995	1996	1997	1996	1995	1995	1997	1996	1996	1997	1997

SANTEE RIVER BASIN

02146381 SUGAR CREEK AT NC 51 NEAR PINEVILLE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1995 - 1997	
ANNUAL TOTAL	35218		41515			
ANNUAL MEAN	96.2		114		109	
HIGHEST ANNUAL MEAN					114	1997
LOWEST ANNUAL MEAN					104	1995
HIGHEST DAILY MEAN	1590	Jan 27	4790	Jul 23	4790	Jul 23 1997
LOWEST DAILY MEAN	22	Sep 24	19	Aug 24	19	Aug 24 1997
ANNUAL SEVEN-DAY MINIMUM	25	Sep 20	22	Sep 2	22	Sep 2 1997
INSTANTANEOUS PEAK FLOW			9890*	Jul 23	9890*	Jul 23 1997
INSTANTANEOUS PEAK STAGE			18.68	Jul 23	18.68	Jul 23 1997
INSTANTANEOUS LOW FLOW			15	Aug 10	15	Aug 10 1997
ANNUAL RUNOFF (CFSM)	1.47		1.74		1.67	
ANNUAL RUNOFF (INCHES)	20.06		23.65		22.64	
10 PERCENT EXCEEDS	154		162		174	
50 PERCENT EXCEEDS	53		52		52	
90 PERCENT EXCEEDS	29		28		30	

* See REMARKS.



SANTEE RIVER BASIN

02146409 LITTLE SUGAR CREEK AT MEDICAL CENTER DRIVE AT CHARLOTTE, NC

LOCATION.--Lat 35°12'11", long 80°50'15", Mecklenburg County, Hydrologic Unit 03050103, on left bank on upstream side of bridge at Medical Center Drive, 3.3 mi upstream from Briar Creek, and 1.3 mi south of City Hall in Charlotte.

DRAINAGE AREA.--11.8 mi^2, revised.

PERIOD OF RECORD.--October 1994 to current year. Fragmentary records 1964-1966, in files of Geological Survey as "Little Sugar Creek at Brunswick Avenue at Charlotte".

GAGE.--Water-stage recorder. Elevation of gage is 610 ft above sea level, from topographic map. Telephone telemetry at station.

REMARKS.--Records good except those below 2.0 ft^3/sec and above 2500 ft^3/sec, which are fair. Minimum discharge for current water year and period of record also occurred Sept. 6, 8 and may have been affected by regulation of unknown origin.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	263	3.4	70	4.3	4.8	28	6.8	7.9	4.2	6.5	5.1	2.0
2	6.7	38	9.4	4.4	4.7	17	5.4	6.6	53	4.9	4.4	3.5
3	4.6	3.4	5.5	4.0	4.4	13	5.2	102	6.6	4.0	4.1	2.2
4	3.8	2.9	4.8	3.9	25	8.1	5.5	10	4.7	3.7	31	2.1
5	3.4	3.1	41	22	16	28	5.8	7.0	4.5	9.9	12	2.9
6	3.3	3.0	12	4.9	6.5	25	24	6.2	23	9.5	4.5	2.0
7	8.9	6.9	16	3.8	5.4	7.5	6.3	5.9	5.4	3.7	4.0	1.9
8	169	137	7.2	7.7	41	6.6	5.0	9.5	4.2	3.6	3.9	2.0
9	9.9	7.5	5.5	163	7.8	6.3	4.7	9.2	3.8	3.2	3.4	4.8
10	6.2	5.0	5.1	11	12	6.1	4.9	5.3	3.7	4.0	7.5	11
11	5.3	4.6	4.8	9.1	9.3	6.1	4.7	5.1	33	2.2	6.0	9.2
12	5.0	4.4	56	5.6	6.3	5.6	97	5.0	28	2.0	3.3	2.6
13	4.5	4.5	39	5.1	133	6.4	7.7	4.9	151	2.0	3.3	2.4
14	4.5	4.2	6.7	4.8	131	111	5.6	4.4	49	2.2	3.0	2.2
15	4.0	4.2	4.9	4.4	131	10	5.3	9.3	7.9	2.3	2.8	2.4
16	3.8	4.3	4.7	79	15	7.5	5.1	4.7	4.5	2.3	2.6	2.4
17	3.9	4.7	9.2	6.6	10	7.1	4.9	4.4	3.8	46	2.5	2.8
18	7.1	28	18	5.1	8.5	6.9	4.7	4.3	3.7	3.1	2.4	2.7
19	5.1	11	17	4.6	7.3	39	4.7	4.4	3.4	2.5	2.6	2.2
20	3.6	4.7	5.8	4.4	7.5	11	4.6	4.5	3.1	4.0	3.1	1.8
21	3.5	40	5.1	4.3	12	8.1	4.4	3.9	4.6	3.9	2.9	1.5
22	3.5	9.1	4.7	4.4	8.8	7.7	47	4.2	3.2	13	3.0	1.6
23	3.6	4.8	4.6	4.9	6.3	7.0	70	3.8	2.9	1970	2.7	1.7
24	3.6	4.3	12	17	6.2	7.0	7.2	3.7	2.7	333	2.3	138
25	3.5	4.3	6.7	42	6.0	18	5.3	17	2.7	17	3.2	28
26	3.6	12	4.7	6.3	6.3	34	4.7	8.7	2.9	8.3	3.2	4.9
27	3.7	4.4	4.6	5.3	8.4	7.5	136	6.2	112	7.1	2.6	3.4
28	3.4	4.0	4.2	14	332	28	297	4.2	8.5	5.7	4.3	85
29	3.1	3.9	6.0	5.4	---	21	26	4.1	3.7	5.0	3.8	11
30	3.2	6.9	4.5	14	---	7.2	10	4.2	3.1	42	2.4	4.2
31	3.3	---	4.1	5.7	---	9.0	---	4.0	---	10	2.1	---
TOTAL	563.6	378.5	403.8	481.0	972.5	510.7	825.5	284.6	546.8	2536.6	144.0	344.4
MEAN	18.2	12.6	13.0	15.5	34.7	16.5	27.5	9.18	18.2	81.8	4.65	11.5
MAX	263	137	70	163	332	111	297	102	151	1970	31	138
MIN	3.1	2.9	4.1	3.8	4.4	5.6	4.4	3.7	2.7	2.0	2.1	1.5
CFSM	1.49	1.03	1.07	1.27	2.85	1.35	2.26	.75	1.49	6.71	.38	.94
IN.	1.72	1.15	1.23	1.47	2.97	1.56	2.52	.87	1.67	7.73	.44	1.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

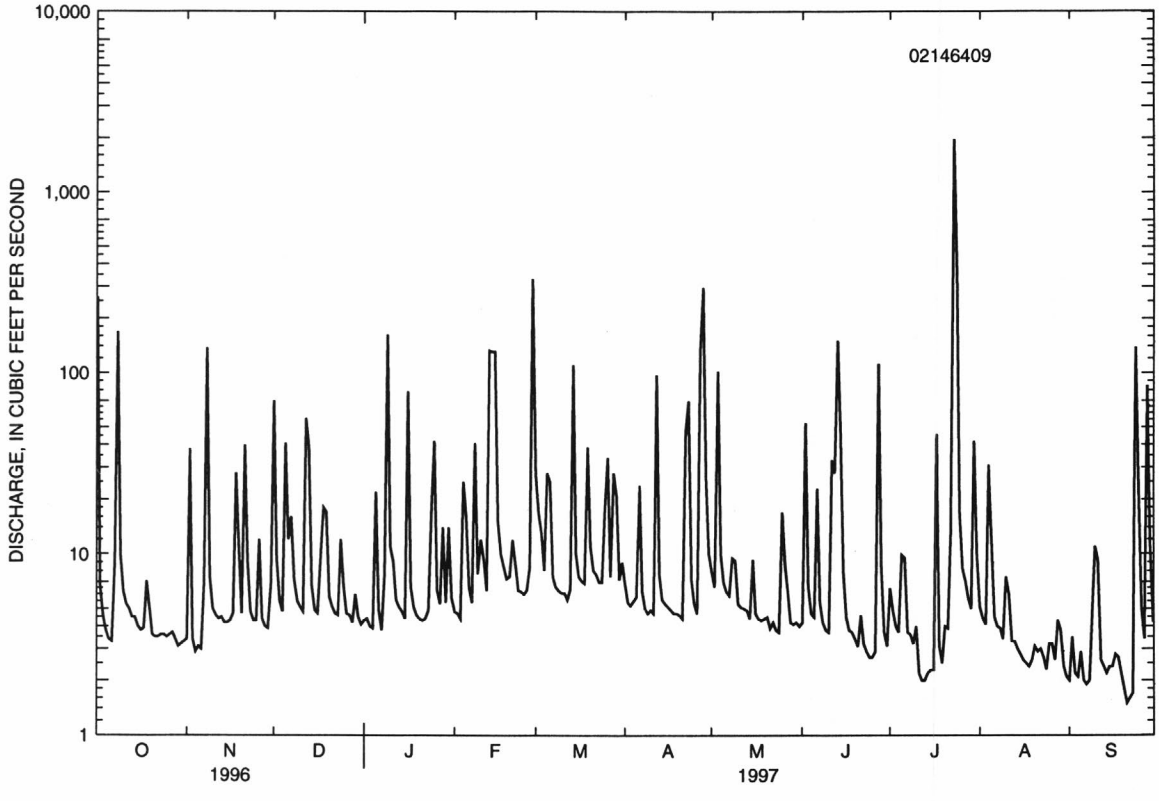
MEAN	20.2	17.6	10.2	22.3	31.2	18.5	19.6	14.7	16.3	37.5	23.4	18.0
MAX	28.9	30.3	13.0	27.2	36.9	26.5	27.5	21.5	20.3	81.8	50.0	25.4
(WY)	1996	1996	1997	1996	1995	1996	1997	1995	1995	1997	1995	1995
MIN	13.6	9.75	8.15	15.5	22.1	12.4	7.06	9.18	10.3	10.1	4.65	11.5
(WY)	1995	1995	1995	1997	1996	1995	1995	1997	1996	1996	1997	1997

SANTEE RIVER BASIN

02146409 LITTLE SUGAR CREEK AT MEDICAL CENTER DRIVE AT CHARLOTTE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1995 - 1997	
ANNUAL TOTAL	6413.8		7992.0			
ANNUAL MEAN	17.5		21.9		20.8	
HIGHEST ANNUAL MEAN					21.9	1997
LOWEST ANNUAL MEAN					19.6	1996
HIGHEST DAILY MEAN	338	Jan 27	1970	Jul 23	1970	Jul 23 1997
LOWEST DAILY MEAN	2.8	Sep 21	1.5	Sep 21	1.5	Sep 21 1997
ANNUAL SEVEN-DAY MINIMUM	3.1	Sep 20	2.0	Sep 17	2.0	Sep 17 1997
INSTANTANEOUS PEAK FLOW			5310	Jul 23	5310	Jul 23 1997
INSTANTANEOUS PEAK STAGE			14.83	Jul 23	14.83	Jul 23 1997
INSTANTANEOUS LOW FLOW			1.2*	Sep 2	1.2*	Sep 2 1997
ANNUAL RUNOFF (CFSM)	1.44		1.79		1.70	
ANNUAL RUNOFF (INCHES)	19.56		24.37		23.11	
10 PERCENT EXCEEDS	32		33		39	
50 PERCENT EXCEEDS	7.0		5.1		6.3	
90 PERCENT EXCEEDS	3.7		2.8		3.2	

* See REMARKS.



SANTEE RIVER BASIN

0214645022 BRIAR CREEK AT SECOND FOOTBRIDGE UPSTREAM OF COLONY ROAD AT CHARLOTTE, NC

LOCATION.--Lat 35°10'30", long 80°49'55", Mecklenburg County, Hydrologic Unit 03050103, on right bank on downstream side of second footbridge 700 feet upstream of Colony Road at Charlotte. Located within Myers Park Country Club.

DRAINAGE AREA.--19.0 mi^2.

PERIOD OF RECORD.--December 1995 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 610 ft above sea level, from topographic map. Telephone telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Maximum gage height for period of record and current water year, 14.29 ft in gage well, 15.41 ft from floodmarks. Maximum discharge for period of record and current water year from slope-area measurement of peak flow. Minimum discharge for period of record and current water year also occurred several days in September.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 27, 1995 reached a stage of 15.6 ft, present site and datum, from floodmarks; discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	311	5.5	59	6.0	8.5	58	10	15	6.2	16	6.7	2.6
2	8.0	36	13	6.1	7.7	28	9.7	13	58	6.1	5.8	2.5
3	4.8	4.4	7.3	5.4	7.5	22	9.7	103	10	4.6	5.4	2.5
4	3.8	3.6	6.3	5.3	25	15	9.5	19	7.1	4.1	30	2.2
5	3.5	5.7	32	18	16	30	9.5	13	6.4	4.5	15	2.1
6	3.3	5.3	16	6.6	9.2	49	25	12	29	8.6	6.2	2.1
7	5.0	4.6	18	5.7	8.2	15	11	10	8.0	4.1	5.2	2.1
8	191	138	10	6.1	44	14	9.3	11	6.6	3.8	4.9	2.1
9	9.0	10	6.9	194	12	13	9.1	19	6.2	8.8	4.7	3.2
10	5.4	5.6	6.2	19	14	13	8.8	9.4	5.9	8.4	10	11
11	4.5	5.0	6.9	13	12	13	8.8	8.8	28	3.5	9.6	14
12	4.1	4.9	30	8.7	9.3	13	82	8.7	34	3.7	4.8	2.7
13	3.9	6.1	55	7.7	123	13	14	8.5	113	3.2	4.4	2.2
14	3.9	5.8	9.1	7.2	173	e200	10	8.2	58	3.0	4.4	2.1
15	4.1	5.5	7.3	6.9	204	e20	9.4	12	13	3.0	4.3	2.2
16	3.9	5.5	6.9	85	25	e15	9.0	7.7	7.4	2.9	4.0	2.1
17	3.8	5.5	12	12	17	e13	9.1	7.5	6.5	6.7	3.8	2.0
18	5.5	21	16	9.2	14	e12	8.7	7.4	6.1	3.3	3.6	2.2
19	5.8	14	25	8.1	12	39	8.7	7.4	5.8	2.8	3.5	2.4
20	3.5	5.6	7.7	7.8	12	17	8.4	7.0	5.6	10	3.3	2.3
21	3.5	35	6.8	7.7	23	12	8.3	6.8	15	3.2	3.5	2.1
22	3.4	12	6.5	8.3	15	11	37	6.5	6.6	5.8	3.2	2.0
23	4.1	6.0	6.4	8.1	10	10	69	6.5	5.0	2610	2.9	2.3
24	3.3	5.4	14	20	9.5	9.6	13	6.4	4.6	685	2.8	108
25	3.4	6.3	10	46	9.3	16	10	12	4.6	21	3.0	28
26	3.8	52	6.6	11	10	31	9.4	12	4.4	11	2.8	4.6
27	4.5	7.3	6.4	9.2	12	11	113	6.9	99	8.3	2.8	3.2
28	4.3	6.0	5.9	17	299	51	454	6.0	11	7.0	8.6	78
29	4.2	5.7	6.8	8.9	---	50	56	6.1	6.3	7.5	4.7	12
30	4.4	7.1	6.3	18	---	14	20	6.0	5.2	43	3.0	4.5
31	4.9	---	6.3	9.4	---	14	---	6.0	---	12	2.7	---
TOTAL	631.6	440.4	432.6	601.4	1141.2	841.6	1069.4	388.8	582.5	3524.9	179.6	311.3
MEAN	20.4	14.7	14.0	19.4	40.8	27.1	35.6	12.5	19.4	114	5.79	10.4
MAX	311	138	59	194	299	200	454	103	113	2610	30	108
MIN	3.3	3.6	5.9	5.3	7.5	9.6	8.3	6.0	4.4	2.8	2.7	2.0
CFSM	1.07	.77	.74	1.02	2.15	1.43	1.88	.66	1.02	5.99	.31	.55
IN.	1.24	.86	.85	1.18	2.24	1.65	2.10	.76	1.14	6.91	.35	.61

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1997, BY WATER YEAR (WY)

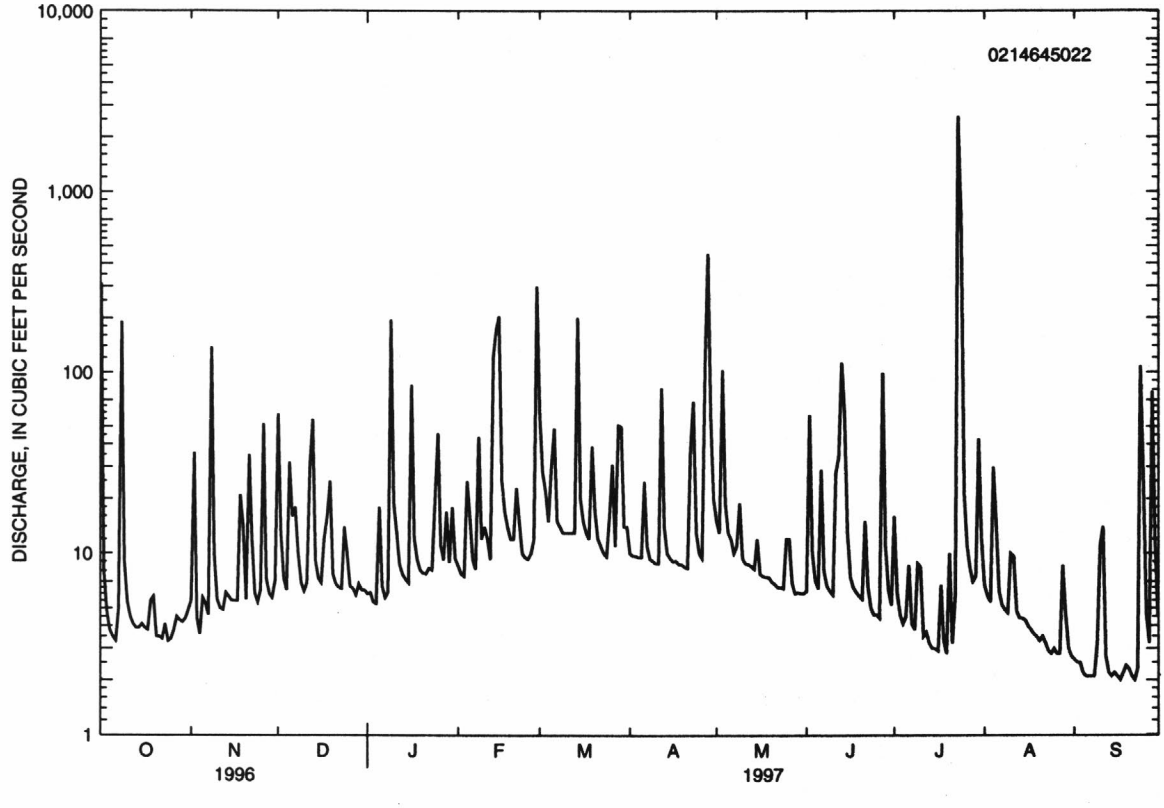
MEAN	20.4	14.7	14.3	27.6	35.5	31.4	33.8	14.6	16.4	61.1	12.5	13.8
MAX	20.4	14.7	14.7	35.7	40.8	35.6	35.6	16.6	19.4	114	19.1	17.2
(WY)	1997	1997	1996	1996	1997	1996	1997	1996	1997	1997	1996	1996
MIN	20.4	14.7	14.0	19.4	30.4	27.1	31.9	12.5	13.4	8.57	5.79	10.4
(WY)	1997	1997	1997	1997	1996	1997	1996	1997	1996	1996	1997	1997

SANTEE RIVER BASIN

0214645022 BRIAR CREEK AT SECOND FOOTBRIDGE UPSTREAM OF COLONY ROAD AT CHARLOTTE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1996 - 1997	
ANNUAL TOTAL	7848.8		10145.3			
ANNUAL MEAN	21.4		27.8		27.8	
HIGHEST ANNUAL MEAN					27.8	1997
LOWEST ANNUAL MEAN					27.8	1997
HIGHEST DAILY MEAN	455	Jan 27	2610	Jul 23	2610	Jul 23 1997
LOWEST DAILY MEAN	3.0	Sep 24	2.0	Sep 17	2.0	Sep 17 1997
ANNUAL SEVEN-DAY MINIMUM	3.4	Sep 19	2.2	Sep 16	2.2	Sep 16 1997
INSTANTANEOUS PEAK FLOW			5680*	Jul 23	5680*	Jul 23 1997
INSTANTANEOUS PEAK STAGE			15.41*	Jul 23	15.41*	Jul 23 1997
INSTANTANEOUS LOW FLOW			1.9*	Sep 4	1.9*	Sep 4 1997
ANNUAL RUNOFF (CFSM)	1.13		1.47		1.47	
ANNUAL RUNOFF (INCHES)	15.39		19.89		19.91	
10 PERCENT EXCEEDS	35		36		37	
50 PERCENT EXCEEDS	11		8.0		9.9	
90 PERCENT EXCEEDS	3.8		3.3		3.6	

e Estimated.
* See REMARKS.



SANTEE RIVER BASIN

02146470 LITTLE HOPE CREEK AT SENECA PLACE AT CHARLOTTE, NC

LOCATION.--Lat 35°09'53", long 80°51'12", Mecklenburg County, Hydrologic Unit 03050103, on right bank at downstream side of bridge on Seneca Place, 0.8 mi upstream from mouth, and 4 mi south of City Hall in Charlotte.

DRAINAGE AREA.--2.63 mi^2, revised.

PERIOD OF RECORD.--Water years 1967 to 1970 (annual maximum), December 1982 to September 1990, October 1994 to current year.

REVISED RECORDS.--WDR NC-85-1: 1984 (P). WDR NC-88-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 597.77 ft above sea level (North Carolina Coast and Geodetic Survey bench mark). Telephone telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No flow occurred periodically in 1986, 1987, and 1988. Minimum discharge for current water year also occurred Sept. 22, 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	.61	14	.83	1.1	7.6	1.2	1.3	.60	7.2	1.4	.59
2	.70	7.0	1.4	.85	.99	2.6	1.1	1.1	12	.80	1.2	.55
3	.54	.48	.84	.69	.93	2.1	1.1	15	.80	.61	1.0	.54
4	.45	.43	.74	.68	5.3	1.4	.99	1.6	.65	.53	1.1	.49
5	.44	.59	7.4	3.0	2.3	4.5	.97	1.3	.61	2.6	5.1	.47
6	.45	.56	1.7	.71	1.2	3.9	4.2	1.1	3.2	.94	1.2	.50
7	1.1	1.4	2.5	.67	1.1	1.4	1.1	1.1	.68	.56	.91	.46
8	26	21	e1.5	.81	8.0	1.4	.96	3.0	.62	.54	.82	.47
9	.95	.93	.84	31	1.4	1.3	.93	2.3	.61	.51	.80	.64
10	.63	.63	.79	1.9	2.1	1.3	.89	.95	.56	.42	3.2	1.4
11	.54	.58	.74	1.5	3.1	1.3	.90	.91	4.7	.39	1.0	1.7
12	.54	.61	12	1.1	1.2	1.1	15	.94	2.3	.38	.83	.48
13	.52	.56	5.3	.98	29	1.1	1.3	.86	34	.37	.81	.43
14	.50	.55	1.1	.92	25	16	1.0	.85	7.0	.36	.80	.49
15	.46	.47	.90	.91	29	1.6	.99	1.1	1.7	.34	.77	.46
16	.46	.49	.86	14	3.0	1.3	.97	.83	.97	.34	.76	.45
17	.54	.50	1.6	1.4	1.9	1.3	.93	.87	.81	1.1	.76	.38
18	.85	4.9	3.0	1.3	1.5	1.3	.87	.84	.70	.53	.72	.47
19	.58	1.2	2.8	1.1	1.4	5.8	.86	.83	.63	.36	.65	.47
20	.48	.66	.93	1.1	1.2	1.6	.83	.98	.61	.43	.64	.39
21	.48	7.8	.85	1.1	5.6	1.3	.83	.63	1.7	.38	.65	.24
22	.47	1.2	.86	.99	1.8	1.3	6.7	.62	.66	6.9	.60	.25
23	.46	.68	.86	1.1	1.2	1.2	8.9	.61	.59	282	.57	.30
24	.50	.64	2.2	3.2	1.1	1.0	1.1	.63	.57	76	.57	19
25	.45	.64	1.0	8.4	1.1	2.5	.97	2.4	.55	2.0	.57	3.4
26	.44	3.0	.84	1.2	1.2	5.9	.93	1.1	.50	1.2	.57	.49
27	.45	.70	.83	1.1	1.3	1.2	32	.63	10	.94	.54	.42
28	.46	.70	.79	2.4	62	12	45	.59	.94	.86	.93	15
29	.46	.85	.85	1.1	---	13	3.9	.61	.60	5.7	1.4	1.2
30	.53	1.0	.75	2.7	---	1.7	1.6	.61	.55	30	.76	.49
31	.64	---	.76	1.2	---	1.6	---	.61	---	3.0	.64	---
TOTAL	76.07	61.36	71.53	89.94	196.02	102.6	139.02	46.80	90.41	428.29	32.27	52.62
MEAN	2.45	2.05	2.31	2.90	7.00	3.31	4.63	1.51	3.01	13.8	1.04	1.75
MAX	34	21	14	31	62	16	45	15	34	282	5.1	19
MIN	.44	.43	.74	.67	.93	1.0	.83	.59	.50	.34	.54	.24
CFSM	.90	.75	.85	1.07	2.57	1.22	1.70	.56	1.11	5.08	.38	.64
IN.	1.04	.84	.98	1.23	2.68	1.40	1.90	.64	1.24	5.86	.44	.72

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997@, BY WATER YEAR (WY)

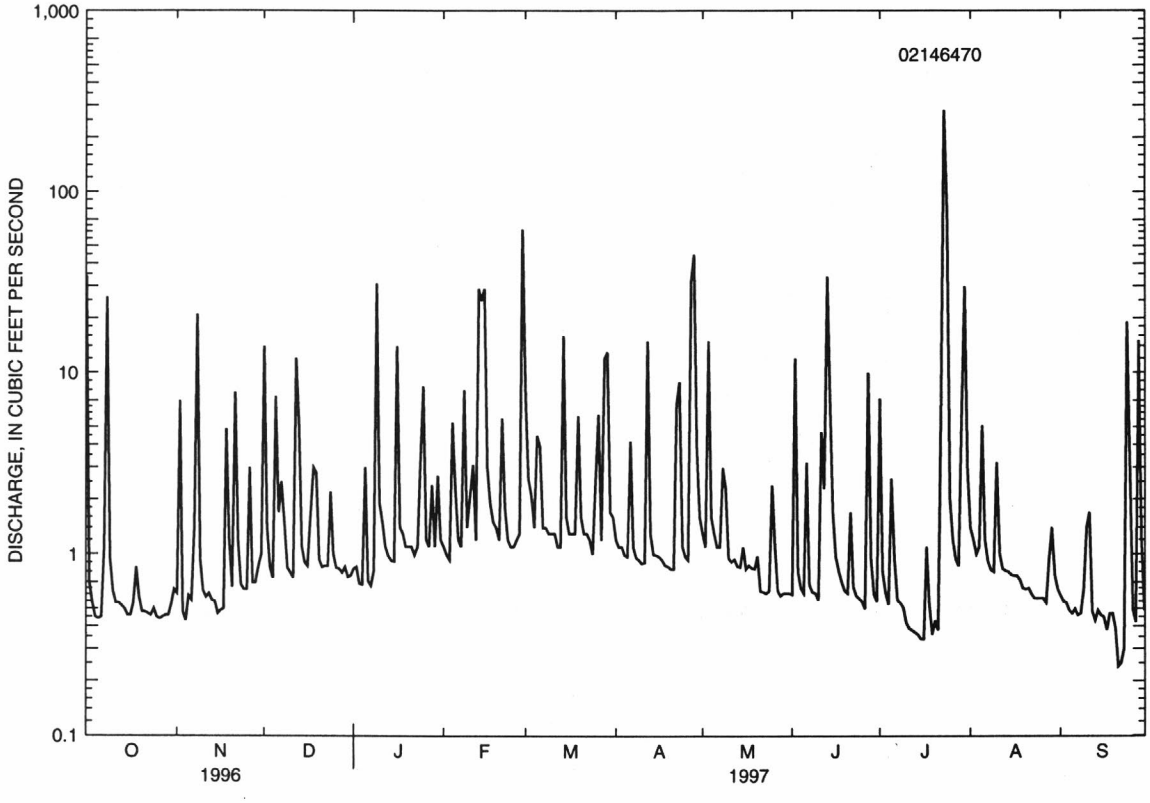
MEAN	2.47	3.37	3.18	4.08	6.11	4.76	2.89	3.05	2.46	3.03	2.95	2.41
MAX	5.05	10.5	10.5	7.58	8.96	9.04	4.99	6.65	7.18	13.8	9.12	8.17
(WY)	1990	1986	1984	1984	1990	1984	1996	1990	1985	1997	1995	1989
MIN	.57	.95	1.38	1.70	1.59	1.03	1.24	.88	.22	.31	.19	.34
(WY)	1988	1985	1989	1986	1986	1985	1985	1987	1986	1986	1987	1983

SANTEE RIVER BASIN

02146470 LITTLE HOPE CREEK AT SENECA PLACE AT CHARLOTTE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1983 - 1997@	
ANNUAL TOTAL	1140.12		1386.93			
ANNUAL MEAN	3.12		3.80		3.40	
HIGHEST ANNUAL MEAN					4.87	1984
LOWEST ANNUAL MEAN					2.31	1988
HIGHEST DAILY MEAN	69	Jan 27	282	Jul 23	282	Jul 23 1997
LOWEST DAILY MEAN	.30	Sep 26	.24	Sep 21	0	Jul 14 1986
ANNUAL SEVEN-DAY MINIMUM	.35	Sep 20	.36	Sep 17	0	Jul 14 1986
INSTANTANEOUS PEAK FLOW			1700	Jul 23	1700	Jul 23 1997
INSTANTANEOUS PEAK STAGE			8.50	Jul 23	8.50	Jul 23 1997
INSTANTANEOUS LOW FLOW			.11*	Sep 21	0*	Jul 14 1986
ANNUAL RUNOFF (CFSM)	1.15		1.40		1.25	
ANNUAL RUNOFF (INCHES)	15.59		18.97		16.97	
10 PERCENT EXCEEDS	5.8		6.8		6.1	
50 PERCENT EXCEEDS	1.3		.93		1.0	
90 PERCENT EXCEEDS	.46		.47		.26	

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



SANTEE RIVER BASIN

02146507 LITTLE SUGAR CREEK AT ARCHDALE DRIVE AT CHARLOTTE, NC

LOCATION.--Lat 35°08'52", long 80°51'29", Mecklenburg County, Hydrologic Unit 03050103, on left bank at downstream side of bridge on Archdale Drive (Secondary Road 3657) in Charlotte, 0.7 mi downstream of Little Hope Creek, and 5.0 mi south of City Hall, Charlotte.

DRAINAGE AREA.--42.6 mi^2.

PERIOD OF RECORD.--January 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 564.46 ft above sea level (levels by City of Charlotte). Telephone telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. A daily average of 20.8 ft^3/s of treated sewage effluent from Little Sugar Creek wastewater treatment plant was discharged into the stream 0.4 mi upstream from gage. Minimum discharge for period of record also occurred Oct. 14, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 22, 1975, reached a stage of about 12.7 ft, from floodmarks, discharge, 7,360 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1130	27	268	37	42	219	45	68	43	88	43	29
2	53	141	63	39	40	101	44	58	217	39	40	29
3	37	31	42	37	40	82	41	375	52	35	39	30
4	33	28	39	37	112	55	43	80	40	32	102	28
5	33	32	138	91	74	92	42	61	36	59	102	28
6	34	32	82	42	45	167	102	57	112	59	41	28
7	39	33	76	37	38	56	51	54	44	32	36	26
8	612	471	52	34	167	51	41	57	39	32	38	27
9	e260	52	40	655	48	48	43	91	38	33	36	28
10	e60	e38	38	79	53	48	39	52	36	44	48	47
11	41	e35	38	55	57	49	39	50	102	34	e44	59
12	38	e33	128	43	e40	46	333	49	135	31	e42	27
13	36	e38	232	38	409	46	60	48	465	32	e40	26
14	36	e33	46	40	588	534	49	47	265	31	e38	25
15	29	33	40	40	640	74	46	59	62	32	e36	26
16	29	31	41	316	99	53	45	45	40	32	e34	26
17	e30	34	59	54	64	50	46	46	37	97	e34	24
18	e60	91	66	44	55	48	40	44	37	38	e32	26
19	36	71	109	40	51	153	44	46	36	33	e32	27
20	28	38	44	39	48	70	43	47	35	43	e30	26
21	28	147	40	37	89	52	44	43	52	37	e30	25
22	28	65	39	37	65	49	152	43	38	43	e28	24
23	28	39	39	42	46	45	291	44	35	6160	e28	25
24	28	37	64	83	45	43	59	43	33	1830	e26	341
25	27	37	52	184	44	67	50	67	33	99	e26	120
26	e28	147	39	48	45	144	47	65	33	58	e25	34
27	e30	39	39	43	48	50	400	46	364	46	e30	29
28	e28	36	38	72	1100	145	1300	45	56	46	37	237
29	e25	36	41	45	---	202	206	36	37	47	42	63
30	27	40	37	78	---	56	81	42	34	309	30	32
31	27	---	37	45	---	57	---	43	---	66	27	---
TOTAL	2958	1945	2106	2511	4192	2952	3866	1951	2586	9597	1216	1522
MEAN	95.4	64.8	67.9	81.0	150	95.2	129	62.9	86.2	310	39.2	50.7
MAX	1130	471	268	655	1100	534	1300	375	465	6160	102	341
MIN	25	27	37	34	38	43	39	36	33	31	25	24
CFSM	2.24	1.52	1.59	1.90	3.51	2.24	3.03	1.48	2.02	7.27	.92	1.19
IN.	2.58	1.70	1.84	2.19	3.66	2.58	3.38	1.70	2.26	8.38	1.06	1.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1997, BY WATER YEAR (WY)

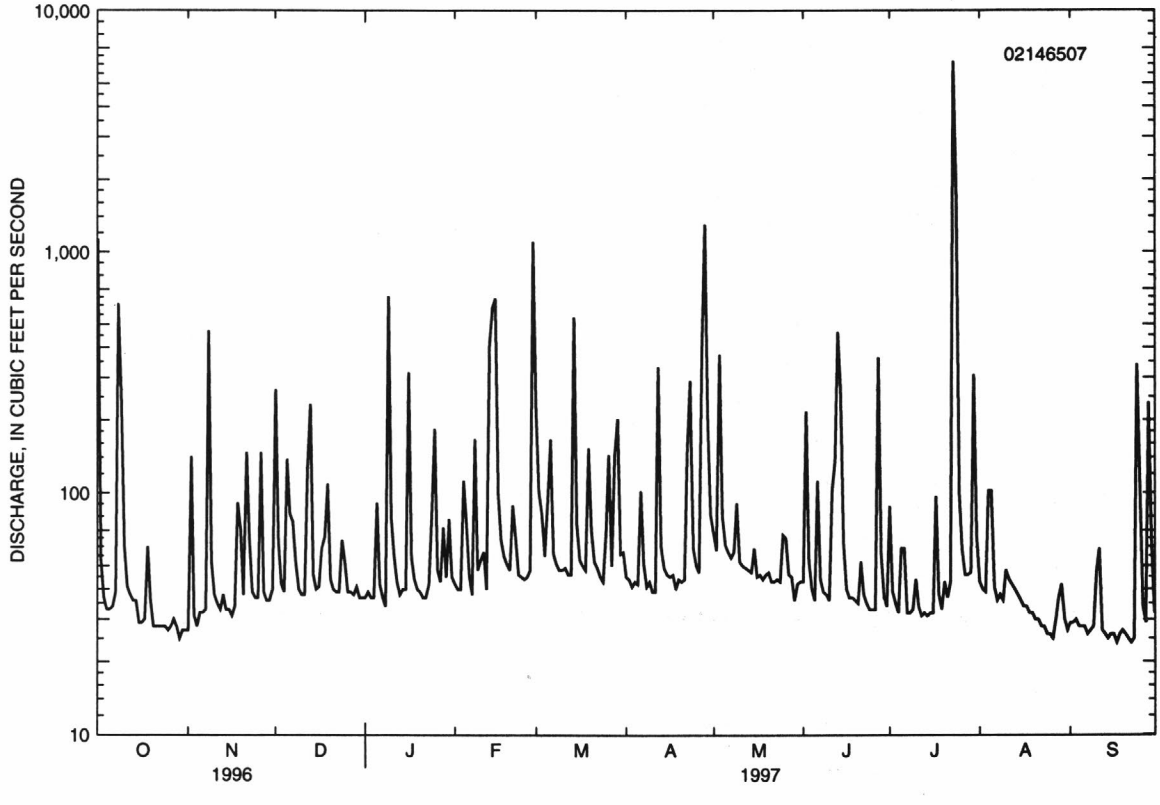
MEAN	72.9	74.3	68.5	107	116	123	80.1	72.3	72.6	69.8	76.4	61.5
MAX	258	197	164	207	194	245	129	119	152	310	227	147
(WY)	1991	1986	1984	1978	1979	1993	1997	1985	1992	1997	1995	1979
MIN	25.7	22.6	32.8	31.6	44.8	40.0	30.8	33.8	20.5	27.2	29.5	21.7
(WY)	1992	1982	1981	1981	1986	1985	1981	1986	1986	1986	1987	1986

SANTEE RIVER BASIN

02146507 LITTLE SUGAR CREEK AT ARCHDALE DRIVE AT CHARLOTTE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1978 - 1997	
ANNUAL TOTAL	28428		37402			
ANNUAL MEAN	77.7		102		82.7	
HIGHEST ANNUAL MEAN					110	1991
LOWEST ANNUAL MEAN					51.7	1981
HIGHEST DAILY MEAN	1370	Jan 27	6160	Jul 23	6160	Jul 23 1997
LOWEST DAILY MEAN	25	Sep 14	24	Sep 17	15	Sep 20 1981
ANNUAL SEVEN-DAY MINIMUM	26	Sep 20	25	Sep 17	15	May 28 1994
INSTANTANEOUS PEAK FLOW			13600	Jul 23	13600	Jul 23 1997
INSTANTANEOUS PEAK STAGE			15.06	Jul 23	15.06	Jul 23 1997
INSTANTANEOUS LOW FLOW			12	Sep 7	11*	Sep 24 1981
ANNUAL RUNOFF (CFSM)	1.82		2.41		1.94	
ANNUAL RUNOFF (INCHES)	24.82		32.66		26.37	
10 PERCENT EXCEEDS	127		147		146	
50 PERCENT EXCEEDS	42		43		38	
90 PERCENT EXCEEDS	28		28		25	

e Estimated.
* See REMARKS.



SANTEE RIVER BASIN

02146530 LITTLE SUGAR CREEK AT HIGHWAY 51 AT PINEVILLE, NC

LOCATION.--Lat 35°05'06", long 80°52'58", Mecklenburg County, Hydrologic Unit 03050103, on left bank on upstream side of bridge on State Highway 51, 0.5 mi east of intersection of State Highway 51 and U.S. Highway 521 at Pineville.,

DRAINAGE AREA.--49.2 mi^2.

PERIOD OF RECORD.--Occasional discharge measurements , water years 1966-97. June 1997 to September 1997.

GAGE.--Water-stage recorder. Elevation of gage is 530 ft above sea level, from topographic map. Telephone telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Maximum gage height for period of record from floodmarks. Maximum discharge for period of record from rating curve extended above 10,120 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, FOR PERIOD JUNE 1997 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									e45	92	50	28
2									e225	47	45	28
3									e60	39	44	29
4									e45	36	61	27
5									e40	36	117	28
6									105	89	46	28
7									51	36	37	26
8									41	35	37	27
9									40	35	35	28
10									37	43	40	47
11									43	33	50	66
12									162	31	33	34
13									343	32	33	32
14									453	31	32	31
15									87	32	e35	31
16									45	32	e37	31
17									41	76	e36	31
18									40	44	e35	30
19									39	32	e33	31
20									37	38	e32	30
21									47	38	e31	28
22									44	35	e30	28
23									37	e6780	e30	29
24									35	e2010	e28	392
25									34	e110	e28	145
26									34	e65	e27	45
27									348	e50	e32	36
28									79	e50	e40	240
29									43	44	e42	102
30									38	289	32	42
31									---	80	28	---
TOTAL									2718	10420	1216	1730
MEAN									90.6	336	39.2	57.7
MAX									453	6780	117	392
MIN									34	31	27	26
CFSM									1.86	6.90	.81	1.18
IN.									2.08	7.96	.93	1.32

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD JUNE 1997 TO SEPTEMBER 1997

MEAN									90.6	336	39.2	57.7
MAX									90.6	336	39.2	57.7
(WY)									1997	1997	1997	1997
MIN									90.6	336	39.2	57.7
(WY)									1997	1997	1997	1997

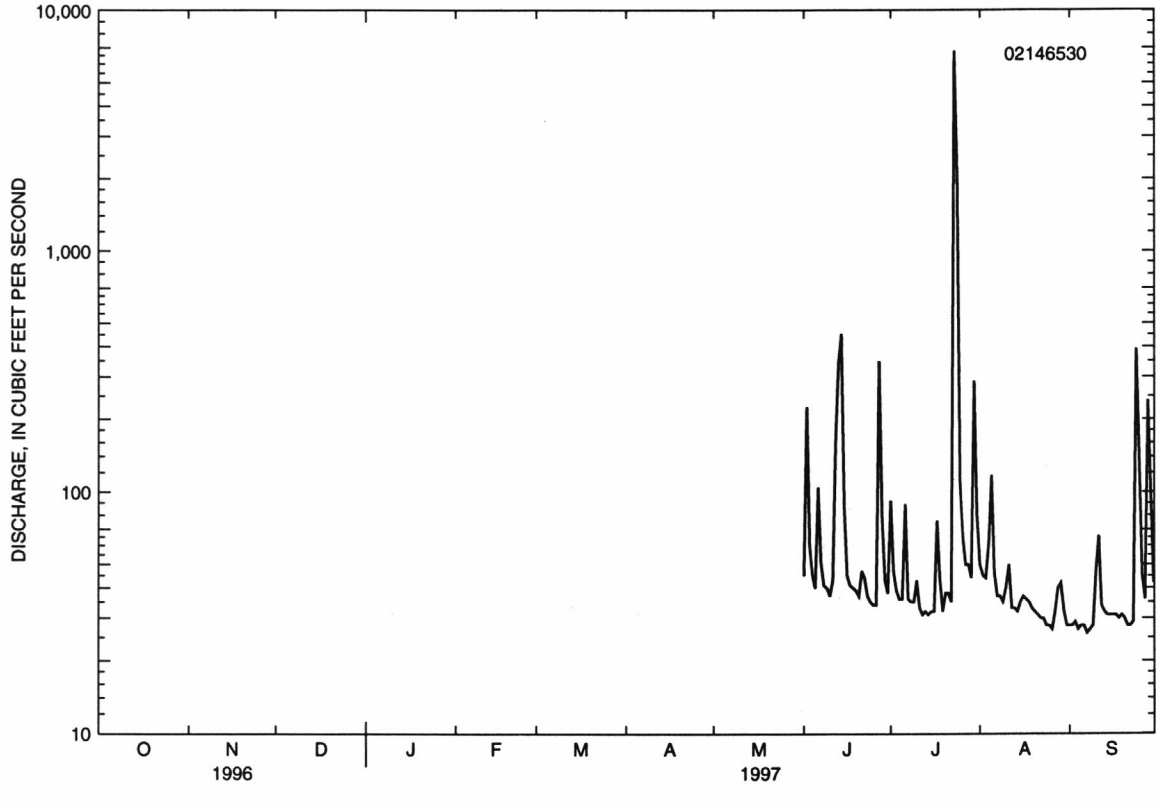
SANTEE RIVER BASIN

02146530 LITTLE SUGAR CREEK AT HIGHWAY 51 AT PINEVILLE, NC--Continued

SUMMARY STATISTICS FOR PERIOD JUNE 1997 TO SEPTEMBER 1997

ANNUAL TOTAL	16084	
ANNUAL MEAN	132	
HIGHEST DAILY MEAN	6780	Jul 23
LOWEST DAILY MEAN	26	Sep 7
ANNUAL SEVEN-DAY MINIMUM	28	Sep 2
INSTANTANEOUS PEAK FLOW	11200*	Jul 23
INSTANTANEOUS PEAK STAGE	23.04*	Jul 23
INSTANTANEOUS LOW FLOW	16	Sep 7
ANNUAL RUNOFF (CFSM)	2.71	
ANNUAL RUNOFF (INCHES)	12.29	
10 PERCENT EXCEEDS	115	
50 PERCENT EXCEEDS	37	
90 PERCENT EXCEEDS	28	

e Estimated.
* See REMARKS.



SANTEE RIVER BASIN

02146600 MCALPINE CREEK AT SARDIS ROAD NEAR CHARLOTTE, NC

LOCATION.--Lat 35°08'14", long 80°46'05", Mecklenburg County, Hydrologic Unit 03050103, near left bank on downstream end of bridge pier at Sardis Road (Secondary Road 3356), 1.7 mi downstream of Irvins Creek, and 7 mi southeast of City Hall, Charlotte.

DRAINAGE AREA.--39.6 mi^2.

PERIOD OF RECORD.--April 1962 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 553.39 ft above sea level (levels by City of Charlotte). Telephone telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Occasional minor fluctuation and regulation of unknown origin. No flow for part of Nov. 15, 1972, was result of upstream construction; minimum discharge for period of record not affected by construction.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 6, 1962, reached a stage of about 14.0 ft, from floodmarks; discharge, 4,150 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	347	8.7	e100	11	18	260	19	24	7.5	26	18	4.0
2	25	58	e30	12	16	72	19	19	7.6	14	18	3.6
3	17	14	17	11	16	51	19	162	9.0	8.1	17	4.0
4	13	8.9	14	11	35	36	18	39	8.0	6.6	39	2.3
5	10	10	53	25	25	32	18	21	7.4	20	41	2.8
6	9.6	16	50	15	19	107	23	17	49	47	12	2.5
7	12	10	25	13	17	33	21	16	16	9.1	8.5	2.5
8	593	185	20	11	96	26	18	16	11	8.7	7.4	2.5
9	38	28	15	515	31	24	18	36	9.8	12	7.2	3.8
10	20	13	15	66	25	23	17	16	8.8	22	29	26
11	15	11	12	31	26	21	17	16	8.0	8.5	17	30
12	12	12	16	21	21	19	85	16	28	5.6	8.0	5.8
13	12	9.3	109	19	249	19	27	16	85	5.1	7.2	3.7
14	11	9.0	21	16	457	209	18	16	67	4.9	6.6	4.2
15	9.8	8.4	14	15	537	53	18	16	18	4.5	6.5	3.3
16	9.4	8.0	13	237	72	29	17	14	13	30	6.2	3.1
17	9.4	8.1	17	49	41	24	17	13	12	13	5.8	2.7
18	9.3	23	20	29	e30	23	17	13	10	7.5	5.4	3.0
19	13	29	67	18	26	65	16	13	9.8	4.5	4.9	2.7
20	9.8	12	18	17	23	48	16	11	9.0	14	6.4	2.4
21	9.4	64	14	15	60	27	16	10	8.7	9.7	6.5	1.9
22	8.4	37	12	15	53	23	44	9.6	8.4	5.2	4.9	1.7
23	8.3	14	12	16	25	21	118	9.6	7.5	2520	4.3	1.7
24	8.5	12	19	31	23	19	26	9.2	7.0	1220	4.1	139
25	8.9	12	23	105	22	20	e20	9.1	6.6	67	4.3	60
26	8.9	148	13	28	22	36	e15	16	6.0	26	4.7	9.7
27	8.8	25	12	21	22	21	e250	10	63	19	4.3	5.4
28	9.3	16	11	24	713	27	874	8.8	23	18	6.2	92
29	9.3	14	11	19	---	141	197	8.5	14	18	8.9	21
30	8.1	17	11	34	---	31	40	8.0	8.9	127	4.6	7.4
31	7.6	---	11	22	---	26	---	7.6	---	34	4.2	---
TOTAL	1290.8	840.4	795	1472	2720	1566	2038	616.4	547.0	4335.0	328.1	454.7
MEAN	41.6	28.0	25.6	47.5	97.1	50.5	67.9	19.9	18.2	140	10.6	15.2
MAX	593	185	109	515	713	260	874	162	85	2520	41	139
MIN	7.6	8.0	11	11	16	19	15	7.6	6.0	4.5	4.1	1.7
CFSM	1.05	.71	.65	1.20	2.45	1.28	1.72	.50	.46	3.53	.27	.38
IN.	1.21	.79	.75	1.38	2.56	1.47	1.91	.58	.51	4.07	.31	.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1997, BY WATER YEAR (WY)

MEAN	34.3	30.2	39.6	66.8	76.5	85.6	47.7	33.3	30.6	28.1	34.2	23.0
MAX	212	109	128	157	169	200	120	173	123	140	178	162
(WY)	1991	1986	1984	1978	1979	1977	1962	1975	1992	1997	1994	1987
MIN	3.16	4.65	7.55	7.46	16.9	13.6	7.45	8.04	3.60	4.04	3.42	1.46
(WY)	1963	1982	1966	1981	1968	1985	1967	1968	1986	1977	1968	1968

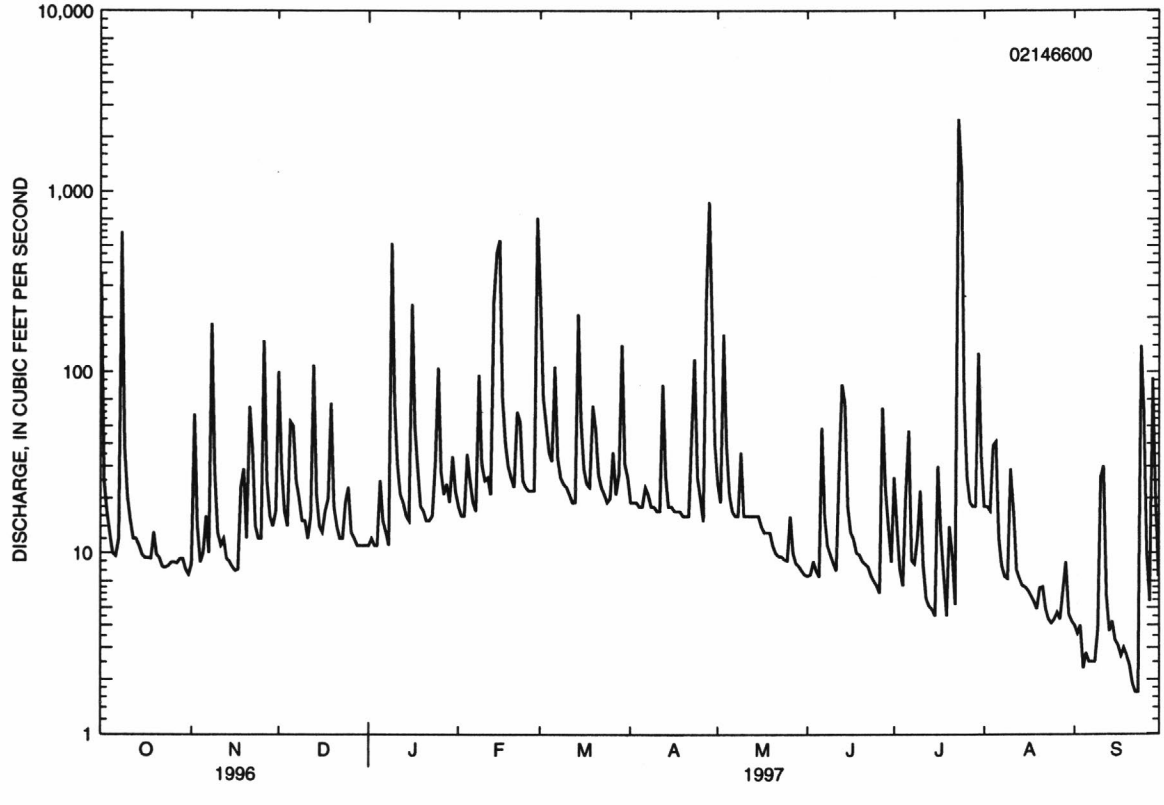
SANTEE RIVER BASIN

02146600 MCALPINE CREEK AT SARDIS ROAD NEAR CHARLOTTE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1962 - 1997	
ANNUAL TOTAL	15778.9		17003.4			
ANNUAL MEAN	43.1		46.6		44.1	
HIGHEST ANNUAL MEAN					72.4	1975
LOWEST ANNUAL MEAN					19.6	1970
HIGHEST DAILY MEAN	953	Jan 27	2520	Jul 23	4490	Aug 27 1995
LOWEST DAILY MEAN	5.4	Aug 23	1.7	Sep 22	.26	Jul 19 1986
ANNUAL SEVEN-DAY MINIMUM	6.2	Jul 3	2.3	Sep 17	.40	Jul 14 1986
INSTANTANEOUS PEAK FLOW			6210	Jul 23	9040	Aug 27 1995
INSTANTANEOUS PEAK STAGE			16.25	Jul 23	17.79	Aug 27 1995
INSTANTANEOUS LOW FLOW			.25	Sep 4	.17*	Jul 19 1986
ANNUAL RUNOFF (CFSM)	1.09		1.18		1.11	
ANNUAL RUNOFF (INCHES)	14.82		15.97		15.13	
10 PERCENT EXCEEDS	63		65		73	
50 PERCENT EXCEEDS	17		16		14	
90 PERCENT EXCEEDS	8.1		5.5		3.9	

e Estimated.

* See REMARKS.



SANTEE RIVER BASIN

02146700 MCMULLEN CREEK AT SHARON VIEW ROAD NEAR CHARLOTTE, NC

LOCATION.--Lat 35°08'27", long 80°49'13", Mecklenburg County, Hydrologic Unit 03050103, on left bank downstream of culvert wingwall at Sharon View Road (Secondary Road 3673), 3.3 mi south of Queens College, Charlotte, and 6.9 mi upstream from mouth.

DRAINAGE AREA.--6.95 mi^2.

PERIOD OF RECORD.--April 1962 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 592.91 ft above sea level (levels by city of Charlotte). Prior to Oct. 13, 1970, at site 73 ft upstream at same datum. Oct. 13, 1970, to Dec. 30, 1971, at site 154 ft downstream at 590.91 ft. Telephone telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Maximum discharge for period of record from rating curve extended above 2,650 ft^3/s on basis of computation of peak flow through culvert. No flow occurred periodically from 1962 to 1973. Minimum discharge for current water year also occurred Sept 5, 8, 9, 17-23. Peak stage for current water year from floodmark.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 6, 1962, reached a stage of 7.5 ft, former site and datum, from floodmarks; discharge, 1,040 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	176	1.5	36	2.3	2.6	29	3.0	3.6	1.3	16	1.9	.50
2	3.5	18	6.0	2.8	2.1	12	2.9	2.7	19	2.8	1.6	.50
3	2.0	1.3	2.5	2.1	2.0	11	3.0	44	2.5	1.6	1.4	.46
4	1.3	.96	2.0	2.0	13	5.7	2.6	5.4	1.3	1.5	11	.38
5	1.2	4.2	19	8.6	5.4	20	2.7	2.9	1.1	18	6.1	.40
6	1.1	2.2	7.1	2.3	2.8	21	9.5	2.6	14	14	1.8	.44
7	2.4	1.2	7.4	2.1	2.4	5.5	3.0	2.0	1.8	1.4	1.2	.57
8	99	66	3.4	3.1	24	4.5	2.3	2.4	1.2	1.3	1.1	.34
9	4.2	3.2	2.1	114	4.5	4.0	2.1	9.6	1.1	1.1	1.1	.51
10	2.0	1.6	1.8	9.8	5.7	3.9	1.9	2.0	1.0	2.1	4.3	4.6
11	1.5	1.3	1.8	5.6	5.6	3.5	1.9	1.6	5.5	.89	1.6	8.1
12	1.4	1.2	21	3.2	3.0	3.2	30	1.7	14	.81	1.0	.69
13	1.3	3.0	23	2.8	72	3.0	3.5	1.7	44	.77	.91	.62
14	1.2	2.4	3.5	2.5	78	78	2.1	1.6	28	.69	.92	.50
15	1.3	1.2	2.5	2.3	94	8.3	1.9	1.9	6.2	.65	.94	.56
16	1.2	1.3	2.3	46	10	4.6	1.8	1.4	2.0	1.2	.96	.50
17	1.3	1.5	4.7	4.2	6.0	3.9	1.8	1.5	1.6	1.0	.83	.42
18	1.8	10	9.4	2.7	4.5	3.8	1.6	1.4	1.6	1.4	.77	.41
19	2.0	4.5	12	2.3	4.0	19	1.6	1.4	1.6	.70	.76	.39
20	1.0	1.4	2.8	2.1	3.7	6.7	2.1	1.6	1.5	16	.81	.36
21	.99	19	2.4	2.0	16	4.2	2.6	1.4	2.7	1.8	.74	.38
22	1.0	4.3	2.1	2.0	7.6	3.7	16	1.3	1.6	2.1	.65	.34
23	.94	1.5	2.2	2.7	3.7	3.0	28	1.3	1.4	e600	.46	.40
24	1.1	1.6	8.4	13	3.3	2.7	3.1	1.3	1.2	e100	.40	47
25	1.4	1.8	3.8	29	3.2	5.6	2.0	2.4	1.2	e18	.66	12
26	1.1	47	2.2	4.1	3.2	11	1.8	3.7	1.1	2.9	.44	1.1
27	1.2	2.7	2.3	2.8	3.5	3.3	56	1.4	46	2.1	.43	.77
28	1.3	1.9	2.3	5.4	160	18	143	1.3	6.9	1.8	.94	31
29	1.4	1.6	2.4	2.5	---	31	19	1.2	2.1	6.1	2.5	3.2
30	1.4	2.8	2.5	8.9	---	5.2	5.3	1.2	1.6	33	.82	.89
31	1.4	---	2.5	3.1	---	5.5	---	1.1	---	6.7	.49	---
TOTAL	319.93	212.16	203.4	298.3	545.8	343.8	358.1	110.6	216.1	858.41	49.53	118.33
MEAN	10.3	7.07	6.56	9.62	19.5	11.1	11.9	3.57	7.20	27.7	1.60	3.94
MAX	176	66	36	114	160	78	143	44	46	600	11	47
MIN	.94	.96	1.8	2.0	2.0	2.7	1.6	1.1	1.0	.65	.40	.34
CFSM	1.48	1.02	.94	1.38	2.80	1.60	1.72	.51	1.04	3.98	.23	.57
IN.	1.71	1.14	1.09	1.60	2.92	1.84	1.92	.59	1.16	4.59	.27	.63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1997, BY WATER YEAR (WY)

MEAN	6.31	5.94	7.79	12.4	13.8	15.5	7.45	6.64	6.74	6.10	6.01	5.33
MAX	30.4	21.3	24.3	33.5	28.1	38.8	19.0	31.3	27.3	27.7	32.1	23.8
(WY)	1991	1986	1977	1978	1979	1977	1962	1975	1992	1997	1995	1987
MIN	.21	.54	.86	1.02	1.77	1.74	1.13	1.08	.75	.61	.24	.084
(WY)	1964	1970	1966	1981	1968	1985	1981	1962	1966	1963	1968	1970

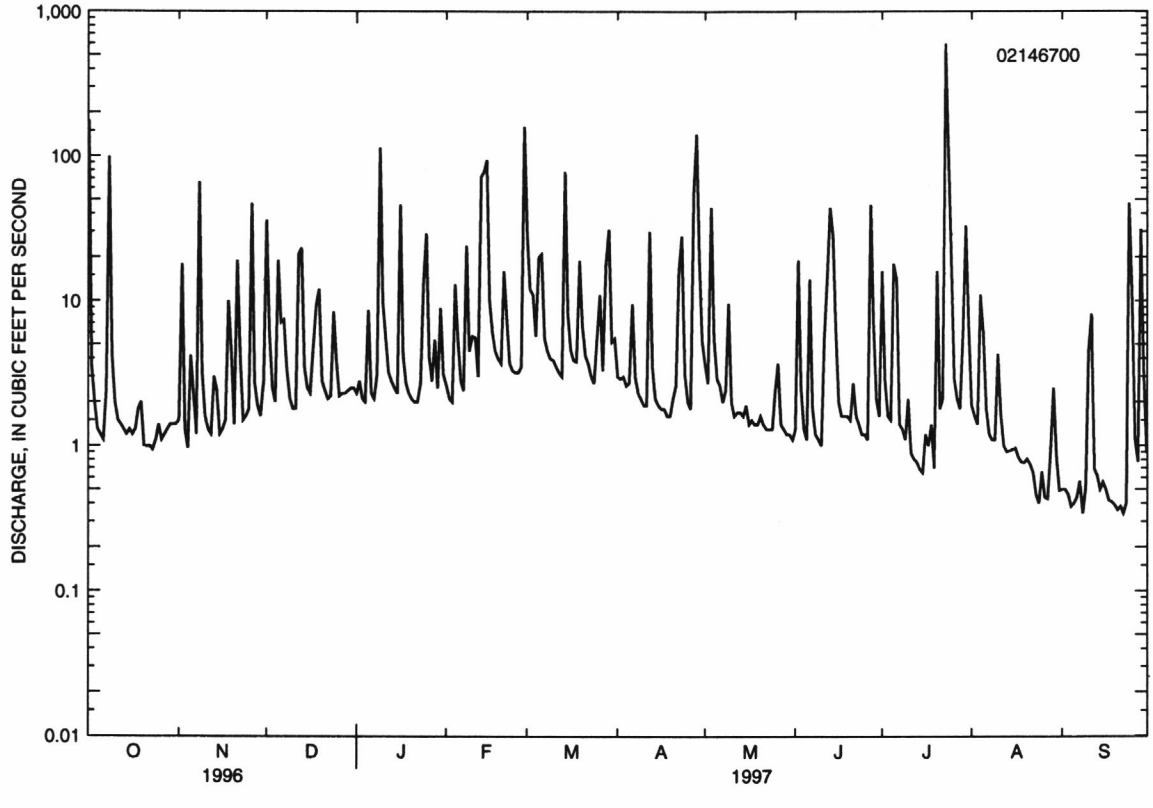
SANTEE RIVER BASIN

02146700 MCMULLEN CREEK AT SHARON VIEW ROAD NEAR CHARLOTTE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1962 - 1997	
ANNUAL TOTAL	3106.06		3634.46			
ANNUAL MEAN	8.49		9.96		8.33	
HIGHEST ANNUAL MEAN					13.8	1975
LOWEST ANNUAL MEAN					3.19	1970
HIGHEST DAILY MEAN	220	Jan 27	600	Jul 23	868	Aug 27 1995
LOWEST DAILY MEAN	.36	Jul 21	.34	Sep 8	0	Aug 31 1962
ANNUAL SEVEN-DAY MINIMUM	.63	Jul 2	.39	Sep 17	.01	Sep 19 1968
INSTANTANEOUS PEAK FLOW			2890	Jul 23	3470*	Aug 27 1995
INSTANTANEOUS PEAK STAGE			10.28*	Jul 23	11.03	Aug 27 1995
INSTANTANEOUS LOW FLOW			.31*	Sep 4	0*	Aug 31 1962
ANNUAL RUNOFF (CFSM)	1.22		1.43		1.20	
ANNUAL RUNOFF (INCHES)	16.63		19.45		16.29	
10 PERCENT EXCEEDS	17		19		15	
50 PERCENT EXCEEDS	2.5		2.3		1.6	
90 PERCENT EXCEEDS	.94		.79		.30	

e Estimated.

* See REMARKS.



SANTEE RIVER BASIN

02146750 MCALPINE CREEK BELOW MCMULLEN CREEK NEAR PINEVILLE, NC

LOCATION.--Lat 35°03'59", long 80°52'12", Mecklenburg County, Hydrologic Unit, 03050103, on right bank at McAlpine Creek Wastewater Treatment Plant of Charlotte, 150 ft downstream of McMullen Creek, 735 ft upstream from effluent outfall, and 2.1 mi south of Pineville.

DRAINAGE AREA.--92.4 mi^2.

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 516.38 ft above sea level. Prior to Oct. 1, 1977, present site at 517.38 ft. Telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Records for periods of heavy overbank flow may be affected by variable backwater not adequately defined. Maximum stage for period of record from high-water mark in gage house. Maximum discharge for period of record from rating curve extended above 11,600 ft^3/s.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1964, about 12.9 ft. (former datum), Apr. 1, 1973, from information by wastewater treatment plant operator.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2230	21	463	36	48	1850	45	96	17	52	31	8.5
2	206	144	240	36	41	229	39	66	47	64	24	8.0
3	63	49	66	32	37	129	37	479	27	19	19	8.3
4	42	25	49	31	92	94	36	230	18	14	16	7.7
5	31	28	95	57	64	82	34	70	17	12	76	7.1
6	26	44	231	50	49	366	41	56	101	92	34	7.0
7	27	32	78	34	39	95	52	46	53	22	17	6.2
8	1680	594	81	32	305	67	34	41	22	14	15	6.8
9	401	329	51	1260	110	57	30	113	19	12	13	6.9
10	62	52	46	565	63	51	30	49	17	25	15	29
11	41	38	39	102	77	48	29	36	15	17	38	69
12	33	34	42	60	51	44	166	34	46	11	16	18
13	30	32	336	50	290	41	87	33	217	9.3	13	10
14	27	31	77	44	1640	960	42	31	580	12	11	9.1
15	26	28	51	43	1690	274	34	29	139	10	12	9.4
16	25	25	43	706	411	84	31	28	34	88	13	8.6
17	25	25	51	139	128	64	30	25	25	75	13	8.0
18	25	44	53	66	92	55	30	25	21	18	11	8.1
19	30	123	223	52	76	112	31	24	19	11	10	7.4
20	25	39	63	49	63	176	29	24	17	20	10	6.7
21	23	150	44	45	88	69	30	24	16	27	14	6.0
22	23	300	39	42	211	54	91	22	16	9.8	10	5.7
23	21	51	38	43	67	46	310	22	13	3470	9.1	6.6
24	21	37	43	72	52	41	77	21	13	7050	8.4	178
25	21	33	77	409	47	42	46	20	13	742	8.6	183
26	21	590	40	95	44	77	33	33	12	71	12	34
27	21	89	37	57	47	48	185	23	164	42	9.2	17
28	22	50	34	59	1070	51	2880	20	115	29	14	134
29	22	39	34	58	---	367	1280	20	30	26	19	125
30	22	41	34	88	---	87	181	19	18	254	13	19
31	21	---	37	65	---	63	---	19	---	80	9.5	---
TOTAL	5293	3117	2835	4477	6992	5823	6000	1778	1861	12398.1	533.8	958.1
MEAN	171	104	91.5	144	250	188	200	57.4	62.0	400	17.2	31.9
MAX	2230	594	463	1260	1690	1850	2880	479	580	7050	76	183
MIN	21	21	34	31	37	41	29	19	12	9.3	8.4	5.7
CFSM	1.85	1.12	.99	1.56	2.70	2.03	2.16	.62	.67	4.33	.19	.35
IN.	2.13	1.25	1.14	1.80	2.81	2.34	2.42	.72	.75	4.99	.21	.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1997, BY WATER YEAR (WY)

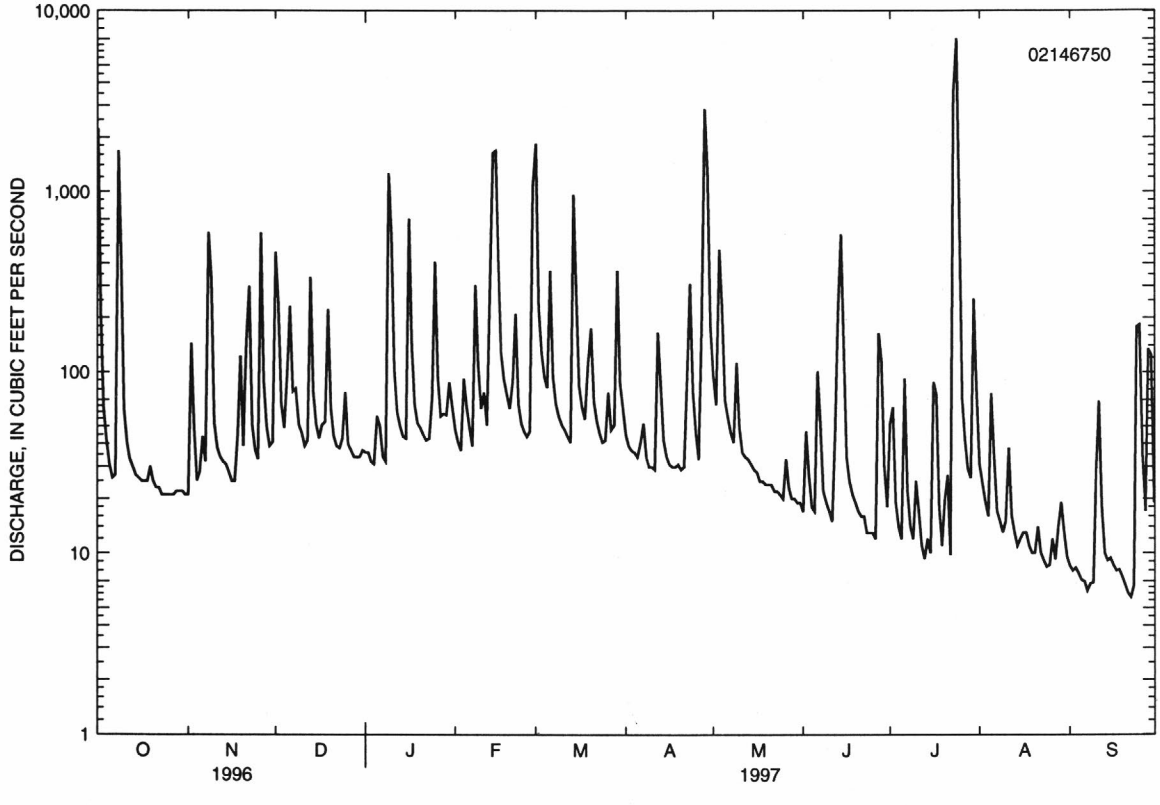
MEAN	106	113	132	235	230	269	125	100	77.7	89.9	115	83.3
MAX	540	414	497	550	506	544	302	397	258	400	597	510
(WY)	1991	1986	1984	1978	1984	1980	1979	1975	1992	1997	1994	1987
MIN	6.82	11.5	24.0	18.6	39.0	35.8	21.9	18.2	7.43	7.07	8.66	5.03
(WY)	1979	1982	1981	1981	1978	1981	1981	1981	1986	1977	1977	1983

SANTEE RIVER BASIN

02146750 MCALPINE CREEK BELOW MCMULLEN CREEK NEAR PINEVILLE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1974 - 1997	
ANNUAL TOTAL	42454.6		52066.0			
ANNUAL MEAN	116		143		140	
HIGHEST ANNUAL MEAN					235	1984
LOWEST ANNUAL MEAN					70.6	1976
HIGHEST DAILY MEAN	2230	Oct 1	7050	Jul 24	7740	Aug 27 1995
LOWEST DAILY MEAN	9.0	Jul 9	5.7	Sep 22	.46	Sep 30 1983
ANNUAL SEVEN-DAY MINIMUM	11	Jul 5	6.9	Sep 17	.76	Sep 28 1983
INSTANTANEOUS PEAK FLOW			9310	Jul 24	12500*	Aug 27 1995
INSTANTANEOUS PEAK STAGE			16.62	Jul 24	19.40*	Aug 27 1995
INSTANTANEOUS LOW FLOW			4.8	Sep 22	.45	Sep 30 1983
ANNUAL RUNOFF (CFSM)	1.26		1.54		1.51	
ANNUAL RUNOFF (INCHES)	17.09		20.96		20.56	
10 PERCENT EXCEEDS	237		229		275	
50 PERCENT EXCEEDS	43		39		34	
90 PERCENT EXCEEDS	20		12		9.0	

* See REMARKS.



0214677974 STEELE CREEK ABOVE SECONDARY ROAD 1344 NEAR SHOPTON, NC

LOCATION.--Lat 35°07'45", long 80°57'12", Mecklenburg County, Hydrologic Unit 03050103, on right bank 1,500 ft upstream from bridge on Secondary Road 1344 (John Price Road), and 2.9 mi south of Shopton.

DRAINAGE AREA.--3.57 mi^2.

PERIOD OF RECORD.--October 1990 to current year.

GAGE.--Water-stage recorder. Datum of gage is 580.69 ft above sea level.

REMARKS.--Records poor. Maximum gage height for period of record and current water year from floodmarks. Maximum discharge for period of record and current water year from culvert computation of peak flow adjusted for drainage area. Minimum discharge for current water year not determined and may have occurred during periods of missing record.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	.75	11	2.3	2.7	14	e2.0	2.7	.63	5.2	e.58	e.29
2	.65	4.0	5.2	2.2	2.3	6.7	e2.1	1.7	29	.66	e.51	e.29
3	.51	.52	2.6	2.1	1.9	5.5	e2.0	18	2.0	.42	e.50	e.28
4	.46	.44	1.5	2.0	6.2	4.3	e2.0	4.8	1.2	.34	e.58	e.27
5	.48	.50	4.8	3.6	5.4	5.2	e2.0	2.5	1.1	.34	e1.0	e.31
6	.48	.51	3.3	1.7	3.2	6.4	e4.0	1.8	2.8	.31	e.60	e.40
7	.88	.91	3.0	1.8	2.3	4.0	e2.0	1.4	1.1	.30	e.40	e.39
8	19	13	2.1	2.0	7.8	3.4	e1.8	3.7	.98	.28	e.39	e.39
9	1.1	1.3	1.8	32	4.9	3.1	e1.7	3.5	.92	.28	e.38	e.48
10	.61	.82	1.5	7.0	4.2	3.0	e1.6	1.1	.93	.28	e.90	e.60
11	.50	.76	1.5	4.7	4.4	2.6	e1.5	1.0	1.7	.23	e.58	e1.3
12	.43	.69	10	3.6	2.4	2.1	e10	.99	2.6	.20	e.32	e.40
13	.40	.65	9.6	3.6	37	2.1	e3.1	.91	83	.20	e.28	e.31
14	.40	.69	3.3	3.5	35	11	e2.0	.81	40	.21	e.28	e.30
15	.41	.65	2.4	3.4	40	4.0	e1.8	.90	7.1	.19	e.28	e.31
16	.47	.63	2.2	11	6.0	3.0	e1.8	.77	1.8	.26	e.25	e.30
17	.53	.64	2.7	5.3	4.5	2.6	e1.6	.74	1.0	.30	e.21	e.30
18	.73	3.0	3.4	3.7	4.6	2.2	e1.5	.70	.77	.28	e.22	e.30
19	.83	2.5	6.0	3.5	4.1	4.4	e1.3	.68	.64	.25	e.21	e.31
20	.86	1.0	3.2	3.6	3.5	4.0	e1.2	.68	.52	.26	.31	e.30
21	.87	6.0	3.0	3.2	5.2	2.8	e1.2	.66	.45	.27	.36	e.25
22	.93	3.0	3.2	2.8	5.3	2.2	e4.0	.64	.39	4.0	.20	e.23
23	.93	1.8	3.2	3.3	3.4	1.7	e20	.63	.36	195	.13	e.25
24	.96	1.8	4.2	5.3	3.1	1.5	e4.5	.62	.33	e100	.11	e25
25	.94	1.8	3.9	10	2.9	2.3	e3.0	2.3	.33	e6.0	e.20	e4.0
26	.86	1.6	2.6	5.6	2.8	3.8	1.2	.85	.30	e1.2	e.31	e1.5
27	.87	.97	2.6	3.6	2.8	1.7	25	.59	9.0	e1.0	e.30	e.80
28	.87	.97	2.4	4.8	98	e2.0	91	.57	1.3	e.80	e.30	e5.1
29	.82	1.0	2.5	3.1	---	e2.5	21	.58	.50	e.70	e.30	e2.0
30	.79	1.1	2.3	5.2	---	e1.9	5.1	.62	.39	e.70	e.33	e.80
31	.76	---	2.4	3.2	---	e1.9	---	.63	---	e.65	e.30	---
TOTAL	61.33	54.00	113.4	152.7	305.9	117.9	223.0	58.07	193.14	321.11	11.62	47.76
MEAN	1.98	1.80	3.66	4.93	10.9	3.80	7.43	1.87	6.44	10.4	.37	1.59
MAX	22	13	11	32	98	14	91	18	83	195	1.0	25
MIN	.40	.44	1.5	1.7	1.9	1.5	1.2	.57	.30	.19	.11	.23
CFSM	.55	.50	1.02	1.38	3.06	1.07	2.08	.52	1.80	2.90	.10	.45
IN.	.64	.56	1.18	1.59	3.19	1.23	2.32	.61	2.01	3.35	.12	.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1997, BY WATER YEAR (WY)

MEAN	8.07	5.52	3.74	9.30	8.53	9.18	4.26	2.79	3.61	2.69	5.75	2.54
MAX	26.3	13.2	6.14	16.9	12.8	21.3	7.43	8.85	10.7	10.4	17.4	8.33
(WY)	1991	1996	1993	1993	1995	1993	1997	1991	1992	1997	1994	1992
MIN	.57	1.01	1.94	3.56	4.96	3.30	.86	.99	.42	.44	.37	.41
(WY)	1992	1992	1994	1992	1991	1995	1995	1994	1993	1993	1997	1993

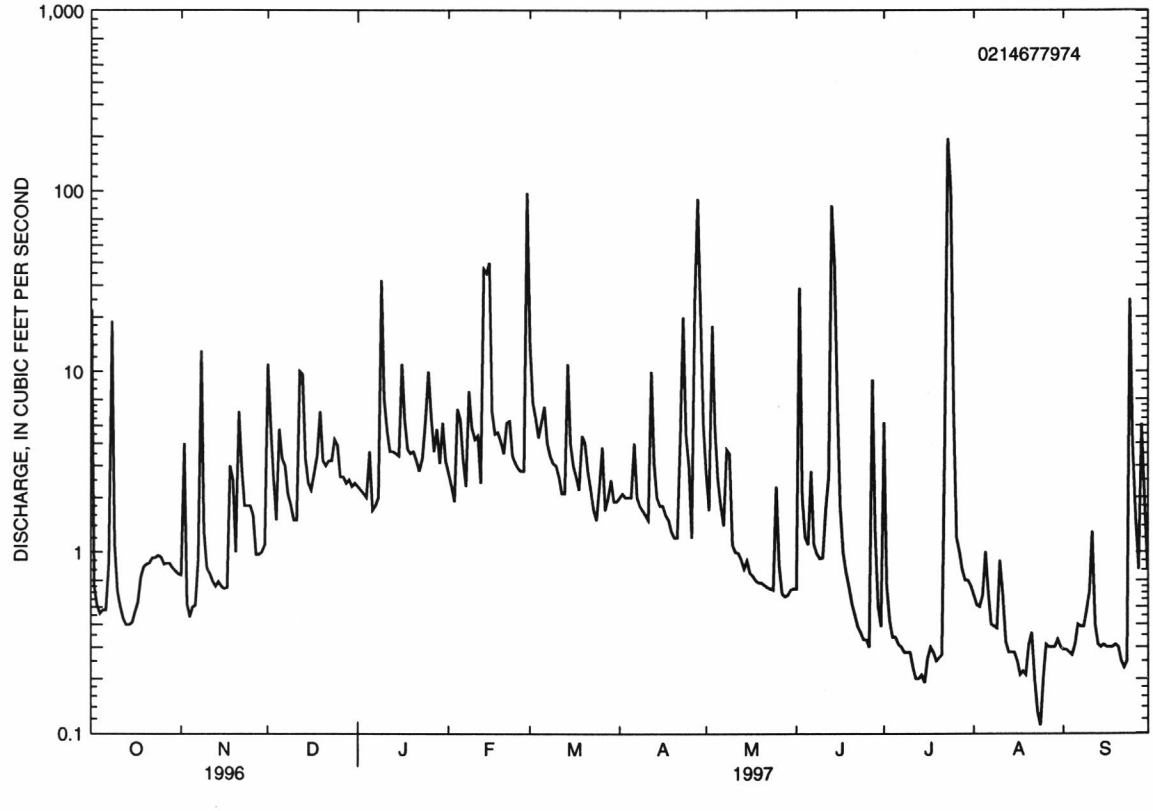
SANTEE RIVER BASIN

0214677974 STEELE CREEK ABOVE SECONDARY ROAD 1344 NEAR SHOPTON, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1991 - 1997	
ANNUAL TOTAL	1435.96		1659.93			
ANNUAL MEAN	3.92		4.55		5.49	
HIGHEST ANNUAL MEAN					8.53	1991
LOWEST ANNUAL MEAN					4.16	1994
HIGHEST DAILY MEAN	152	Feb 2	195	Jul 23	333	Oct 4 1992
LOWEST DAILY MEAN	.36	Sep 15	.11	Aug 24	.03	Sep 13 1993
ANNUAL SEVEN-DAY MINIMUM	.38	Sep 9	.22	Aug 19	.05	Sep 7 1993
INSTANTANEOUS PEAK FLOW			2000*	Jul 23	2000*	Jul 23 1997
INSTANTANEOUS PEAK STAGE			10.34*	Jul 23	10.34*	Jul 23 1997
INSTANTANEOUS LOW FLOW			NOT DETERMINED*		.01	Sep 13 1993
ANNUAL RUNOFF (CFSM)	1.10		1.27		1.54	
ANNUAL RUNOFF (INCHES)	14.96		17.30		20.90	
10 PERCENT EXCEEDS	5.4		6.0		9.6	
50 PERCENT EXCEEDS	1.3		1.5		1.2	
90 PERCENT EXCEEDS	.45		.30		.31	

e Estimated.

* See REMARKS.



SANTEE RIVER BASIN

02146900 TWELVE MILE CREEK NEAR WAXHAW, NC

LOCATION.--Lat 34°57'08", long 80°45'21", Union County, Hydrologic Unit 03050103, on left bank 90 ft upstream from bridge on State Highway 16, 680 ft downstream of West Fork Twelve Mile Creek, and 2.5 mi north of Waxhaw.

DRAINAGE AREA.--76.5 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-60. October 1960 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 489.04 ft above sea level. Prior to Mar. 13, 1962, water-stage recorder at site 70 ft downstream at same datum. Telephone telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No flow also occurred Oct. 6, 1968, Oct. 7-15, 1970, and Oct. 1-22, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1900 is 23.6 ft, Sept. 7, 1949, from floodmarks. No flow observed on Oct. 6, 1954.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	220	21	46	23	48	1240	47	82	10	8.1	9.5	2.8
2	38	29	102	23	40	173	40	56	10	8.9	6.3	2.6
3	19	29	45	22	36	104	39	106	10	8.1	5.1	e2.4
4	15	20	35	21	35	73	36	98	e9.0	7.1	4.1	2.2
5	14	17	31	21	35	59	34	49	e8.0	e6.0	3.7	2.2
6	13	17	73	22	34	213	33	37	e18	5.6	4.1	2.3
7	11	17	69	21	31	85	33	32	e14	5.5	4.2	2.2
8	1370	149	134	19	192	60	31	28	e10	6.1	4.1	2.3
9	207	130	54	735	117	50	28	28	e8.0	6.4	4.1	2.4
10	36	28	37	306	64	46	26	27	e6.0	5.3	4.4	4.9
11	20	20	32	93	57	41	26	24	e8.0	4.3	4.6	6.4
12	15	15	30	59	49	36	62	23	e10	e4.0	4.1	4.6
13	13	13	53	45	197	33	76	23	e60	e4.0	3.9	3.7
14	12	12	45	39	1570	916	40	22	92	e3.0	3.7	2.8
15	12	12	31	36	1340	214	32	20	67	e3.0	3.2	2.6
16	13	12	27	405	223	94	30	19	28	e2.8	3.4	2.5
17	14	12	27	128	110	70	28	17	19	e3.8	3.4	2.3
18	15	12	26	63	78	60	26	17	14	e3.6	3.5	2.2
19	15	21	106	48	66	64	26	16	13	3.5	3.4	2.4
20	14	18	61	43	56	123	26	15	10	3.1	3.2	2.2
21	14	64	35	e40	57	72	25	15	48	3.0	3.4	2.3
22	15	319	29	36	171	59	31	13	13	3.2	3.3	2.3
23	15	63	27	35	73	50	208	12	e10	14	2.9	2.2
24	15	41	27	34	52	44	83	11	8.8	2010	2.5	2.5
25	15	34	34	487	45	40	47	11	8.5	44	2.1	4.1
26	14	33	30	118	42	100	37	13	6.3	14	2.1	4.4
27	14	33	28	64	43	62	210	13	8.7	8.0	1.9	4.1
28	17	28	27	53	428	49	2600	11	13	6.0	e1.8	4.5
29	18	26	26	48	---	135	782	10	12	5.3	2.0	e5.0
30	19	26	25	51	---	83	157	10	9.4	159	2.5	4.5
31	20	---	24	62	---	57	---	10	---	37	2.6	---
TOTAL	2262	1271	1376	3200	5289	4505	4899	868	561.7	2405.7	113.1	93.9
MEAN	73.0	42.4	44.4	103	189	145	163	28.0	18.7	77.6	3.65	3.13
MAX	1370	319	134	735	1570	1240	2600	106	92	2010	9.5	6.4
MIN	11	12	24	19	31	33	25	10	6.0	2.8	1.8	2.2
CFSM	.95	.55	.58	1.35	2.47	1.90	2.13	.37	.24	1.01	.05	.04
IN.	1.10	.62	.67	1.56	2.57	2.19	2.38	.42	.27	1.17	.05	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1997, BY WATER YEAR (WY)

MEAN	54.8	38.4	66.8	134	166	170	93.1	46.0	34.2	36.3	44.3	29.4
MAX	372	161	261	331	351	425	289	178	111	238	318	161
(WY)	1991	1986	1984	1978	1990	1980	1973	1989	1992	1978	1995	1987
MIN	.39	2.18	5.97	11.5	22.7	25.8	14.3	6.19	1.26	2.33	.93	.15
(WY)	1984	1962	1966	1981	1986	1985	1981	1981	1986	1986	1983	1968

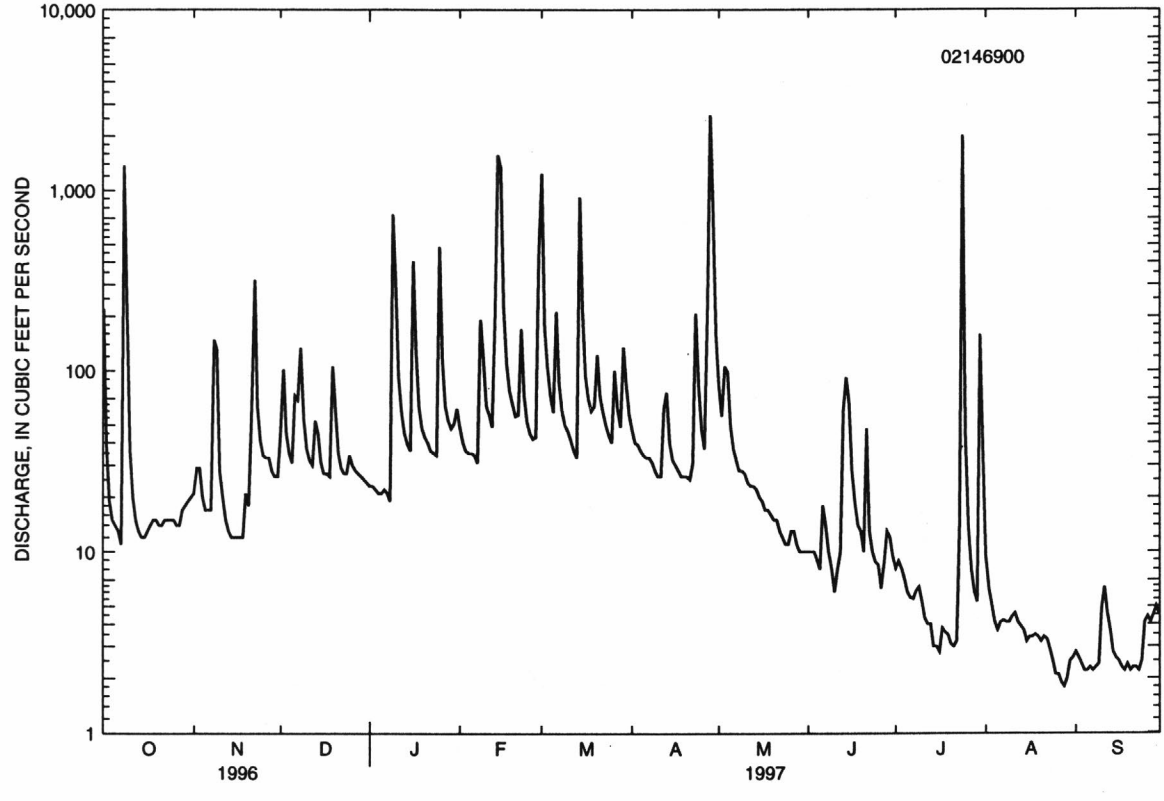
SANTEE RIVER BASIN

02146900 TWELVE MILE CREEK NEAR WAXHAW, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1961 - 1997	
ANNUAL TOTAL	23491.9		26844.4			
ANNUAL MEAN	64.2		73.5		75.7	
HIGHEST ANNUAL MEAN					150	1991
LOWEST ANNUAL MEAN					25.4	1970
HIGHEST DAILY MEAN	2090	Feb 3	2600	Apr 28	6700	Aug 27 1995
LOWEST DAILY MEAN	3.6	Jul 10	1.8	Aug 28	0	Oct 6 1968
ANNUAL SEVEN-DAY MINIMUM	3.9	Jul 6	2.1	Aug 24	0	Oct 7 1970
INSTANTANEOUS PEAK FLOW			3120	Apr 28	9970	Aug 27 1995
INSTANTANEOUS PEAK STAGE			14.68	Apr 28	21.94	Aug 27 1995
INSTANTANEOUS LOW FLOW			1.7	Aug 29	0*	Oct 5 1968
ANNUAL RUNOFF (CFSM)	.84		.96		.99	
ANNUAL RUNOFF (INCHES)	11.42		13.05		13.44	
10 PERCENT EXCEEDS	98		108		136	
50 PERCENT EXCEEDS	29		24		19	
90 PERCENT EXCEEDS	9.9		3.2		2.6	

e Estimated.

* See REMARKS.



SANTEE RIVER BASIN

02149000 COVE CREEK NEAR LAKE LURE, NC

LOCATION.--Lat 35°25'24", long 82°06'42", Rutherford County, Hydrologic Unit 03050105, on left bank 40 ft upstream from bridge on U.S. Highways 64 and 74, 1.0 mi upstream from mouth, and 5.0 mi east of town of Lake Lure.

DRAINAGE AREA.--79.0 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-50. October 1950 to current year. Monthly discharge only for some periods, published in WSP 1723.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 815.4 ft above sea level. Prior to Dec. 20, 1954, nonrecording gage at same site and datum.

REMARKS.--Records good except those during period of ice effect, Jan. 17-19, which are fair. Minimum discharge for period of record occurred several days in Sept. and Oct. 1954. Minimum discharge for current water year also occurred Sept. 21.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1916 reached a stage of about 23 ft, from records of North Carolina State Highway Commission.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	77	1030	93	127	384	170	217	183	119	100	93
2	112	89	416	93	120	259	166	191	268	116	91	64
3	105	76	216	91	115	258	163	282	287	105	85	62
4	95	75	168	89	212	230	158	231	196	98	82	60
5	91	76	149	105	233	199	156	202	157	103	84	58
6	89	76	141	95	187	188	243	186	142	95	83	57
7	88	85	129	90	161	167	218	172	136	92	79	56
8	101	344	120	88	180	158	183	165	134	91	78	56
9	95	155	113	175	162	151	170	163	131	91	77	57
10	86	113	108	155	152	147	162	156	128	94	77	81
11	83	99	106	140	143	141	157	151	122	129	77	91
12	81	91	111	123	134	136	254	149	130	96	75	68
13	80	87	144	114	135	142	230	146	154	90	73	65
14	79	85	117	107	148	1390	190	142	200	93	73	63
15	78	82	110	104	267	470	175	140	247	85	73	62
16	77	80	106	175	222	291	166	134	157	88	80	60
17	75	78	121	e135	180	238	162	133	143	105	71	60
18	76	83	113	e115	160	216	155	131	133	85	69	59
19	76	85	124	e109	149	598	153	128	124	81	67	59
20	76	79	110	110	141	429	151	129	119	80	67	58
21	75	80	105	107	158	293	147	123	125	78	66	56
22	75	84	103	105	186	246	166	120	133	78	63	57
23	79	77	101	106	153	219	432	119	120	89	61	58
24	78	76	102	164	143	202	258	118	110	113	61	231
25	76	76	98	220	137	196	205	121	110	84	61	158
26	76	148	94	171	135	236	182	122	118	82	62	93
27	78	102	97	147	134	199	191	119	148	80	61	78
28	78	91	93	175	321	200	301	117	123	93	73	92
29	78	87	103	156	---	212	381	116	123	90	62	124
30	78	116	98	144	---	192	256	129	114	271	59	81
31	76	---	95	135	---	181	---	126	---	129	86	---
TOTAL	2620	2952	4841	3936	4695	8568	6101	4678	4515	3123	2276	2317
MEAN	84.5	98.4	156	127	168	276	203	151	151	101	73.4	77.2
MAX	130	344	1030	220	321	1390	432	282	287	271	100	231
MIN	75	75	93	88	115	136	147	116	110	78	59	56
CFSM	1.07	1.25	1.98	1.61	2.12	3.50	2.57	1.91	1.91	1.28	.93	.98
IN.	1.23	1.39	2.28	1.85	2.21	4.03	2.87	2.20	2.13	1.47	1.07	1.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1997, BY WATER YEAR (WY)

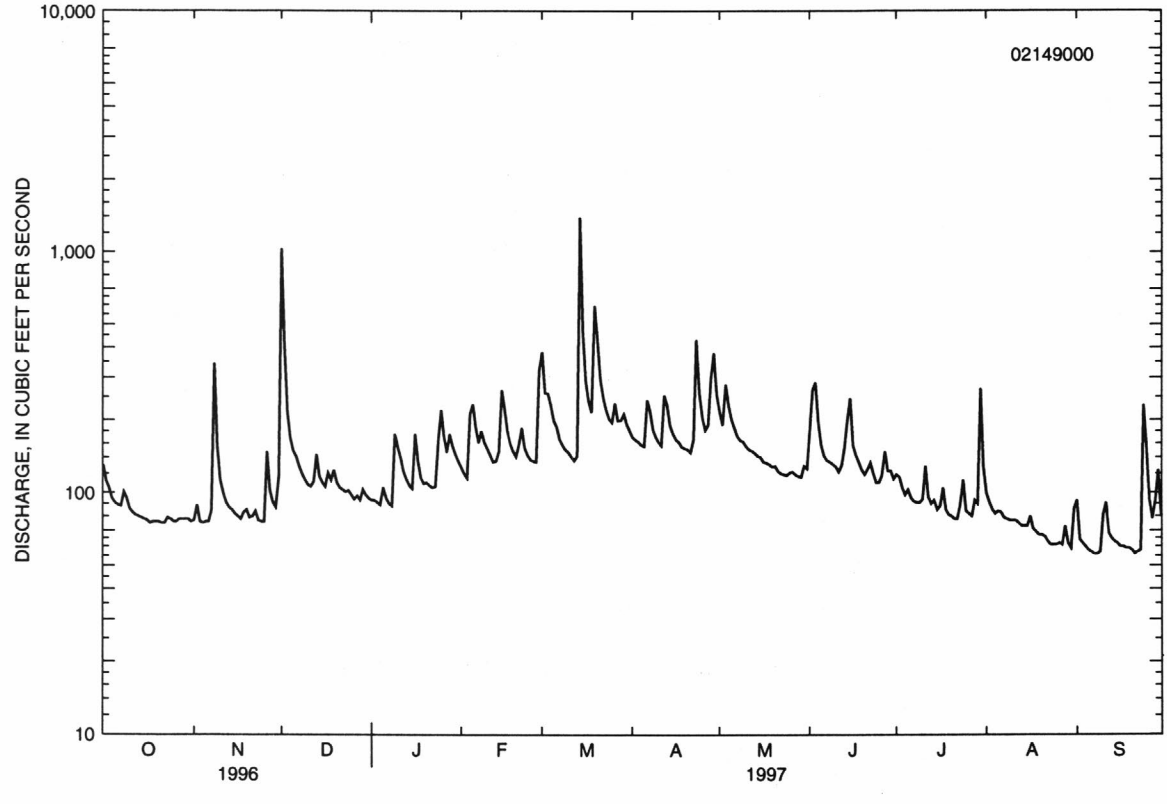
MEAN	117	119	131	145	170	200	185	152	134	100	111	99.0
MAX	381	334	278	314	327	479	391	384	309	189	377	333
(WY)	1965	1993	1984	1993	1960	1979	1980	1975	1992	1974	1974	1979
MIN	24.5	33.1	38.2	39.5	79.8	68.6	69.6	59.2	37.3	33.1	31.5	24.5
(WY)	1955	1955	1989	1956	1988	1988	1989	1988	1988	1988	1956	1954

SANTEE RIVER BASIN

02149000 COVE CREEK NEAR LAKE LURE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1951 - 1997	
ANNUAL TOTAL	52458		50622			
ANNUAL MEAN	143		139		139	
HIGHEST ANNUAL MEAN					231	1993
LOWEST ANNUAL MEAN					65.3	1956
HIGHEST DAILY MEAN	1690	Jan 27	1390	Mar 14	3190	Oct 4 1964
LOWEST DAILY MEAN	54	Jul 24	56	Sep 7	21	Sep 8 1954
ANNUAL SEVEN-DAY MINIMUM	57	Jul 18	58	Sep 3	21	Sep 30 1954
INSTANTANEOUS PEAK FLOW			2750	Mar 14	7050	Jun 5 1957
INSTANTANEOUS PEAK STAGE			10.30	Mar 14	18.53	Jun 5 1957
INSTANTANEOUS LOW FLOW			54*	Sep 9	21*	Sep 8 1954
ANNUAL RUNOFF (CFSM)	1.81		1.76		1.76	
ANNUAL RUNOFF (INCHES)	24.70		23.84		23.94	
10 PERCENT EXCEEDS	209		219		229	
50 PERCENT EXCEEDS	108		116		107	
90 PERCENT EXCEEDS	70		73		54	

e Estimated.
* See REMARKS.



SANTEE RIVER BASIN

02151000 SECOND BROAD RIVER AT CLIFFSIDE, NC

LOCATION.--Lat 35°14'08", long 81°45'57", Rutherford County, Hydrologic Unit 03050105, on left bank 0.2 mi downstream of dam at Cliffside Mills, at Cliffside, and 1.3 mi upstream from mouth.

DRAINAGE AREA.--220 mi^2.

PERIOD OF RECORD.--June 1925 to December 1996 (discontinued).

REVISED RECORDS.--WSP 892: 1928(M). WSP 1553: 1935-39(m). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 670.5 ft above sea level (levels by Natural Resources Conservation Service).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Considerable diurnal fluctuation and some low-flow regulation by mills upstream from station. Minimum discharge for period of record also occurred Aug. 3, 1937, and July 24, 1943. Minimum discharge for current water year affected by regulation.

DISCHARGE, CUBIC FEET PER SECOND, FOR PERIOD OCTOBER 1996 TO DECEMBER 1996

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	142	1420									
2	214	149	1870									
3	184	161	684									
4	192	146	454									
5	140	140	375									
6	151	144	358									
7	151	147	328									
8	163	408	310									
9	179	515	291									
10	154	274	339									
11	155	220	276									
12	144	199	290									
13	143	186	e650									
14	167	179	e430									
15	114	170	e340									
16	144	167	e310									
17	149	160	e320									
18	134	164	e310									
19	139	179	e350									
20	134	180	e320									
21	140	175	e320									
22	139	174	e310									
23	140	173	e310									
24	136	163	e300									
25	141	158	e300									
26	140	193	e290									
27	138	221	e280									
28	141	185	e270									
29	142	180	e280									
30	140	181	e280									
31	141	---	e270									
TOTAL	4693	5833	13235									
MEAN	151	194	427									
MAX	214	515	1870									
MIN	114	140	270									
CFSM	.69	.88	1.94									
IN.	.79	.99	2.24									

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1997, BY WATER YEAR (WY)

MEAN	267	247	309	383	420	460	398	306	270	230	258	209
MAX	1438	664	674	1182	999	1242	1044	950	588	641	1421	879
(WY)	1965	1993	1968	1937	1960	1975	1936	1975	1975	1941	1928	1945
MIN	57.4	91.6	90.2	91.8	152	169	166	124	91.5	71.3	59.9	55.8
(WY)	1955	1956	1956	1956	1941	1955	1986	1941	1956	1986	1956	1954

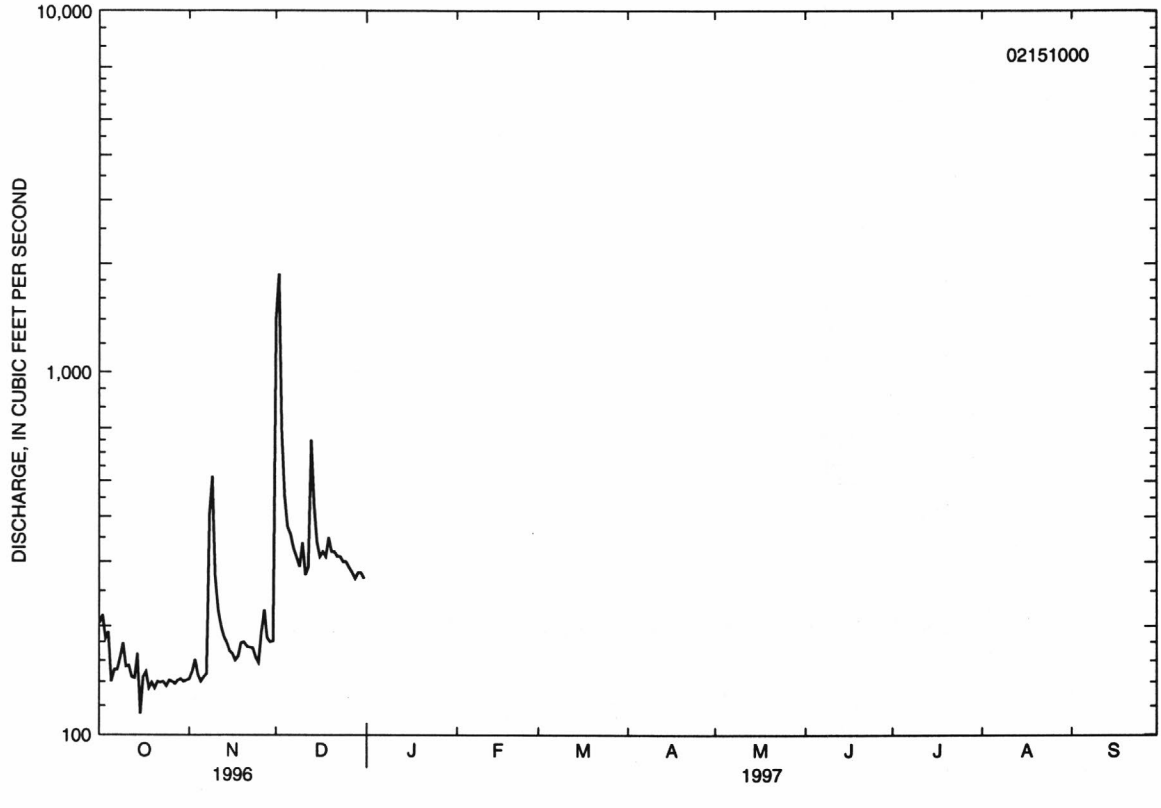
SANTEE RIVER BASIN

02151000 SECOND BROAD RIVER AT CLIFFSIDE, NC--Continued

SUMMARY STATISTIC	FOR 1996 CALENDAR YEAR		FOR PERIOD OCTOBER TO DECEMBER 1996		WATER YEARS 1925 - 1997	
ANNUAL TOTAL	121770					
ANNUAL MEAN	333				313	
HIGHEST ANNUAL MEAN					500	1965
LOWEST ANNUAL MEAN					151	1955
HIGHEST DAILY MEAN	3790	Jan 28			13200	Aug 16 1928
LOWEST DAILY MEAN	114	Oct 15			6.0	Jun 9 1940
ANNUAL SEVEN-DAY MINIMUM	136	Oct 15			39	Oct 28 1926
INSTANTANEOUS PEAK FLOW			2640	Dec 2	15000	Aug 14 1940
INSTANTANEOUS PEAK STAGE			4.99	Dec 2	17.93	Aug 14 1940
INSTANTANEOUS LOW FLOW			33*	Nov 25	4.0*	Sep 27 1935
ANNUAL RUNOFF (CFSM)	1.51				1.42	
ANNUAL RUNOFF (INCHES)	20.59				19.34	
10 PERCENT EXCEEDS	510				510	
50 PERCENT EXCEEDS	271				228	
90 PERCENT EXCEEDS	144				115	

e Estimated.

* See REMARKS.



SANTEE RIVER BASIN

02151500 BROAD RIVER NEAR BOILING SPRINGS, NC

LOCATION.--Lat 35°12' 39", long 81°41'52", Cleveland County, Hydrologic Unit 03050105, on right bank 0.5 mi upstream from Sandy Run Creek, 3 mi downstream of Second Broad River, and 3.5 mi southwest of Boiling Springs.

DRAINAGE AREA.--875 mi^2.

PERIOD OF RECORD.--June 1925 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area. WDR NC-88: 1986(m).

GAGE.--Water-stage recorder. Datum of gage is 639.92 ft above sea level (Duke Power Company bench mark). Prior to July 20, 1934, at site 500 ft upstream at 640.92 ft. Telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Considerable diurnal fluctuation and some regulation caused by power plants upstream from station. Maximum discharge and gage height for period of record from former site, present datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1170	768	6480	1240	1650	5240	1920	2410	1620	1320	1220	453
2	1270	678	8660	863	1250	3520	1730	1890	2910	1240	1220	850
3	1020	897	3600	1190	1420	2590	1690	2690	3630	1090	843	731
4	925	823	2640	1150	1630	2670	1660	3050	2400	1100	600	595
5	807	1070	1650	1030	2300	2330	1610	2120	1930	1180	928	588
6	830	1140	1700	1130	2070	2270	1600	2060	1570	947	919	724
7	621	1170	1460	1220	1830	2120	2190	1990	1710	717	902	533
8	1320	1970	1550	1030	1770	1970	2180	1790	1260	1140	827	403
9	1070	2620	1460	1810	1830	1760	1930	1790	1120	1070	908	567
10	725	1730	1230	2490	1690	1700	1840	1970	1400	965	699	680
11	780	963	1150	1620	1650	1850	1620	1630	1350	1170	552	903
12	872	856	1310	1770	1590	1760	1710	1200	1290	1740	802	867
13	601	1020	1580	1400	1570	1720	1960	1760	1190	1100	779	779
14	747	1110	1820	1390	1780	3550	1700	1820	1610	818	808	490
15	870	929	1400	1360	4450	4350	1690	1610	2800	1120	731	455
16	934	1110	1200	1570	3080	3110	1650	1500	2190	1090	855	649
17	847	1320	1160	1820	2280	2190	1520	1480	1900	1140	689	612
18	637	1460	1400	1810	2180	2180	1450	1290	1430	1070	495	606
19	787	1470	1480	1710	2000	2600	1310	1360	1330	977	782	543
20	572	1380	1440	1660	1810	4030	1240	1430	1140	865	715	656
21	545	1290	1470	1450	1640	3130	1340	1400	1330	640	703	431
22	978	1260	1000	1510	2050	2720	1530	1290	1040	982	610	411
23	881	1150	973	1600	1780	2140	3360	1290	1040	1130	640	612
24	757	832	1270	1540	1630	2210	2940	1220	1290	1750	569	1240
25	620	1140	1130	2930	1750	2050	2350	1240	1220	1340	449	3020
26	805	927	1090	2240	1670	2520	1860	1420	1200	1570	641	1460
27	735	1340	1240	2070	1680	2730	1760	1230	1410	804	468	1020
28	550	863	1080	1830	2880	2250	2880	1450	1850	873	604	740
29	895	1010	1080	1920	---	2390	5280	1380	1090	1230	495	1010
30	736	1020	947	1930	---	2010	3370	1190	1100	1150	720	1110
31	647	---	1280	1870	---	2150	---	1510	---	1740	452	---
TOTAL	25554	35316	56930	50153	54910	79810	60870	51460	48350	35068	22625	23738
MEAN	824	1177	1836	1618	1961	2575	2029	1660	1612	1131	730	791
MAX	1320	2620	8660	2930	4450	5240	5280	3050	3630	1750	1220	3020
MIN	545	678	947	863	1250	1700	1240	1190	1040	640	449	403
CFSM	.94	1.35	2.10	1.85	2.24	2.94	2.32	1.90	1.84	1.29	.83	.90
IN.	1.09	1.50	2.42	2.13	2.33	3.39	2.59	2.19	2.06	1.49	.96	1.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1997, BY WATER YEAR (WY)

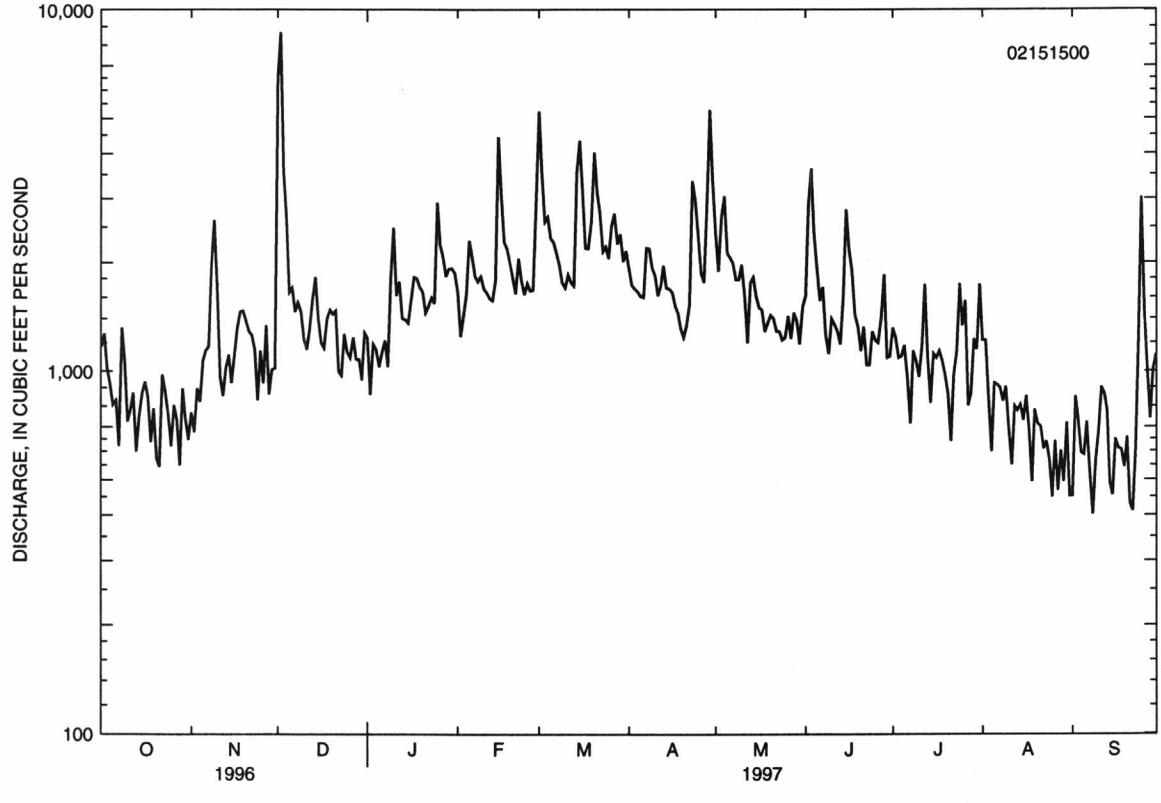
MEAN	1299	1249	1471	1774	1913	2119	1947	1561	1333	1119	1250	1086
MAX	5499	3275	2875	4750	4304	4868	4525	3441	2812	2505	6893	3100
(WY)	1965	1993	1984	1937	1960	1975	1936	1973	1973	1949	1928	1945
MIN	237	407	449	422	820	783	821	682	420	351	295	288
(WY)	1955	1955	1956	1956	1941	1988	1986	1988	1988	1986	1956	1954

SANTEE RIVER BASIN

02151500 BROAD RIVER NEAR BOILING SPRINGS, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1925 - 1997	
ANNUAL TOTAL	598102		544784			
ANNUAL MEAN	1634		1493			1511
HIGHEST ANNUAL MEAN					2328	1973
LOWEST ANNUAL MEAN					768	1988
HIGHEST DAILY MEAN	16300	Jan 27	8660	Dec 2	63900	Aug 16 1928
LOWEST DAILY MEAN	545	Oct 21	403	Sep 8	105	Oct 10 1954
ANNUAL SEVEN-DAY MINIMUM	713	Oct 25	547	Aug 25	185	Aug 27 1956
INSTANTANEOUS PEAK FLOW			11500	Dec 1	73300*	Aug 16 1928
INSTANTANEOUS PEAK STAGE			8.15	Dec 1	24.30*	Aug 16 1928
INSTANTANEOUS LOW FLOW			364	Sep 15	40	Oct 17 1954
ANNUAL RUNOFF (CFSM)	1.87		1.71		1.73	
ANNUAL RUNOFF (INCHES)	25.43		23.16		23.46	
10 PERCENT EXCEEDS	2460		2390		2510	
50 PERCENT EXCEEDS	1290		1320		1190	
90 PERCENT EXCEEDS	785		653		587	

* See REMARKS.



SANTEE RIVER BASIN

02152100 FIRST BROAD RIVER NEAR CASAR, NC

LOCATION.--Lat 35°29'35", long 81°40'56", Cleveland County, Hydrologic Unit 03050105, on right bank 570 ft upstream from bridge on Secondary Road 1530, 0.5 mi upstream from No Business Creek, and 4.0 mi southwest of Casar.

DRAINAGE AREA.--60.5 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-56, March 1959 to current year.

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

GAGE.--Water-stage recorder. Elevation of gage is 890 ft above sea level, from topographic map.

REMARKS.--Records good except those during period of ice effect, Jan. 18-19, which are fair, and those for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1916 and August 1940 reached a stage of about 25 ft, from information by local resident. A discharge of 14.5 ft^3/s was measured on Sept. 21, 1955.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	39	1160	58	85	514	129	164	137	72	81	e60
2	62	53	346	58	80	273	123	139	174	73	70	e50
3	57	43	127	58	76	208	118	193	114	66	64	e40
4	51	39	85	57	161	169	115	168	96	63	61	e38
5	47	39	71	74	187	148	111	142	88	72	63	e34
6	45	39	69	72	140	144	182	129	83	64	58	35
7	44	41	64	66	115	126	191	119	82	61	56	34
8	50	429	62	62	125	119	147	114	81	60	55	34
9	50	153	60	116	115	114	131	118	80	60	56	34
10	47	77	57	116	108	110	121	109	79	86	55	57
11	43	63	56	102	101	107	117	105	74	136	56	54
12	43	56	56	86	94	103	194	102	75	68	54	42
13	42	52	133	76	91	101	207	101	106	63	52	40
14	42	50	90	72	115	221	156	97	148	61	e52	39
15	42	48	77	69	440	160	138	96	339	58	e50	38
16	41	45	72	128	248	130	128	92	122	60	e60	37
17	41	44	74	107	163	119	123	90	98	68	e52	37
18	41	47	72	e90	132	114	116	89	88	60	e50	36
19	39	52	79	e80	119	429	114	87	80	56	e50	36
20	39	45	74	75	110	338	111	86	76	55	e48	35
21	40	44	73	72	111	205	108	85	78	57	e46	33
22	40	49	71	70	134	163	124	82	97	54	e44	33
23	40	43	69	73	111	140	583	81	75	63	e42	33
24	40	42	69	104	104	127	256	80	71	74	e40	107
25	40	42	68	173	100	122	165	81	69	61	e40	88
26	40	60	65	119	99	438	136	90	68	132	e42	53
27	40	51	64	96	100	242	140	83	80	69	e40	45
28	43	47	62	122	408	186	215	81	76	63	e40	45
29	41	45	62	114	---	176	325	79	78	104	40	46
30	40	51	62	101	---	153	210	86	69	314	e38	40
31	39	---	60	92	---	139	---	84	---	124	e50	---
TOTAL	1379	1928	3609	2758	3972	5838	5034	3252	2981	2477	1605	1333
MEAN	44.5	64.3	116	89.0	142	188	168	105	99.4	79.9	51.8	44.4
MAX	70	429	1160	173	440	514	583	193	339	314	81	107
MIN	39	39	56	57	76	101	108	79	68	54	38	33
CFSM	.74	1.06	1.92	1.47	2.34	3.11	2.77	1.73	1.64	1.32	.86	.73
IN.	.85	1.19	2.22	1.70	2.44	3.59	3.10	2.00	1.83	1.52	.99	.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1997, BY WATER YEAR (WY)

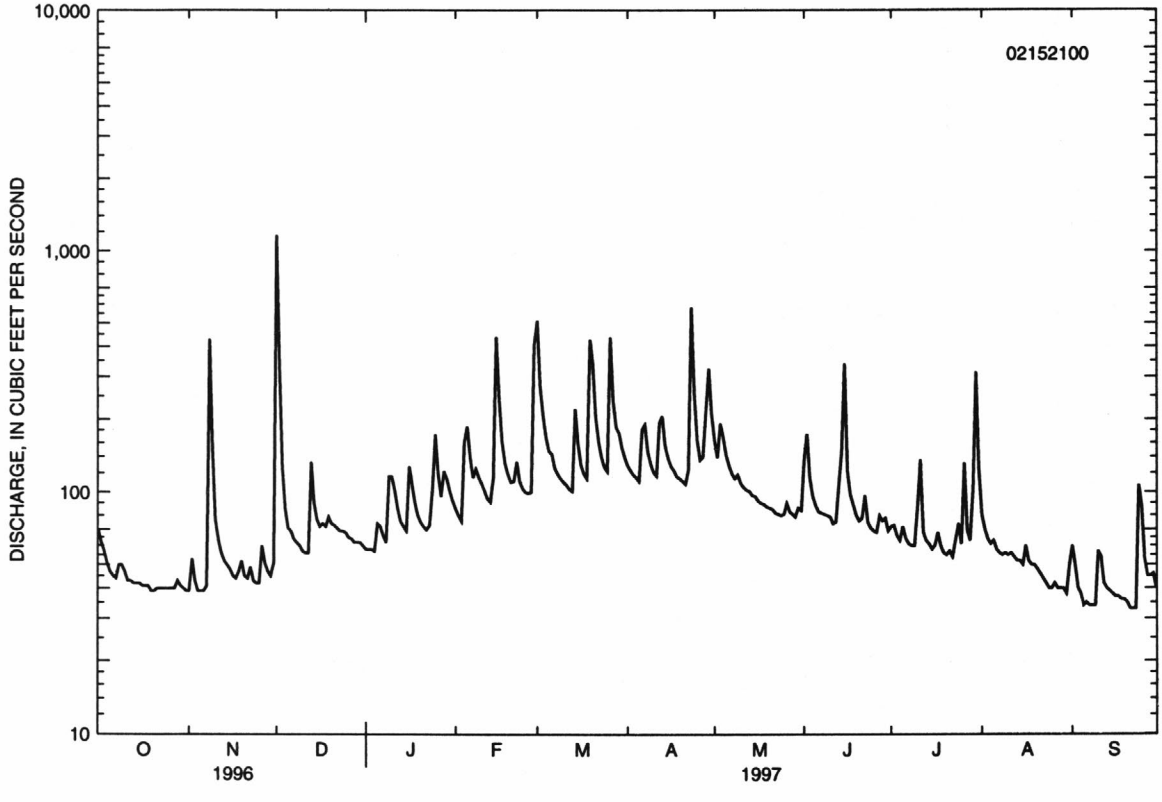
MEAN	78.1	71.0	86.9	107	126	143	127	99.3	81.6	63.6	70.2	56.6
MAX	318	191	185	273	286	386	291	254	168	138	262	132
(WY)	1965	1978	1962	1995	1960	1975	1983	1975	1975	1984	1970	1959
MIN	24.7	27.3	26.6	44.4	50.8	44.6	48.1	33.9	23.4	19.2	19.5	27.2
(WY)	1964	1982	1989	1989	1988	1988	1967	1988	1988	1988	1988	1988

SANTEE RIVER BASIN

02152100 FIRST BROAD RIVER NEAR CASAR, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1959 - 1997	
ANNUAL TOTAL	32963		36166			
ANNUAL MEAN	90.1		99.1		92.4	
HIGHEST ANNUAL MEAN					139	1960
LOWEST ANNUAL MEAN					43.4	1988
HIGHEST DAILY MEAN	1160	Dec 1	1160	Dec 1	3130	Mar 14 1975
LOWEST DAILY MEAN	39	Jul 25	33	Sep 21	11	Aug 27 1988
ANNUAL SEVEN-DAY MINIMUM	40	Oct 19	35	Sep 17	15	Aug 21 1988
INSTANTANEOUS PEAK FLOW			2080	Dec 1	7790	Jan 14 1995
INSTANTANEOUS PEAK STAGE			6.84	Dec 1	16.70	Oct 17 1975
INSTANTANEOUS LOW FLOW			32	Sep 21	10	Aug 28 1988
ANNUAL RUNOFF (CFSM)	1.49		1.64		1.53	
ANNUAL RUNOFF (INCHES)	20.27		22.24		20.76	
10 PERCENT EXCEEDS	140		163		150	
50 PERCENT EXCEEDS	68		75		65	
90 PERCENT EXCEEDS	42		40		36	

e Estimated.



Lakes and Reservoirs in South Atlantic Slope Basin

02067800; 02067820 TALBOTT AND TOWNES RESERVOIRS

These two reservoirs on the Dan River are operated as a unit for storage of water for Pinnacles hydroelectric plant.

TALBOTT DAM

LOCATION.--Lat 36°40'36", long 80°23'51", Patrick County, Va, Hydrologic Unit 03010103, 4.5 mi northeast of Kibler.

DRAINAGE AREA.--20.2 mi^2.

TOWNES DAM

LOCATION.--Lat 36°41'11", long 80°25'49", Patrick County, Va, Hydrologic Unit 03010103, 4 mi north of Kibler.

DRAINAGE AREA.--32.9 mi^2.

PERIOD OF RECORD.--February 1939 to December 1945 and January 1948 to September 1960 (combined monthend contents only published in WSP 1723), October 1960 to current year.

REMARKS.--Total capacity of Talbott Reservoir is 350,000,000 ft^3 and Townes Reservoir is 60,000,000 ft^3. Filling was started in Talbott Reservoir Feb. 13, 1939, and in Townes Reservoir several months earlier. Records furnished by city of Danville, Virginia. (See station 02068500.)

02077280 HYCO LAKE

LOCATION.--Lat 36°30'28", long 79°02'48", Person County, Hydrologic Unit 03010104, at outlet control structure 0.4 mi northwest of dam on Hyco River, 1.1 mi southwest of McGehees Mill, and 8 mi northwest of Roxboro.

DRAINAGE AREA.--189 mi^2.

PERIOD OF RECORD.--October 1964 to current year. Prior to October 1970, published as "Roxboro Steam-Electric Generating Plant Lake."

GAGE.--Water-stage recorder and tape gage. Prior to Feb. 11, 1965, staff gage at upstream end of outlet control structure. Datum of gage is 399.79 ft above sea level (levels by Carolina Power and Light Co.).

REMARKS.--Lake, used for cooling water at the Roxboro Steam-Electric Generating Plant of Carolina Power and Light Co., first began to fill Sept. 19, 1964, and first reached spillway elevation (9.97 ft gage height) Mar. 19, 1965. Total capacity at top of spillway is 3,288,000,000 ft^3. Lake cannot be drawn below -0.03 ft (bottom of gated flume).

02079964 LAKE GASTON

LOCATION.--Lat 36°30'04", long 77°48'43", Halifax County, Hydrologic Unit 03010106, at Gaston Dam on Roanoke River, 0.2 mi upstream from Black Gut Creek, and 2.7 mi northwest of Thelma.

DRAINAGE AREA.--8,339 mi^2.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and staff gage. Datum of gage is sea level.

REMARKS.--Lake, used mainly for hydroelectric power development, was first filled Oct.13-15, 1962, and has a total capacity of 22,434,000,000 ft^3. Usable capacity at top of spillway gates, 20,127,000,000 ft^3, is between elevations 165 and 203 ft. Capacity reserved for flood control, 2,788,000 ft^3, is between elevations 200 and 203 ft. Storage for power generation, 10,673,000,000 ft^3, is between elevations 185 and 200 ft.

COOPERATION.--Records furnished by Virginia Electric and Power Co. (See station 02080500.)

02080100 ROANOKE RAPIDS LAKE

LOCATION.--Lat 36°29'10", long 77°39'31", Halifax County, Hydrologic Unit 03010107, at Roanoke Rapids Dam on Roanoke River, 1.5 mi upstream from bridge on State Highway 48, and 2.2 mi north of Roanoke Rapids.

DRAINAGE AREA.--8,371 mi^2.

PERIOD OF RECORD.--June 1955 to September 1960 (monthend contents only published in WSP 1723), October 1960 to current year.

GAGE.--Water-stage recorder and staff gage. Datum of gage is sea level.

REMARKS.--Lake, used for hydroelectric power development, was put in operation June 25, 1955, and has a total capacity of 3,360,220,000 ft^3 at elevation 132.0 ft (normal high water). Usable capacity is 3,515,290,000 ft^3 at 132.75 ft (top of gates).

COOPERATION.--Records furnished by Virginia Electric and Power Co. (See station 02080500.)

02087182 FALLS LAKE

LOCATION.--Lat 35°56'00", long 78°35'00", Wake County, Hydrologic Unit 03020201, at Falls Dam on Neuse River at Falls, 10 mi north of Raleigh, and 235 mi upstream from mouth.

DRAINAGE AREA.--770 mi^2.

PERIOD OF RECORD.--February 1979 to current year.

GAGE.--Datum of gage is sea level.

REMARKS.--Lake is used for flood control, water supply, low-flow augmentation, and recreation. Temporary filling began May 1981 for water supply for city of Raleigh during drought conditions. Jan. 13, 1983, gates closed and normal pool elevation of 250.1 ft was reached Dec. 7, 1983. (See station 02087183.) Total capacity of reservoir is 4,998,074,400 ft^3 at elevation of 250.1 ft.

COOPERATION.--Records furnished by Corps of Engineers. (See station 02087183.)

Lakes and Reservoirs in South Atlantic Slope Basin--Continued

02098197 B. EVERETT JORDAN LAKE

LOCATION.--Lat 35°39'17", long 79°04'02", Chatham County, Hydrologic Unit 03030002, at B. Everett Jordan Dam on Haw River, 0.3 mi downstream of mouth of New Hope River, 2.5 mi north of Moncure, 4.2 mi upstream from mouth of Haw River, and 202.2 mi upstream from mouth of Cape Fear River.

DRAINAGE AREA.--1,689 mi^2.

PERIOD OF RECORD.--December 1972 to current year.

GAGE.--Water-stage recorder and staff gage at dam. Datum of gage is sea level.

REMARKS.--Lake is used for flood control, water supply, low-flow augmentation, and recreation. Some storage was affected during construction and then operated temporarily as a "dry reservoir" January 1975 to August 1981. Reservoir began filling September 1981 and reached normal pool elevation, 216 ft, Feb. 4, 1982. Total capacity is 32,825,074,000 ft^3 at 240.0 ft, of which 23,454,011,000 ft^3 is controlled flood storage. (See station 02098198.)

02111391 W. KERR SCOTT RESERVOIR

LOCATION.--Lat 36°08'04", long 81°13'30", Wilkes County, Hydrologic Unit 03040101, at W. Kerr Scott Dam on Yadkin River, 0.1 mi upstream from Fish Trap Creek, 2.0 mi upstream from Millers Creek, and 4.0 mi west of Wilkesboro.

DRAINAGE AREA.--350 mi^2, approximately.

PERIOD OF RECORD.--August 1962 to current year.

GAGE.--Water-stage recorder and staff gage at dam. Datum of gage is sea level.

REMARKS.--Lake is used for flood control, low-flow augmentation, recreation, and water supply. Some storage was affected during construction in July 1962, but gates were closed Aug. 22, 1962. Reservoir reached normal pool elevation on Jan. 19, 1963. Total capacity at elevation 1075.0 ft is 6,664,680,000 ft^3 of which 4,878,720,000 ft^3 is controlled flood storage.

COOPERATION.--Records furnished by Corps of Engineers. (See station 02129000.)

02122400 HIGH ROCK LAKE

LOCATION.--Lat 35°36'02", long 80°14'06", Davidson County, Hydrologic Unit 03040103, at High Rock Dam on Yadkin River, 2 mi upstream from Lick Creek, 0.8 mi northwest of High Rock, and 256 mi upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--4,000 mi^2, approximately.

PERIOD OF RECORD.--November 1927 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year.

GAGE.--Water-stage recorder and staff gage at dam. Datum of gage is 30.9 ft below sea level.

REMARKS.--Lake, used for hydroelectric power development, was first put in operation Nov. 7, 1927. Total capacity is 11,090,000,000 ft^3. Usable capacity, 10,230,000,000 ft^3, is between 625 and 655 ft gage datum (top of gates).

COOPERATION.--Records furnished by Yadkin, Inc. (See station 02129000.)

02122699 TUCKERTOWN RESERVOIR

LOCATION.--Lat 35°29'03", long 80°10'30", Stanly County, Hydrologic Unit 03040103, at Tuckertown Dam on Yadkin River, 2.5 mi upstream from Garr Creek, 3.8 mi northeast of New London, and 250 mi upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--4,120 mi^2, approximately.

PERIOD OF RECORD--April 1962 to current year.

GAGE--Remote water-stage recorder in powerhouse. Datum of gage is 30.9 ft below sea level.

REMARKS.--Lake, used for hydroelectric power development, was first filled Apr. 6, 1962. Total capacity is 1,852,400,000 ft^3. Usable capacity, 293,800,000 ft^3, is between 593 and 596 ft gage datum.

COOPERATION.--Records furnished by Yadkin, Inc. (See station 02129000.)

02122844 BADIN LAKE

LOCATION.--Lat 35°35'10", long 80°05'34", Stanly County, Hydrologic Unit 03040103, at Badin Dam on Yadkin River, 2.5 mi upstream from Falls Dam, 1.5 mi northeast of Badin, and 242 mi upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--4,180 mi^2, approximately.

PERIOD OF RECORD.--December 1917 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year.

GAGE.--Water-stage recorder and staff gage at dam. Datum of gage is 30.9 ft below sea level.

REMARKS.--Lake, generally known as Narrows Reservoir, used for hydroelectric power development, was first put in operation July 12, 1917. Total capacity is 10,497,960,000 ft^3. Usable capacity, 5,616,584,000 ft^3, is between 510.00 and 541.10 ft.

COOPERATION.--Records furnished by Yadkin, Inc. (See station 02129000.)

Lakes and Reservoirs in South Atlantic Slope Basin--Continued

02123736 LAKE TILLERY

LOCATION.--Lat 35°12'24", long 80°03'57", Stanly County, Hydrologic Unit 03040104, at Norwood Dam on Pee Dee River, 700 ft upstream from Norfolk Southern Railroad bridge, 5 mi upstream from Rocky River, 3.5 mi southeast of Norwood, and 224 mi upstream from mouth in Winyah Bay.

DRAINAGE AREA.--4,600 mi^2, approximately.

PERIOD OF RECORD.--February 1928 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year.

GAGE.--Water-stage recorder and float-tape gage at dam. Datum of gage is 38.67 ft above sea level (levels by Carolina Power and Light Co.).

REMARKS.--Lake, used for hydroelectric power development, was first put in operation during January 1928. Total capacity is 7,274,520,000 ft^3. Usable capacity, 5,927,040,000 ft^3, is between elevations 200.5 and 239.5 ft gage datum (top of gates).

COOPERATION.--Records furnished by Carolina Power and Light Co. (See station 02129000.)

02128800 BLEWETT FALLS LAKE

LOCATION.--Lat 34°58'58", long 79°52'40", Richmond County, Hydrologic Unit 03040104, at Blewett Falls Dam on Pee Dee River, 1.2 mi upstream from Cartledge Creek, 6.5 mi northwest of Rockingham, and 195 mi upstream from mouth in Winyah Bay.

DRAINAGE AREA.--6,830 mi^2, approximately.

PERIOD OF RECORD.--December 1929 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year.

GAGE.--Self-synchronous motor, dial indicator, and staff gage at dam. Datum of gage is 39.08 ft above sea level (levels by Carolina Power and Light Co.).

REMARKS.--Lake, used for hydroelectric power development, was first put in use during 1911. Total capacity is 4,225,320,000 ft^3. Usable capacity, 1,850,000,000 ft^3, is between 120.0 and 139.0 ft gage datum (top of flashboards).

COOPERATION.--Records furnished by Carolina Power and Light Co. (See station 02129000.)

02138519 LAKE JAMES

LOCATION.--Lat 35°44'36", long 81°50'22", Burke County, Hydrologic Unit 03050101, at Linville Dam at intake tower on Catawba River, 2.1 mi northeast of Bridgewater, and 279 mi upstream from mouth of Wateree River.

DRAINAGE AREA.--380 mi^2, approximately.

PERIOD OF RECORD.--March 1920 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year.

GAGE.--Float gage with self-synchronous motor to indicator in powerhouse. Staff gage at Catawba River Dam is also read when lake elevation drops below 1,160 ft, 60 ft gage datum, and lake becomes two separate reservoirs. Datum of gage is 1,100.00 ft above sea level (levels by Duke Power Co.).

REMARKS.--Lake, generally known as Bridgewater Reservoir, used for hydroelectric power development, was first put in operation May 5, 1919. The total capacity is 12,581,800,000 ft^3 at 100.0 ft gage datum (crest of spillway). Usable capacity, 7,943,700,000 ft^3, is between 65.0 and 100.0 ft gage datum.

COOPERATION.--Records furnished by Duke Power Co.

02141490 RHODHISS LAKE

LOCATION.--Lat 35°46'54", long 81°26'42", Caldwell County, Hydrologic Unit 03030101, at Rhodhiss Dam on Catawba River, 0.8 mi west of Rhodhiss, 1.8 mi south of Granite Falls, and 243 mi upstream from mouth of Wateree River.

DRAINAGE AREA.--1,090 mi^2, approximately.

PERIOD OF RECORD.--September 1935 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year.

GAGE.--Float gage, indicator, and reference point at dam. Datum of gage is 895.1 ft above sea level (levels by Duke Power Co.).

REMARKS.--Lake, used for hydroelectric power development, was first put in operation Feb. 18, 1925. Total capacity is 3,188,592,000 ft^3. Usable capacity, 1,717,000,000 ft^3, is between elevations 85.0 and 100.0 ft gage datum (crest of spillway).

COOPERATION.--Records furnished by Duke Power Co.

02141961 LAKE HICKORY

LOCATION.--Lat 35°49'28", long 81°11'28", Alexander County, Hydrologic Unit 03050101, at Oxford Dam on Catawba River, 2 mi upstream from Lower Little River, 7 mi south of Taylorsville, and 226 mi upstream from mouth of Wateree River.

DRAINAGE AREA.--1,310 mi^2, approximately.

PERIOD OF RECORD.--September 1935 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year.

GAGE.--Float gage and indicator at dam. Datum of gage is 835.0 ft above sea level (levels by Duke Power Co.).

REMARKS.--Lake, generally known as Oxford Reservoir, used for hydroelectric power development, was first put in operation Apr. 5, 1928. Total capacity is 5,552,985,000 ft^3. The usable capacity from Sept. 1, 1935, to Sept. 30, 1957, was considered to be 2,277,970,200 ft^3 between 85.0 and 100.0 ft gage datum (top of flood gates). Usable capacity from Apr. 30, 1928, to Aug. 31, 1935, Oct. 1, 1957, to Sept. 30, 1964, was considered to be 3,378,400,000 ft^3 between 75.0 and 100.0 ft gage datum (top of flood gates); and from Oct. 1, 1964, to present, is considered to be 2,277,800,000 ft^3 between 85.0 and 100.0 ft gage datum (top of flood gates).

COOPERATION.--Records furnished by Duke Power Co.

Lakes and Reservoirs in South Atlantic Slope Basin--Continued

02142441 LOOKOUT SHOALS LAKE

LOCATION.--Lat 35°45'57", long 81°05'36", Catawba County, Hydrologic Unit 03050101, at Lookout Shoals Dam on Catawba River, 4 mi upstream from bridge on U.S. Highways 64 and 70, 4.2 mi north of Catawba, and 216 mi upstream from mouth of Wateree River.

DRAINAGE AREA.-- 1,450 mi^2, approximately.

PERIOD OF RECORD.--December 1915 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year.

GAGE.--Float gage, indicator, and staff gage at dam. Datum of gage is 738.1 ft above sea level (levels by Duke Power Co.).

REMARKS.--Lake, used for hydroelectric power development, was first put in operation Dec. 2, 1915. Total capacity was originally 1,355,190,000 ft^3. Capacity has been reduced by silting. The usable capacity prior to October 1957 was considered to be 473,980,000 ft^3 and from October 1957 to Sept. 30, 1964, was considered to be 388,300,000 ft^3 between elevations 90.0 and 100.0 ft gage datum (crest of spillway). Usable capacity from Oct. 1, 1964, to present is considered to be 208,200,000 ft^3 between 95.0 and 100.0 ft gage datum (crest of spillway). Flood of July 16, 1916, washed out an earth dike.

COOPERATION.--Records furnished by Duke Power Co.

02142647 LAKE NORMAN

LOCATION.--Lat 35°26'05", long 80°57'28", Mecklenburg County, Hydrologic Unit 03050101, at Cowans Ford Dam on Catawba River, 0.8 mi upstream from Derr Creek, 7.8 mi southwest of Davidson, and 182 mi upstream from mouth of Wateree River.

DRAINAGE AREA.--1,790 mi^2, approximately.

PERIOD OF RECORD.--March 1962 to current year.

GAGE.--Float gage with transmitter to dial meter in control room. Datum of gage is 660 ft above sea level (levels by Duke Power Co.).

REMARKS.--Lake, used for hydroelectric power development, began filling in March 1962. Total capacity is 47,586,200,000 ft^3. Usable capacity, 26,910,400,000 ft^3, is between 75.0 and 100.0 ft gage datum (top of flood gates).

COOPERATION.--Records furnished by Duke Power Co.

02142676 MOUNTAIN ISLAND LAKE

LOCATION--Lat 35°20'03", long 80°59'12", Gaston County, Hydrologic Unit 03050101, at Mountain Island Dam on Catawba River, 1.5 mi downstream from bridge on State Highway 16, 3 mi northeast of Mount Holly, and 167 mi upstream from mouth of Wateree River.

DRAINAGE AREA.--1,860 mi^2, approximately.

PERIOD OF RECORD.--December 1923 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year.

GAGE.--Float gage, indicator, and stage gage at dam. Datum of gage is 547.5 ft above sea level (levels by Duke Power Co.).

REMARKS.--Lake, used for hydroelectric power development, was first put in operation Dec. 16, 1923. Total capacity is 2,495,988,000 ft^3. Usable capacity prior to October 1964 was considered to be 1,132,000,000 ft^3 between 90.0 and 100.0 ft gage datum (crest of spillway) and from October 1964 to present, 845,000,000 ft^3, is considered to be between 93.0 and 100.0 ft gage datum (crest of spillway).

COOPERATION.--Records furnished by Duke Power Co.

OTHER RESERVOIRS

The following smaller reservoirs in the South Atlantic Slope basin are described below. Records of contents are not published herein.

02077229 LAKE ROXBORO

LOCATION.--Lat 79°08'26", long 36°20'55", Caswell County, Hydrologic Unit 03010104, on South Hyco Creek near Roseville.

DRAINAGE AREa.--23.2 mi^2.

REMARKS.--Lake is part of Roxboro's municipal water supply. Total capacity is 380,991,000 ft^3. Dam was completed and filled April 1978. (See station 02077250.)

02077302 ROXBORO STEAM-ELECTRIC GENERATING PLANT AFTERBAY RESERVOIR

LOCATION.--Lat 36°31'51", long 78°59'50", Person County, Hydrologic Unit 03010104, on Hyco River near McGehees Mill.

DRAINAGE AREA.--196 mi^2.

REMARKS.--Lake is used as a cooling-water reservoir for Carolina Power and Light Co. powerplant. Total capacity is approximately 522,720,000 ft^3 with a surface area of about 650 acres at a normal elevation of 385 ft above sea level. Dam completed May 30, 1974, and filling began Apr. 26, 1974. Water in reservoir first reached normal water-level elevation, 385 ft, on Aug. 22, 1974.

02077665 MAYO STEAM-ELECTRIC GENERATING PLANT LAKE.

LOCATION--Lat 36°32'15", long 78°52'30", Person County, Hydrologic Unit 03010104, on Mayo Creek near Bethel Hill.

DRAINAGE AREA.-- 52.2 mi^2.

REMARKS.--Lake is used as cooling-water reservoir for Carolina Power and Light Co. powerplant. Total capacity is 3,831,000,000 ft^3 with a surface area of 2,800 acres at a normal elevation of 434 ft above sea level. Dam was completed and filling began Aug. 1, 1980. Water in reservoir first reached normal water-level elevation of 434 ft on April 16, 1983. (See station 02077660.)

Lakes and Reservoirs in South Atlantic Slope Basin--Continued

02086490 LAKE MICHIE

LOCATION.--Lat 36°09'02", long 79°49'49", Durham County, Hydrologic Unit 03020201, at Durham municipal dam on Flat River, 3 mi southeast of Bahama, and 5 mi upstream from confluence with Eno River.

DRAINAGE AREA.--170 mi^2, approximately.

PERIOD OF RECORD.--October 1962 to April 1975.

REMARKS.--Lake, used for municipal water supply, began filling in May 1926 and reached spillway elevation Dec. 26, 1926. Total capacity, 618,000,000 ft^3, is between 300.0 and 341.0 ft gage datum (crest of spillway). (See station 02087000.)

02087339 LAKE JOHNSON

LOCATION.--Lat 35°45'44", long 78°42'17", Wake County, Hydrologic Unit 03020201, on Walnut Creek near Raleigh.

DRAINAGE AREA.--7.05 mi^2.

REMARKS.--Lake is part of Raleigh's municipal water supply. Total capacity is 98,900,000 ft^3. Dam was completed in 1923 and spillway raised to its present elevation in 1951. (See station 02087500.)

02087344 LAKE RALEIGH

LOCATION.--Lat 35°45'56", long 78°40'38", Wake County, Hydrologic Unit 03020201, on Walnut Creek near Raleigh.

DRAINAGE AREA.--12.3 mi^2.

REMARKS.--Lake is part of Raleigh's municipal water supply. Total capacity is 13,400,000 ft^3. Dam was completed in 1914 and raised to its present elevation in 1919. (See station 02087500.)

02087588 LAKE WHEELER

LOCATION.--Lat 35°41'30", long 78°41'31", Wake County, Hydrologic Unit 03020201, on Swift Creek near Raleigh.

DRAINAGE AREA.-- 38 mi^2, approximately.

REMARKs.--Lake is part of Raleigh's municipal water supply. Total capacity is 267,400,000 ft^3. Dam was completed and filling began in 1956. (See station 02087500.)

02087701 LAKE BENSON

LOCATION.--Lat 35°39'44", long 78°36'42", Wake County, Hydrologic Unit 03020201, on Swift Creek near Garner.

DRAINAGE AREA.--67 mi^2, approximately.

REMARKS.--Lake is part of Raleigh's municipal water supply. Total capacity is 133,700,000 ft^3. Lake, formerly known as Rand's Mill, acquired by city of Raleigh in 1927 and spillway raised to its present elevation in 1954. (See station 02087500.)

02090370 BUCKHORN RESERVOIR

LOCATION.--Lat 35°41'22", long 78°07'33", Wilson County, Hydrologic Unit 03020203, on Contentnea Creek near Lucama.

DRAINAGE AREA.--155 mi^2.

REMARKS.--Lake is part of Wilson's municipal water supply. Total capacity is 133,680,000 ft^3. Dam was completed Nov. 12, 1976, and reservoir filled Dec. 1, 1976. (See station 02090380.)

02093981 LAKE HIGGINS

LOCATION.--Lat 36°10'11", long 79°52'49", Guilford County, Hydrologic Unit 03030002, on Brush Creek near Greensboro.

DRAINAGE AREA.--12 mi^2, approximately.

REMARKS.--Lake is part of Greensboro's municipal water supply. Total capacity is 107,000,000 ft^3. Reservoir was first filled Mar. 1, 1957. (See station 02094500.)

02094117 LAKE BRANDT

LOCATION.--Lat 36°10'20", long 79°50'20", Guilford County, Hydrologic Unit 03030002, on Reedy Fork and Horsepen Creek near Greensboro.

DRAINAGE AREA.--70.0 mi^2, approximately.

REMARKS.--Total capacity is 294,000,000 ft^3. Dam was completed February 1923 and raised to present level 1959-60. Reservoir first filled to present level on Oct. 8, 1960. Lake is part of Greensboro's municipal water supply. (See station 02094500.)

02094305 LAKE TOWNSEND

LOCATION.--Lat 36°11'25", long 79°43'57", Guilford County, Hydrologic Unit 03030002, on Reedy Fork near Greensboro.

DRAINAGE AREA.--105 mi^2.

REMARKS.--Lake is part of Greensboro's municipal water supply. Total capacity is 869,000,000 ft^3. Dam was completed Oct. 18, 1968, and reservoir was first filled on Aug. 17, 1969. (See station 02094500.)

02096003 LAKE BURLINGTON

LOCATION.--Lat 36°10'25", long 79°24'53", Alamance County, Hydrologic Unit 03030002, on Stony Creek near Burlington.

DRAINAGE AREA.--44 mi^2, approximately.

REMARKS.--Lake is part of Burlington's municipal water supply. Prior to October 1971 published as "Stony Creek Reservoir." Total capacity is 427,800,000 ft^3. Dam completed August 1960 and reservoir first filled Jan. 28, 1961. (See station 02096500.)

Lakes and Reservoirs in South Atlantic Slope Basin--Continued

02096432 STONY CREEK RESERVOIR

LOCATION.--Lat 36°07'37", long 79°24'20", Alamance County, Hydrologic Unit 03030002, on Stony Creek near Burlington.

DRAINAGE AREA.--95.0 mi^2, approximately.

REMARKS.--Lake is part of Burlington's water supply. Prior to October 1971 published as "Lake Burlington." Total capacity is 64,900,000 ft^3. Dam completed and reservoir filled in 1928. (See station 02096500.)

02098495 OAK HOLLOW RESERVOIR

LOCATION.--Lat 36°00'42", long 79°59'11", Guilford County, Hydrologic Unit 03030003, on West Fork Deep River and 1.8 mi southwest of Deep River.

DRAINAGE AREA.--32 mi^2, approximately.

REMARKS.--Lake is part of High Point's municipal water supply. Total capacity is 468,000,000 ft^3. Dead storage (nonwithdrawal) is minor. Total surface area, about 725 acres. Dam completed and filling began in May 1970. Reservoir first filled Dec. 24, 1970. (See station 02099500.)

02099096 HIGH POINT MUNICIPAL LAKE

LOCATION.--Lat 35°59'43", long 79°56'42", Guilford County, Hydrologic Unit 03030003, on Deep River near High Point, High Point's municipal water supply.

DRAINAGE AREA.--61.4 mi^2.

REMARKS.--Total capacity is 220,588,000 ft^3. Dam completed in 1926 and reservoir first filled in 1927. (See station 02099500)

02102178 BUCKHORN RESERVOIR

LOCATION.--Lat 35°31'35", long 78°59'22", Chatham County, Hydrologic Unit 03030004, on Cape Fear River near Corinth.

DRAINAGE AREA.--3,200 mi^2, approximately.

REMARKS.-- Usable capacity is 69,700,000 ft^3. Completed and filled in 1908. Hydroelectric power operation stopped Dec. 31, 1962.

02102190 SHEARON HARRIS MAIN RESERVOIR

LOCATION.--Lat 35°34'00", long 78°57'55", Chatham County, Hydrologic Unit 03030004, on Buckhorn Creek near Corinth.

DRAINAGE AREA.--71 mi^2.

REMARKS.--Lake is a cooling-water reservoir for Carolina Power and Light Co. powerplant. Total capacity is 3,136,320,000 ft^3 with a surface area of 4,150 acres at a normal elevation of 220 ft above sea level. Dam was completed Dec. 23, 1981, and filling began Dec. 1, 1980. (See station 02102192.)

02121461 LEXINGTON-THOMASVILLE RESERVOIR

LOCATION.--Lat 35°51'54", long 80°11'41", Davidson County, Hydrologic Unit 03050103, on Abbotts Creek near Lexington.

DRAINAGE AREA.--70.3 mi^2.

REMARKS.--Total capacity is 284,100,000 ft^3 of which 281,400,000 ft^3 is usable. Dam completed Aug. 8, 1957, and reservoir first filled Nov. 23, 1957. Lexington and Thomasville's municipal water supply.

02184122 LAKE TOXAWAY

LOCATION.--Lat 35°07'27", long 82°55'56", Transylvania County, Hydrologic Unit 03060101, on Toxaway River at town of Lake Toxaway.

DRAINAGE AREA.--7.79 mi^2.

REMARKS.--A recreation lake. Total surface area is about 640 acres. Lake reached spillway elevation September 1961.

Lakes and Reservoirs in South Atlantic Slope Basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage Height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
		02067800 & 02067820 Talbott & Townes Reservoir			02077280 Hyco Lake	
Sept. 30		345	-	10.30	3,340	-
Oct. 31		352	+7	10.21	3,326	-14
Nov. 30		368	+16	10.41	3,356	+30
Dec. 31		360	-8	10.53	3,375	+19
CAL YR 1996		-	+160		-	+21
Jan. 31		371	+11	10.61	3,388	+13
Feb. 28		362	-9	10.67	3,397	+9
Mar. 31		352	-10	10.52	3,373	-24
Apr. 30		363	+11	11.32	3,507	+134
May 31		332	-31	9.83	3,265	-242
June 30		321	-11	9.51	3,214	-51
July 31		286	-35	9.07	3,141	-73
Aug. 31		227	-59	8.50	3,047	-94
Sept. 30		206	-21	8.33	3,019	-28
WTR YR 1997		-	-139		-	-321

Date	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
		02079964 Lake Gaston			02080100 Roanoke Rapids Lake	
Sept. 30	200.78	20,282	-	131.1	3,180	-
Oct. 31	199.61	19,263	-1,019	129.7	2,916	-264
Nov. 30	199.63	19,280	+17	131.2	3,198	+282
Dec. 31	199.35	19,035	-245	130.2	3,008	-190
CAL YR 1996		-	-105		-	+36
Jan. 31	199.40	19,079	+44	131.5	3,252	+244
Feb. 28	199.48	19,149	+70	129.9	2,953	-299
Mar. 31	199.36	19,044	-105	131.2	3,198	+245
Apr. 30	199.28	18,975	-69	130.9	3,142	-56
May 31	199.54	19,201	+226	130.8	3,122	-20
June 30	199.55	19,210	+9	129.9	2,953	-169
July 31	199.43	19,105	-105	130.3	3,026	+73
Aug. 31	199.32	19,009	-96	129.8	2,935	-91
Sept. 30	199.66	19,306	+297	130.3	3,026	+91
WTR YR 1997		-	-976		-	-154

Lakes and Reservoirs in South Atlantic Slope Basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
		02087182 Falls Lake			02098197 B. Everett Jordan Lake	
Sept. 30	251.73	5,610	-	216.5	9,685	-
Oct. 31	250.11	4,766	-844	216.1	9,434	-251
Nov. 30	250.14	4,781	+15	216.3	9,559	+125
Dec. 31	250.60	5,013	+232	216.3	9,559	0
CAL YR 1996		-	+121		-	+62
Jan. 31	250.73	5,079	+66	216.1	9,434	-125
Feb. 28	250.15	4,786	-293	216.4	9,622	+188
Mar. 31	250.37	4,897	+111	216.3	9,559	-63
Apr. 30	255.25	7,703	+2,806	225.3	16,249	+6,690
May 31	250.68	5,054	-2,649	216.5	9,685	-6,564
June 30	250.93	5,180	+126	216.3	9,559	-126
July 31	251.02	5,226	+46	217.4	10,256	+697
Aug. 31	249.76	4,597	-629	215.1	8,840	-1,416
Sept. 30	248.99	4,235	-362	214.6	8,555	-285
WTR YR 1997		-	-1,375		-	-1,130

Date	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage Height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
		02111391 W. Kerr Scott Reservoir			02122400 High Rock Lake	
Sept. 30	1,030.19	1,807.17	-	651.7	9,038	-
Oct. 31	1,030.09	1,798.70	-8	647.3	6,720	-2,318
Nov. 30	1,030.57	1,841.05	+42	646.6	6,389	-331
Dec. 31	1,030.09	1,798.70	-42	641.8	4,427	-1,962
CAL YR 1996		-	0		-	-784
Jan. 31	1,030.06	1,798.70	0	648.4	7,262	+2,835
Feb. 28	1,031.01	1,874.95	+76	650.8	8,532	+1,270
Mar. 31	1,030.05	1,790.23	-85	651.0	8,644	+112
Apr. 30	1,030.57	1,841.05	+51	655.0	11,090	+2,446
May 31	1,030.18	1,807.17	-34	653.3	10,001	-1,089
June 30	1,030.16	1,807.17	0	652.8	9,698	-303
July 31	1,030.09	1,798.70	-8	651.3	8,813	-885
Aug. 31	1,029.61	1,772.88	-26	651.3	8,813	0
Sept. 30	1,030.17	1,807.17	+34	649.2	7,669	-1,144
WTR YR 1997		-	0		-	-1,369

Lakes and Reservoirs in South Atlantic Slope Basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Gage Height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage Height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
	02122699 Tuckertown Reservoir			02122844 Badin Lake		
Sept. 30	595.16	1,765	-	539.5	10,124	-
Oct. 31	595.15	1,764	-1	540.1	10,264	+140
Nov. 30	594.98	1,747	-17	539.8	10,194	-70
Dec. 31	595.28	1,778	+31	539.5	10,124	-70
CAL YR 1996		-	-14		-	+163
Jan. 31	595.36	1,786	+8	540.1	10,264	+140
Feb. 28	595.72	1,823	+37	539.9	10,217	-47
Mar. 31	595.34	1,784	-39	540.6	10,381	+164
Apr. 30	595.81	1,833	+49	540.9	10,451	+70
May 31	595.24	1,774	-59	540.1	10,264	-187
June 30	595.19	1,768	-6	540.1	10,264	0
July 31	594.93	1,741	-27	539.8	10,194	-70
Aug. 31	595.02	1,751	+10	538.6	9,914	-280
Sept. 30	595.32	1,782	+31	539.5	10,124	+210
WTR YR 1997		-	+17		-	0

Date	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage Height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
	02123736 Lake Tillery			02128800 Blewett Falls Lake		
Sept. 30	276.6	5,794	-	175.0	1,530	-
Oct. 31	273.3	4,890	-904	175.8	1,610	+80
Nov. 30	277.5	5,772	+882	177.2	1,756	+146
Dec. 31	277.9	5,859	+87	174.9	1,520	-236
CAL YR 1996		-	+65		-	-278
Jan. 31	277.2	5,708	-151	178.9	1,930	+410
Feb. 28	277.3	5,729	+21	175.9	1,620	-310
Mar. 31	277.2	5,708	-21	178.8	1,920	+300
Apr. 30	278.2	5,925	+217	181.7	2,210	+290
May 31	277.5	5,772	-153	175.2	1,550	-660
June 30	277.5	5,772	0	171.2	1,160	-390
July 31	277.4	5,750	-22	175.9	1,620	+460
Aug. 31	278.0	5,881	+131	173.4	1,370	-250
Sept. 30	277.6	5,772	-109	172.4	1,270	-100
WTR YR 1997		-	-22		-	-260

Lakes and Reservoirs in South Atlantic Slope Basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Gage Height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage Height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
	02138519 Lake James			02141490 Rhodhiss Lake		
Sept. 30	97.0	11,754	-	97.2	1,311	-
Oct. 31	96.0	11,487	-267	97.5	1,353	+42
Nov. 30	96.3	11,567	+80	97.0	1,284	-69
Dec. 31	94.9	11,198	-369	96.8	1,257	-27
CAL YR 1996		-	0		-	0
Jan. 31	93.6	10,865	-333	97.3	1,325	+68
Feb. 28	95.7	11,408	+543	97.5	1,353	+28
Mar. 31	97.4	11,862	+454	96.9	1,270	-83
Apr. 30	98.3	12,108	+246	99.4	1,626	+356
May 31	97.8	11,971	-137	96.4	1,203	-423
June 30	98.0	12,025	+54	96.7	1,243	+40
July 31	97.3	11,835	-190	97.0	1,284	+41
Aug. 31	97.1	11,781	-54	97.1	1,298	+14
Sept. 30	96.0	11,487	-294	97.7	1,381	+83
WTR YR 1997		-	-267		-	+70

Date	Gage Height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage Height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
	02141961 Lake Hickory			02142441 Lookout Shoals Lake		
Sept. 30	97.5	1,842	-	98.4	138	-
Oct. 31	97.2	1,791	-51	98.3	138	0
Nov. 30	97.1	1,775	-16	97.9	117	-21
Dec. 31	96.8	1,724	-51	97.3	92	-25
CAL YR 1996		-	0		-	+24
Jan. 31	97.4	1,815	+91	97.6	105	+13
Feb. 28	98.0	1,927	+112	96.4	55	-50
Mar. 31	98.2	1,962	+35	96.6	63	+8
Apr. 30	99.3	2,153	+191	98.6	147	+84
May 31	96.9	1,741	-412	97.1	84	-63
June 30	97.3	1,808	+67	96.9	76	-8
July 31	97.3	1,808	0	98.1	126	+50
Aug 31	97.0	1,758	-50	97.6	105	-21
Sept. 30	97.2	1,791	+33	98.0	121	+16
WTR YR 1997		-	-51		-	-17

Lakes and Reservoirs in South Atlantic Slope Basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Gage Height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage Height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
		02142647 Lake Norman			02142676 Mountain Island Lake	
Sept. 30	97.2	43,740	-	96.2	354	-
Oct. 31	96.8	43.210	-530	97.0	450	+96
Nov. 30	96.9	43,340	+130	96.8	426	-24
Dec. 31	96.2	42,420	-920	96.4	378	-48
CAL YR 1996		-	+130		-	-24
Jan. 31	93.7	39,260	-3,160	96.9	438	+60
Feb. 28	95.9	42,030	+2,770	98.1	588	+150
Mar. 31	97.4	44,010	+1,980	97.2	475	-113
Apr. 30	98.5	45,500	+1,490	96.9	438	-37
May 31	97.7	44,420	-1,080	96.3	366	-72
June 30	98.2	45,090	+670	97.1	462	+96
July 31	98.1	44,960	-130	96.8	426	-36
Aug. 31	97.0	43,470	-1,490	97.0	450	+24
Sept. 30	97.0	43,470	0	98.1	588	+138
WTR YR 1997		-	-270		-	+234

KANAWHA RIVER BASIN

03161000 SOUTH FORK NEW RIVER NEAR JEFFERSON, NC

LOCATION.--Lat 36°23'35", long 81°24'26", Ashe County, Hydrologic Unit 05050001, on right bank 600 ft upstream from bridge on State Highways 16 and 88, 0.2 mi downstream of Bear Creek, and 4 mi southeast of Jefferson.

DRAINAGE AREA.--205 mi^2.

PERIOD OF RECORD.--October 1924 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1925-26(M), 1928-30(M), 1931-32, 1933-35(M), 1941-42(m), 1944(m). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,657.04 ft above sea level. Prior to Oct. 14, 1934, nonrecording gage on bridge 400 ft downstream at same datum. Oct. 14, 1934, to Mar. 25, 1935, nonrecording gage at present site and datum. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records good except those during periods of ice effect, Dec. 20-23, and Jan. 11-24, which are poor. Maximum discharge for period of record, from rating curve extended above 14,000 ft^3/s on basis of slope-area measurement of peak flow. Minimum discharge for period of record result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 15, 1916, reached a stage of 18.0 ft, from floodmarks witnessed by local resident; discharge, 35,200 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	444	245	2160	445	416	805	518	655	1330	308	335	165
2	417	249	2370	419	399	659	488	572	1170	345	289	179
3	393	245	1180	411	389	905	476	555	1120	390	267	213
4	377	236	877	397	513	1180	465	555	776	347	258	179
5	354	233	738	426	644	808	455	493	646	284	261	160
6	341	234	682	483	533	801	499	474	563	271	249	152
7	336	246	657	411	487	665	574	452	525	267	237	150
8	368	2670	654	387	485	603	468	434	512	260	236	147
9	397	2240	585	424	490	560	443	434	489	273	232	150
10	342	881	538	420	447	558	429	424	455	301	227	203
11	312	658	525	e416	431	547	422	401	425	343	225	514
12	301	551	530	e414	408	497	472	387	425	368	248	387
13	296	495	695	e410	403	475	533	378	541	278	257	244
14	292	465	580	e406	415	2390	443	372	480	258	249	205
15	286	440	523	e400	515	1830	422	369	479	248	238	192
16	282	408	499	e498	540	1050	413	353	416	306	214	182
17	278	394	502	e456	459	850	406	342	397	375	207	175
18	279	401	509	e450	428	755	402	336	393	280	201	168
19	279	438	487	e446	419	888	396	332	376	246	198	165
20	267	407	e480	e440	415	977	396	358	356	242	212	158
21	261	385	e470	e436	449	781	396	369	366	456	242	152
22	259	424	e460	e432	843	707	479	328	351	364	211	149
23	264	392	e456	e436	619	653	714	315	332	954	187	150
24	263	367	463	e504	527	613	681	312	321	568	180	279
25	252	362	481	544	489	583	531	309	312	389	180	578
26	255	871	436	503	465	623	476	351	315	329	180	296
27	270	642	425	446	463	627	468	584	352	308	178	224
28	275	499	417	473	595	560	507	486	337	329	176	213
29	262	455	411	523	---	601	1130	396	318	283	173	312
30	262	501	412	454	---	541	838	416	308	394	175	290
31	252	---	420	437	---	531	---	412	---	495	167	---
TOTAL	9516	17034	20622	13747	13686	24623	15340	12954	15186	10859	6889	6731
MEAN	307	568	665	443	489	794	511	418	506	350	222	224
MAX	444	2670	2370	544	843	2390	1130	655	1330	954	335	578
MIN	252	233	411	387	389	475	396	309	308	242	167	147
CFSM	1.50	2.77	3.25	2.16	2.38	3.87	2.49	2.04	2.47	1.71	1.08	1.09
IN.	1.73	3.09	3.74	2.49	2.48	4.47	2.78	2.35	2.76	1.97	1.25	1.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1997, BY WATER YEAR (WY)

MEAN	366	412	414	475	516	592	565	460	393	334	359	330
MAX	901	1889	797	1346	973	1316	1350	1052	1036	904	2613	1212
(WY)	1991	1978	1958	1995	1983	1979	1983	1973	1992	1941	1940	1979
MIN	117	124	146	140	197	222	236	220	158	111	93.7	99.5
(WY)	1955	1932	1934	1940	1934	1988	1986	1941	1988	1930	1925	1954

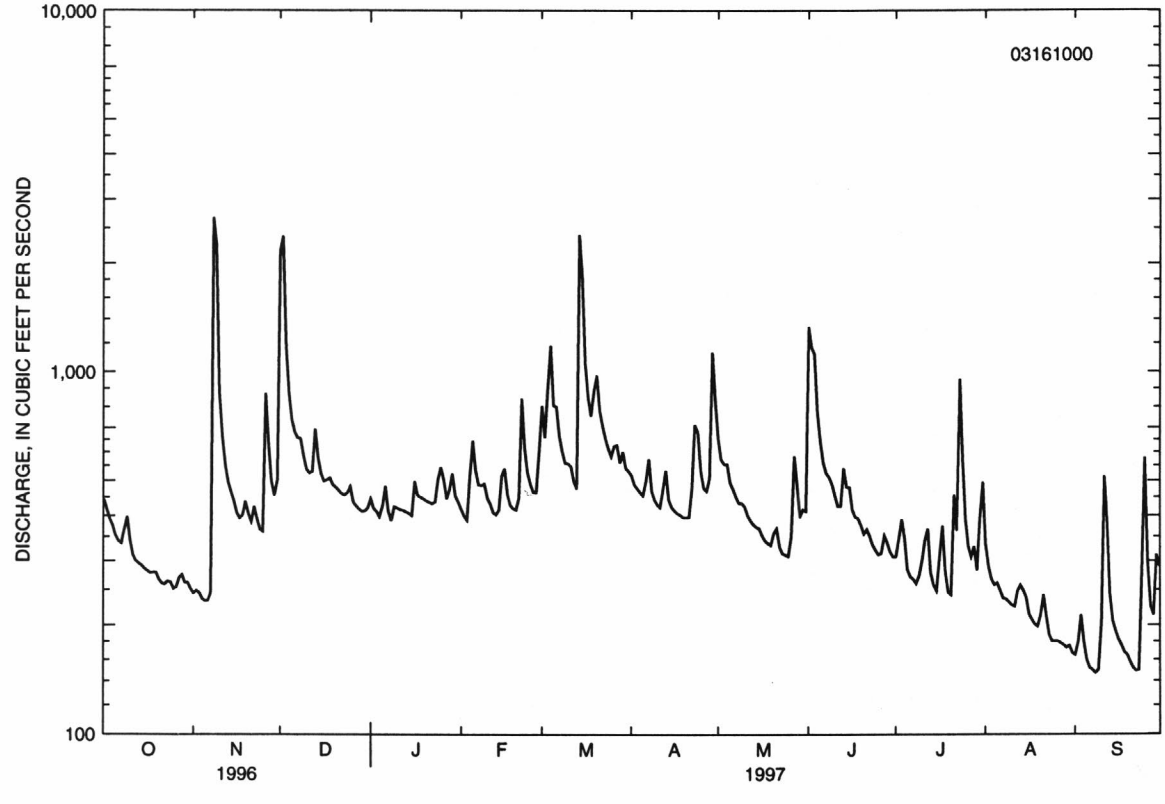
KANAWHA RIVER BASIN

03161000 SOUTH FORK NEW RIVER NEAR JEFFERSON, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1925 - 1997	
ANNUAL TOTAL	196041		167187			
ANNUAL MEAN	536		458		434	
HIGHEST ANNUAL MEAN					669	1949
LOWEST ANNUAL MEAN					233	1988
HIGHEST DAILY MEAN	5620	Jan 19	2670	Nov 8	27700	Aug 14 1940
LOWEST DAILY MEAN	216	Jul 28	147	Sep 8	65	Sep 9 1925
ANNUAL SEVEN-DAY MINIMUM	241	Nov 1	160	Sep 17	72	Aug 21 1925
INSTANTANEOUS PEAK FLOW			5530	Nov 8	52800*	Aug 14 1940
INSTANTANEOUS PEAK STAGE			7.42	Nov 8	22.50	Aug 14 1940
INSTANTANEOUS LOW FLOW			143	Sep 8	52*	Dec 24 1943
ANNUAL RUNOFF (CFSM)	2.61		2.23		2.12	
ANNUAL RUNOFF (INCHES)	35.57		30.34		28.76	
10 PERCENT EXCEEDS	726		661		714	
50 PERCENT EXCEEDS	436		415		351	
90 PERCENT EXCEEDS	272		220		173	

e Estimated.

* See REMARKS.



TENNESSEE RIVER BASIN

03439000 FRENCH BROAD RIVER AT ROSMAN, NC

LOCATION.--Lat 35°08'32", long 82°49'28", Transylvania County, Hydrologic Unit 06010105, on left bank 50 ft upstream from bridge on U.S. Highway 178 at Rosman, 1.0 mi upstream from East Fork, and at mile 216.4.

DRAINAGE AREA.--67.9 mi^2.

PERIOD OF RECORD.--May 1907 to June 1909, October 1935 to current year. Monthly discharge only for some periods published in WSP 1306.

REVISED RECORDS.--WSP 823: Drainage area. WSP 1306: 1908(M). WSP 1910: 1936(M), 1938(M), 1939-40, 1942-43.

GAGE.--Water-stage recorder. Datum of gage is 2,173.83 ft above sea level. Prior to June 30, 1909, nonrecording gage at site 500 ft downstream at different datum. Jan. 1, 1936, to July 6, 1937, nonrecording gage at present site and datum. Satellite telemetry at station. National Weather Service telephone telemetry at station.

REMARKS.--Records good except those during period of ice effect, Jan. 18, which are fair. Minimum discharge for period of record result of freezeup. Minimum daily discharge occurred several days in Sept. and Oct. 1954. Minimum discharge for current water year also occurred Sept. 21.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1916 reached a stage of 13.9 ft, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	393	157	2460	228	294	721	326	398	616	174	152	149
2	342	184	892	223	271	543	315	363	358	167	142	95
3	309	160	586	214	258	598	304	599	306	161	135	93
4	274	157	477	207	383	501	293	460	289	155	129	89
5	250	156	434	298	404	461	283	410	260	153	124	82
6	235	156	399	246	340	463	454	381	240	150	121	80
7	225	250	374	228	314	405	363	357	226	147	121	78
8	220	1470	347	225	355	382	327	343	220	145	124	77
9	206	441	330	452	319	363	309	331	213	157	115	77
10	197	330	316	339	301	352	291	314	204	159	122	102
11	194	276	302	294	280	334	279	300	195	152	120	110
12	189	242	349	265	266	319	748	290	276	143	116	92
13	186	223	349	247	279	547	482	283	268	140	109	84
14	184	213	310	235	303	2180	399	269	370	141	106	80
15	181	200	289	232	420	823	367	261	308	135	101	78
16	179	193	276	399	344	632	345	248	251	145	103	77
17	179	191	330	288	321	547	329	242	229	143	97	76
18	179	196	292	e260	300	500	313	234	211	135	95	74
19	176	197	276	245	289	669	307	230	196	127	93	73
20	175	187	252	235	275	557	294	231	192	143	93	72
21	174	199	244	228	519	495	281	219	209	125	92	72
22	170	196	235	233	478	454	335	213	216	132	89	74
23	176	184	233	243	376	418	395	203	194	486	87	73
24	169	181	272	481	343	393	342	197	198	274	87	244
25	166	197	245	538	322	385	313	214	200	172	87	209
26	167	371	230	399	317	410	296	205	187	157	87	123
27	180	231	239	350	339	365	345	195	192	147	85	98
28	172	208	228	437	931	403	607	239	186	165	87	135
29	171	197	287	364	---	392	570	233	182	160	83	147
30	172	360	250	343	---	359	449	281	175	170	82	102
31	157	---	239	320	---	343	---	256	---	184	82	---
TOTAL	6347	7903	12342	9296	9941	16314	11061	8999	7367	5144	3266	3015
MEAN	205	263	398	300	355	526	369	290	246	166	105	101
MAX	393	1470	2460	538	931	2180	748	599	616	486	152	244
MIN	157	156	228	207	258	319	279	195	175	125	82	72
CFSM	3.02	3.88	5.86	4.42	5.23	7.75	5.43	4.28	3.62	2.44	1.55	1.48
IN.	3.48	4.33	6.76	5.09	5.45	8.94	6.06	4.93	4.04	2.82	1.79	1.65

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 1997@, BY WATER YEAR (WY)

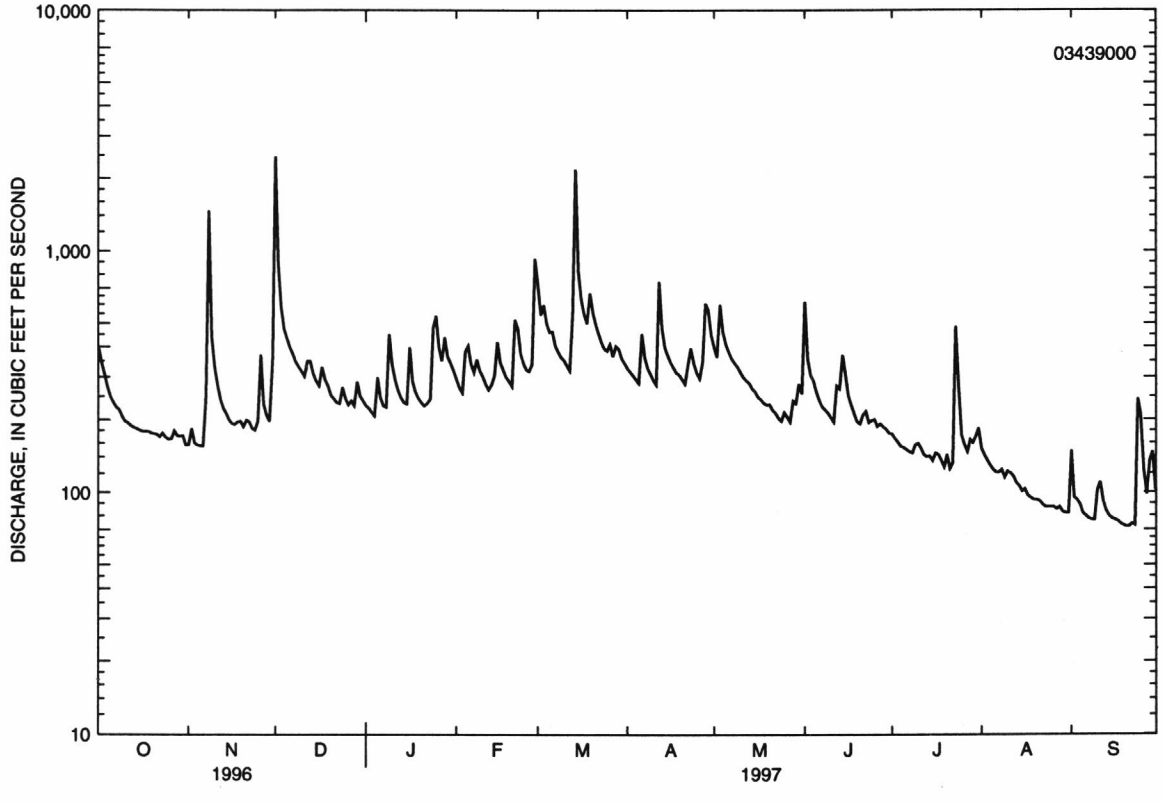
MEAN	180	206	250	283	320	340	326	266	223	178	191	167
MAX	734	635	489	672	648	787	582	551	882	624	543	447
(WY)	1965	1993	1993	1937	1939	1979	1983	1909	1909	1989	1994	1950
MIN	42.2	56.7	72.6	72.0	130	135	108	114	79.8	75.8	65.3	43.6
(WY)	1955	1955	1940	1981	1963	1988	1986	1941	1988	1986	1954	1954

TENNESSEE RIVER BASIN

03439000 FRENCH BROAD RIVER AT ROSMAN, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1908 - 1997@	
ANNUAL TOTAL	102850		100995			
ANNUAL MEAN	281		277		242	
HIGHEST ANNUAL MEAN					370	1949
LOWEST ANNUAL MEAN					136	1981
HIGHEST DAILY MEAN	2460	Dec 1	2460	Dec 1	5630	Oct 4 1964
LOWEST DAILY MEAN	119	Jul 12	72	Sep 20	37*	Sep 25 1954
ANNUAL SEVEN-DAY MINIMUM	128	Jul 6	73	Sep 17	38	Sep 23 1954
INSTANTANEOUS PEAK FLOW			5580	Nov 8	13500	Oct 4 1964
INSTANTANEOUS PEAK STAGE			10.25	Nov 8	14.95	Oct 4 1964
INSTANTANEOUS LOW FLOW			69*	Sep 20	23*	Jan 3 1940
ANNUAL RUNOFF (CFSM)	4.14		4.08		3.56	
ANNUAL RUNOFF (INCHES)	56.35		55.33		48.43	
10 PERCENT EXCEEDS	436		450		423	
50 PERCENT EXCEEDS	209		239		195	
90 PERCENT EXCEEDS	147		100		90	

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



TENNESSEE RIVER BASIN

03440000 CATHEYS CREEK NEAR BREVARD, NC

LOCATION.--Lat 35°12'40", long 82°47'00", Transylvania County, Hydrologic Unit 06010105, on right bank 1,200 ft downstream of Kuykendall Creek, 1.0 mi upstream from U.S. Highway 64, 2.1 mi upstream from mouth, and 3.2 mi southwest of Brevard.

DRAINAGE AREA.--11.7 mi^2.

PERIOD OF RECORD.--October 1944 to September 1955, November 1986 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,230 ft above sea level, from topographic map. Prior to Oct. 2, 1946, at site 0.9 mi downstream at different datum. October 2, 1946, to Jan. 9, 1947, at site 0.8 mi downstream of present gage at different datum. Jan. 10, 1947, to Oct. 3, 1951, at present site at different datum. Oct. 3, 1951, to Sept. 30, 1955, at site 40 ft downstream at different datum. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Maximum discharge for period of record from rating curve extended above 600 ft^3/s on basis of slope-area measurement of peak flow. City of Brevard diverted about 1.6 ft^3/s from Catheys Creek for municipal water supply. Minimum discharge for current water year also occurred Sept. 20, 22, 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	21	376	33	41	110	52	61	113	39	25	19
2	35	25	130	32	39	87	50	56	67	38	24	16
3	32	21	80	31	38	90	49	93	58	36	22	16
4	29	20	63	30	64	78	48	71	56	34	21	15
5	28	20	58	37	63	74	47	63	53	34	21	14
6	27	20	53	32	52	70	76	59	50	33	21	14
7	27	34	49	31	48	63	60	55	49	33	21	14
8	26	126	45	31	56	60	53	53	49	32	20	14
9	25	47	42	55	49	58	51	51	48	33	20	14
10	24	35	40	41	47	56	48	48	46	33	21	19
11	24	31	40	37	44	53	47	47	45	32	20	17
12	24	28	46	34	42	51	120	46	67	30	19	15
13	23	27	43	33	44	87	79	44	63	30	18	15
14	23	27	40	32	48	210	65	43	92	29	18	14
15	23	25	38	33	61	106	60	41	73	28	18	13
16	22	25	37	55	52	86	56	40	62	33	18	13
17	22	25	45	39	48	77	54	39	57	29	17	13
18	22	25	39	38	47	72	51	38	53	27	17	13
19	22	25	37	37	46	105	50	37	49	26	17	13
20	22	24	35	33	44	86	48	37	47	25	17	13
21	22	26	34	32	89	77	47	35	46	25	17	13
22	21	24	34	33	81	71	55	34	54	24	16	13
23	23	23	33	33	62	66	59	33	47	66	16	13
24	21	23	38	72	56	62	51	33	47	37	15	46
25	21	27	35	73	52	62	47	35	44	29	15	32
26	21	36	33	54	51	65	46	34	43	26	15	18
27	23	27	34	47	55	59	56	33	45	25	18	15
28	21	26	33	60	129	64	100	40	43	30	18	21
29	21	25	40	50	---	62	90	38	42	29	16	18
30	20	57	35	47	---	58	69	41	40	30	15	15
31	20	---	34	44	---	54	---	41	---	30	21	---
TOTAL	753	925	1719	1269	1548	2379	1784	1419	1648	985	577	498
MEAN	24.3	30.8	55.5	40.9	55.3	76.7	59.5	45.8	54.9	31.8	18.6	16.6
MAX	39	126	376	73	129	210	120	93	113	66	25	46
MIN	20	20	33	30	38	51	46	33	40	24	15	13
CFSM	2.08	2.64	4.74	3.50	4.73	6.56	5.08	3.91	4.70	2.72	1.59	1.42
IN.	2.39	2.94	5.47	4.03	4.92	7.56	5.67	4.51	5.24	3.13	1.83	1.58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1997@, BY WATER YEAR (WY)

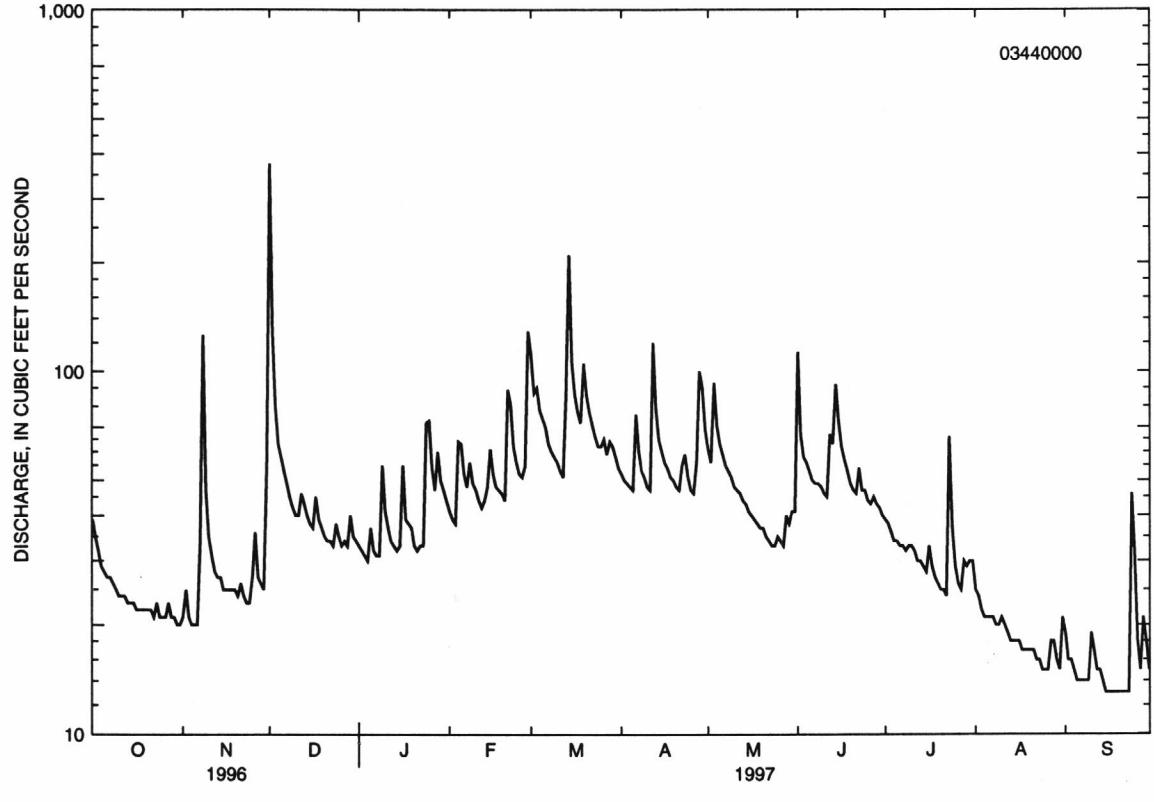
MEAN	26.0	32.3	37.0	44.4	47.4	56.0	49.1	39.0	34.8	30.1	30.5	26.3
MAX	70.0	77.9	63.3	81.4	84.9	110	69.3	57.3	78.2	94.9	91.2	67.8
(WY)	1996	1949	1993	1946	1990	1952	1991	1949	1989	1949	1994	1950
MIN	7.30	8.69	14.1	14.5	24.7	20.7	27.2	17.2	11.6	10.9	9.64	8.21
(WY)	1955	1955	1994	1955	1989	1988	1988	1988	1988	1988	1988	1954

TENNESSEE RIVER BASIN

03440000 CATHEYS CREEK NEAR BREVARD, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1945 - 1997@	
ANNUAL TOTAL	15328		15504			
ANNUAL MEAN	41.9		42.5		37.7	
HIGHEST ANNUAL MEAN					59.7	1949
LOWEST ANNUAL MEAN					18.3	1988
HIGHEST DAILY MEAN	376	Dec 1	376	Dec 1	814	Aug 17 1994
LOWEST DAILY MEAN	15	Sep 25	13	Sep 15	6.6	Sep 28 1954
ANNUAL SEVEN-DAY MINIMUM	17	Sep 20	13	Sep 15	6.6	Oct 20 1954
INSTANTANEOUS PEAK FLOW			745	Dec 1	2410*	Aug 17 1994
INSTANTANEOUS PEAK STAGE			4.35	Dec 1	7.28	Aug 17 1994
INSTANTANEOUS LOW FLOW			10*	Sep 19	3.6	Sep 28 1988
ANNUAL RUNOFF (CFSM)	3.58		3.63		3.22	
ANNUAL RUNOFF (INCHES)	48.74		49.29		43.78	
10 PERCENT EXCEEDS	68		68		64	
50 PERCENT EXCEEDS	33		37		31	
90 PERCENT EXCEEDS	21		18		14	

* See REMARKS.
@ See PERIOD OF RECORD.



TENNESSEE RIVER BASIN

03441000 DAVIDSON RIVER NEAR BREVARD, NC

LOCATION.--Lat 35°16'23", long 83°42'21", Transylvania County, Hydrologic Unit 06010105, on right bank 150 ft upstream of bridge on State Highway 280, 2.1 mi downstream of Avery Creek, 3.3 mi northeast of Brevard, and at mile 2.2.

DRAINAGE AREA.--40.4 mi^2.

PERIOD OF RECORD.--October 1920 to September 1990. October 1993 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 823: Drainage Area. WSP 1336: 1921, 1922 (M), 1923, 1924-25(M), 1926, 1927(M), 1929-32(M).

GAGE.--Water-stage recorder. Datum of gage is 2,115.13 ft above sea level (levels by Tennesse Valley Authority). Prior to May 17, 1934, nonrecording gage at site 50 ft downstream at same datum. Satellite telemetry at station.

REMARKS.-- Records good except those during period of ice effect, Dec. 20-21, Jan. 17-20, and those for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1869, 11.9 ft June 1876 (from studies by Tennesse Valley Authority).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	72	1350	118	156	466	178	238	468	93	91	68
2	208	106	581	115	146	342	171	208	247	87	80	45
3	193	78	360	111	140	369	166	385	197	82	73	45
4	162	74	282	108	262	308	160	283	205	79	69	41
5	146	73	252	158	292	280	155	241	173	88	65	38
6	136	72	224	127	219	274	252	218	157	77	62	37
7	130	119	209	119	191	238	198	196	147	74	63	37
8	128	988	189	117	233	219	175	184	144	72	67	36
9	117	294	174	252	195	204	164	176	138	77	62	36
10	111	203	164	182	181	196	155	164	131	80	67	50
11	107	167	158	155	167	183	150	157	122	127	e72	50
12	103	147	174	139	158	173	397	151	129	80	e62	41
13	99	135	174	130	163	302	269	145	166	75	57	38
14	96	128	155	124	175	1050	217	139	196	76	56	38
15	93	119	147	122	248	455	194	135	165	93	53	36
16	91	113	142	226	197	349	180	127	143	84	53	35
17	88	111	171	e154	181	301	171	123	134	75	50	35
18	87	111	148	e145	171	274	161	120	124	70	48	36
19	82	109	141	e132	167	485	158	117	117	66	47	35
20	82	102	e132	e127	159	372	150	117	113	64	47	34
21	80	111	e127	122	301	312	146	109	111	62	46	34
22	79	108	125	127	295	280	182	106	107	60	43	35
23	87	99	125	134	224	254	257	103	99	201	42	34
24	79	96	140	265	196	234	189	101	96	149	42	170
25	76	103	127	322	181	227	168	107	103	92	42	123
26	75	190	122	221	183	237	158	103	97	81	43	64
27	96	124	124	186	195	208	188	100	114	74	48	49
28	80	114	119	248	615	230	443	137	108	98	65	89
29	76	108	151	199	---	222	375	123	106	e90	44	95
30	74	231	129	181	---	199	279	150	97	e107	42	58
31	72	---	123	167	---	191	---	139	---	123	44	---
TOTAL	3349	4605	6739	5033	5991	9434	6206	4902	4454	2756	1745	1562
MEAN	108	154	217	162	214	304	207	158	148	88.9	56.3	52.1
MAX	216	988	1350	322	615	1050	443	385	468	201	91	170
MIN	72	72	119	108	140	173	146	100	96	60	42	34
CFSM	2.67	3.80	5.38	4.02	5.30	7.53	5.12	3.91	3.67	2.20	1.39	1.29
IN.	3.08	4.24	6.21	4.63	5.52	8.69	5.71	4.51	4.10	2.54	1.61	1.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1997@, BY WATER YEAR (WY)

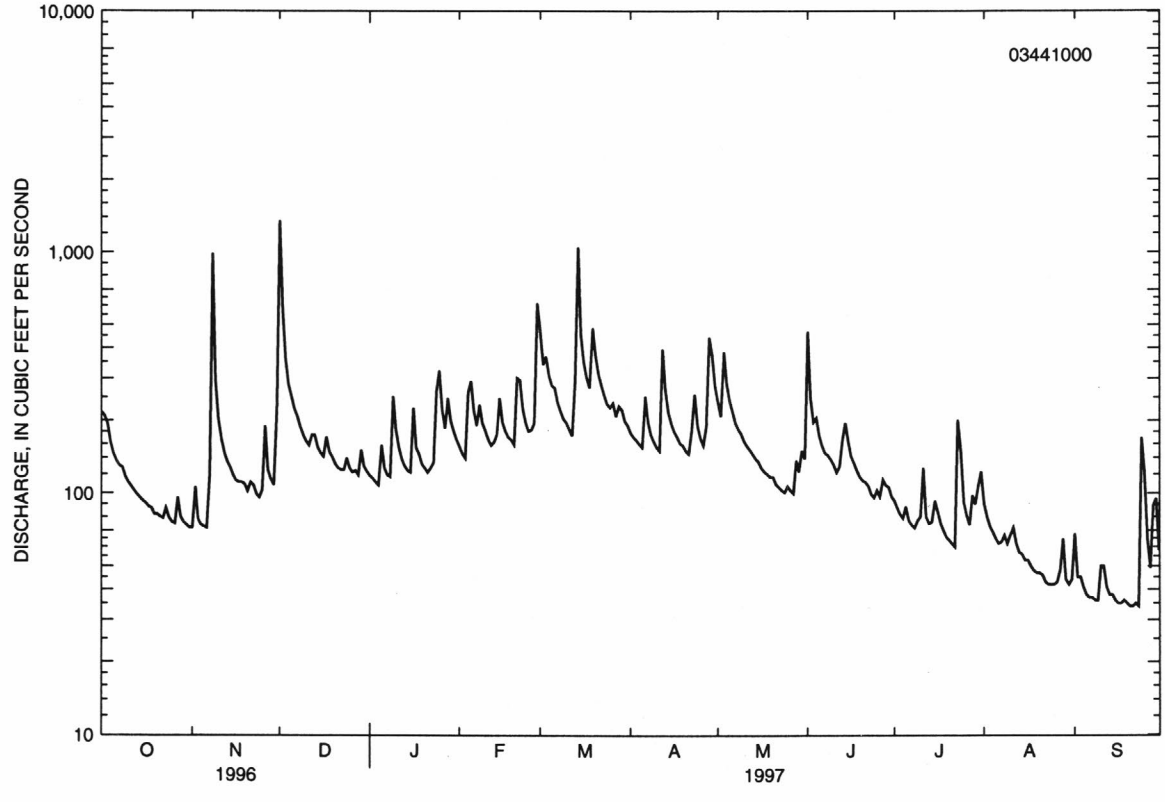
MEAN	97.6	107	132	156	169	186	174	143	115	93.5	101	90.6
MAX	379	362	323	374	363	466	349	293	254	285	404	297
(WY)	1965	1980	1933	1937	1939	1929	1957	1923	1967	1989	1928	1928
MIN	18.2	24.5	31.7	37.8	66.5	74.1	57.7	54.6	37.9	37.2	24.0	17.5
(WY)	1955	1955	1940	1956	1941	1988	1986	1941	1988	1986	1925	1954

TENNESSEE RIVER BASIN

03441000 DAVIDSON RIVER NEAR BREVARD, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1921 - 1997@	
ANNUAL TOTAL	55533		56776			
ANNUAL MEAN	152		156		130	
HIGHEST ANNUAL MEAN					208	1949
LOWEST ANNUAL MEAN					70.6	1988
HIGHEST DAILY MEAN	1350	Dec 1	1350	Dec 1	2940	Aug 17 1994
LOWEST DAILY MEAN	49	Jul 13	34	Sep 20	14	Sep 28 1954
ANNUAL SEVEN-DAY MINIMUM	57	Jul 1	35	Sep 17	15	Sep 25 1954
INSTANTANEOUS PEAK FLOW			3330	Nov 8	8400	Aug 15 1928
INSTANTANEOUS PEAK STAGE			6.72	Nov 8	12.08	Aug 17 1994
INSTANTANEOUS LOW FLOW			32	Sep 21	13	Oct 11 1954
ANNUAL RUNOFF (AC-FT)	110100		112600		94270	
ANNUAL RUNOFF (CFSM)	3.76		3.85		3.22	
ANNUAL RUNOFF (INCHES)	51.13		52.28		43.76	
10 PERCENT EXCEEDS	254		263		231	
50 PERCENT EXCEEDS	116		129		102	
90 PERCENT EXCEEDS	66		50		43	

e Estimated.
@ See PERIOD OF RECORD.



TENNESSEE RIVER BASIN

03443000 FRENCH BROAD RIVER AT BLANTYRE, NC

LOCATION.--Lat 35°17'56", long 82°37'26", Transylvania County, Hydrologic Unit 06010105, on left bank 40 ft upstream from bridge on Secondary Road 1503, 700 ft east of railroad at Blantyre, 3.5 mi downstream of Little River, and at mile 183.7.

DRAINAGE AREA.--296 mi^2.

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 923: 1921-23, 1929, 1933, 1935-36(M), 1938, 1940.

GAGE.--Water-stage recorder. Datum of gage is 2,060.32 ft above sea level (levels by Tennessee Valley Authority). Prior to July 5, 1930, nonrecording gage at same site and datum. National Weather Service has telephone telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, and those above 2,600 ft^3/s, which are fair. Considerable diurnal fluctuation at low flow caused by power plant about 8 mi upstream from station. Maximum gage height for period of record, 25.50 ft, from floodmarks. Minimum discharge for current water year also occurred Sept. 24.

EXTREMES OUTSIDE PERIOD OF RECORD.--Since at least 1791, maximum stage 27.1 ft, July 16, 1916, from floodmarks (from studies by Tennessee Valley Authority).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1380	529	3870	951	1280	3770	1440	1730	2260	786	734	500
2	1180	653	5440	931	1190	3270	1360	1550	2280	769	635	507
3	1110	638	4780	917	1130	2700	1320	2220	1630	728	582	391
4	977	554	2520	903	1390	2530	1270	2210	1480	699	570	373
5	882	543	1680	979	1810	2060	1240	1760	1270	702	544	329
6	835	539	1590	1070	1520	2020	1770	1600	1160	674	518	316
7	796	589	1420	956	1350	1770	2100	1480	1090	647	513	e310
8	812	2640	1310	913	1460	1640	1550	1380	1040	617	540	308
9	766	2740	1200	1560	1410	1540	1410	1330	1010	655	516	291
10	728	1360	1130	1590	1280	1470	1320	1260	967	734	512	374
11	710	1070	1090	1310	1220	1390	1260	1190	923	715	533	487
12	682	931	1110	1140	1150	1320	2050	1160	1030	653	506	485
13	664	858	1500	1060	1140	1400	2670	1130	1340	618	474	409
14	652	818	1200	1010	1230	4160	1840	1090	1590	604	460	311
15	645	784	1100	986	1930	4550	1610	1060	1710	622	438	346
16	623	736	1050	1610	1690	3740	1490	1010	1330	626	461	293
17	614	716	1130	1390	1460	2450	1400	990	1170	643	426	282
18	613	727	1140	1150	1360	2040	1330	965	1080	606	405	284
19	598	744	1070	1080	1270	2540	1280	936	1000	560	391	279
20	588	712	1010	1020	1250	2530	1240	936	985	549	383	272
21	580	692	947	993	1430	2050	1190	903	938	558	380	267
22	575	778	928	981	2390	1860	1360	873	956	528	362	275
23	595	703	930	1050	1720	1710	1780	859	1030	707	349	294
24	606	670	966	1690	1490	1600	1610	832	897	1760	337	658
25	587	654	1030	3000	1370	1550	1420	876	915	888	342	1340
26	538	1090	939	2100	1300	1760	1310	926	892	708	347	818
27	613	929	935	1610	1330	1610	1350	841	887	646	337	534
28	617	805	923	1830	2740	1590	2240	944	901	629	385	591
29	578	760	1010	1720	---	1870	2630	928	867	732	348	875
30	555	958	1090	1490	---	1660	2030	1050	808	759	328	594
31	542	---	1000	1360	---	1530	---	1050	---	876	418	---
TOTAL	22241	26920	47038	40350	41290	67680	47870	37069	35436	21998	14074	13393
MEAN	717	897	1517	1302	1475	2183	1596	1196	1181	710	454	446
MAX	1380	2740	5440	3000	2740	4550	2670	2220	2280	1760	734	1340
MIN	538	529	923	903	1130	1320	1190	832	808	528	328	267
CFSM	2.42	3.03	5.13	4.40	4.98	7.38	5.39	4.04	3.99	2.40	1.53	1.51
IN.	2.80	3.38	5.91	5.07	5.19	8.51	6.02	4.66	4.45	2.76	1.77	1.68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1997, BY WATER YEAR (WY)

MEAN	776	851	1042	1205	1275	1404	1311	1073	888	736	791	700
MAX	3504	2486	2142	2783	2582	3169	2509	2339	1872	2214	2363	1828
(WY)	1965	1980	1962	1937	1990	1979	1936	1973	1989	1949	1994	1979
MIN	157	235	301	260	561	550	473	434	278	290	191	169
(WY)	1955	1955	1956	1956	1941	1988	1986	1988	1988	1925	1925	1954

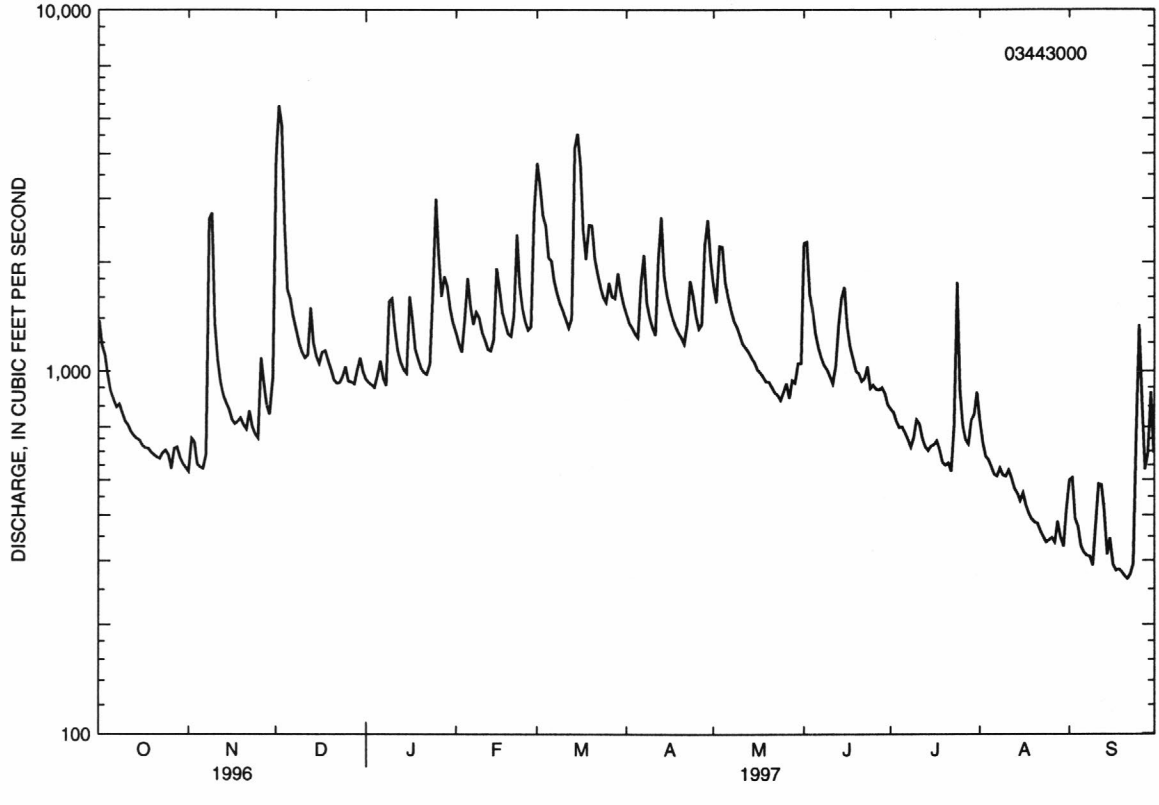
TENNESSEE RIVER BASIN

03443000 FRENCH BROAD RIVER AT BLANTYRE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1921 - 1997	
ANNUAL TOTAL	411335		415359			
ANNUAL MEAN	1124		1138		1003	
HIGHEST ANNUAL MEAN					1564	1949
LOWEST ANNUAL MEAN					534	1988
HIGHEST DAILY MEAN	6080	Jan 28	5440	Dec 2	22700	Oct 5 1964
LOWEST DAILY MEAN	437	Jul 13	267	Sep 21	123	Oct 10 1954
ANNUAL SEVEN-DAY MINIMUM	491	Jul 8	279	Sep 16	133	Oct 8 1954
INSTANTANEOUS PEAK FLOW			5620	Dec 2	30000	Oct 5 1964
INSTANTANEOUS PEAK STAGE			18.41	Dec 2	25.50*	Oct 5 1964
INSTANTANEOUS LOW FLOW			265*	Sep 22	119	Oct 1 1954
ANNUAL RUNOFF (CFSM)	3.80		3.84		3.39	
ANNUAL RUNOFF (INCHES)	51.69		52.20		46.05	
10 PERCENT EXCEEDS	1930		1860		1730	
50 PERCENT EXCEEDS	887		986		815	
90 PERCENT EXCEEDS	575		461		364	

e Estimated.

* See REMARKS.



TENNESSEE RIVER BASIN

03446000 MILLS RIVER NEAR MILLS RIVER, NC

LOCATION.--Lat 35°23'55", long 82°35'42", Henderson County, Hydrologic Unit 06010105, on right bank 1.5 mi downstream of confluence of North and South Forks, 1.8 mi northwest of Mills River, 4.2 mi northwest of Horseshoe, and at mile 4.6.

DRAINAGE AREA.--66.7 mi^2.

PERIOD OF RECORD.--September 1924 to September 1926, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 823: Drainage area. WSP 923: 1935, 1937, 1939. WSP 1003: 1938, 1940-42. WSP 1143: 1940(P). WSP 1276: 1926.

GAGE.--Water-stage recorder. Datum of gage is 2,088.47 ft above sea level (levels by Tennessee Valley Authority). Prior to Oct. 1, 1926, nonrecording gage at site 500 ft upstream at 2,091.44 ft. Satellite telemetry at station.

REMARKS.--Records good except those during period of ice effect, Dec. 20-22, Jan. 11-13, 17-20, and those for estimated daily discharges, which are fair. City of Hendersonville diverted about 7.1 ft^3/s from North Fork and Bradley Creek for municipal water supply. Maximum discharge for period of record, from rating curve extended above 6,200 ft^3/s on basis of slope-area measurement of peak flow. Minimum discharge for period of record result of freezeup. Minimum discharge for current water year also occurred Sept. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	262	108	1310	154	198	479	251	289	442	194	114	101
2	239	135	717	151	187	394	244	261	335	180	108	71
3	251	112	450	147	178	456	237	399	321	167	103	70
4	217	108	356	143	334	414	231	342	e320	156	100	64
5	198	107	316	177	428	368	224	305	273	154	97	58
6	186	105	290	157	330	355	309	280	242	146	95	57
7	183	132	270	148	281	313	271	260	223	140	93	55
8	189	779	247	145	323	293	243	247	216	135	94	54
9	172	343	229	234	279	274	233	239	207	205	92	53
10	160	246	218	204	266	262	224	225	197	177	92	97
11	154	208	211	183	250	247	219	215	186	376	92	138
12	148	187	227	166	233	234	408	210	185	211	87	87
13	144	174	242	158	238	306	354	204	224	179	84	70
14	138	166	210	154	235	1150	297	196	266	165	82	63
15	133	157	199	151	306	545	268	191	239	155	79	58
16	130	150	192	247	263	426	251	182	209	170	79	54
17	128	145	218	181	251	374	240	179	196	165	76	53
18	127	149	201	188	243	345	228	175	183	146	73	53
19	125	147	194	209	237	503	222	170	172	136	72	52
20	123	138	178	162	233	442	215	169	191	132	73	50
21	121	139	176	162	320	395	208	161	253	132	72	49
22	119	142	177	156	391	365	231	156	235	125	66	50
23	124	131	170	162	303	337	346	157	197	150	62	50
24	119	127	180	265	270	320	273	154	190	189	61	194
25	114	129	171	313	250	311	245	157	273	137	61	180
26	114	216	161	247	244	315	231	157	282	126	60	100
27	130	162	160	219	240	290	247	152	295	120	59	76
28	119	150	157	294	465	294	396	187	251	120	77	123
29	115	144	179	254	---	291	383	162	227	127	64	151
30	114	189	164	233	---	270	323	175	208	133	65	93
31	109	---	158	213	---	264	---	172	---	133	107	---
TOTAL	4705	5325	8328	5977	7776	11632	8052	6528	7238	4981	2539	2424
MEAN	152	178	269	193	278	375	268	211	241	161	81.9	80.8
MAX	262	779	1310	313	465	1150	408	399	442	376	114	194
MIN	109	105	157	143	178	234	208	152	172	120	59	49
CFSM	2.28	2.66	4.03	2.89	4.16	5.63	4.02	3.16	3.62	2.41	1.23	1.21
IN.	2.62	2.97	4.64	3.33	4.34	6.49	4.49	3.64	4.04	2.78	1.42	1.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1997@, BY WATER YEAR (WY)

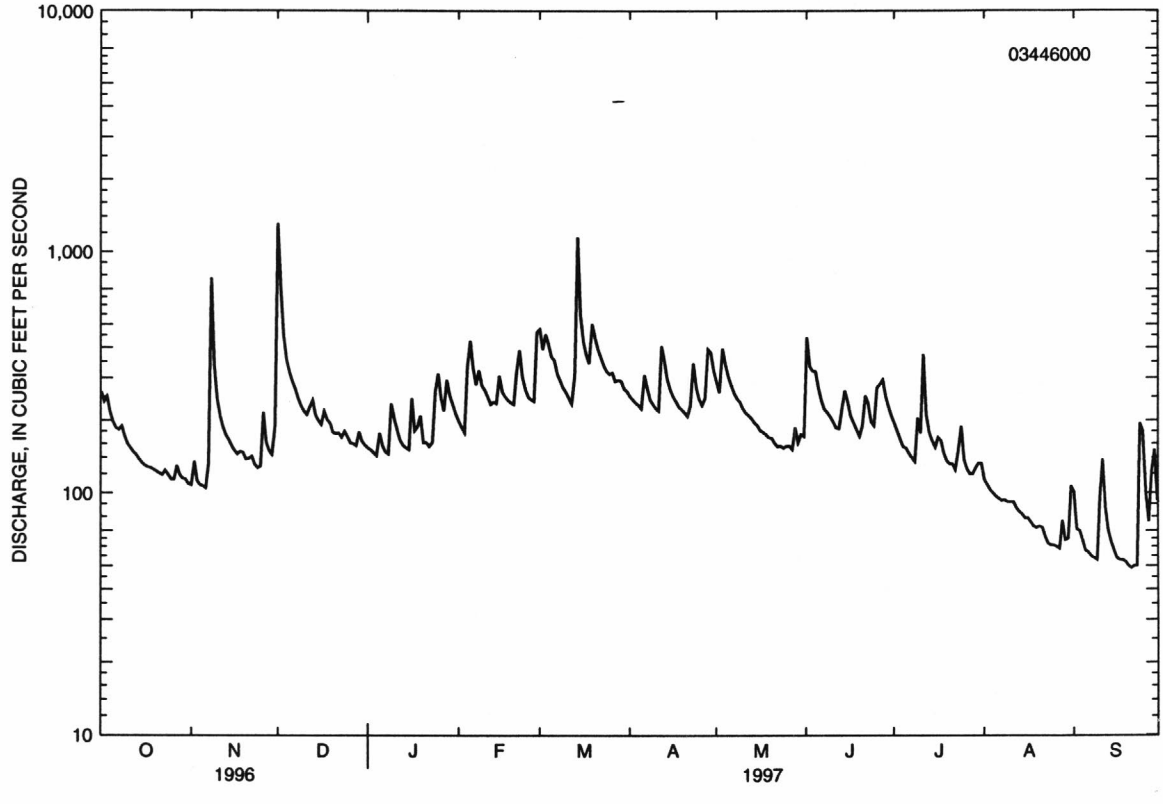
MEAN	129	146	166	199	220	247	237	189	154	121	131	117
MAX	465	510	338	534	448	520	468	412	359	356	506	354
(WY)	1965	1980	1962	1937	1939	1979	1957	1973	1992	1989	1940	1979
MIN	24.8	35.2	40.7	43.5	88.9	87.5	79.7	76.2	41.7	38.6	25.4	22.8
(WY)	1955	1955	1940	1956	1941	1988	1986	1988	1988	1988	1925	1925

TENNESSEE RIVER BASIN

03446000 MILLS RIVER NEAR MILLS RIVER, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1925 - 1997@	
ANNUAL TOTAL	71916		75505			
ANNUAL MEAN	196		207		171	
HIGHEST ANNUAL MEAN					272	1949
LOWEST ANNUAL MEAN					86.8	1988
HIGHEST DAILY MEAN	1570	Jan 27	1310	Dec 1	4470	Aug 13 1940
LOWEST DAILY MEAN	64	Jul 20	49	Sep 21	18	Sep 30 1954
ANNUAL SEVEN-DAY MINIMUM	70	Jul 1	51	Sep 17	19	Sep 24 1954
INSTANTANEOUS PEAK FLOW			2290	Dec 1	13400*	Aug 30 1940
INSTANTANEOUS PEAK STAGE			6.14	Dec 1	13.62	Aug 30 1940
INSTANTANEOUS LOW FLOW			48*	Sep 20	16*	Dec 24 1943
ANNUAL RUNOFF (CFSM)	2.95		3.10		2.57	
ANNUAL RUNOFF (INCHES)	40.11		42.11		34.88	
10 PERCENT EXCEEDS	322		332		302	
50 PERCENT EXCEEDS	154		186		138	
90 PERCENT EXCEEDS	85		81		56	

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



TENNESSEE RIVER BASIN

0344894205 NORTH FORK SWANNANOA RIVER NEAR WALKERTOWN, NC

LOCATION.--Lat 35°41'07", long 82°19'58", Buncombe County, Hydrologic Unit 06010105, on left bank 400 ft downstream of Sugar Springs Cove, 0.6 mi upstream from Burnette Reservoir, and 2.3 mi north of Walkertown.

DRAINAGE AREA.--14.5 mi^2.

PERIOD OF RECORD.--February 1989 to current year.

REVISED RECORDS.--WDR NC-91-1: 1989(M).

GAGE.--Water-stage recorder. Elevation of gage is 2,650 ft above sea level, from topographic map.

REMARKS.--Records good except those during period of ice effect, Jan. 17-20, and those above 1,000 ft^3/s, which are fair. Maximum discharge for period of record, from rating curve extended above 1,000 ft^3/s by logarithmic plotting. Minimum discharge for period of record also occurred Oct. 6 and 8-10, 1993.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	11	623	44	44	171	49	68	193	46	11	8.6
2	27	12	206	39	41	122	45	59	87	42	10	8.8
3	25	11	118	36	38	181	42	92	67	33	9.7	8.1
4	21	11	85	33	68	126	40	76	64	32	9.3	6.0
5	19	10	69	84	97	104	37	66	52	34	9.1	5.2
6	17	10	57	59	65	101	75	58	44	28	8.5	4.9
7	16	14	54	49	55	81	66	52	39	24	9.1	4.6
8	17	263	48	44	56	71	55	48	36	22	10	4.5
9	15	78	42	54	48	63	50	45	34	34	8.8	4.6
10	14	50	39	51	45	60	45	41	32	35	8.6	9.1
11	13	38	36	45	41	54	42	37	30	46	8.8	7.8
12	13	32	58	41	38	48	65	35	31	35	8.5	5.9
13	12	29	85	37	36	49	58	33	36	30	9.0	5.3
14	11	27	60	35	39	192	50	31	55	27	9.6	5.0
15	11	25	51	33	60	109	46	29	48	25	8.0	4.7
16	10	23	46	49	49	82	43	27	39	25	7.8	4.5
17	10	22	46	e42	45	70	40	26	35	23	7.0	4.5
18	10	32	43	e40	43	65	37	24	31	20	6.9	4.4
19	10	41	38	e36	42	138	35	23	28	18	6.8	4.2
20	10	32	34	e34	42	111	34	23	50	17	6.8	3.9
21	9.7	39	32	29	88	87	32	21	84	21	6.4	4.3
22	9.6	48	31	30	88	74	40	20	74	17	6.0	4.4
23	10	38	30	31	62	65	147	19	51	16	5.7	4.3
24	9.3	33	35	39	53	58	109	19	42	17	5.6	87
25	9.0	31	34	56	48	53	77	19	38	15	5.5	36
26	9.0	52	31	42	46	61	65	21	33	13	5.4	17
27	13	38	32	38	62	52	61	21	35	13	5.3	11
28	14	34	31	84	315	54	104	20	32	13	5.2	12
29	17	30	44	63	---	57	106	21	32	13	5.0	14
30	13	108	41	54	---	52	80	32	29	13	4.8	11
31	12	---	45	48	---	55	---	33	---	12	4.9	---
TOTAL	437.6	1222	2224	1399	1754	2666	1775	1139	1481	759	233.1	315.6
MEAN	14.1	40.7	71.7	45.1	62.6	86.0	59.2	36.7	49.4	24.5	7.52	10.5
MAX	31	263	623	84	315	192	147	92	193	46	11	87
MIN	9.0	10	30	29	36	48	32	19	28	12	4.8	3.9
CFSM	.97	2.81	4.95	3.11	4.32	5.94	4.08	2.54	3.41	1.69	.52	.73
IN.	1.12	3.14	5.71	3.59	4.50	6.84	4.56	2.92	3.80	1.95	.60	.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1997, BY WATER YEAR (WY)

MEAN	37.2	37.7	50.3	70.9	63.2	81.7	53.6	48.0	42.6	20.9	37.3	22.3
MAX	79.1	84.6	79.8	134	120	111	78.9	74.4	78.0	43.0	123	64.3
(WY)	1996	1993	1993	1995	1990	1993	1994	1992	1995	1989	1994	1989
MIN	3.60	10.7	20.1	45.1	35.0	46.5	18.6	19.6	13.6	6.20	5.33	4.50
(WY)	1994	1994	1996	1997	1993	1996	1995	1994	1993	1993	1993	1993

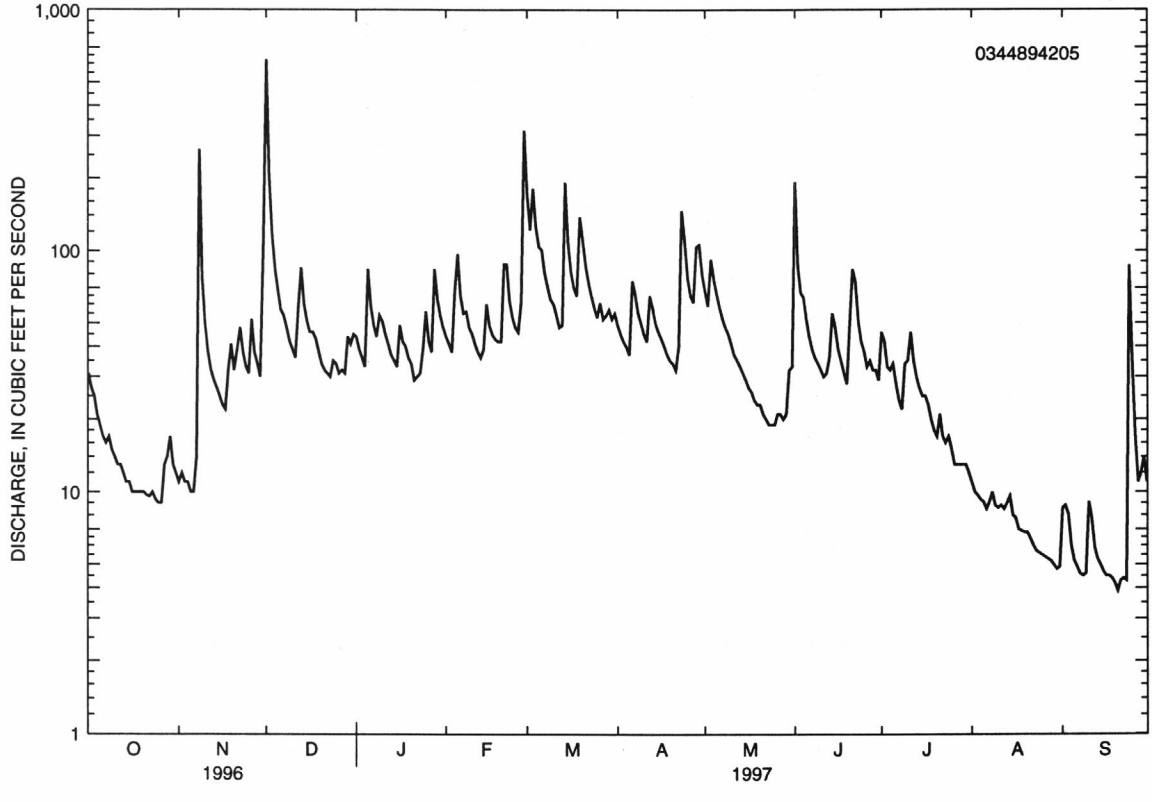
TENNESSEE RIVER BASIN

0344894205 NORTH FORK SWANNANOA RIVER NEAR WALKERTOWN, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1989 - 1997	
ANNUAL TOTAL	14515.2		15405.3			
ANNUAL MEAN	39.7		42.2		46.7	
HIGHEST ANNUAL MEAN					51.9	1995
LOWEST ANNUAL MEAN					40.9	1996
HIGHEST DAILY MEAN	623	Dec 1	623	Dec 1	1740	Jan 14 1995
LOWEST DAILY MEAN	5.8	Jul 24	3.9	Sep 20	2.2	Oct 9 1993
ANNUAL SEVEN-DAY MINIMUM	7.1	Jul 18	4.3	Sep 17	2.4	Oct 4 1993
INSTANTANEOUS PEAK FLOW			1490	Dec 1	4600*	Jan 14 1995
INSTANTANEOUS PEAK STAGE			6.20	Dec 1	8.19	Jan 14 1995
INSTANTANEOUS LOW FLOW			3.7	Sep 20	2.2*	Oct 5 1993
ANNUAL RUNOFF (CFSM)	2.74		2.91		3.22	
ANNUAL RUNOFF (INCHES)	37.26		39.55		43.76	
10 PERCENT EXCEEDS	69		79		87	
50 PERCENT EXCEEDS	30		35		32	
90 PERCENT EXCEEDS	9.9		8.1		8.7	

e Estimated.

* See REMARKS.



TENNESSEE RIVER BASIN

03450000 BEETREE CREEK NEAR SWANNANOA, NC

LOCATION.--Lat 35°39'11", long 82°24'20", Buncombe County, Hydrologic Unit 06010105, on left bank 0.5 mi downstream of Wolfe Branch, 0.8 mi upstream from Beetree Reservoir dam, 3.8 mi north of Swannanoa, and 4.8 mi above mouth.

DRAINAGE AREA.--5.46 mi^2.

PERIOD OF RECORD.--February 1926 to September 1975, October 1979 to September 1981, October 1985 to September 1986, and May 1987 to current year.

REVISED RECORDS.--WSP 823: Drainage area. WSP 893: 1928, 1936-37 (M). WSP 953: 1929 (M). WSP 1276: 1932.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 2,728.39 ft above sea level.

REMARKS.--Records good except those for periods of ice effect, Dec. 19-24, and Jan. 17-19, and those for estimated daily discharges, which are poor. Maximum discharge for period of record, from rating curve extended above 240 ft^3/s on basis of computation of peak flow over weir. Minimum discharge for period of record also occurred July 25, 1996. Minimum discharge for current water year also occurred Sept. 20, 22, 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	e1.9	91	11	14	59	16	26	29	14	1.7	2.3
2	9.7	e1.9	53	10	12	42	16	e23	27	11	1.3	3.2
3	8.9	e1.8	35	9.7	11	44	15	e28	24	8.7	1.1	2.6
4	7.8	e1.8	28	9.0	14	36	14	e25	20	9.9	1.0	1.4
5	7.0	e1.7	24	18	16	32	13	e22	16	10	1.2	.96
6	6.4	e1.7	21	17	15	29	23	e20	13	8.2	1.0	.92
7	6.1	e2.2	19	15	14	25	22	e19	11	7.1	1.2	.84
8	6.6	31	17	14	15	23	20	e17	10	6.3	1.7	.81
9	6.1	21	14	19	14	21	18	e16	9.3	6.6	1.1	.81
10	5.4	16	13	17	12	20	17	e15	8.2	6.5	1.1	3.0
11	5.0	13	12	17	11	18	15	e14	7.1	12	1.9	2.8
12	4.7	8.3	19	16	10	16	19	e13	7.4	7.8	1.7	1.2
13	4.3	5.4	28	13	10	17	17	e13	8.7	6.6	1.1	.86
14	2.9	5.5	24	12	12	45	15	e12	18	5.8	1.1	.74
15	1.9	5.0	21	11	17	33	14	e11	17	5.1	4.4	.69
16	e1.6	4.4	19	17	16	28	13	e9.0	13	5.3	3.1	.62
17	e1.6	4.2	19	15	15	25	12	e8.0	11	4.8	1.4	.60
18	e1.6	6.1	16	15	14	23	11	e7.0	9.7	3.9	1.2	.54
19	e1.6	7.1	e14	14	12	41	10	e6.0	8.6	3.5	1.2	.50
20	e1.6	6.0	e13	14	12	37	9.8	e5.0	16	3.6	1.2	.44
21	e1.6	10	e12	13	18	31	9.6	e4.0	23	5.7	1.2	.55
22	e1.6	14	e11	12	22	27	15	e3.5	18	3.5	1.1	.49
23	e1.6	12	e10	11	19	24	41	e3.2	14	3.9	1.1	.46
24	e1.5	11	e10	12	18	21	37	e2.9	12	3.9	1.1	23
25	e1.5	10	9.1	14	16	20	29	e2.9	10	3.2	1.1	9.0
26	e1.5	13	8.7	11	15	20	26	e3.0	9.0	2.7	1.3	4.0
27	e2.0	11	8.7	11	17	17	24	e3.1	9.4	3.0	1.3	2.7
28	e2.2	10	8.2	17	80	17	30	3.1	8.1	2.6	1.2	2.7
29	e2.6	9.0	12	18	---	18	33	3.3	7.4	2.5	1.2	3.2
30	e2.1	18	11	17	---	17	29	4.3	6.6	2.7	1.1	2.1
31	e1.9	---	11	15	---	18	---	4.3	---	2.3	1.7	---
TOTAL	121.9	264.0	611.7	434.7	471	844	583.4	346.6	401.5	182.7	44.1	74.03
MEAN	3.93	8.80	19.7	14.0	16.8	27.2	19.4	11.2	13.4	5.89	1.42	2.47
MAX	11	31	91	19	80	59	41	28	29	14	4.4	23
MIN	1.5	1.7	8.2	9.0	10	16	9.6	2.9	6.6	2.3	1.0	.44
CFSM	.72	1.61	3.61	2.57	3.08	4.99	3.56	2.05	2.45	1.08	.26	.45
IN.	.83	1.80	4.17	2.96	3.21	5.75	3.97	2.36	2.74	1.24	.30	.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1997@, BY WATER YEAR (WY)

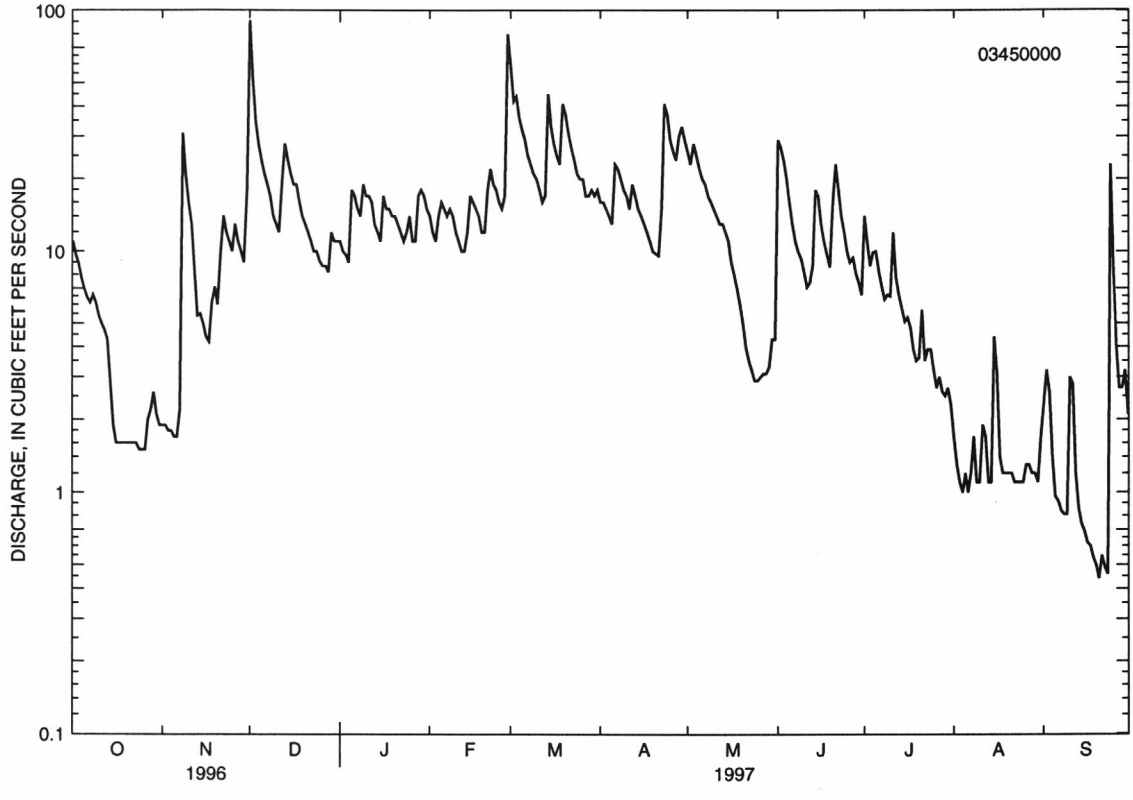
MEAN	6.45	8.49	10.7	13.5	15.5	19.2	16.7	11.9	8.66	6.12	6.74	5.08
MAX	33.9	45.3	25.4	38.5	43.0	43.1	34.2	28.5	27.0	37.9	61.8	21.3
(WY)	1930	1980	1933	1937	1990	1975	1936	1973	1949	1949	1940	1928
MIN	.65	1.23	1.58	1.99	4.46	5.25	5.21	4.68	1.82	1.34	1.15	.51
(WY)	1955	1955	1940	1940	1941	1988	1986	1948	1988	1930	1956	1954

TENNESSEE RIVER BASIN

03450000 BEETREE CREEK NEAR SWANNANOA, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1926 - 1997@	
ANNUAL TOTAL	4232.41		4379.63			
ANNUAL MEAN	11.6		12.0		10.8	
HIGHEST ANNUAL MEAN					17.8	1949
LOWEST ANNUAL MEAN					6.18	1981
HIGHEST DAILY MEAN	112	Jan 27	91	Dec 1	528	Aug 13 1940
LOWEST DAILY MEAN	.32	Jul 24	.44	Sep 20	.30	Sep 30 1954
ANNUAL SEVEN-DAY MINIMUM	.41	Jul 18	.51	Sep 17	.40	Sep 24 1954
INSTANTANEOUS PEAK FLOW			210	Dec 1	1370*	Aug 13 1940
INSTANTANEOUS PEAK STAGE			3.92	Dec 1	6.20	Aug 13 1940
INSTANTANEOUS LOW FLOW			.42*	Sep 19	.28*	Jul 24 1996
ANNUAL RUNOFF (CFSM)	2.12		2.20		1.97	
ANNUAL RUNOFF (INCHES)	28.84		29.84		26.81	
10 PERCENT EXCEEDS	21		24		22	
50 PERCENT EXCEEDS	9.2		11		7.4	
90 PERCENT EXCEEDS	1.6		1.2		1.7	

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



TENNESSEE RIVER BASIN

03451000 SWANNANOA RIVER AT BILTMORE, NC

LOCATION.--Lat 35°34'06", long 82°32'42", Buncombe County, Hydrologic Unit 06010105, on left bank at Biltmore, 100 ft downstream of Biltmore Avenue Bridge, 200 ft upstream from Southern Railway bridge, and 1.6 mi upstream from mouth.

DRAINAGE AREA.--130 mi^2.

PERIOD OF RECORD.--October 1920 to September 1926, May 1934 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 803: 1921(M), 1923(M), 1925(M). WSP 823: Drainage area. WSP 1306: 1921(M), 1924(M), 1926(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,976.58 ft above sea level (levels by Tennessee Valley Authority). Dec. 1, 1920, to Sept. 30, 1926, nonrecording gage at site 100 ft upstream at same datum. National Weather Service telephone telemetry at station.

REMARKS.--Records good except those for period of ice effect, Jan. 17-20, which are fair. Considerable regulation from 1925-50 (reservoir silted) by Lake Craig, 3.6 mi upstream from station. City of Asheville diverted an average of 34.0 ft^3/s from Burnett Lake (station 03448959) on North Fork Swannanoa River, 20 mi upstream from station and Bee Tree Lake on Beetree Creek (station 03450000), 13 mi upstream from station for water supply. An average of 35.6 ft^3/s was discharged downstream of station into the French Broad River as treated sewage effluent. Maximum discharge for period of record, from rating curve extended above 9,100 ft^3/s on basis of computation of peak flow over dam 3.6 mi upstream from station. Minimum discharge for period of record occurred several days in Oct. 1941. Minimum discharge for current water year also occurred Sept. 9.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage observed: 26 ft; discharge: 40,000 ft^3/s in April 1791, from studies by Tennessee Valley Authority. Flood of July 1916 reached a stage of 20.7 ft; discharge, 23,000 ft^3/s, from flood profile by Tennessee Valley Authority. Flood of Aug. 16, 1928 reached a stage of 18.74 ft, from floodmarks; discharge, 17,800 ft^3/s. High stages are subject to backwater from French Broad River.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	56	1180	145	192	941	240	324	457	139	63	52
2	89	70	1070	141	176	630	225	484	563	151	60	49
3	85	55	531	132	164	674	214	487	385	130	59	45
4	74	53	347	126	237	547	204	384	284	116	57	41
5	70	53	270	280	234	460	195	337	232	144	56	37
6	67	54	232	225	228	431	466	298	204	116	55	35
7	66	59	212	193	206	349	379	267	184	105	57	35
8	79	427	185	176	250	311	301	251	174	95	66	34
9	70	150	163	268	210	281	267	236	165	105	58	35
10	62	104	145	213	199	271	241	215	158	146	56	118
11	63	91	135	194	182	246	223	203	143	497	57	88
12	59	81	249	171	166	222	314	191	138	148	56	55
13	59	76	344	155	167	282	272	178	182	125	56	44
14	58	74	258	142	197	960	241	169	323	113	53	41
15	57	71	218	138	315	602	213	159	413	99	55	40
16	56	67	191	308	239	450	200	150	221	105	64	39
17	55	67	204	e162	217	375	189	143	186	125	50	38
18	56	80	177	e147	197	329	177	138	163	92	48	37
19	53	84	164	e142	185	930	175	142	143	84	45	41
20	52	71	141	e136	174	646	170	133	129	82	45	37
21	54	86	132	131	277	511	201	121	214	123	47	36
22	54	117	126	128	333	423	493	113	257	83	40	35
23	55	102	125	134	265	358	525	109	205	90	39	36
24	53	101	128	204	233	315	428	108	170	102	40	706
25	51	106	129	226	212	285	348	112	151	78	39	215
26	52	155	121	191	199	309	308	112	136	72	38	90
27	55	121	124	176	200	265	350	113	137	73	38	69
28	56	112	117	282	1040	272	579	116	128	71	37	77
29	57	107	198	252	---	336	455	110	127	67	37	86
30	57	166	156	227	---	270	379	133	121	88	36	60
31	54	---	148	208	---	265	---	142	---	77	36	---
TOTAL	1927	3016	7920	5753	6894	13546	8972	6178	6493	3641	1543	2351
MEAN	62.2	101	255	186	246	437	299	199	216	117	49.8	78.4
MAX	99	427	1180	308	1040	960	579	487	563	497	66	706
MIN	51	53	117	126	164	222	170	108	121	67	36	34
CFSM	.48	.77	1.97	1.43	1.89	3.36	2.30	1.53	1.66	.90	.38	.60
IN.	.55	.86	2.27	1.65	1.97	3.88	2.57	1.77	1.86	1.04	.44	.67

TENNESSEE RIVER BASIN

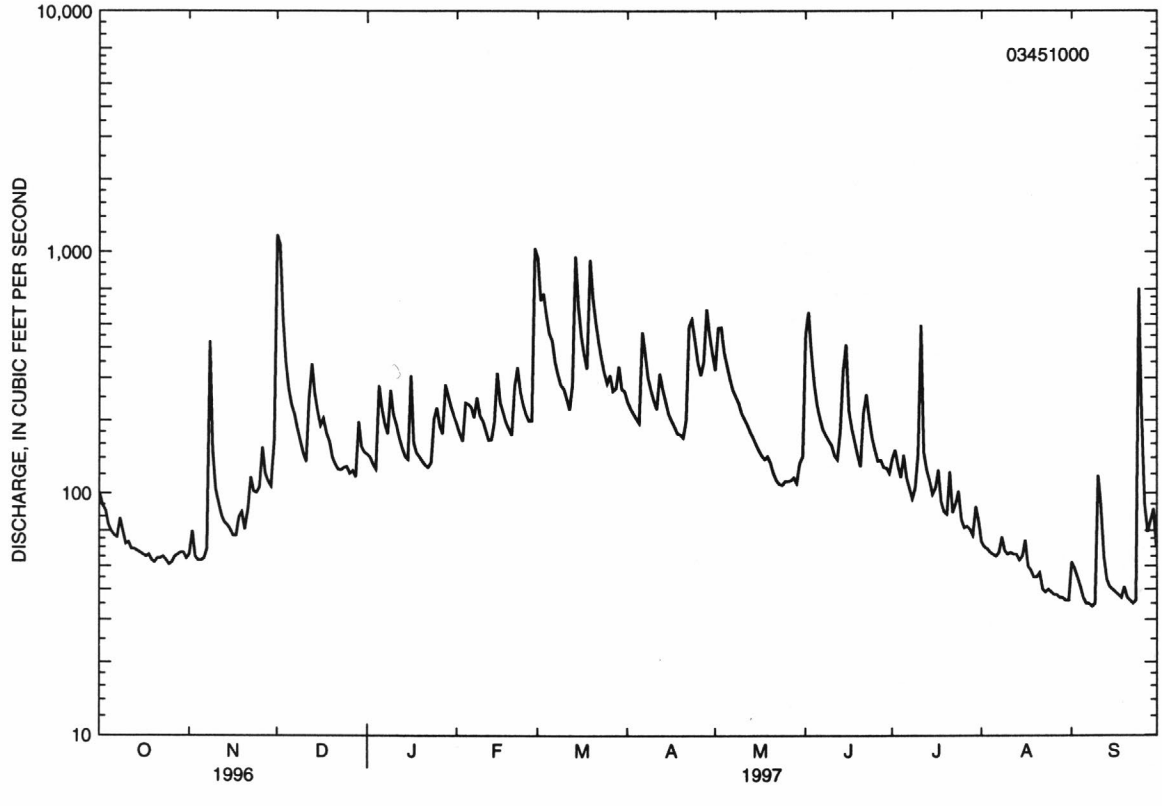
03451000 SWANNANOA RIVER AT BILTMORE, NC--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1997[@], BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	101	120	143	196	228	282	250	188	139	101	104	88.2
MAX	569	604	385	610	598	740	560	480	387	503	828	421
(WY)	1965	1980	1962	1995	1990	1975	1936	1973	1949	1949	1940	1979
MIN	13.7	27.0	35.3	32.3	65.7	45.7	55.6	45.5	17.7	18.2	18.8	13.8
(WY)	1955	1982	1989	1956	1988	1988	1986	1988	1988	1986	1956	1954

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1921 - 1997[@]	
ANNUAL TOTAL	66028		68234			
ANNUAL MEAN	180		187		161	
HIGHEST ANNUAL MEAN					277	1949
LOWEST ANNUAL MEAN					55.9	1988
HIGHEST DAILY MEAN	2310	Jan 27	1180	Dec 1	7560	Aug 13 1940
LOWEST DAILY MEAN	39	Jul 24	34	Sep 8	1.2	Oct 14 1941
ANNUAL SEVEN-DAY MINIMUM	42	Jul 18	37	Sep 17	7.3	Sep 13 1953
INSTANTANEOUS PEAK FLOW			1860	Dec 1	18400*	Aug 13 1940
INSTANTANEOUS PEAK STAGE			5.59	Dec 1	19.00	Aug 13 1940
INSTANTANEOUS LOW FLOW			33*	Sep 8	1.1*	Oct 9 1941
ANNUAL RUNOFF (CFSM)	1.39		1.44		1.24	
ANNUAL RUNOFF (INCHES)	18.89		19.53		16.86	
10 PERCENT EXCEEDS	321		365		311	
50 PERCENT EXCEEDS	129		142		107	
90 PERCENT EXCEEDS	55		52		38	

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



TENNESSEE RIVER BASIN

03451500 FRENCH BROAD RIVER AT ASHEVILLE, NC

LOCATION.--Lat 35°36'33", long 82°34'43", Buncombe County, Hydrologic Unit 06010105, on right bank 27 ft upstream from Pearson Bridge (Secondary Road 1348) at Asheville, 1.4 mi downstream of bridge on U.S. Highways 19 and 23, 3.2 mi downstream of Swannanoa River, and at mile 145.8.

DRAINAGE AREA.--945 mi^2.

PERIOD OF RECORD.--October 1895 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 823: Drainage area. WSP 1306: 1895-1909, 1901(M), 1914-15(M), 1917(M), 1920-22(M),

GAGE.--Water-stage recorder. Datum of gage is 1,950.28 ft above sea level. Sept. 17, 1895, to Dec. 31, 1901, nonrecording gage at present site at different datum. Mar. 19, 1903, to July 15, 1916, and Jan. 1, 1917, to Sept. 30, 1922, nonrecording gage at Smith Bridge 1.5 mi upstream at datum 1961.80 ft. Oct. 1, 1922, to Aug. 9, 1930, nonrecording gage at present site and datum. Satellite telemetry at station. National Weather Service also has telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Many small diversions from tributaries upstream from station for water supply. Diversions by City of Asheville and others from upstream tributaries in the Swannanoa River basin (station 03451000) totaled about 34.0 ft^3/s and 35.6 ft^3/s was discharged 4 mi downstream from station as treated effluent. Slight diurnal fluctuation and occasional slight regulation at low flow caused by power plant 46 mi upstream and small reservoirs upstream from station. Maximum discharge for period of record, from rating curve extended above 43,000 ft^3/s, by logarithmic plotting; maximum gage height, 23.10, from floodmarks. Minimum discharge for period of record occurred several days in Aug. and Sept. 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage observed since at least 1791, that of July 16, 1916, and flood of June 17, 1876, reached a stage of 18 ft, from studies by Tennessee Valley Authority.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2910	1190	6950	2020	2720	7400	3080	3790	3790	1960	1700	1220
2	2490	1330	9010	1960	2560	6510	2930	3340	4970	1920	1500	1140
3	2370	1390	8250	1910	2420	6340	2830	4690	4200	1810	1380	1060
4	2110	1270	7730	1880	2850	5410	2750	4910	3330	1710	1330	935
5	1910	1200	4860	2210	3730	4560	2680	3980	2930	1700	1290	888
6	1790	1200	3200	2300	3430	4390	3350	3500	2640	1640	1260	829
7	1730	1230	2940	2100	2980	3860	4560	3230	2470	1580	1220	815
8	1740	4300	2730	1980	3130	3500	3620	3050	2350	1530	1240	783
9	1730	5040	2510	2770	3120	3270	3120	2940	2280	1500	1250	774
10	1580	3520	2340	3390	2850	3150	2940	2820	2210	2170	1210	1090
11	1530	2370	2250	2890	2720	3020	2800	2670	2100	3640	1240	1450
12	1490	2040	2410	2500	2560	2880	3300	2580	2070	2170	1220	1270
13	1450	1860	3190	2270	2510	2980	4490	2500	2680	1790	1170	1090
14	1420	1750	2800	2140	2640	8750	4140	2410	3390	1640	1130	982
15	1390	1690	2460	2080	3990	8530	3390	2340	4490	1580	1110	884
16	1370	1610	2300	3220	3930	7610	3120	2250	3160	1560	1130	886
17	1350	1550	2390	3030	3220	6370	2960	2170	2650	1650	1090	830
18	1320	1580	2460	2450	2960	4450	2840	2140	2430	1540	1040	808
19	1300	1640	2310	2300	2800	6660	2730	2100	2230	1460	1010	809
20	1270	1570	2150	2200	2700	6570	2680	2110	2130	1400	995	789
21	1260	1550	2030	2120	2850	5020	2620	2050	2230	1480	993	760
22	1260	1650	1990	2080	4230	4300	2700	1950	2350	1380	947	748
23	1260	1610	1980	2140	3810	3850	4530	1900	2210	1390	907	749
24	1280	1510	1990	2640	3170	3540	3980	1870	2090	2570	898	2740
25	1260	1490	2070	4850	2940	3360	3320	1860	2000	2430	882	3320
26	1240	2010	1990	4450	2790	3610	3030	1970	2240	1740	886	2240
27	1220	2170	1950	3320	2790	3510	2970	1930	3260	1570	881	1530
28	1320	1810	1930	3650	5810	3270	4200	1990	2290	1510	869	1360
29	1280	1690	2150	3690	---	3780	5380	2020	2150	1550	926	2010
30	1250	1750	2240	3160	---	3510	4570	2080	2030	1710	866	1650
31	1190	---	2110	2920	---	3260	---	2270	---	1830	878	---
TOTAL	48070	56570	97670	82620	88210	147220	101610	81410	81350	55110	34448	36439
MEAN	1551	1886	3151	2665	3150	4749	3387	2626	2712	1778	1111	1215
MAX	2910	5040	9010	4850	5810	8750	5380	4910	4970	3640	1700	3320
MIN	1190	1190	1930	1880	2420	2880	2620	1860	2000	1380	866	748
CFSM	1.64	2.00	3.33	2.82	3.33	5.03	3.58	2.78	2.87	1.88	1.18	1.29
IN.	1.89	2.23	3.84	3.25	3.47	5.80	4.00	3.20	3.20	2.17	1.36	1.43

TENNESSEE RIVER BASIN

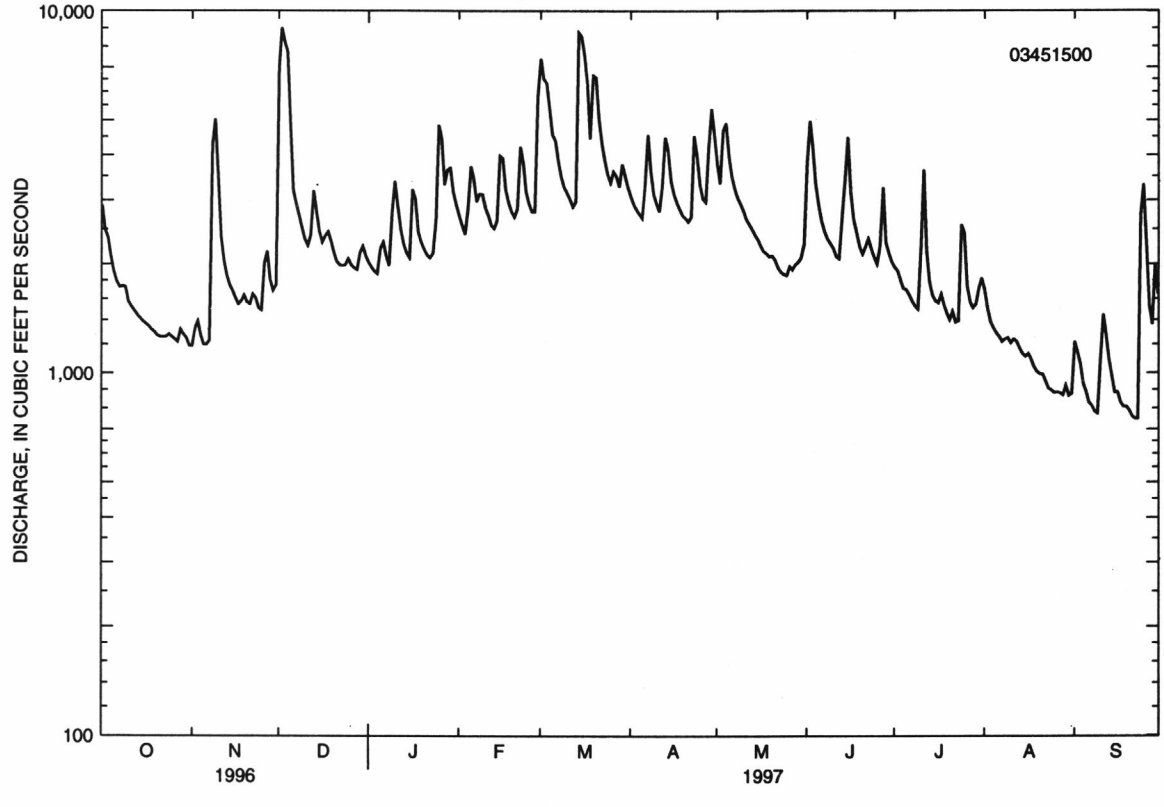
03451500 FRENCH BROAD RIVER AT ASHEVILLE, NC--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1896 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1609	1640	2121	2428	2663	3035	2762	2200	1903	1716	1717	1482
MAX	7025	5121	5700	6068	5673	7928	5705	4961	5774	11500	8362	4967
(WY)	1965	1980	1915	1937	1990	1899	1899	1973	1909	1916	1901	1906
MIN	353	507	636	548	1083	1037	973	859	547	559	328	346
(WY)	1955	1932	1956	1956	1931	1988	1986	1988	1988	1986	1925	1954

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1896 - 1997	
ANNUAL TOTAL	905621		910727			
ANNUAL MEAN	2474		2495		2104	
HIGHEST ANNUAL MEAN					3671	1901
LOWEST ANNUAL MEAN					1004	1988
HIGHEST DAILY MEAN	16500	Jan 27	9010	Dec 2	66000	Jul 16 1916
LOWEST DAILY MEAN	991	Jul 12	748	Sep 22	239	Sep 21 1925
ANNUAL SEVEN-DAY MINIMUM	1100	Jul 1	785	Sep 17	258	Aug 24 1925
INSTANTANEOUS PEAK FLOW			10600	Dec 1	110000*	Jul 16 1916
INSTANTANEOUS PEAK STAGE			6.26	Dec 1	23.10*	Jul 16 1916
INSTANTANEOUS LOW FLOW			734	Sep 23	239*	Aug 28 1925
ANNUAL RUNOFF (CFSM)	2.62		2.64		2.23	
ANNUAL RUNOFF (INCHES)	35.65		35.85		30.25	
10 PERCENT EXCEEDS	3990		4200		3670	
50 PERCENT EXCEEDS	1990		2170		1640	
90 PERCENT EXCEEDS	1260		1130		786	

* See REMARKS.



TENNESSEE RIVER BASIN

03453000 IVY RIVER NEAR MARSHALL, NC

LOCATION.--Lat 35°46'10", long 82°37'16", Madison County, Hydrologic Unit 06010105, on right bank 0.2 mi downstream from bridge on U.S. Highway 25-70, 1.9 mi upstream from mouth, and 4.0 mi southeast of Marshall.

DRAINAGE AREA.--158 mi^2.

PERIOD OF RECORD.--October 1933 to September 1973. July 1, 1994 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,700.41 ft above sea level (levels by Tennessee Valley Authority).

REVISED RECORDS.--WSP 803: 1934(M), 1935. WSP 1910: 1936(P), 1937(M), 1940(M), 1946(M), 1957(P).

REMARKS.--No estimated daily discharges. Records good. Considerable low flow regulation, at times, caused by small power plant at Ivy Dam, 0.4 mi upstream. Minimum discharge for period of record, result of freeze-up. Minimum discharge for current water year also occurred Sept. 20, 21, affected by regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June, 1876, reached a stage of 16.0 ft, from studies by Tennessee Valley Authority (discharge 14,000 ft^3/s). An outstanding but lesser flood occurred in July, 1916 (stage and discharge unknown).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	50	680	169	160	958	268	332	282	304	51	26
2	91	57	476	155	143	560	231	269	210	201	47	38
3	101	53	280	141	131	1180	207	437	196	136	45	38
4	72	49	202	127	150	742	189	370	238	111	44	32
5	65	48	165	215	153	497	174	315	185	108	48	27
6	60	49	148	199	137	460	246	274	153	93	44	25
7	58	49	160	173	127	350	232	233	136	85	41	24
8	61	694	156	152	138	297	199	206	125	82	48	23
9	60	261	136	202	128	254	187	196	119	106	42	24
10	55	149	121	194	123	245	173	176	119	148	40	33
11	53	116	116	171	119	214	163	158	104	114	41	67
12	51	94	225	159	110	188	179	148	118	95	41	35
13	50	83	455	155	116	173	171	141	167	87	43	30
14	49	82	280	138	130	367	151	135	338	80	62	28
15	46	78	209	129	200	309	140	126	266	75	41	28
16	48	71	173	314	186	256	133	116	187	93	44	26
17	46	68	159	179	170	228	128	111	166	99	37	25
18	47	86	140	185	153	216	123	105	141	72	48	25
19	51	141	125	175	143	703	121	114	122	67	42	24
20	45	107	105	152	134	708	121	135	105	63	40	24
21	45	123	115	132	164	494	117	112	134	63	43	26
22	45	186	107	138	274	377	153	98	120	60	36	27
23	47	134	103	130	193	300	559	93	104	59	33	26
24	47	113	105	123	174	250	483	89	129	64	31	304
25	44	99	111	176	160	217	359	87	102	58	30	173
26	45	132	94	147	151	288	285	119	90	54	30	71
27	52	110	97	137	159	234	248	107	145	55	29	51
28	56	97	92	234	1430	352	420	112	124	71	28	119
29	77	90	143	222	---	429	506	96	101	72	33	154
30	57	128	138	199	---	359	409	120	92	70	29	67
31	51	---	159	180	---	328	---	110	---	60	27	---
TOTAL	1767	3597	5775	5302	5556	12533	7075	5240	4618	2905	1238	1620
MEAN	57.0	120	186	171	198	404	236	169	154	93.7	39.9	54.0
MAX	101	694	680	314	1430	1180	559	437	338	304	62	304
MIN	44	48	92	123	110	173	117	87	90	54	27	23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1997@, BY WATER YEAR (WY)

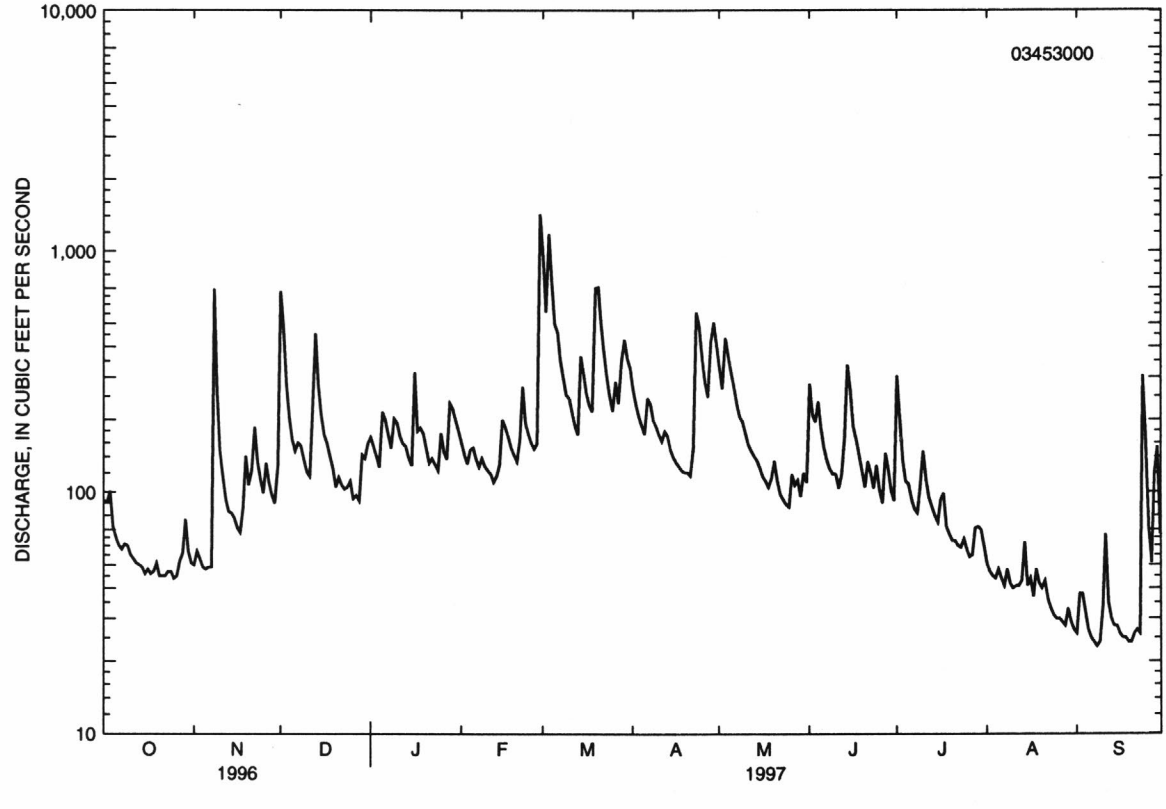
MEAN	80.2	94.9	138	215	268	318	237	154	113	95.6	90.0	62.3
MAX	367	229	407	636	563	848	574	328	272	280	444	141
(WY)	1965	1950	1962	1937	1957	1963	1936	1946	1950	1949	1940	1949
MIN	19.3	28.9	39.8	46.4	60.9	129	76.1	58.6	43.3	29.8	22.8	21.7
(WY)	1953	1940	1940	1940	1941	1970	1942	1941	1953	1952	1956	1954

TENNESSEE RIVER BASIN

03453000 IVY RIVER NEAR MARSHALL, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1934 - 1997@	
ANNUAL TOTAL	65958		57226			
ANNUAL MEAN	180		157		155	
HIGHEST ANNUAL MEAN					232	1936
LOWEST ANNUAL MEAN					92.1	1941
HIGHEST DAILY MEAN	3070	Jan 27	1430	Feb 28	8010	Mar 12 1963
LOWEST DAILY MEAN	39	Sep 27	23	Sep 8	8.5	Sep 2 1953
ANNUAL SEVEN-DAY MINIMUM	44	Sep 21	25	Sep 16	9.8	Aug 28 1953
INSTANTANEOUS PEAK FLOW			2850	Feb 28	14400	Mar 26 1965
INSTANTANEOUS PEAK STAGE			9.13	Feb 28	17.21	Jan 14 1995
INSTANTANEOUS LOW FLOW			5.2*	Sep 19	3.0*	Jan 20 1940
10 PERCENT EXCEEDS	328		302		300	
50 PERCENT EXCEEDS	125		123		98	
90 PERCENT EXCEEDS	50		41		36	

* See REMARKS.
@ See PERIOD OF RECORD.



TENNESSEE RIVER BASIN

03453500 FRENCH BROAD RIVER AT MARSHALL, NC

LOCATION.--Lat 35°47'10", long 82°39'39", Madison County, Hydrologic Unit 06010105, on right bank 0.7 mi upstream from Hayes Creek, 1.0 mi downstream of Ivy River, 1.5 mi southeast of Marshall, and at mile 126.7.

DRAINAGE AREA.--1,332 mi^2.

PERIOD OF RECORD.--October 1942 to current year.

REVISED RECORDS.--WSP 1436: 1954(M).

GAGE.--Electronic data logger. Datum of gage is 1,646.79 ft above sea level (levels by Tennessee Valley Authority). National Weather Service telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Small diversions from tributaries for water supply. Slight diurnal fluctuation and occasional slight regulation at low flow caused by small reservoirs upstream from station. Prior to July 1963, some regulation by Weaver plant of Carolina Power and Light Company 15 mi upstream, after November 1986 the same power plant was operated by the Metropolitan Sewage Treatment Plant. Minimum discharge for period of record also occurred Sept. 14, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage observed since at least 1791: 22.0 ft, July 16, 1916; discharge: 115,000 ft^3/s. Flood of Aug. 30, 1940, reached a stage of 16.6 ft; discharge, 70,000 ft^3/s, from high water marks, flood profiles, and studies by Tennessee Valley Authority.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3370	1160	6880	2310	3340	9630	3740	4830	4130	2350	1700	1030
2	2760	1270	9800	2190	3100	7840	3470	4150	5480	2170	1480	1130
3	2700	1370	8460	2140	2890	9270	3300	5870	5230	1950	1340	1090
4	2290	1270	7760	2090	3050	7300	3170	6210	4060	1790	1280	933
5	1990	1180	5450	2500	3990	5990	3060	5140	3420	1780	1270	863
6	1830	1160	3690	2730	4340	5730	3720	4420	2980	1690	1220	816
7	1750	1190	3330	2500	3710	5120	5410	3970	2720	1590	1170	782
8	1740	5450	3080	2280	3520	4690	4320	3630	2580	1540	1180	765
9	1740	5930	2780	2900	3770	4280	3640	3470	2490	1580	1190	765
10	1590	4300	2550	4200	3420	3990	3350	3280	2420	2300	1160	934
11	1520	2650	2430	3580	3180	3750	3160	3060	2280	3830	1150	1510
12	1470	2180	2580	2970	2980	3470	3520	2930	2220	2490	1200	1310
13	1430	1920	4280	2640	2820	3230	5090	2830	2770	1910	1140	1090
14	1410	1810	3520	2460	2950	9100	4750	2720	4200	1700	1120	967
15	1360	1710	2900	2400	4150	9130	3830	2630	5370	1590	1050	878
16	1350	1620	2620	3000	4940	8290	3480	2520	3880	1670	1110	828
17	1310	1560	2620	3520	3970	7220	3280	2420	3050	1730	1050	831
18	1300	1590	2730	3060	3480	5450	3110	2360	2720	1570	1020	787
19	1260	1770	2570	2760	3240	8220	2990	2320	2470	1470	976	777
20	1250	1640	2350	2620	3060	8420	2930	2420	2310	1470	954	773
21	1210	1640	2160	2480	3090	6470	2840	2270	2370	1520	971	775
22	1220	1870	2140	2430	4830	5480	3090	2130	2550	1410	922	743
23	1230	1740	2110	2450	4840	4850	5830	2050	2350	1370	877	745
24	1240	1590	2130	2610	3890	4340	5400	2030	2310	2290	851	3570
25	1230	1530	2210	5350	3430	4020	4340	1990	2160	2740	845	4260
26	1210	1980	2160	5460	3180	4340	3760	2140	2380	1770	846	2630
27	1190	2340	2080	4170	3100	4250	3510	2130	3550	1530	845	1680
28	1260	1940	2050	4320	8650	4120	4800	2110	2520	1510	835	1500
29	1300	1740	2320	4930	---	4770	6630	2190	2320	1540	873	2200
30	1240	1770	2510	4140	---	4450	5780	2220	2140	1740	842	1830
31	1170	---	2420	3650	---	4100	---	2440	---	1820	808	---
TOTAL	48920	60870	106670	96840	104910	181310	119300	94880	91430	57410	33275	38792
MEAN	1578	2029	3441	3124	3747	5849	3977	3061	3048	1852	1073	1293
MAX	3370	5930	9800	5460	8650	9630	6630	6210	5480	3830	1700	4260
MIN	1170	1160	2050	2090	2820	3230	2840	1990	2140	1370	808	743
CFSM	1.18	1.52	2.58	2.35	2.81	4.39	2.99	2.30	2.29	1.39	.81	.97
IN.	1.37	1.70	2.98	2.70	2.93	5.06	3.33	2.65	2.55	1.60	.93	1.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1997, BY WATER YEAR (WY)

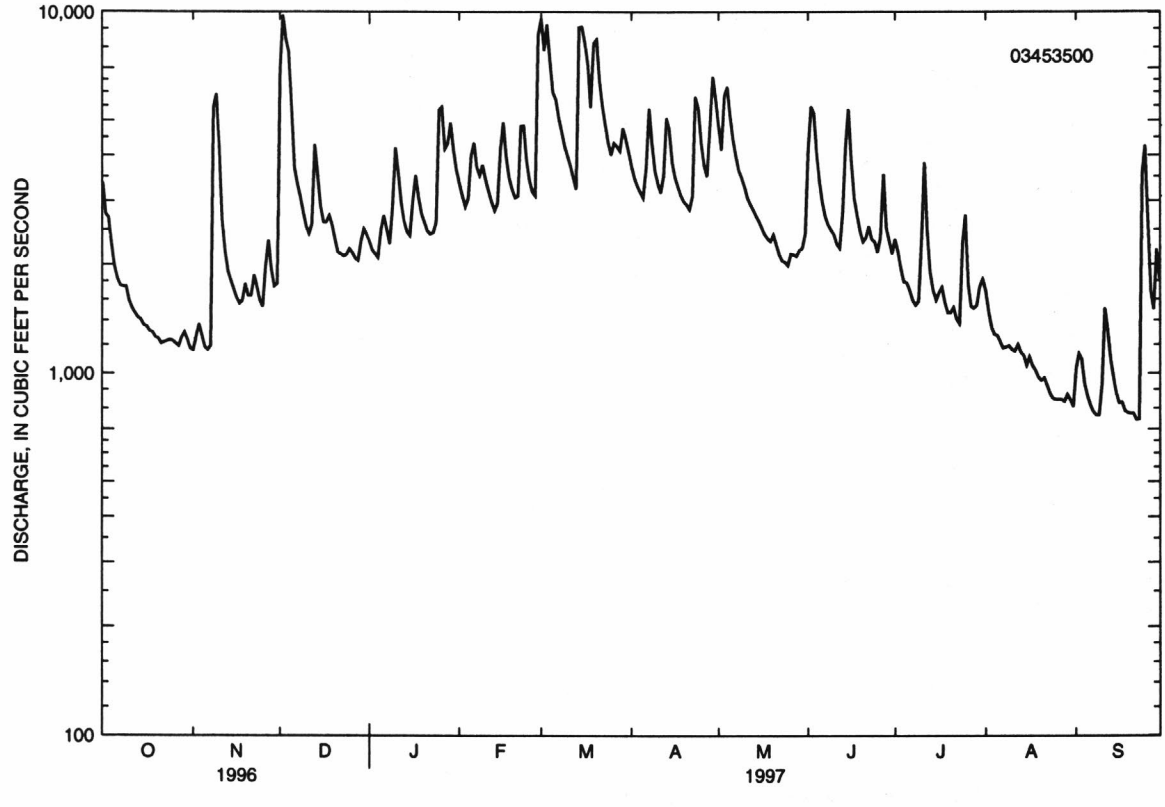
MEAN	1818	2059	2479	2916	3335	3804	3417	2690	2226	1780	1811	1575
MAX	8172	5640	5465	5774	6978	7170	6149	5478	4191	5071	4905	3857
(WY)	1965	1980	1962	1995	1990	1975	1983	1973	1989	1949	1994	1950
MIN	450	651	778	715	1571	1235	1191	1066	700	708	635	384
(WY)	1955	1955	1956	1956	1988	1988	1986	1988	1988	1986	1956	1954

TENNESSEE RIVER BASIN

03453500 FRENCH BROAD RIVER AT MARSHALL, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1943 - 1997	
ANNUAL TOTAL	1015370		1034607			
ANNUAL MEAN	2774			2835	2488	
HIGHEST ANNUAL MEAN					3573	1949
LOWEST ANNUAL MEAN					1229	1988
HIGHEST DAILY MEAN	23300	Jan 27	9800	Dec 2	30800	Oct 5 1964
LOWEST DAILY MEAN	1020	Jul 12	743	Sep 22	292	Sep 27 1954
ANNUAL SEVEN-DAY MINIMUM	1150	Jul 1	776	Sep 17	313	Sep 24 1954
INSTANTANEOUS PEAK FLOW			14100	Feb 28	54000	Nov 6 1977
INSTANTANEOUS PEAK STAGE			6.25	Feb 28	13.64	Nov 6 1977
INSTANTANEOUS LOW FLOW			700	Sep 21	193*	Sep 13 1954
ANNUAL RUNOFF (CFSM)	2.08		2.13		1.87	
ANNUAL RUNOFF (INCHES)	28.36		28.89		25.38	
10 PERCENT EXCEEDS	4840		5130		4410	
50 PERCENT EXCEEDS	2180		2430		1990	
90 PERCENT EXCEEDS	1260		1100		922	

* See REMARKS.



TENNESSEE RIVER BASIN

03455500 WEST FORK PIGEON RIVER ABOVE LAKE LOGAN NEAR HAZELWOOD, NC

LOCATION.--Lat 35°23'46", long 82°56'17", Haywood County, Hydrologic Unit 06010106, on right bank at upstream side of bridge on Secondary Road 1216, 600 ft upstream from Big Creek, 1.1 mi upstream from Lake Logan, 6.7 mi southeast of Hazelwood, and at mile 9.3.

DRAINAGE AREA.--27.6 mi^2.

PERIOD OF RECORD.--February 1954 to current year.

REVISED RECORDS.--WDR NC-95-1: 1994(M).

GAGE.--Water-stage recorder. Datum of gage is 2,976.00 ft above sea level. Telephone telemetry at station.

REMARKS.--Records good except those during periods of ice effect, Dec. 19-22, Jan. 11-14 and 17-20, which are fair. Maximum gage height for period of record, from floodmarks. Minimum discharge for period of record also occurred Sept. 30, 1954.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	143	41	1130	102	120	374	126	164	459	64	65	52
2	111	105	337	94	111	269	119	143	165	57	53	27
3	97	48	222	87	107	397	111	395	125	51	48	24
4	86	43	176	82	162	265	105	202	125	49	45	21
5	77	41	158	287	178	247	100	172	106	56	43	21
6	71	39	137	130	123	262	332	154	94	44	41	20
7	66	103	166	111	111	199	168	138	87	41	50	20
8	66	701	128	107	146	179	137	129	82	39	46	19
9	60	134	110	293	117	161	126	123	77	58	39	19
10	59	100	105	158	108	157	116	111	72	54	47	32
11	58	85	100	e134	100	138	108	104	67	48	42	28
12	55	75	162	e123	94	127	293	98	74	41	40	21
13	51	71	144	e112	95	332	147	92	159	39	37	20
14	50	71	110	e103	130	1080	126	87	248	37	35	19
15	47	64	101	103	178	312	117	86	130	39	32	19
16	46	58	94	155	114	243	108	79	103	53	33	18
17	42	58	117	e107	105	210	104	74	100	39	30	18
18	45	77	96	e101	100	189	97	72	87	35	30	18
19	41	76	e87	e95	99	621	97	69	79	33	28	17
20	39	61	e84	e91	98	312	91	69	77	36	27	17
21	39	97	e80	87	269	247	85	65	82	34	27	17
22	39	86	e78	101	171	213	152	61	78	32	26	18
23	51	68	76	114	125	188	275	57	67	278	25	18
24	40	63	114	233	113	169	156	56	69	101	25	153
25	38	103	85	347	106	160	128	64	64	54	24	93
26	38	177	75	157	113	213	117	68	60	45	24	36
27	73	84	85	135	178	155	147	60	93	40	23	26
28	44	76	79	280	851	169	398	95	76	54	24	96
29	41	70	187	166	---	156	326	87	74	59	23	67
30	39	333	111	147	---	139	193	142	61	150	23	34
31	37	---	114	131	---	148	---	101	---	111	24	---
TOTAL	1789	3208	4848	4473	4322	8031	4705	3417	3240	1871	1079	1008
MEAN	57.7	107	156	144	154	259	157	110	108	60.4	34.8	33.6
MAX	143	701	1130	347	851	1080	398	395	459	278	65	153
MIN	37	39	75	82	94	127	85	56	60	32	23	17
CFSM	2.09	3.87	5.67	5.23	5.59	9.39	5.68	3.99	3.91	2.19	1.26	1.22
IN.	2.41	4.32	6.53	6.03	5.83	10.82	6.34	4.61	4.37	2.52	1.45	1.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1997, BY WATER YEAR (WY)

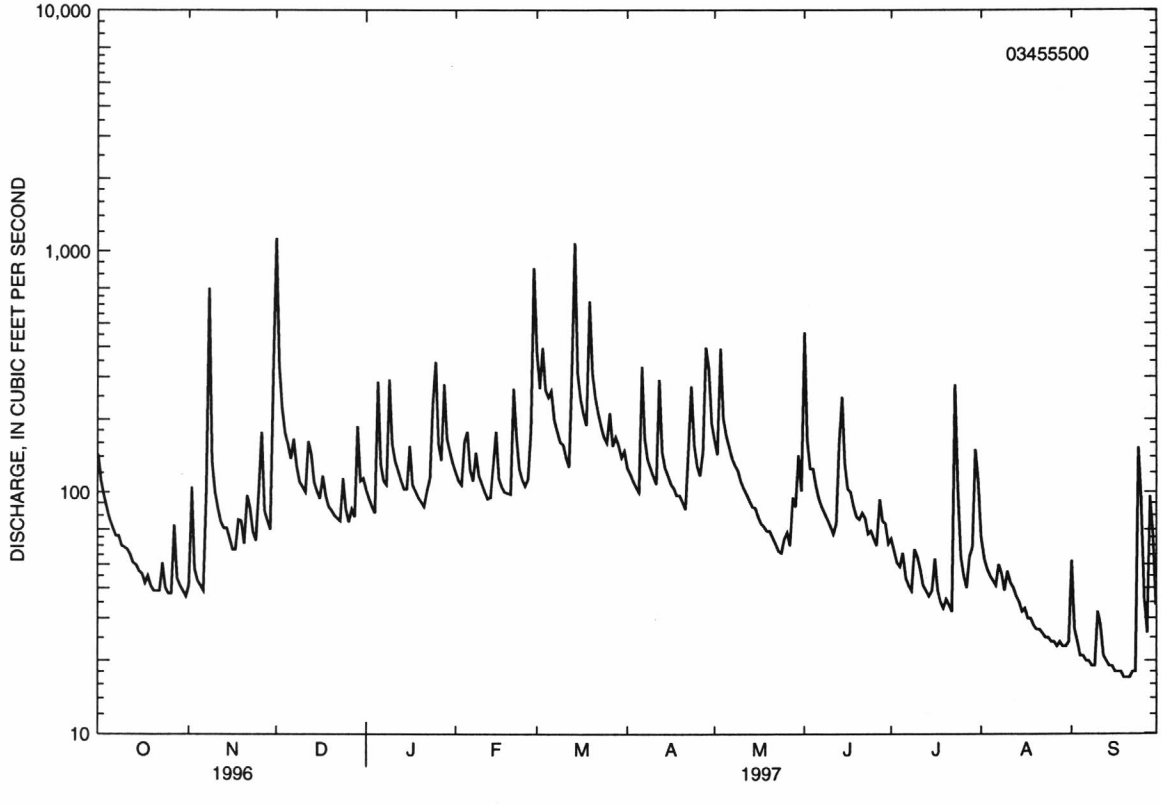
MEAN	75.3	91.1	113	127	155	167	144	110	85.4	60.0	60.6	57.8
MAX	229	301	234	259	355	312	291	289	213	207	187	260
(WY)	1965	1980	1962	1996	1966	1975	1983	1976	1967	1967	1994	1979
MIN	13.5	26.8	29.7	34.0	68.7	53.8	47.8	51.6	30.8	23.3	16.8	13.0
(WY)	1955	1979	1966	1981	1968	1988	1986	1988	1988	1993	1993	1954

TENNESSEE RIVER BASIN

03455500 WEST FORK PIGEON RIVER ABOVE LAKE LOGAN NEAR HAZELWOOD, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1954 - 1997	
ANNUAL TOTAL	44650		41991			
ANNUAL MEAN	122		115		104	
HIGHEST ANNUAL MEAN					143	1979
LOWEST ANNUAL MEAN					59.6	1986
HIGHEST DAILY MEAN	1170	Jan 18	1130	Dec 1	4500	Feb 13 1966
LOWEST DAILY MEAN	32	Jul 24	17	Sep 19	10	Sep 28 1954
ANNUAL SEVEN-DAY MINIMUM	36	Jul 8	18	Sep 16	11	Sep 24 1954
INSTANTANEOUS PEAK FLOW			3150	Nov 8	9740	Feb 13 1966
INSTANTANEOUS PEAK STAGE			6.03	Nov 8	9.50*	Feb 13 1966
INSTANTANEOUS LOW FLOW			16	Sep 20	9.4*	Sep 29 1954
ANNUAL RUNOFF (CFSM)	4.42		4.17		3.77	
ANNUAL RUNOFF (INCHES)	60.18		56.60		51.26	
10 PERCENT EXCEEDS	217		211		189	
50 PERCENT EXCEEDS	85		92		72	
90 PERCENT EXCEEDS	40		30		27	

e Estimated.
* See REMARKS.



TENNESSEE RIVER BASIN

0345577330 WEST FORK PIGEON RIVER NEAR RETREAT, NC

LOCATION.--Lat 35°25'36", long 82°55'12", Haywood County, Hydrologic Unit 06010106, on right bank at upstream side of bridge on State Highway 215, and 1.6 mi southwest of Retreat.

DRAINAGE AREA.--33.5 mi^2.

PERIOD OF RECORD.--March 1988 to current year.

REVISED RECORDS.--WDR NC-95-1: 1994(M).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,839 ft above sea level, from topographic map. Telephone telemetry at station.

REMARKS.--Records poor. Some low flow regulation, at times, caused by Lake Logan (station 03455773). Maximum discharge for period of record from rating curve extended above 4,000 ft^3/s by logarithmic plotting.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173	44	1220	e114	129	409	144	213	456	80	88	71
2	141	119	402	e106	121	257	138	191	241	74	74	42
3	e121	56	250	e98	117	362	130	413	188	64	66	32
4	e102	50	194	e93	170	249	123	255	154	59	61	29
5	e90	48	158	e301	191	222	117	220	129	70	59	27
6	e82	46	126	e146	136	247	350	196	116	54	56	27
7	e75	95	175	e125	125	179	239	177	106	51	69	27
8	e70	739	114	e120	159	160	201	162	102	50	77	26
9	e69	151	102	e316	129	145	162	150	99	64	62	27
10	e64	110	e110	e184	118	141	140	134	95	70	71	42
11	e62	e90	105	e154	107	121	133	124	90	65	68	42
12	e61	e80	e165	e140	102	116	299	115	94	54	64	32
13	e59	77	160	e128	103	231	189	106	193	51	61	29
14	e55	80	e140	e118	134	1070	152	104	300	49	56	30
15	e53	71	e110	e117	188	274	138	103	209	48	50	32
16	e51	65	99	e178	e131	223	127	93	141	67	52	31
17	e50	65	152	e125	e121	197	122	90	122	54	48	31
18	e54	78	125	e118	e115	185	114	87	108	45	48	33
19	e50	89	e110	e110	e113	593	114	84	100	43	46	33
20	e47	67	e104	e105	e112	335	109	85	103	49	45	32
21	44	97	e100	e100	e282	239	103	78	101	51	44	33
22	45	101	e97	e114	e197	215	150	74	101	43	41	33
23	57	75	94	131	e144	195	290	72	87	246	39	31
24	45	69	165	236	e130	180	178	70	91	148	39	145
25	42	e110	e145	368	e122	174	149	78	85	79	36	143
26	42	211	e110	184	e129	232	136	83	79	66	36	63
27	87	83	e120	150	e192	177	156	71	108	59	37	44
28	54	77	112	e308	e911	190	372	110	96	71	37	102
29	49	77	229	e192	---	181	376	95	91	81	39	114
30	45	306	146	151	---	161	245	154	78	154	35	50
31	40	---	143	138	---	173	---	119	---	147	35	---
TOTAL	2079	3426	5582	4968	4728	7833	5396	4106	4063	2306	1639	1433
MEAN	67.1	114	180	160	169	253	180	132	135	74.4	52.9	47.8
MAX	173	739	1220	368	911	1070	376	413	456	246	88	145
MIN	40	44	94	93	102	116	103	70	78	43	35	26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1997, BY WATER YEAR (WY)

MEAN	106	113	134	189	201	213	159	127	114	73.7	94.5	68.9
MAX	262	265	239	314	360	309	268	193	210	209	220	137
(WY)	1996	1993	1993	1996	1990	1990	1994	1990	1989	1989	1994	1989
MIN	26.5	52.0	52.1	115	116	62.6	72.2	62.9	40.0	31.3	26.2	27.8
(WY)	1994	1994	1989	1992	1992	1988	1995	1988	1988	1993	1993	1993

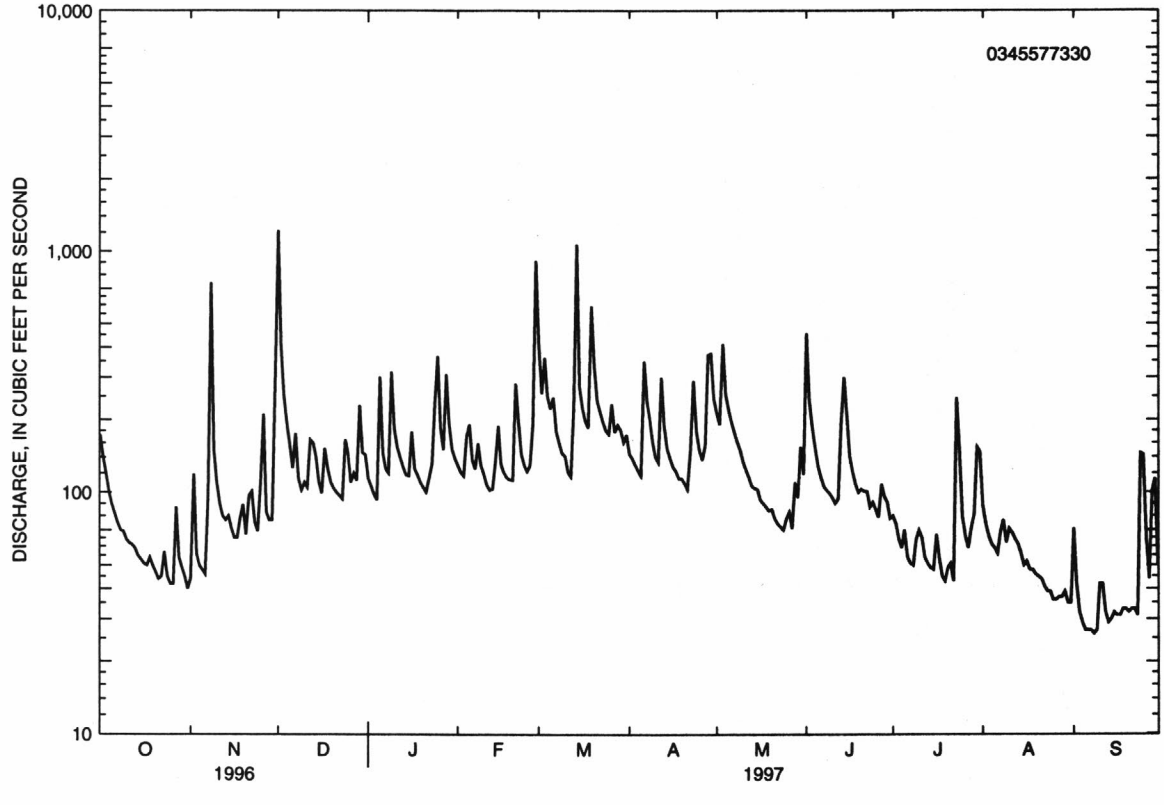
TENNESSEE RIVER BASIN

0345577330 WEST FORK PIGEON RIVER NEAR RETREAT, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1988 - 1997	
ANNUAL TOTAL	52593		47559			
ANNUAL MEAN	144		130		137	
HIGHEST ANNUAL MEAN					157	1996
LOWEST ANNUAL MEAN					118	1992
HIGHEST DAILY MEAN	1390	Jan 19	1220	Dec 1	2940	Oct 5 1995
LOWEST DAILY MEAN	40	Jul 24	26	Sep 8	19	Jul 14 1993
ANNUAL SEVEN-DAY MINIMUM	45	Jul 8	28	Sep 3	22	Sep 20 1993
INSTANTANEOUS PEAK FLOW			3000	Nov 8	7960a	Aug 17 1994
INSTANTANEOUS PEAK STAGE			5.58	Nov 8	8.97	Aug 17 1994
INSTANTANEOUS LOW FLOW			20	Sep 14	17	Oct 8 1993
10 PERCENT EXCEEDS	252		231		241	
50 PERCENT EXCEEDS	102		106		93	
90 PERCENT EXCEEDS	48		43		36	

e Estimated.

a See REVISED RECORDS.



TENNESSEE RIVER BASIN

03456100 WEST FORK PIGEON RIVER AT BETHEL, NC

LOCATION.--Lat 35°27'48", long 82°54'00", Haywood County, Hydrologic Unit 06010106, on left bank 20 ft downstream of bridge on Secondary Road 1112, 0.6 mi southwest of Bethel, 1.6 mi upstream from confluence with East Fork Pigeon River, and 5.6 mi downstream of Lake Logan.

DRAINAGE AREA.--58.4 mi^2.

PERIOD OF RECORD.--January 1981 to current year.

REVISED RECORDS.--WDR NC-95-1: 1994(M).

GAGE.--Water-stage recorder. Datum of gage is 2,667.78 ft above sea level (levels by Tennessee Valley Authority). Telephone telemetry at station.

REMARKS.--Records good except those during periods of ice effect, Dec. 20-23 and Jan. 17-19, which are poor. Considerable regulation, at times, caused by Lake Logan (station 03455773). Minimum discharge for current water year also occurred Sept. 5-9 and 13-21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	203	71	1520	176	237	739	249	289	560	113	100	74
2	168	143	556	164	221	521	235	258	253	108	98	58
3	152	82	363	154	209	694	222	631	205	98	76	56
4	131	75	304	146	264	545	211	416	213	92	72	46
5	118	72	275	369	285	473	200	345	182	104	77	46
6	109	71	230	224	221	500	477	305	167	87	74	45
7	104	101	250	194	205	397	321	275	154	84	78	44
8	104	854	212	186	254	352	268	255	147	82	87	44
9	98	206	186	428	216	322	246	239	140	91	72	45
10	92	153	176	312	202	307	228	219	134	106	77	63
11	90	129	166	254	189	275	216	206	125	106	75	58
12	85	116	217	226	180	253	413	194	127	85	72	50
13	82	110	249	206	182	325	272	184	220	80	70	46
14	78	109	188	191	212	1620	235	175	351	78	66	45
15	77	101	174	188	300	580	221	170	236	77	62	45
16	75	94	165	296	216	462	208	158	186	87	63	44
17	73	92	190	e215	201	395	198	152	174	83	59	44
18	76	100	166	e200	191	355	186	145	157	73	60	46
19	75	118	154	e187	185	863	186	140	143	70	57	45
20	71	96	e143	174	182	586	177	140	151	76	56	45
21	71	114	e134	167	349	466	168	131	144	86	56	46
22	71	133	e131	179	325	406	220	125	145	70	53	47
23	84	103	e128	209	237	360	421	122	126	290	51	47
24	76	97	175	315	218	329	276	118	132	184	50	210
25	71	99	154	511	205	307	233	120	124	97	50	164
26	71	237	136	309	209	379	215	130	114	84	50	79
27	104	129	148	265	261	300	228	114	141	78	49	60
28	79	122	138	446	1210	311	472	159	140	83	50	106
29	74	112	262	324	---	305	528	136	127	92	50	143
30	73	300	192	287	---	271	333	197	112	157	49	72
31	69	---	190	261	---	287	---	171	---	168	48	---
TOTAL	2904	4339	7672	7763	7366	14285	8063	6419	5330	3169	2007	1963
MEAN	93.7	145	247	250	263	461	269	207	178	102	64.7	65.4
MAX	203	854	1520	511	1210	1620	528	631	560	290	100	210
MIN	69	71	128	146	180	253	168	114	112	70	48	44
CFSM	1.60	2.48	4.24	4.29	4.50	7.89	4.60	3.55	3.04	1.75	1.11	1.12
IN.	1.85	2.76	4.89	4.94	4.69	9.10	5.14	4.09	3.40	2.02	1.28	1.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1997, BY WATER YEAR (WY)

MEAN	104	136	183	206	258	278	226	173	125	89.1	101	76.7
MAX	336	341	334	425	511	461	481	368	287	281	317	207
(WY)	1996	1993	1984	1996	1990	1997	1983	1984	1992	1989	1994	1989
MIN	33.2	43.0	83.5	53.5	102	83.6	83.5	81.7	53.0	45.8	29.3	33.1
(WY)	1994	1982	1989	1981	1986	1988	1986	1986	1988	1993	1993	1986

TENNESSEE RIVER BASIN

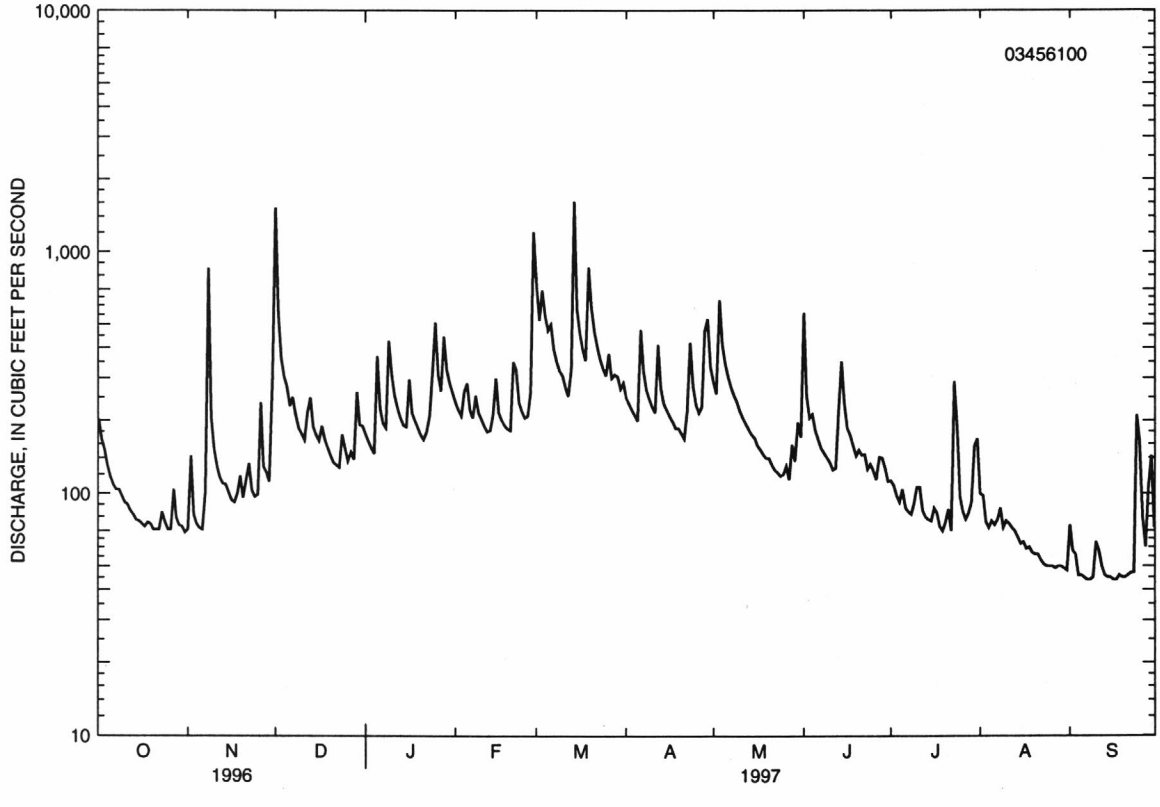
03456100 WEST FORK PIGEON RIVER AT BETHEL, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1981 - 1997	
ANNUAL TOTAL	71480		71280			
ANNUAL MEAN	195		195		166	
HIGHEST ANNUAL MEAN					211	1996
LOWEST ANNUAL MEAN					87.5	1988
HIGHEST DAILY MEAN	2140	Jan 27	1620	Mar 14	3810	Feb 2 1983
LOWEST DAILY MEAN	59	Aug 10	44	Sep 7	9.2	Sep 2 1986
ANNUAL SEVEN-DAY MINIMUM	64	Jul 8	45	Sep 14	16	Sep 2 1986
INSTANTANEOUS PEAK FLOW			3680	Mar 14	8900a	Aug 17 1994
INSTANTANEOUS PEAK STAGE			6.53	Mar 14	12.63	Aug 17 1994
INSTANTANEOUS LOW FLOW			44*	Sep 4	4.2	Sep 5 1986
ANNUAL RUNOFF (CFSM)	3.34		3.34		2.84	
ANNUAL RUNOFF (INCHES)	45.53		45.40		38.54	
10 PERCENT EXCEEDS	360		351		312	
50 PERCENT EXCEEDS	140		157		113	
90 PERCENT EXCEEDS	71		60		47	

e Estimated.

* See REMARKS.

a See REVISED RECORDS.



TENNESSEE RIVER BASIN

03456500 EAST FORK PIGEON RIVER NEAR CANTON, NC

LOCATION.--Lat 35°27'42", long 82°52'13", Haywood County, Hydrologic Unit 06010106, on right bank 800 ft upstream from bridge on U.S. Highway 276, 0.3 mi downstream of Dix Creek, 1.6 mi upstream from confluence with West Fork Pigeon River, and 5.2 mi southwest of Canton.

DRAINAGE AREA.--51.5 mi^2.

PERIOD OF RECORD.--March 1954 to current year.

REVISED RECORDS.--WDR NC-73-1: 1966(M), 1972(M).

GAGE.--Water-stage recorder. Datum of gage is 2,674.34 ft above sea level (Tennessee Valley Authority bench mark). Telephone telemetry at station.

REMARKS.--Records good except those during period of ice effect, Dec. 20-21, Jan. 17-19, and those for estimated daily discharges, which are fair. Maximum discharge for period of record, from rating curve extended above 5,470 ft^3/s, on basis of contracted-opening measurement of peak flow. Minimum discharge for period of record also occurred Dec. 11, 1981, result of freezeup, and Oct. 9, 1994. Minimum discharge for current water year also occurred Sept. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	234	59	1480	119	190	517	188	217	451	106	67	55
2	200	91	676	116	177	396	179	197	246	99	62	44
3	188	64	431	111	167	541	170	449	217	92	59	59
4	161	61	325	108	237	441	163	318	236	86	58	36
5	144	59	277	172	280	384	156	269	199	88	57	36
6	131	58	242	135	226	384	254	240	178	81	56	35
7	123	94	232	126	208	311	204	217	163	78	54	35
8	122	1840	206	124	232	278	182	201	154	75	58	34
9	110	453	185	270	208	253	171	190	145	88	54	34
10	102	287	173	221	196	237	163	174	136	87	55	50
11	99	226	163	191	182	216	155	163	127	131	57	43
12	92	193	183	171	172	201	336	155	125	86	52	38
13	88	172	193	158	171	294	234	147	157	78	51	36
14	84	159	163	148	180	1700	205	140	208	81	49	35
15	80	145	154	144	258	655	191	136	191	80	47	34
16	77	134	146	245	203	485	178	127	160	93	46	33
17	75	128	167	e178	190	392	169	123	149	81	44	32
18	74	127	149	e168	180	337	159	118	136	73	44	33
19	72	122	141	e156	174	614	154	114	125	69	41	32
20	69	112	e136	147	171	458	147	112	136	70	43	31
21	68	115	e133	140	324	379	141	105	163	76	42	33
22	67	119	127	139	320	329	165	101	150	66	40	33
23	71	106	121	150	249	289	250	98	127	154	40	32
24	66	101	134	253	225	261	188	95	123	141	39	158
25	63	106	124	328	207	243	172	96	129	84	39	110
26	63	248	116	236	201	259	163	97	120	76	38	58
27	78	147	118	210	210	221	174	91	128	71	42	45
28	65	135	113	311	691	226	273	120	125	68	38	103
29	62	128	148	245	---	221	319	104	124	66	e36	121
30	61	227	128	225	---	200	242	119	110	77	36	61
31	59	---	124	206	---	206	---	111	---	89	36	---
TOTAL	3048	6016	7208	5651	6429	11928	5845	4944	4938	2690	1480	1519
MEAN	98.3	201	233	182	230	385	195	159	165	86.8	47.7	50.6
MAX	234	1840	1480	328	691	1700	336	449	451	154	67	158
MIN	59	58	113	108	167	200	141	91	110	66	36	31
CFSM	1.91	3.89	4.51	3.54	4.46	7.47	3.78	3.10	3.20	1.68	.93	.98
IN.	2.20	4.35	5.21	4.08	4.64	8.62	4.22	3.57	3.57	1.94	1.07	1.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1997, BY WATER YEAR (WY)

MEAN	115	136	150	165	204	238	210	158	120	74.5	80.5	83.2
MAX	363	484	337	381	411	541	480	453	339	268	263	436
(WY)	1965	1980	1962	1995	1966	1979	1957	1976	1967	1989	1994	1979
MIN	17.1	27.9	42.4	33.8	71.9	60.9	63.2	59.8	35.7	25.3	26.5	16.0
(WY)	1955	1955	1956	1956	1986	1988	1986	1986	1988	1986	1954	1954

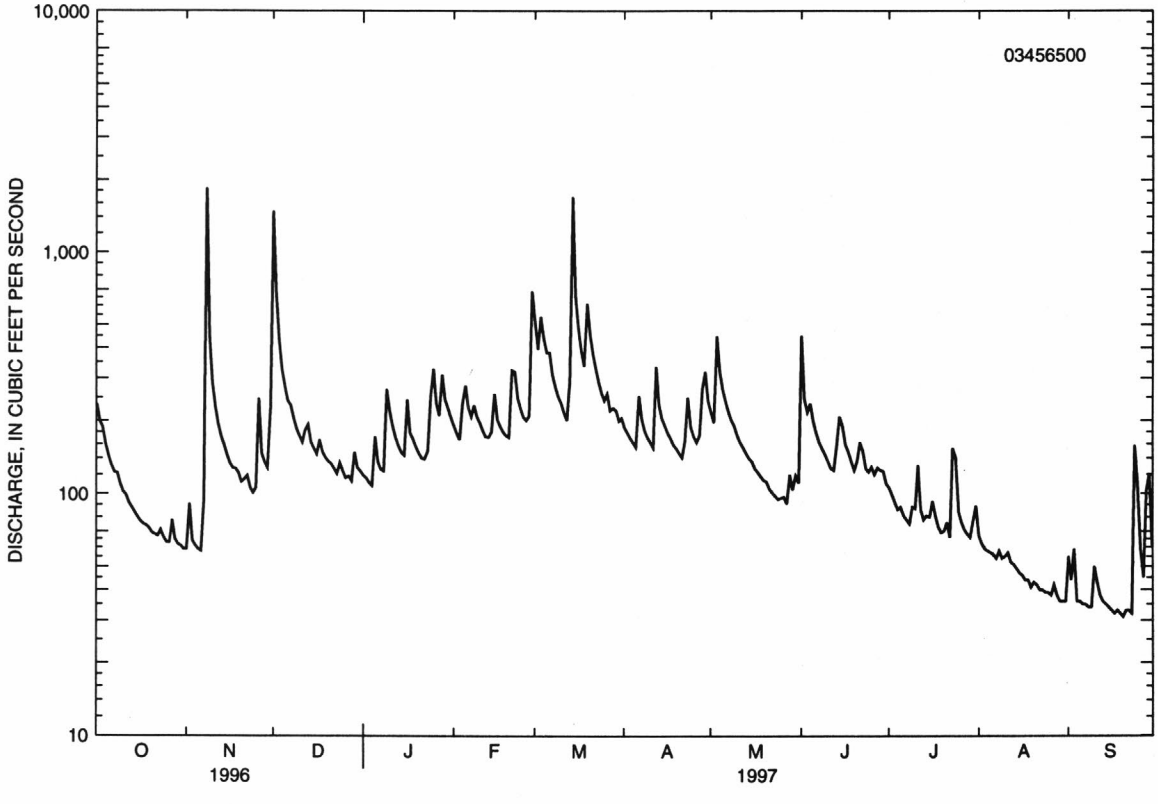
TENNESSEE RIVER BASIN

03456500 EAST FORK PIGEON RIVER NEAR CANTON, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1954 - 1997	
ANNUAL TOTAL	58592		61696			
ANNUAL MEAN	160		169		145	
HIGHEST ANNUAL MEAN					204	1979
LOWEST ANNUAL MEAN					71.9	1988
HIGHEST DAILY MEAN	1990	Jan 27	1840	Nov 8	4390	Feb 13 1966
LOWEST DAILY MEAN	38	Jul 29	31	Sep 20	14	Sep 16 1954
ANNUAL SEVEN-DAY MINIMUM	42	Jul 19	32	Sep 17	14	Sep 24 1954
INSTANTANEOUS PEAK FLOW			8050	Nov 8	12000*	May 28 1973
INSTANTANEOUS PEAK STAGE			9.03	Nov 8	11.19	May 28 1973
INSTANTANEOUS LOW FLOW			30*	Sep 19	12*	Jan 9 1956
ANNUAL RUNOFF (CFSM)	3.11		3.28		2.81	
ANNUAL RUNOFF (INCHES)	42.32		44.56		38.24	
10 PERCENT EXCEEDS	280		279		267	
50 PERCENT EXCEEDS	106		136		102	
90 PERCENT EXCEEDS	52		46		36	

e Estimated.

* See REMARKS.



TENNESSEE RIVER BASIN

03456991 PIGEON RIVER NEAR CANTON, NC

LOCATION.--Lat 35°31'19", long 82°50'53", Haywood County, Hydrologic Unit 06010106, on right bank 600 ft upstream from State Highway 215 bridge, 1.3 mi upstream from U.S. Highways 19 and 23 at Canton, and at mile 64.9.

DRAINAGE AREA.--130 mi^2.

PERIOD OF RECORD.--May 1907 to June 1909, October 1928 to current year. Monthly discharge only for some periods published in WSP 1306. Published as Pigeon River at Canton, NC (03457000) May 1907 to June 1909, October 1928 to September 1983.

REVISED RECORDS.--WSP 823: Drainage area. WSP 853: 1929-37(M). WSP 1306: 1903(M). WDR NC-91-1: 1984-89(M).

GAGE.--Water-stage recorder. Datum of gage is 2,581.66 ft above sea level (Tennessee Valley Authority bench mark). Prior to June 1909, nonrecording gage at bridge 1.2 mi downstream at different datum. Dec. 6, 1928, to Jan. 3, 1929, nonrecording gage at site 0.8 mi downstream at different datum. Prior to Oct. 1, 1983, water-stage recorder at site 0.8 mi downstream at different datum. Telephone telemetry at station.

REMARKS.--Records good except those during periods of ice effect, Dec. 20-21, Jan. 17, 19, and those for estimated daily discharges, which are fair. Occasional diurnal fluctuation and considerable regulation at low flow, since 1932, caused by Lake Logan (station 03455773) on West Fork Pigeon River 11.2 mi upstream. Prior to regulation, maximum discharge: 21,500 ft^3/s, Aug. 16, 1928; gage height: 16.40 ft; minimum discharge: 39 ft^3/s, Sept. 3, 1930. Maximum discharge and gage height for period of record, at former site from high water mark in gage well; minimum discharge for period of record, at former site, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of about 1810 is believed to have been approximately equal to that of Aug. 30, 1940, and flood of June 15, 1876, reached a stage of 18.3 ft; discharge, 25,700 ft^3/s, at former site, from studies by Tennessee Valley Authority.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	514	132	3090	321	461	1260	464	546	1010	247	183	117
2	443	262	1230	303	435	934	440	494	560	239	171	95
3	435	169	809	287	409	1280	417	1110	480	216	140	109
4	361	149	654	274	518	1000	396	788	520	199	132	79
5	323	144	581	538	591	875	377	659	439	216	134	69
6	298	140	512	398	483	917	689	592	396	190	133	65
7	280	182	515	350	445	744	569	539	363	179	126	64
8	276	2680	456	331	514	671	477	503	345	174	153	64
9	255	706	406	714	459	616	447	476	327	211	126	65
10	234	493	379	584	433	588	418	439	311	238	131	112
11	230	404	357	484	404	539	397	408	290	290	133	98
12	212	348	430	434	381	499	721	388	288	199	124	79
13	203	315	512	399	381	514	545	367	419	180	117	69
14	192	298	393	368	415	3530	467	350	612	176	111	64
15	184	275	361	357	599	1200	441	341	490	178	104	64
16	179	255	340	583	461	926	414	316	396	194	101	64
17	174	243	389	e440	430	787	392	305	364	189	97	62
18	171	247	348	402	408	695	370	294	332	159	97	63
19	167	273	323	e370	393	1500	366	286	298	149	93	60
20	159	233	e300	351	385	1050	349	288	312	147	90	59
21	154	238	e290	334	620	856	329	270	344	188	89	62
22	154	295	285	338	713	744	400	256	339	145	83	62
23	164	232	281	396	528	661	706	248	284	389	80	61
24	154	220	324	538	480	606	506	244	291	419	78	450
25	141	219	312	858	e450	568	441	245	292	205	78	345
26	138	503	271	587	e460	649	409	260	270	175	75	155
27	193	309	287	516	488	540	422	237	299	162	74	103
28	162	291	273	762	2030	549	744	316	314	155	78	156
29	147	267	427	612	---	576	881	274	285	172	76	325
30	141	464	353	552	---	497	616	346	254	226	71	134
31	131	---	339	504	---	526	---	331	---	302	71	---
TOTAL	6969	10986	15827	14285	14774	26897	14610	12516	11524	6508	3349	3374
MEAN	225	366	511	461	528	868	487	404	384	210	108	112
MAX	514	2680	3090	858	2030	3530	881	1110	1010	419	183	450
MIN	131	132	271	274	381	497	329	237	254	145	71	59
CFSM	1.73	2.82	3.93	3.54	4.06	6.67	3.75	3.11	2.95	1.61	.83	.87
IN.	1.99	3.14	4.53	4.09	4.23	7.70	4.18	3.58	3.30	1.86	.96	.97

TENNESSEE RIVER BASIN

03456991 PIGEON RIVER NEAR CANTON, NC--Continued

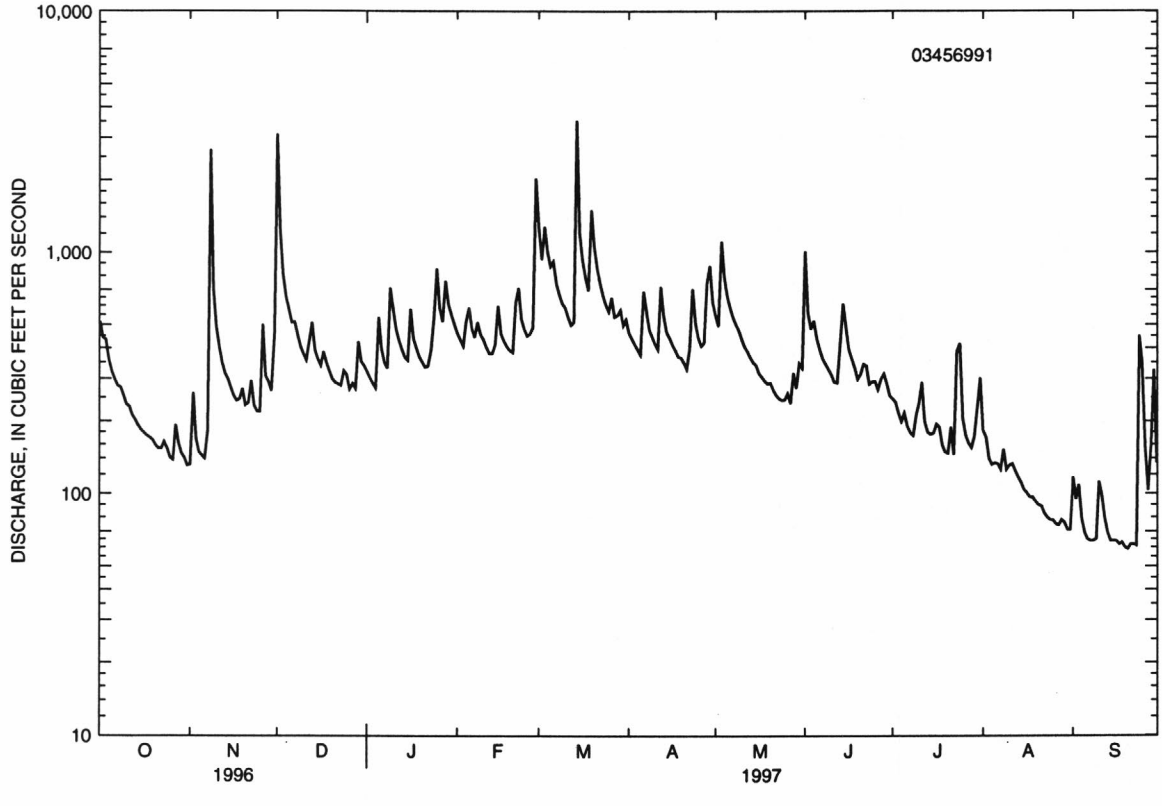
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1997*, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	230	269	329	423	478	542	470	338	267	193	207	193
MAX	787	964	872	1017	1151	1058	1005	981	781	583	1476	818
(WY)	1965	1980	1933	1937	1939	1975	1983	1976	1967	1989	1940	1979
MIN	48.2	59.2	64.5	85.3	150	155	167	132	96.5	89.7	65.9	50.2
(WY)	1955	1955	1940	1956	1941	1988	1986	1941	1941	1993	1954	1954

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1932 - 1997*	
ANNUAL TOTAL	139468		141619			
ANNUAL MEAN	381		388		327	
HIGHEST ANNUAL MEAN					503	1949
LOWEST ANNUAL MEAN					170	1988
HIGHEST DAILY MEAN	5160	Jan 27	3530	Mar 14	12800	Aug 13 1940
LOWEST DAILY MEAN	102	Jul 28	59	Sep 20	27	Sep 7 1954
ANNUAL SEVEN-DAY MINIMUM	115	Aug 4	61	Sep 17	43	Oct 22 1954
INSTANTANEOUS PEAK FLOW			10100	Nov 8	31600*	Aug 30 1940
INSTANTANEOUS PEAK STAGE			9.68	Nov 8	20.75*	Aug 30 1940
INSTANTANEOUS LOW FLOW			56	Sep 20	15*	Jan 8 1956
ANNUAL RUNOFF (CFSM)	2.93		2.98		2.52	
ANNUAL RUNOFF (INCHES)	39.91		40.52		34.22	
10 PERCENT EXCEEDS	666		660		615	
50 PERCENT EXCEEDS	276		331		234	
90 PERCENT EXCEEDS	140		102		88	

e Estimated.

* Regulated period only (1932-1997). See REMARKS.



TENNESSEE RIVER BASIN

03459500 PIGEON RIVER NEAR HEPCO, NC

LOCATION.--Lat 35°38'05", long 82°59'21", Haywood County, Hydrologic Unit 06010106, on left bank 95 ft east of Interstate Highway 40, 0.8 mi downstream of Jonathan Creek, 2.0 mi south of Hepco, 2.4 mi upstream from Fines Creek, and at mile 45.1.

DRAINAGE AREA.--350 mi^2.

PERIOD OF RECORD.--July 1927 to current year.

REVISED RECORDS.--WSP 823: Drainage area. WSP 893: 1928-31, 1932(M), 1933-36, 1937-39(M).

GAGE.--Water-stage recorder. Datum of gage is 2,335.95 ft above sea level (levels by Tennessee Valley Authority). Tennessee Valley Authority satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Considerable regulation by Lake Junaluska (station 03458319) on Richland Creek and Lake Logan (station 03455773) on West Fork Pigeon River for periods at low flow, combined capacity of reservoirs, about 2,000 ft^3/s-day. Maximum discharge for period of record, from rating curve extended above 12,000 ft^3/s on basis of slope-area measurements at gage heights 14.94 and 15.82 ft. Maximum gage height for period of record and current water year from high-water mark in gage house.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of June 1876 and February 1902 reached a stage of about 18 ft, from flood profiles by Tennessee Valley Authority; discharge, about 42,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	831	295	4710	674	852	3260	1200	1200	1670	570	428	248
2	733	518	2600	637	846	2340	1120	1070	1190	550	383	263
3	1030	418	1630	606	952	3940	1060	2720	1100	508	339	241
4	642	354	1250	580	1090	2740	1000	1890	1200	477	316	221
5	565	339	1070	942	1130	2340	955	1540	950	478	317	191
6	516	327	966	804	919	2410	1640	1360	861	458	317	183
7	490	323	994	693	873	1910	1780	1210	795	435	317	180
8	474	3060	908	662	981	1680	1490	1120	752	425	364	177
9	456	1300	791	1480	909	1510	1020	1060	726	517	320	187
10	417	858	736	1260	859	1450	1060	985	692	599	321	258
11	410	712	699	995	818	1300	935	917	652	593	335	336
12	389	618	910	870	768	1180	1230	877	635	483	337	229
13	375	567	1170	798	762	1140	1120	842	874	439	303	203
14	364	543	854	743	810	4330	894	799	2020	425	290	190
15	352	517	772	725	1110	2290	795	777	1360	438	273	188
16	341	478	716	1340	900	1850	758	731	1010	460	260	190
17	337	458	749	858	976	1610	783	713	887	431	255	180
18	343	467	698	755	934	1460	841	688	816	391	250	196
19	345	521	650	745	752	3490	849	684	745	370	247	183
20	320	467	577	723	739	2540	814	742	696	360	241	178
21	312	473	558	689	944	2050	788	657	725	448	236	209
22	311	581	571	698	1480	1790	952	624	733	368	221	187
23	342	482	564	804	1060	1570	1610	605	656	443	212	193
24	333	452	626	923	936	1420	1170	593	619	907	208	2380
25	309	443	653	1950	776	1320	1000	596	662	468	206	1170
26	301	882	562	1280	747	1660	931	675	636	401	206	547
27	343	606	596	1080	932	1330	927	666	688	375	209	377
28	366	551	567	1790	4910	1410	1400	783	659	414	217	440
29	326	522	787	1630	---	1710	1910	706	606	410	203	644
30	315	650	729	1460	---	1340	1380	742	576	488	196	391
31	299	---	702	1140	---	1360	---	724	---	601	206	---
TOTAL	13287	18782	30365	30334	29765	61730	33412	29296	26191	14730	8533	10760
MEAN	429	626	980	979	1063	1991	1114	945	873	475	275	359
MAX	1030	3060	4710	1950	4910	4330	1910	2720	2020	907	428	2380
MIN	299	295	558	580	739	1140	758	593	576	360	196	177

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1997, BY WATER YEAR (WY)

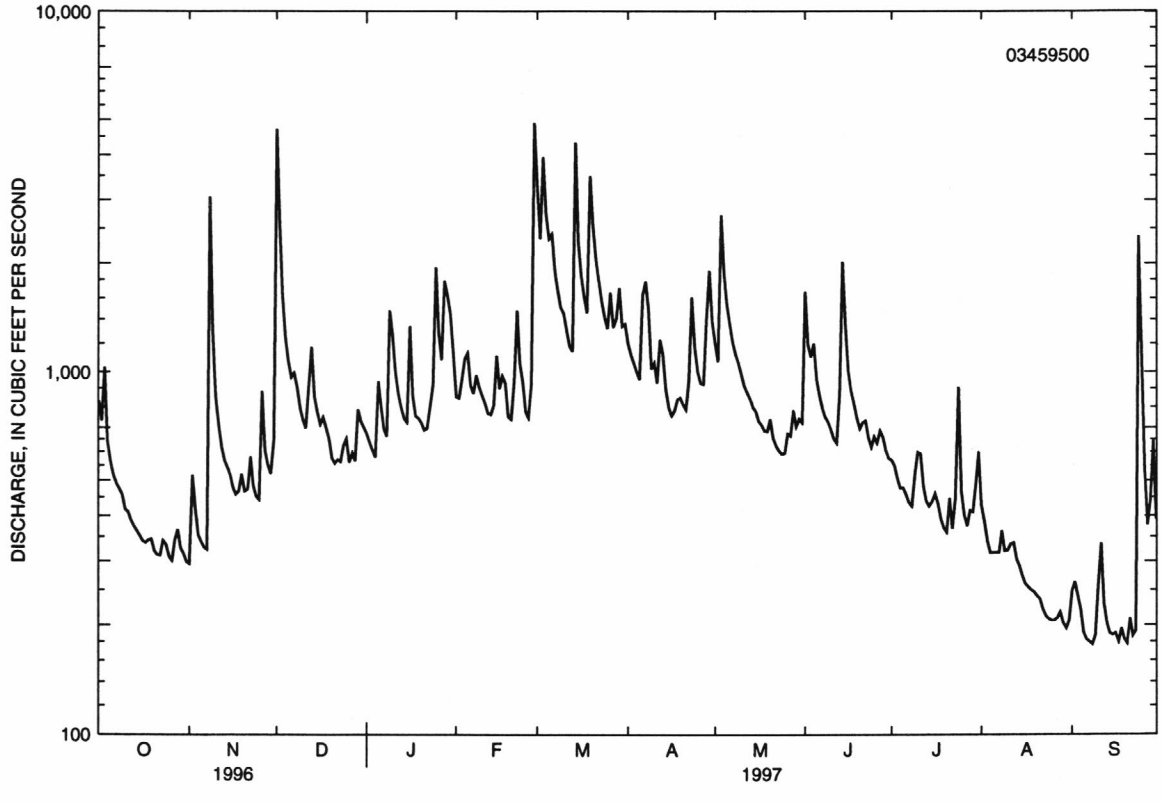
MEAN	424	507	680	885	1029	1169	993	728	548	426	435	384
MAX	1353	1627	2125	2275	2227	2455	2010	1630	1502	1141	2246	1214
(WY)	1965	1980	1933	1937	1990	1929	1936	1984	1967	1989	1940	1928
MIN	122	133	193	194	319	346	359	283	200	183	163	129
(WY)	1955	1954	1940	1940	1941	1988	1986	1941	1988	1986	1953	1954

TENNESSEE RIVER BASIN

03459500 PIGEON RIVER NEAR HEPCO, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1927 - 1997	
ANNUAL TOTAL	293305		307185			
ANNUAL MEAN	801		842		682	
HIGHEST ANNUAL MEAN					943	1949
LOWEST ANNUAL MEAN					341	1988
HIGHEST DAILY MEAN	9580	Jan 27	4910	Feb 28	17100	Aug 13 1940
LOWEST DAILY MEAN	253	Sep 26	177	Sep 8	95	Sep 30 1941
ANNUAL SEVEN-DAY MINIMUM	278	Jul 8	186	Sep 14	109	Oct 12 1941
INSTANTANEOUS PEAK FLOW			8990	Feb 28	32700*	Aug 30 1940
INSTANTANEOUS PEAK STAGE			8.51*	Feb 28	15.82*	Aug 30 1940
INSTANTANEOUS LOW FLOW			169	Sep 20	81	Sep 30 1941
10 PERCENT EXCEEDS	1440		1550		1260	
50 PERCENT EXCEEDS	587		699		510	
90 PERCENT EXCEEDS	309		259		210	

* See REMARKS.



TENNESSEE RIVER BASIN

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, NC

(Hydrologic Benchmark Network station)

LOCATION.--Lat 35°40'02", long 83°04'22", Haywood County, Hydrologic Unit 06010106, in Great Smoky Mountains National Park, on left bank 20 ft downstream of bridge on State Highway 284, 500 ft upstream from Little Cataloochee Creek, 2 mi north of Cataloochee, and 3.7 mi upstream from mouth.

DRAINAGE AREA.--49.2 mi^2.

PERIOD OF RECORD.--October 1933 to September 1952, October 1962 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 823: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,456.88 ft above sea level (levels by Tennessee Valley Authority). Satellite telemetry at station.

REMARKS.--Records good except those during period of ice effect, Dec. 20-22, Jan. 12-14, and 17-20, and those for estimated daily discharges, which are poor. Minimum discharge for period of record also occurred Jan. 2, 1940, and Dec. 17, 24, 1943, result of freezeup. Minimum discharge for current water year also occurred Sept. 6, 7, 8, 9, 15, 16, 17 18, 19, 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	41	897	142	181	682	243	223	155	100	48	35
2	64	65	484	138	162	443	220	194	130	91	46	32
3	76	42	296	131	149	1120	202	566	139	85	45	32
4	61	40	220	123	158	744	187	405	e200	81	45	32
5	57	40	191	156	205	530	175	307	142	80	48	30
6	54	39	162	128	164	478	248	256	128	76	46	30
7	53	39	194	120	157	384	198	220	120	73	49	30
8	52	516	164	118	176	321	183	197	113	71	51	30
9	50	176	149	226	152	273	173	182	111	89	44	32
10	48	125	138	203	148	267	163	163	105	82	44	50
11	47	103	131	178	138	222	155	151	100	72	45	53
12	45	90	237	e150	130	198	174	142	97	69	54	34
13	44	83	256	e134	132	198	151	136	118	67	51	32
14	43	85	214	e128	134	410	139	127	238	64	45	31
15	42	76	186	127	144	321	132	120	196	66	42	31
16	42	71	166	199	129	277	126	114	160	64	41	30
17	42	68	159	e132	124	247	123	110	145	61	40	29
18	47	82	140	e118	120	225	118	105	140	58	41	38
19	43	85	127	e108	117	498	126	110	125	57	38	31
20	40	75	e114	e98	113	431	115	118	120	68	41	33
21	40	89	e110	90	171	354	114	98	112	66	39	39
22	40	87	e106	108	167	300	148	93	105	58	37	32
23	51	82	103	131	147	257	244	90	99	67	36	32
24	41	80	137	148	139	226	184	88	95	62	35	406
25	39	83	112	340	133	204	166	89	116	55	35	138
26	39	128	105	252	130	289	154	108	107	53	35	71
27	44	95	111	208	191	217	150	105	138	51	35	55
28	40	92	105	305	1000	278	204	119	107	52	35	78
29	41	88	152	259	---	342	359	101	98	55	34	71
30	39	161	134	230	---	309	262	101	93	63	33	54
31	37	---	151	203	---	284	---	97	---	53	32	---
TOTAL	1471	2926	5951	5131	5011	11329	5336	5035	3852	2109	1290	1651
MEAN	47.5	97.5	192	166	179	365	178	162	128	68.0	41.6	55.0
MAX	76	516	897	340	1000	1120	359	566	238	100	54	406
MIN	37	39	103	90	113	198	114	88	93	51	32	29
CFSM	.96	1.98	3.90	3.36	3.64	7.43	3.62	3.30	2.61	1.38	.85	1.12
IN.	1.11	2.21	4.50	3.88	3.79	8.57	4.03	3.81	2.91	1.59	.98	1.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1997@, BY WATER YEAR (WY)

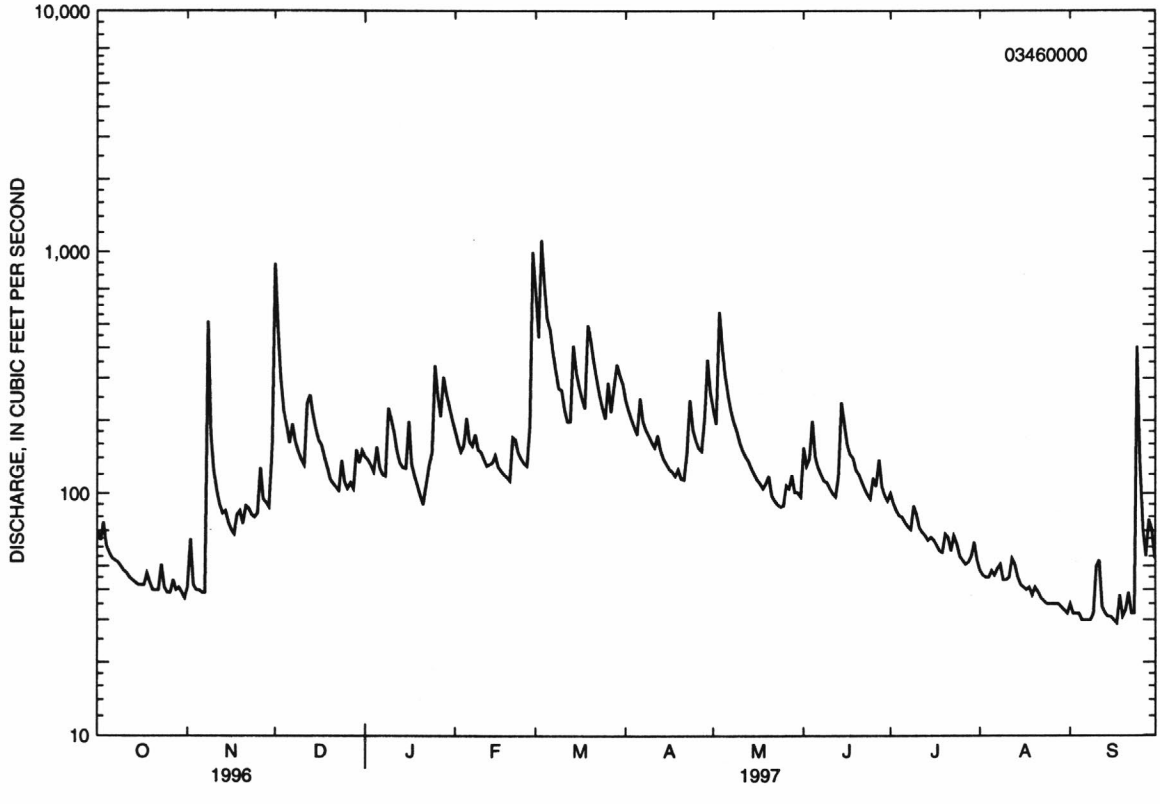
MEAN	54.7	72.4	115	167	180	208	155	111	85.2	72.7	73.0	54.3
MAX	146	159	302	392	394	496	305	283	252	182	223	123
(WY)	1990	1980	1973	1937	1990	1963	1936	1984	1967	1949	1940	1989
MIN	22.3	22.3	26.0	35.5	49.5	63.2	58.8	46.2	34.7	29.6	26.9	24.9
(WY)	1940	1940	1940	1940	1941	1988	1986	1986	1986	1986	1987	1941

TENNESSEE RIVER BASIN

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1934 - 1997@	
ANNUAL TOTAL	52927		51092			
ANNUAL MEAN	145		140		112	
HIGHEST ANNUAL MEAN					171	1994
LOWEST ANNUAL MEAN					51.5	1986
HIGHEST DAILY MEAN	1910	Jan 27	1120	Mar 3	2690	Mar 16 1973
LOWEST DAILY MEAN	37	Oct 31	29	Sep 17	12	Jan 2 1940
ANNUAL SEVEN-DAY MINIMUM	40	Oct 25	31	Sep 2	19	Dec 31 1939
INSTANTANEOUS PEAK FLOW			1800	Mar 3	5080	Mar 6 1963
INSTANTANEOUS PEAK STAGE			5.55	Mar 3	8.08	Mar 6 1963
INSTANTANEOUS LOW FLOW			29*	Sep 5	9.4*	Jan 2 1940
ANNUAL RUNOFF (CFSM)	2.94		2.85		2.28	
ANNUAL RUNOFF (INCHES)	40.02		38.63		30.98	
10 PERCENT EXCEEDS	248		258		206	
50 PERCENT EXCEEDS	112		113		82	
90 PERCENT EXCEEDS	46		39		34	

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



TENNESSEE RIVER BASIN

03460795 PIGEON RIVER BELOW POWER PLANT NEAR WATERVILLE, NC

LOCATION.--Lat 35°47'02", long 82°06'44", Cocke County Tennessee, Hydrologic Unit 06010105, on left bank, 550 ft upstream of Browns Bridge on Waterville Road, 0.9 mi downstream of North Carolina and Tennessee state lines, 1.0 mi northwest of Waterville, and at mile 25.

DRAINAGE AREA.--538 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February to September 1997.

GAGE.--Water-stage recorder. Elevation of gage is 1,360 ft above sea level, from topographic map. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Considerable regulation, caused by Walters Hydroelectric Plant, 1.0 mi upstream. Minimum discharge for current water year affected by regulation.

DISCHARGE, CUBIC FEET PER SECOND, FOR PERIOD FEBRUARY 1997 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					e1700	6370	2510	2200	e1800	1390	197	149
2					e1500	4200	1490	1520	e1400	1330	501	600
3					e1100	8530	1610	3320	e1800	1160	192	606
4					2110	5650	1290	3410	1920	885	207	522
5					1810	4190	1680	2700	1470	998	526	108
6					1530	4610	1900	2540	1060	555	859	148
7					1130	3620	2590	2390	1300	1050	561	129
8					1200	3210	2550	2070	921	961	174	287
9					1800	3020	1820	1300	1420	969	482	336
10					2090	3000	1560	1330	881	840	154	365
11					2250	2660	1320	1280	1020	171	718	e150
12					642	2160	1830	e1300	1070	1160	196	e300
13					1760	2670	1990	e1600	1210	759	397	e200
14					1950	4470	1350	990	1900	953	341	e150
15					953	3870	1020	1010	2330	730	147	e100
16					598	3120	1450	1020	1910	867	400	107
17					1370	e2800	1250	1330	1660	955	292	112
18					2000	2710	1240	570	1790	712	247	558
19					1770	4160	1250	1240	1790	834	810	115
20					1860	4180	1110	1290	1100	199	924	104
21					2020	3310	2280	1240	610	1140	890	106
22					1720	2910	1470	996	344	432	585	644
23					769	2690	2160	1070	1020	462	455	630
24					e1500	2620	2590	927	758	508	102	1890
25					2090	2570	1800	363	1410	422	102	2400
26					1500	2640	1250	815	1480	809	176	376
27					1850	2580	2310	1170	2680	977	693	140
28					6410	2280	2200	1840	1840	999	703	739
29					---	2550	3680	752	1250	961	222	1040
30					---	2570	2720	1420	1830	578	424	1180
31					---	2730	---	1120	---	590	216	---
TOTAL					48982	108650	55270	46123	42974	25356	12893	14291
MEAN					1749	3505	1842	1488	1432	818	416	476
MAX					6410	8530	3680	3410	2680	1390	924	2400
MIN					598	2160	1020	363	344	171	102	100
†					+58	-60	+24	-18	+8	-17	-16	+37

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD FEBRUARY 1997 TO SEPTEMBER 1997

MEAN					1749	3505	1842	1488	1432	818	416	476
MAX					1749	3505	1842	1488	1432	818	416	476
(WY)					1997	1997	1997	1997	1997	1997	1997	1997
MIN					1749	3505	1842	1488	1432	818	416	476
(WY)					1997	1997	1997	1997	1997	1997	1997	1997

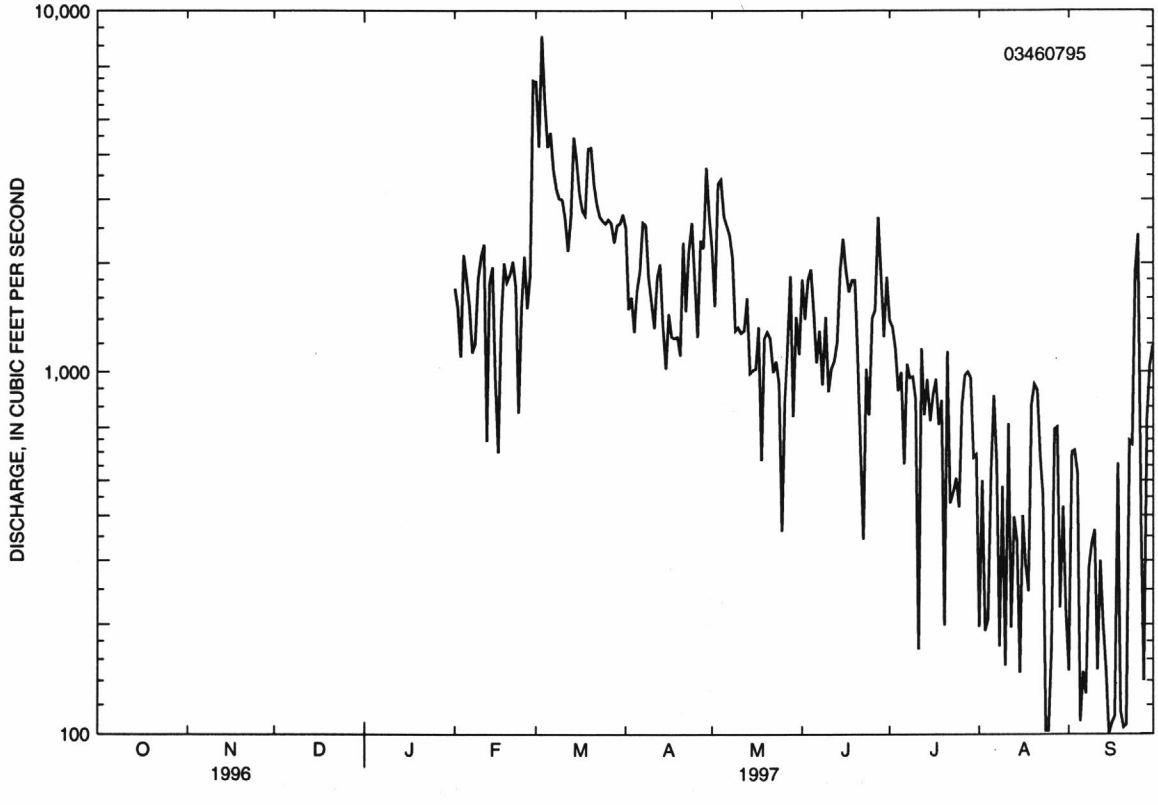
TENNESSEE RIVER BASIN

03460795 PIGEON RIVER BELOW POWER PLANT NEAR WATERVILLE, NC--Continued

SUMMARY STATISTICS — FOR PERIOD FEBRUARY 1997 TO SEPTEMBER 1997

INSTANTANEOUS PEAK FLOW	14000	Mar 3
INSTANTANEOUS PEAK STAGE	12.17	Mar 3
INSTANTANEOUS LOW FLOW	25*	Aug 25

e Estimated.
* See REMARKS.
† Change in contents, equivalent in cubic feet per second, in Walters Reservoir provided by Carolina Power and Light Co.



03460795 PIGEON RIVER BELOW POWER PLANT NEAR WATERVILLE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May to September 1997.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May to September 1997.

DISSOLVED OXYGEN: May to September 1997.

INSTRUMENTATION.--Water-quality monitor since May 1997.

REMARKS.--Interruptions in the data for the period of record May to September are due to malfunctions of the monitor.

EXTREMES FOR PERIOD MAY TO SEPTEMBER 1997.--

WATER TEMPERATURE: Maximum recorded, 24.3°C, Aug. 17; minimum recorded, 11.1°C, May 10.

DISSOLVED OXYGEN: Maximum recorded, 11.3 mg/l, May 10; minimum recorded, 4.1 mg/l Sept. 10.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR MAY TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	13.7	13.0	13.4
7	---	---	---	---	---	---	---	---	---	14.0	13.2	13.6
8	---	---	---	---	---	---	---	---	---	14.2	13.4	13.8
9	---	---	---	---	---	---	---	---	---	14.1	13.0	13.8
10	---	---	---	---	---	---	---	---	---	14.1	11.1	13.2
11	---	---	---	---	---	---	---	---	---	13.9	12.4	13.4
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	14.2	11.1	13.2
15	---	---	---	---	---	---	---	---	---	14.1	12.4	13.7
16	---	---	---	---	---	---	---	---	---	14.0	11.3	13.5
17	---	---	---	---	---	---	---	---	---	14.3	13.8	14.0
18	---	---	---	---	---	---	---	---	---	15.4	12.0	13.7
19	---	---	---	---	---	---	---	---	---	14.6	13.8	14.4
20	---	---	---	---	---	---	---	---	---	15.1	14.3	14.7
21	---	---	---	---	---	---	---	---	---	15.2	14.4	15.0
22	---	---	---	---	---	---	---	---	---	15.4	14.4	15.0
23	---	---	---	---	---	---	---	---	---	15.7	14.5	15.3
24	---	---	---	---	---	---	---	---	---	15.9	15.1	15.5
25	---	---	---	---	---	---	---	---	---	15.9	15.6	15.7
26	---	---	---	---	---	---	---	---	---	16.3	15.5	15.9
27	---	---	---	---	---	---	---	---	---	17.2	15.7	16.4
28	---	---	---	---	---	---	---	---	---	17.0	16.7	16.9
29	---	---	---	---	---	---	---	---	---	16.7	15.3	16.1
30	---	---	---	---	---	---	---	---	---	16.8	14.3	16.2
31	---	---	---	---	---	---	---	---	---	16.7	16.0	16.4
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

TENNESSEE RIVER BASIN

03460795 PIGEON RIVER BELOW POWER PLANT NEAR WATERVILLE, NC--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR MAY TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	---	---	---	23.4	21.9	22.4
2	---	---	---	---	---	---	23.0	21.3	22.1	23.1	21.7	22.3
3	---	---	---	---	---	---	23.3	21.4	22.3	22.7	22.0	22.5
4	---	---	---	---	---	---	23.2	21.5	22.3	22.6	21.3	22.1
5	---	---	---	---	---	---	22.3	21.7	22.0	23.0	20.7	21.8
6	---	---	---	---	---	---	22.6	21.4	22.1	22.8	20.6	21.6
7	---	---	---	---	---	---	22.9	21.5	22.1	22.6	20.8	21.5
8	---	---	---	---	---	---	22.8	21.4	22.0	22.4	20.7	21.3
9	---	---	---	---	---	---	22.1	21.0	21.5	21.7	21.2	21.4
10	---	---	---	---	---	---	22.5	21.0	21.6	21.7	21.1	21.4
11	---	---	---	---	---	---	22.4	20.9	21.6	---	---	---
12	---	---	---	---	---	---	22.7	21.6	22.1	---	---	---
13	---	---	---	---	---	---	22.5	21.4	21.8	---	---	---
14	---	---	---	---	---	---	23.1	21.8	22.2	---	---	---
15	---	---	---	---	---	---	23.3	21.6	22.4	---	---	---
16	---	---	---	---	---	---	23.1	21.7	22.1	21.7	19.7	20.6
17	---	---	---	---	---	---	24.3	21.9	22.3	21.3	19.9	20.5
18	---	---	---	---	---	---	23.2	22.0	22.3	21.7	20.3	20.7
19	---	---	---	---	---	---	22.8	21.7	22.2	22.1	20.3	21.1
20	---	---	---	---	---	---	22.7	22.1	22.5	21.8	20.0	20.8
21	---	---	---	---	---	---	22.8	22.2	22.6	20.8	20.0	20.5
22	---	---	---	---	---	---	22.7	21.9	22.5	21.1	19.6	20.3
23	---	---	---	23.1	21.8	22.4	22.8	21.0	22.1	21.0	20.3	20.8
24	---	---	---	23.4	21.8	22.6	23.4	20.8	22.0	20.9	18.8	20.0
25	---	---	---	23.5	22.1	22.8	22.6	20.8	21.6	19.0	18.7	18.8
26	---	---	---	23.3	22.4	22.9	23.0	20.7	21.7	18.7	17.7	18.2
27	---	---	---	23.6	22.7	23.2	22.5	21.5	22.0	18.9	17.3	18.1
28	---	---	---	23.8	22.9	23.4	22.5	21.6	22.1	18.5	18.0	18.2
29	---	---	---	23.8	23.1	23.5	23.1	21.9	22.3	18.4	18.0	18.2
30	---	---	---	23.7	22.4	23.2	22.9	21.4	22.1	18.5	17.9	18.3
31	---	---	---	23.5	21.9	22.8	23.1	21.8	22.2	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

03460795 PIGEON RIVER BELOW POWER PLANT NEAR WATERVILLE, NC--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR MAY TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	10.3	10.0	10.2
7	---	---	---	---	---	---	---	---	---	10.4	9.9	10.2
8	---	---	---	---	---	---	---	---	---	10.4	9.9	10.1
9	---	---	---	---	---	---	---	---	---	10.4	10.0	10.2
10	---	---	---	---	---	---	---	---	---	11.3	9.9	10.4
11	---	---	---	---	---	---	---	---	---	11.0	10.0	10.3
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	11.0	10.0	10.4
15	---	---	---	---	---	---	---	---	---	10.7	9.9	10.2
16	---	---	---	---	---	---	---	---	---	11.0	9.8	10.3
17	---	---	---	---	---	---	---	---	---	10.4	10.0	10.2
18	---	---	---	---	---	---	---	---	---	11.0	9.7	10.3
19	---	---	---	---	---	---	---	---	---	10.2	9.5	9.9
20	---	---	---	---	---	---	---	---	---	10.0	9.6	9.8
21	---	---	---	---	---	---	---	---	---	10.2	9.5	9.8
22	---	---	---	---	---	---	---	---	---	10.2	9.6	9.9
23	---	---	---	---	---	---	---	---	---	10.1	9.5	9.8
24	---	---	---	---	---	---	---	---	---	10.1	9.3	9.6
25	---	---	---	---	---	---	---	---	---	10.0	9.2	9.5
26	---	---	---	---	---	---	---	---	---	9.6	9.1	9.4
27	---	---	---	---	---	---	---	---	---	10.1	9.0	9.3
28	---	---	---	---	---	---	---	---	---	9.5	8.9	9.1
29	---	---	---	---	---	---	---	---	---	10.0	8.7	9.4
30	---	---	---	---	---	---	---	---	---	10.1	8.7	9.1
31	---	---	---	---	---	---	---	---	---	9.4	8.7	9.1
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

TENNESSEE RIVER BASIN

03460795 PIGEON RIVER BELOW POWER PLANT NEAR WATERVILLE, NC--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR MAY TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	---	---	---	7.7	5.6	6.8
2	---	---	---	---	---	---	7.9	6.2	7.1	7.7	5.1	6.1
3	---	---	---	---	---	---	8.2	6.9	7.4	6.5	5.0	5.8
4	---	---	---	---	---	---	8.4	6.0	7.1	7.1	5.3	6.2
5	---	---	---	---	---	---	7.6	6.0	6.5	8.0	6.6	7.1
6	---	---	---	---	---	---	7.6	5.6	6.3	8.3	6.2	7.3
7	---	---	---	---	---	---	8.0	5.9	6.5	7.9	6.2	7.1
8	---	---	---	---	---	---	8.0	6.1	7.2	8.1	5.9	6.7
9	---	---	---	---	---	---	8.0	6.1	6.9	7.7	5.4	6.5
10	---	---	---	---	---	---	8.0	6.3	7.3	8.0	4.1	6.4
11	---	---	---	---	---	---	8.1	6.0	6.9	---	---	---
12	---	---	---	---	---	---	7.7	6.6	7.1	---	---	---
13	---	---	---	---	---	---	8.0	5.7	6.8	---	---	---
14	---	---	---	---	---	---	7.8	6.3	6.9	---	---	---
15	---	---	---	---	---	---	7.7	6.7	7.1	---	---	---
16	---	---	---	---	---	---	7.7	6.0	6.7	7.4	6.2	6.7
17	---	---	---	---	---	---	7.9	6.1	6.7	7.4	6.2	6.7
18	---	---	---	---	---	---	8.0	6.1	6.8	7.4	5.0	6.2
19	---	---	---	---	---	---	7.3	5.8	6.5	7.2	6.2	6.6
20	---	---	---	---	---	---	7.1	4.9	6.3	7.7	6.0	6.7
21	---	---	---	---	---	---	7.5	5.2	5.9	7.4	6.3	6.7
22	---	---	---	---	---	---	7.1	5.3	6.1	6.9	5.1	6.2
23	---	---	---	8.3	5.6	6.8	7.9	5.3	6.4	6.8	5.2	5.8
24	---	---	---	8.3	5.6	6.7	7.9	6.6	7.2	6.9	5.0	6.3
25	---	---	---	7.9	5.6	6.9	8.3	6.6	7.3	6.8	6.7	6.8
26	---	---	---	7.0	5.4	6.2	8.4	6.5	7.3	8.2	6.8	7.5
27	---	---	---	7.0	5.2	5.9	8.0	5.6	6.4	8.0	7.3	7.6
28	---	---	---	6.6	5.4	6.0	7.9	5.2	6.3	7.6	6.6	7.0
29	---	---	---	6.6	5.5	6.0	7.6	5.8	6.7	7.1	6.7	7.0
30	---	---	---	7.4	5.9	6.6	7.8	5.1	6.5	7.1	6.8	7.0
31	---	---	---	7.9	5.7	6.8	7.7	6.4	6.8	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

TENNESSEE RIVER BASIN

03463300 SOUTH TOE RIVER NEAR CELO, NC

LOCATION.--Lat 35°49'53", long 82°11'04", Yancey County, Hydrologic Unit 06010108, on right bank on Secondary Road 1168, 800 ft upstream from bridge on Secondary Road 1167, 0.3 mi downstream of Whiteoak Creek, 1.9 mi southeast of Celo, and at mile 20.1.

DRAINAGE AREA.--43.3 mi^2.

PERIOD OF RECORD.--July 1957 to current year.

REVISED RECORDS.--WSP 1910: 1958-59. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 2,658 ft above sea level, from topographic map. Satellite telemetry at station.

REMARKS.--Records fair except those during periods of ice effect, Dec. 20-22, Jan. 11-20, and those for estimated daily discharges, which are poor. Maximum discharge for period of record, from rating curve extended above 5,000 ft^3/s on basis of slope-area measurement of peak flow; gage height from outside floodmarks. Minimum discharge for current water year also occurred Sept. 21, 22, 23, 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	49	1550	116	111	369	163	209	433	170	52	24
2	90	57	555	105	104	276	153	184	172	143	48	28
3	109	50	343	97	100	484	145	317	146	105	45	29
4	82	49	266	93	220	333	136	245	e144	89	45	24
5	72	49	228	176	220	292	129	209	142	104	45	21
6	65	47	196	127	163	321	231	189	123	81	41	20
7	63	55	190	110	142	242	191	171	124	75	40	20
8	88	707	169	101	154	215	158	159	126	70	43	20
9	77	217	148	146	136	195	145	153	121	97	38	22
10	66	142	137	130	127	199	135	140	115	104	36	39
11	62	115	132	e111	116	176	129	131	102	228	37	35
12	61	99	175	e93	108	159	271	124	100	127	36	27
13	57	90	221	e85	108	203	206	119	110	105	36	23
14	56	89	159	e80	114	1130	169	113	155	93	41	21
15	54	83	139	e85	181	439	155	106	126	95	33	21
16	52	76	128	174	133	325	144	100	107	133	31	20
17	51	73	134	e114	124	274	135	96	97	120	29	20
18	49	97	124	e99	119	254	126	93	88	89	29	20
19	50	121	115	e93	121	448	121	90	82	79	28	20
20	51	90	e102	e93	127	339	120	89	83	73	28	17
21	51	106	e102	88	255	276	117	84	103	73	28	17
22	51	136	e102	89	242	245	142	79	97	68	25	17
23	51	100	99	96	166	215	469	77	83	67	24	18
24	48	90	114	129	145	196	296	75	76	77	23	258
25	47	91	106	184	133	184	220	75	78	62	23	102
26	48	211	95	129	131	227	189	80	77	58	25	47
27	60	123	105	117	150	181	188	82	128	56	23	34
28	54	108	99	191	659	214	305	108	118	53	23	45
29	60	99	130	151	---	217	310	88	150	52	22	71
30	53	226	115	133	---	186	242	102	111	62	21	39
31	49	---	123	120	---	191	---	99	---	66	23	---
TOTAL	1930	3645	6401	3655	4609	9005	5640	3986	3717	2874	1021	1119
MEAN	62.3	122	206	118	165	290	188	129	124	92.7	32.9	37.3
MAX	109	707	1550	191	659	1130	469	317	433	228	52	258
MIN	47	47	95	80	100	159	117	75	76	52	21	17
CFSM	1.44	2.81	4.77	2.72	3.80	6.71	4.34	2.97	2.86	2.14	.76	.86
IN.	1.66	3.13	5.50	3.14	3.96	7.74	4.85	3.42	3.19	2.47	.88	.96

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1997, BY WATER YEAR (WY)

MEAN	133	152	143	162	180	230	190	157	129	82.2	96.7	107
MAX	359	714	277	428	360	596	361	373	415	199	323	517
(WY)	1996	1978	1984	1995	1966	1979	1983	1976	1972	1967	1994	1979
MIN	15.8	25.9	41.5	62.2	76.6	69.1	59.7	53.1	34.8	23.3	27.3	19.7
(WY)	1994	1982	1966	1966	1963	1988	1986	1986	1988	1986	1993	1993

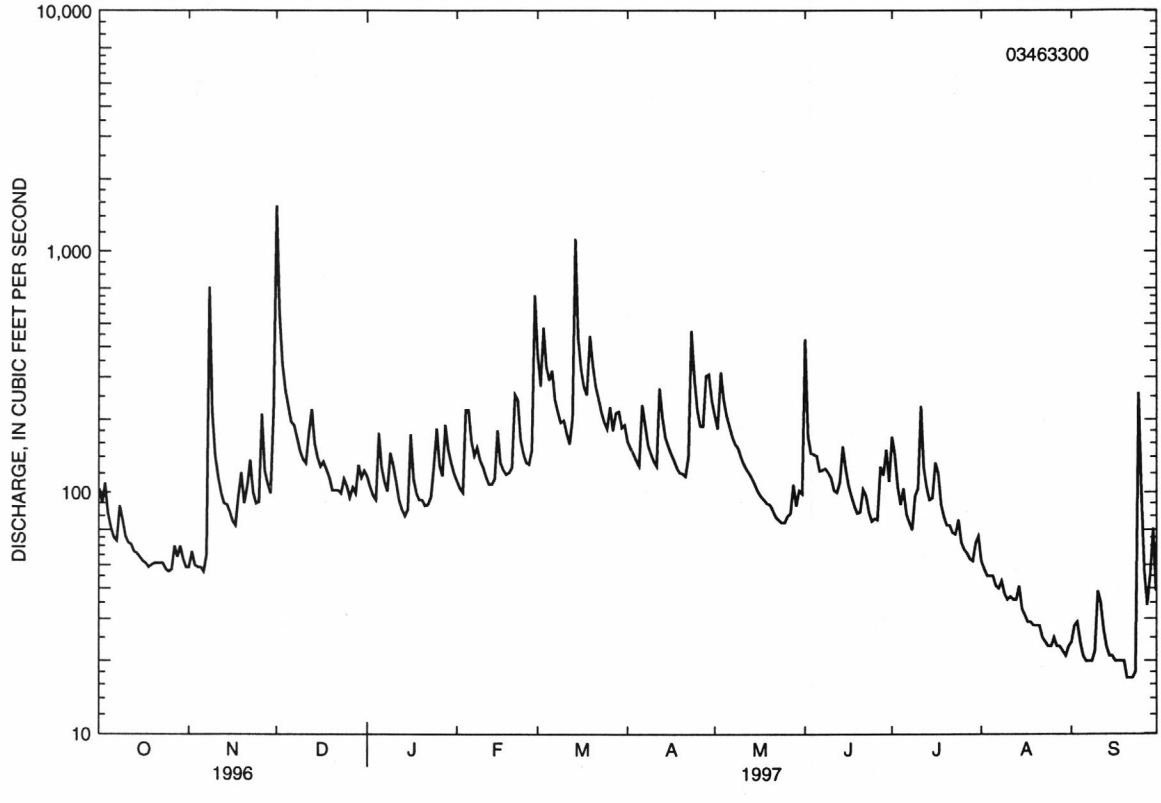
TENNESSEE RIVER BASIN

03463300 SOUTH TOE RIVER NEAR CELO, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1957 - 1997	
ANNUAL TOTAL	50433		47602			
ANNUAL MEAN	138		130		147	
HIGHEST ANNUAL MEAN					227	1979
LOWEST ANNUAL MEAN					79.4	1988
HIGHEST DAILY MEAN	2160	Jan 19	1550	Dec 1	9960	Nov 6 1977
LOWEST DAILY MEAN	22	Jul 24	17	Sep 20	12	Jul 21 1986
ANNUAL SEVEN-DAY MINIMUM	24	Jul 19	18	Sep 17	12	Oct 4 1993
INSTANTANEOUS PEAK FLOW			2980	Dec 1	32900*	Nov 6 1977
INSTANTANEOUS PEAK STAGE			4.29	Dec 1	17.41*	Nov 6 1977
INSTANTANEOUS LOW FLOW			16*	Sep 20	11*	Jul 22 1986
ANNUAL RUNOFF (CFSM)	3.18		3.01		3.39	
ANNUAL RUNOFF (INCHES)	43.33		40.90		46.02	
10 PERCENT EXCEEDS	240		228		262	
50 PERCENT EXCEEDS	96		105		101	
90 PERCENT EXCEEDS	42		30		38	

e Estimated.

* See REMARKS.



TENNESSEE RIVER BASIN

03479000 WATAUGA RIVER NEAR SUGAR GROVE, NC

LOCATION.--Lat 36°14'18", long 81°49'22", Watauga County, Hydrologic Unit 06010103, on right bank 250 ft upstream from bridge on Secondary Road 1121, 300 ft downstream of Cove Creek, 2.3 mi southwest of Sugar Grove, and at mile 64.4.

DRAINAGE AREA.--92.1 mi^2.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1306.

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

GAGE.--Water-stage recorder. Datum of gage is 2,607.84 ft above sea level. Tennessee Valley Authority satellite telemetry at station.

REMARKS.--Records good except those during periods of ice effect, Dec. 19-22, Jan. 11-22, which are poor. Slight diurnal fluctuation at low flow caused by small mills above station. Maximum discharge for period of record from rating curve extended above 4,900 ft^3/s on basis of slope-area measurement of peak flow, from profile based on floodmarks. Minimum discharge for period of record, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1916 reached a stage of 22.1 ft, from floodmarks on barn 0.25 mi upstream from station, as witnessed by local resident; discharge, 28,000 ft^3/s, from rating curve extended above 4,900 ft^3/s, on basis of slope-area measurement.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	62	1600	170	174	432	205	330	609	128	92	40
2	130	66	900	165	162	370	194	260	540	127	83	52
3	135	61	504	156	153	755	185	259	413	180	77	76
4	111	59	348	148	221	684	176	217	309	121	76	48
5	101	59	274	209	221	488	167	193	243	106	77	42
6	95	59	236	196	197	478	204	181	203	98	67	39
7	92	65	232	178	185	373	190	165	186	95	64	37
8	105	1840	207	164	196	313	163	156	172	89	63	37
9	98	521	189	189	183	268	155	157	160	100	61	36
10	88	287	174	179	173	270	148	143	147	109	59	57
11	83	214	170	e170	164	232	144	134	138	165	60	138
12	81	180	199	e155	154	210	182	130	149	105	59	91
13	79	160	269	e154	153	209	176	126	183	92	65	58
14	77	157	222	e146	159	1720	150	122	178	86	69	51
15	75	144	201	e140	224	789	142	118	152	81	57	47
16	74	133	186	185	201	508	137	110	134	106	54	43
17	72	129	191	e154	188	382	134	106	126	112	53	42
18	72	142	173	e150	177	335	131	102	119	86	57	41
19	71	157	e165	e148	175	519	130	101	112	79	54	39
20	68	142	e160	e148	175	533	127	151	123	80	67	37
21	67	149	e155	e146	280	417	138	116	144	115	59	38
22	65	162	e150	e164	433	343	180	102	132	153	52	36
23	67	145	145	214	302	290	422	97	114	373	e50	36
24	65	172	159	219	253	252	330	94	104	155	e48	206
25	63	146	157	237	225	229	255	95	232	119	e46	141
26	66	394	143	210	209	293	217	177	289	102	e44	78
27	70	233	143	191	202	242	201	338	176	125	e42	61
28	68	195	138	229	393	242	219	189	131	103	e40	69
29	71	176	139	207	---	234	688	154	121	89	45	138
30	65	245	136	195	---	211	451	150	113	130	41	78
31	61	---	172	186	---	234	---	137	---	115	40	---
TOTAL	2585	6654	8237	5502	5932	12855	6341	4910	5952	3724	1821	1932
MEAN	83.4	222	266	177	212	415	211	158	198	120	58.7	64.4
MAX	150	1840	1600	237	433	1720	688	338	609	373	92	206
MIN	61	59	136	140	153	209	127	94	104	79	40	36
CFSM	.91	2.41	2.89	1.93	2.30	4.50	2.29	1.72	2.15	1.30	.64	.70
IN.	1.04	2.69	3.33	2.22	2.40	5.19	2.56	1.98	2.40	1.50	.74	.78

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

MEAN	116	156	178	211	264	311	258	183	147	111	122	112
MAX	380	662	434	817	599	858	689	411	583	461	1169	691
(WY)	1965	1978	1951	1995	1966	1979	1987	1973	1992	1989	1940	1979
MIN	19.2	34.6	45.6	55.5	67.5	77.0	82.1	67.5	41.4	35.0	25.6	18.1
(WY)	1955	1982	1964	1956	1941	1988	1986	1941	1988	1944	1956	1954

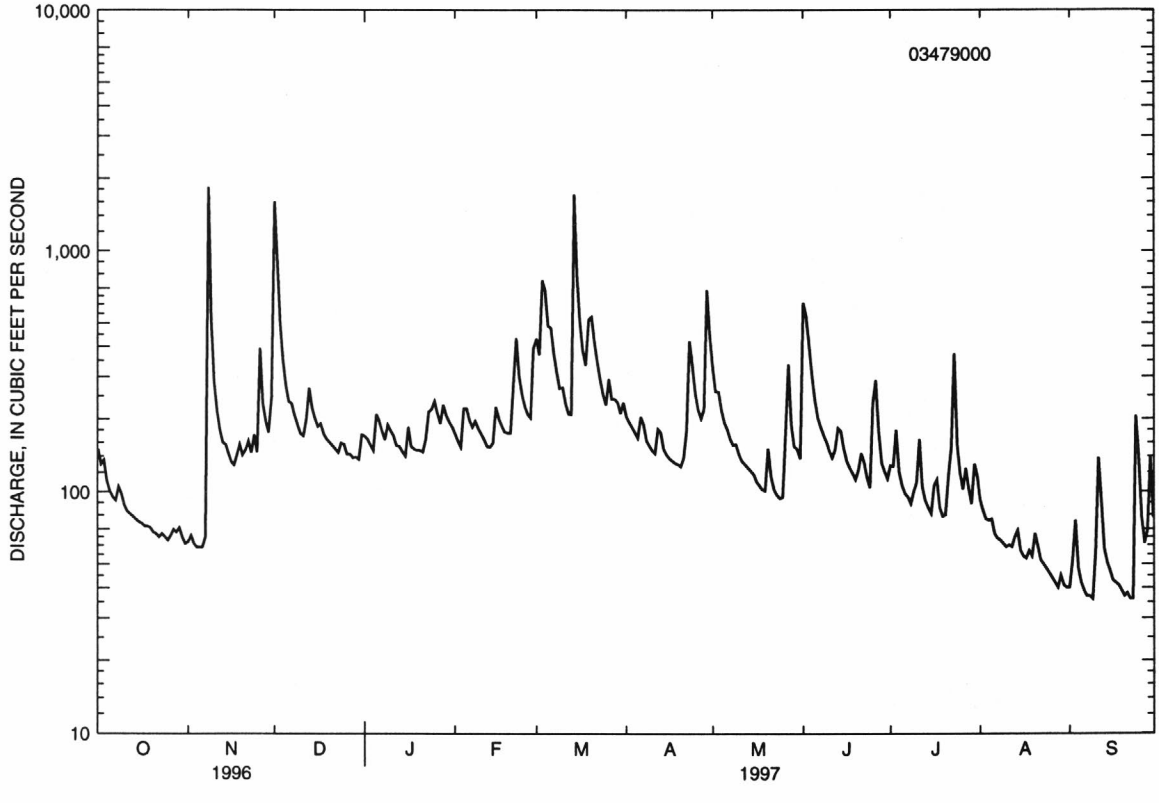
TENNESSEE RIVER BASIN

03479000 WATAUGA RIVER NEAR SUGAR GROVE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1940 - 1997	
ANNUAL TOTAL	74871		66445			
ANNUAL MEAN	205		182		179	
HIGHEST ANNUAL MEAN					297	1979
LOWEST ANNUAL MEAN					84.7	1988
HIGHEST DAILY MEAN	4730	Jan 19	1840	Nov 8	15900	Aug 13 1940
LOWEST DAILY MEAN	50	Jul 24	36	Sep 9	13	Sep 19 1954
ANNUAL SEVEN-DAY MINIMUM	53	Jul 22	38	Sep 17	15	Sep 13 1954
INSTANTANEOUS PEAK FLOW			4200	Nov 8	50800*	Aug 13 1940
INSTANTANEOUS PEAK STAGE			9.12	Nov 8	29.60	Aug 13 1940
INSTANTANEOUS LOW FLOW			34	Sep 9	6.5*	Jan 1 1954
ANNUAL RUNOFF (CFSM)	2.22		1.98		1.94	
ANNUAL RUNOFF (INCHES)	30.24		26.84		26.34	
10 PERCENT EXCEEDS	328		311		329	
50 PERCENT EXCEEDS	138		149		117	
90 PERCENT EXCEEDS	65		59		40	

e Estimated.

* See REMARKS.



03500000 LITTLE TENNESSEE RIVER NEAR PRENTISS, NC

LOCATION.--Lat 35°08'59", long 83°22'47", Macon County, Hydrologic Unit 06010202, on left bank 600 ft upstream from Owenby Branch, 0.5 mi upstream from Cartoogechaye Creek, 2 mi north of Prentiss, and at mile 119.5.

DRAINAGE AREA.--140 mi^2.

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 1236: 1949(M).

GAGE.--Water-stage recorder. Datum of gage is 2,008.39 ft above sea level (levels by Tennessee Valley Authority). Since Oct. 1, 1954, auxiliary water-stage recorder 0.5 mi downstream of base gage at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minimum discharge for current water year also occurred Sept. 22, 23.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in October 1898 reached a stage of about 15 ft, from profiles by Tennessee Valley Authority.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	579	190	e2200	376	523	1670	595	633	1010	329	346	192
2	485	249	e2100	359	488	1050	572	576	907	325	297	173
3	474	211	e880	342	464	1060	568	1360	666	305	274	165
4	402	196	695	330	504	873	548	982	609	295	255	155
5	359	192	620	541	586	781	525	759	549	296	243	145
6	327	190	576	448	513	842	1020	664	498	289	235	141
7	311	203	527	397	476	705	853	599	464	278	234	139
8	299	760	489	376	591	647	655	566	446	274	244	137
9	280	445	447	966	552	602	594	561	434	275	232	138
10	263	322	424	700	509	571	571	554	423	305	240	173
11	259	282	409	563	474	555	557	535	403	263	233	165
12	247	257	423	488	447	547	993	512	448	256	215	153
13	241	245	526	445	481	570	824	487	591	260	214	147
14	236	241	427	417	559	2410	666	465	738	253	219	143
15	232	234	402	403	699	1460	604	450	606	246	200	140
16	227	225	387	646	592	1020	574	429	505	242	213	136
17	221	221	422	477	545	873	570	414	470	246	193	133
18	224	e224	389	423	501	792	549	401	448	239	186	132
19	223	e250	370	403	473	1110	531	391	417	232	181	129
20	208	e230	343	389	450	934	518	403	400	225	180	125
21	206	e250	330	378	655	801	494	386	401	219	179	123
22	203	e360	325	382	836	732	568	359	422	238	169	124
23	219	e260	325	436	593	673	682	344	374	658	164	123
24	210	e240	361	630	550	632	566	336	368	998	162	453
25	196	e230	360	1030	511	607	522	383	359	399	161	987
26	192	e400	330	697	497	664	494	429	353	317	160	403
27	231	e440	351	593	521	588	508	368	366	286	157	252
28	217	296	337	860	1730	678	919	397	355	281	189	280
29	201	e270	495	682	---	958	1090	389	334	305	163	442
30	196	e340	440	603	---	751	747	512	327	334	152	258
31	190	---	404	567	---	658	---	505	---	526	148	---
TOTAL	8358	8453	17114	16347	16320	26814	19477	16149	14691	9994	6438	6406
MEAN	270	282	552	527	583	865	649	521	490	322	208	214
MAX	579	760	2200	1030	1730	2410	1090	1360	1010	998	346	987
MIN	190	190	325	330	447	547	494	336	327	219	148	123
CFSM	1.93	2.01	3.94	3.77	4.16	6.18	4.64	3.72	3.50	2.30	1.48	1.53
IN.	2.22	2.25	4.55	4.34	4.34	7.12	5.18	4.29	3.90	2.66	1.71	1.70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1997, BY WATER YEAR (WY)

MEAN	254	307	402	492	569	618	568	431	347	261	247	226
MAX	1078	815	841	1008	1252	1199	1015	999	694	772	695	671
(WY)	1965	1980	1962	1946	1990	1952	1964	1976	1949	1989	1974	1950
MIN	70.5	101	154	120	222	244	172	157	110	94.8	78.3	80.2
(WY)	1955	1955	1981	1981	1986	1988	1986	1986	1988	1986	1986	1954

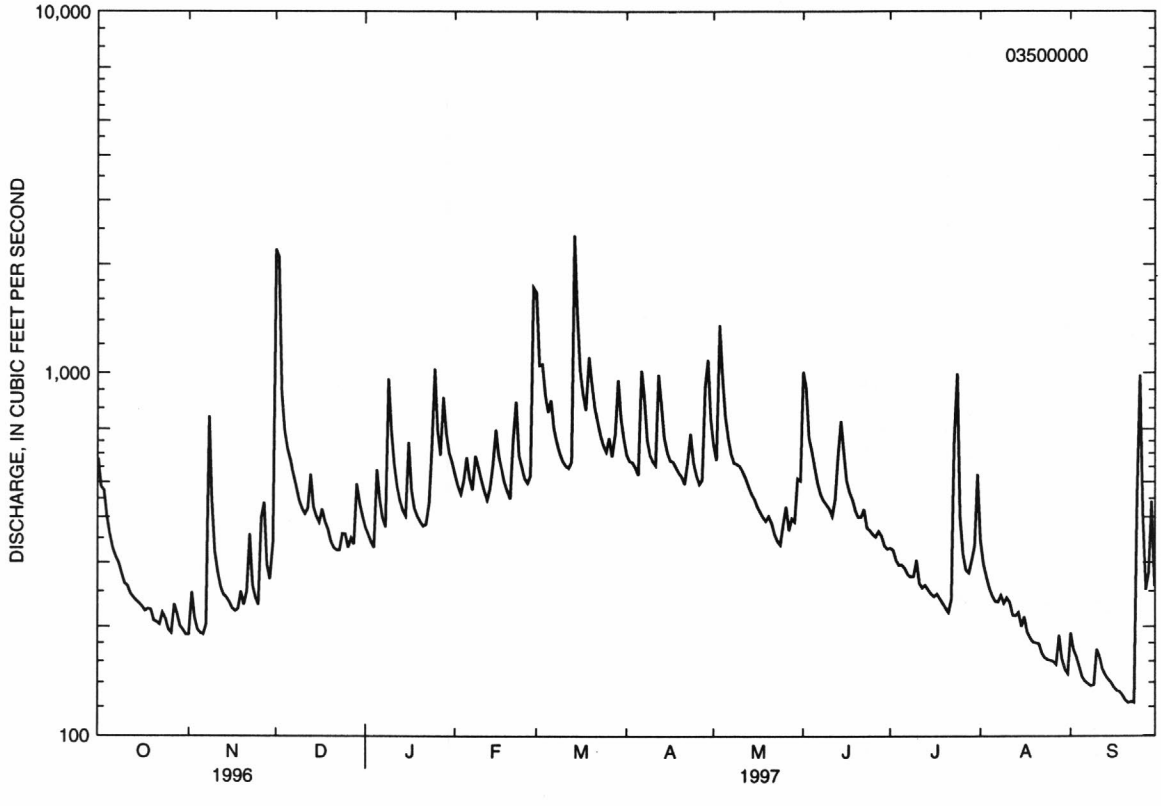
TENNESSEE RIVER BASIN

03500000 LITTLE TENNESSEE RIVER NEAR PRENTISS, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1944 - 1997	
ANNUAL TOTAL	161392		166561			
ANNUAL MEAN	441		456		393	
HIGHEST ANNUAL MEAN					588	1949
LOWEST ANNUAL MEAN					173	1986
HIGHEST DAILY MEAN	4030	Jan 27	2410	Mar 14	7280	Oct 5 1964
LOWEST DAILY MEAN	141	Sep 15	123	Sep 21	56	Oct 7 1986
ANNUAL SEVEN-DAY MINIMUM	162	Sep 9	127	Sep 17	62	Oct 2 1986
INSTANTANEOUS PEAK FLOW			2910	Dec 2	12200	Oct 4 1964
INSTANTANEOUS PEAK STAGE			7.43	Dec 2	17.30	Oct 4 1964
INSTANTANEOUS LOW FLOW			122*	Sep 21	55	Oct 7 1986
ANNUAL RUNOFF (CFSM)	3.15		3.26		2.81	
ANNUAL RUNOFF (INCHES)	42.88		44.26		38.15	
10 PERCENT EXCEEDS	722		759		703	
50 PERCENT EXCEEDS	360		403		312	
90 PERCENT EXCEEDS	189		190		132	

e Estimated.

* See REMARKS.



TENNESSEE RIVER BASIN

03500240 CARTOOGECHAYE CREEK NEAR FRANKLIN, NC

LOCATION.--Lat 35°09'31", long 83°23'40", Macon County, Hydrologic Unit 06010202, on downstream side of center pier of bridge on Secondary Road 1152, 0.1 mi downstream of unnamed creek, 1.8 mi south of Franklin, and 1.9 mi upstream from mouth.

DRAINAGE AREA.--57.1 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1944, 1947, 1953-55, 1958, 1960. June 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,017.18 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Minimum discharge for period of record also occurred Oct. 8, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1949 reached a stage of 15.6 ft, from studies by Tennessee Valley Authority; discharge, about 7,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	76	1000	198	212	830	241	266	329	126	132	64
2	139	126	559	182	196	546	226	232	304	118	114	64
3	132	83	317	169	187	566	215	593	224	111	104	71
4	115	77	243	158	197	469	206	410	209	106	99	63
5	107	73	217	230	213	408	198	307	192	111	95	59
6	100	72	195	185	187	473	424	265	175	106	e90	58
7	97	76	195	169	179	360	304	238	164	103	e105	57
8	92	629	176	167	232	313	256	224	157	101	e95	56
9	88	233	161	439	200	281	232	216	150	116	e90	60
10	86	160	151	307	192	270	216	202	144	112	e100	88
11	85	133	146	244	179	243	205	193	139	100	e90	65
12	81	117	243	209	170	227	334	186	149	97	93	61
13	79	109	253	192	200	261	252	179	211	95	100	59
14	77	108	199	178	209	644	225	171	389	92	93	58
15	75	101	176	173	240	402	213	169	270	89	86	57
16	74	96	163	285	210	316	201	158	210	97	81	55
17	73	94	193	201	195	278	194	153	193	91	79	54
18	82	101	163	182	182	257	185	150	176	89	77	54
19	75	108	152	172	173	605	185	148	160	84	74	53
20	71	96	141	164	166	503	181	162	176	82	74	52
21	71	114	135	159	282	381	176	145	180	81	74	53
22	69	117	133	176	269	319	242	137	156	86	67	53
23	78	103	132	196	221	282	298	134	140	370	67	53
24	70	99	168	227	200	258	229	132	133	172	66	256
25	70	120	151	406	188	243	206	139	128	111	66	385
26	68	223	140	286	187	327	193	164	126	97	65	120
27	87	143	157	237	227	256	210	147	153	181	64	87
28	76	127	145	405	1100	276	434	203	158	188	64	148
29	73	117	341	304	---	333	499	192	140	148	63	121
30	71	178	252	261	---	284	327	215	125	183	61	88
31	68	---	222	232	---	269	---	196	---	177	61	---
TOTAL	2689	4009	7019	7093	6593	11480	7507	6426	5560	3820	2589	2572
MEAN	86.7	134	226	229	235	370	250	207	185	123	83.5	85.7
MAX	160	629	1000	439	1100	830	499	593	389	370	132	385
MIN	68	72	132	158	166	227	176	132	125	81	61	52
CFSM	1.52	2.34	3.97	4.01	4.12	6.49	4.38	3.63	3.25	2.16	1.46	1.50
IN.	1.75	2.61	4.57	4.62	4.30	7.48	4.89	4.19	3.62	2.49	1.69	1.68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1997, BY WATER YEAR (WY)

MEAN	87.7	111	155	195	226	251	207	158	122	89.2	86.0	74.8
MAX	295	266	317	336	460	440	375	339	259	195	185	161
(WY)	1965	1993	1962	1996	1990	1980	1964	1976	1989	1989	1994	1989
MIN	33.9	41.5	52.2	55.2	102	84.7	72.9	61.2	42.3	33.1	33.1	34.7
(WY)	1979	1979	1966	1981	1986	1988	1986	1986	1988	1986	1986	1986

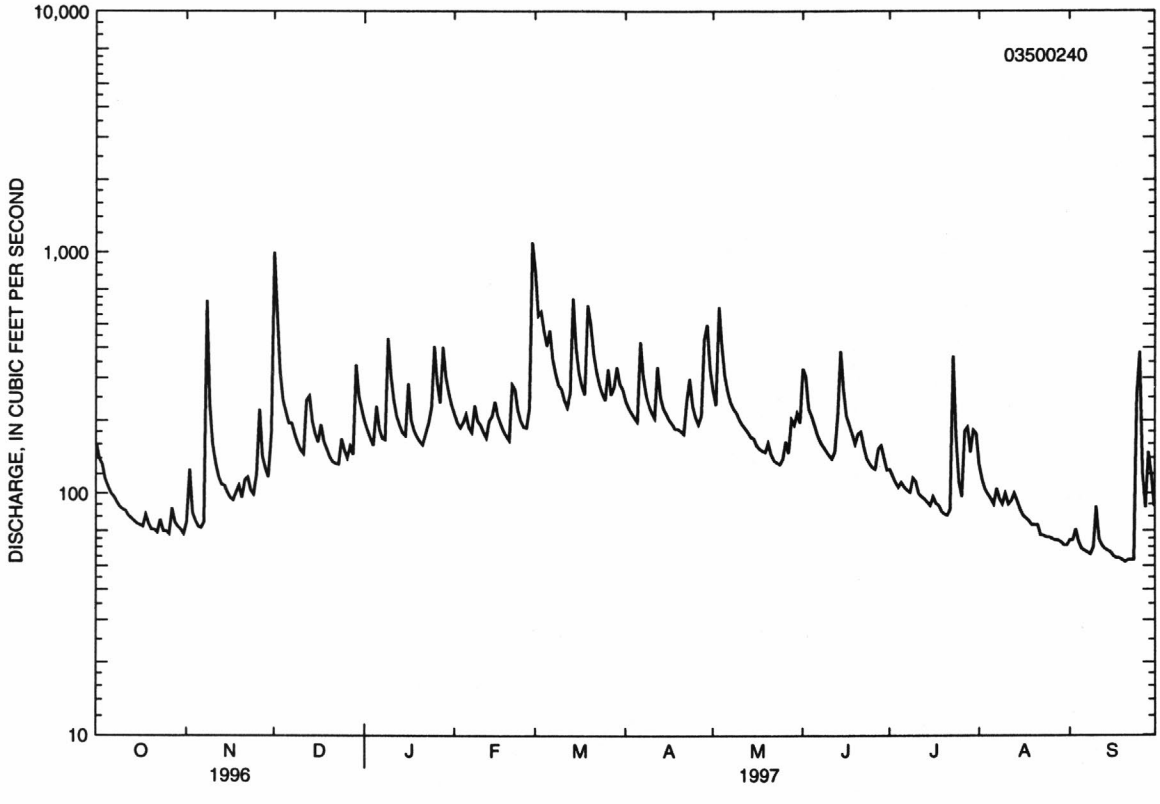
TENNESSEE RIVER BASIN

03500240 CARTOOGECHAYE CREEK NEAR FRANKLIN, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1961 - 1997	
ANNUAL TOTAL	65272		67357			
ANNUAL MEAN	178		185		146	
HIGHEST ANNUAL MEAN					204	1990
LOWEST ANNUAL MEAN					69.9	1986
HIGHEST DAILY MEAN	1770	Jan 27	1100	Feb 28	2710	Oct 4 1964
LOWEST DAILY MEAN	64	Sep 15	52	Sep 20	18	Oct 7 1986
ANNUAL SEVEN-DAY MINIMUM	71	Jul 8	53	Sep 17	22	Oct 2 1986
INSTANTANEOUS PEAK FLOW			1700	Feb 28	4720	Oct 4 1964
INSTANTANEOUS PEAK STAGE			8.77	Feb 28	12.96	Oct 4 1964
INSTANTANEOUS LOW FLOW			50	Sep 20	16*	Oct 7 1986
ANNUAL RUNOFF (CFSM)	3.12		3.23		2.56	
ANNUAL RUNOFF (INCHES)	42.52		43.88		34.83	
10 PERCENT EXCEEDS	310		314		265	
50 PERCENT EXCEEDS	142		163		110	
90 PERCENT EXCEEDS	73		71		51	

e Estimated.

* See REMARKS.



TENNESSEE RIVER BASIN

03503000 LITTLE TENNESSEE RIVER AT NEEDMORE, NC

LOCATION.--Lat 35°20'11", long 83°31'37", Swain County, Hydrologic Unit 06010202, on left bank on Secondary Road 1113, 0.8 mi downstream of DeHart Creek, 0.8 mi north of Needmore, 2.4 mi downstream of Brush Creek, 6.3 mi downstream of Tellico Creek, and at mile 92.9.

DRAINAGE AREA.--436 mi^2.

PERIOD OF RECORD.--October 1943 to December 1981, October 1983 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,761.19 ft above sea level (levels by Tennessee Valley Authority). Tennessee Valley Authority satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Considerable diurnal fluctuation caused by Porters Bend power plant at Lake Emory, 20 mi upstream. Minimum discharge for period of record also occurred Nov. 8, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of October 1898 and Aug. 30, 1940, reached stages of about 13 and 11.5 ft, respectively, from flood profiles by Tennessee Valley Authority.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1520	548	6250	1140	1430	5360	1550	2040	2640	988	1020	471
2	1260	778	5720	1060	1320	3200	1460	1780	2320	955	881	539
3	1170	636	2530	1010	1250	3380	1440	4140	1890	881	777	520
4	1030	565	1860	965	1310	2970	1410	3240	1860	843	e700	479
5	921	547	1610	1370	1550	2430	1360	2510	1650	884	e670	442
6	852	555	1450	1300	1350	2800	2290	2230	1530	818	e640	426
7	825	535	1370	1100	1250	2270	2360	2010	1410	783	615	418
8	796	2880	1250	1040	1540	2050	1760	1900	1370	762	634	409
9	751	1690	1150	2550	1490	1850	1600	1820	1320	757	615	417
10	709	1070	1060	2280	1320	1770	1480	1710	1280	954	646	552
11	706	902	1050	1660	1260	1640	1410	1620	1220	780	654	488
12	666	794	1200	1380	1160	1510	2240	1580	1240	730	629	434
13	650	742	1660	1240	1240	1480	2170	1530	1730	719	613	395
14	638	757	1250	1160	1460	5390	1720	1460	2180	705	810	378
15	621	691	1130	1080	1810	3890	1580	1440	2070	682	698	371
16	617	687	1040	1760	1590	2500	1480	1370	1630	697	581	361
17	588	658	1170	1330	1400	2120	1440	1330	1500	696	562	351
18	620	656	1100	1170	1300	1910	1350	1310	1430	671	563	345
19	621	795	1010	1150	1240	3290	1330	1280	1340	635	534	339
20	575	728	929	1060	1200	3090	1320	1340	1280	625	526	334
21	565	687	885	1020	1370	2440	1260	1280	1340	667	521	326
22	554	888	884	1050	2550	2130	1550	1200	1400	689	505	312
23	582	734	871	1200	1640	1910	2430	1170	1230	1280	483	198
24	583	710	950	1290	1450	1720	1740	1140	1130	2780	480	e1300
25	550	686	1050	2980	1360	1610	1480	1190	1170	1080	472	e2700
26	541	1570	903	2070	1310	1840	1150	1390	1130	929	472	e1100
27	610	1060	948	1640	1390	1620	1410	1270	e1130	795	468	727
28	606	904	923	2400	5360	1580	2590	1450	e1120	1070	472	618
29	561	856	1500	2140	---	2180	3610	1360	e1110	910	484	1020
30	540	951	1430	1790	---	1860	2460	1530	e1100	928	451	711
31	524	---	1220	1560	---	1700	---	1620	---	1330	442	---
TOTAL	22352	26260	47353	45945	43900	75490	52430	52240	44750	28023	18618	17481
MEAN	721	875	1528	1482	1568	2435	1748	1685	1492	904	601	583
MAX	1520	2880	6250	2980	5360	5390	3610	4140	2640	2780	1020	2700
MIN	524	535	871	965	1160	1480	1150	1140	1100	625	442	198
CFSM	1.65	2.01	3.50	3.40	3.60	5.59	4.01	3.87	3.42	2.07	1.38	1.34
IN.	1.91	2.24	4.04	3.92	3.75	6.44	4.47	4.46	3.82	2.39	1.59	1.49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1997@, BY WATER YEAR (WY)

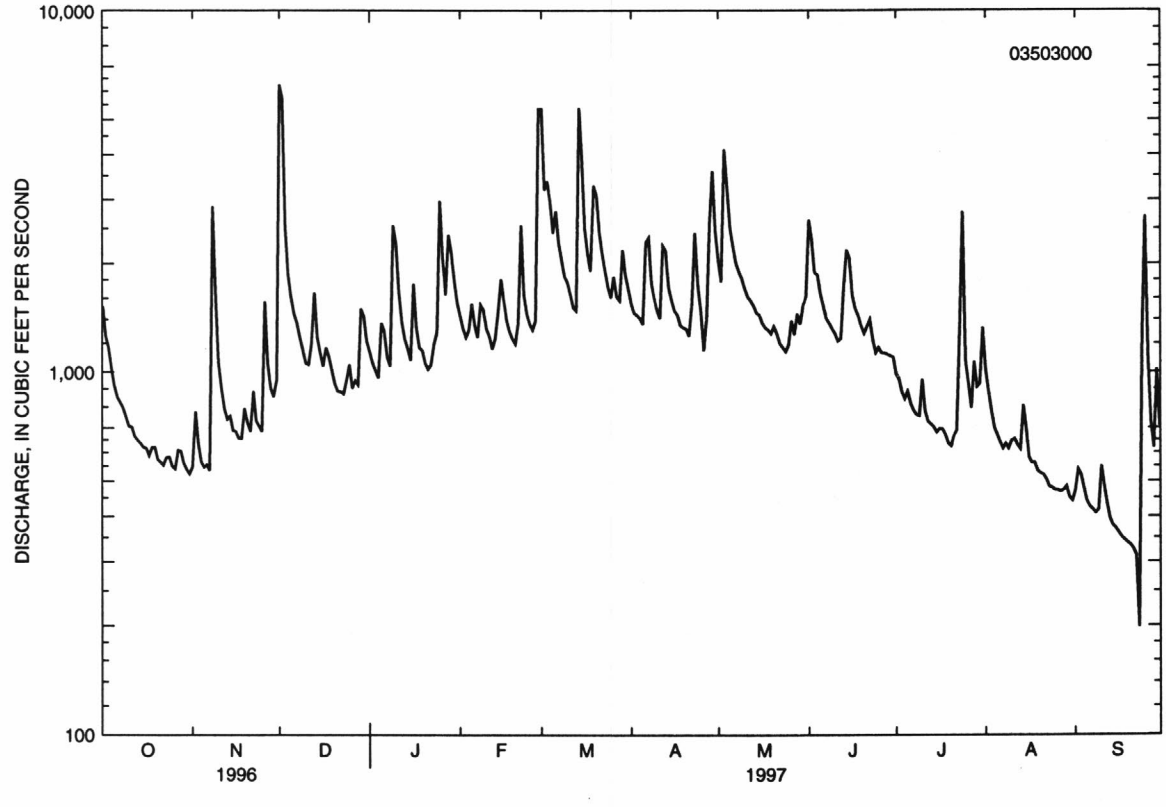
MEAN	662	817	1068	1374	1594	1768	1553	1190	941	708	661	594
MAX	2557	2169	2231	2570	3718	3372	2746	2573	2061	2136	1670	1605
(WY)	1965	1980	1962	1946	1990	1990	1964	1976	1949	1989	1967	1950
MIN	192	282	368	349	660	596	553	489	351	238	213	208
(WY)	1955	1955	1966	1981	1986	1988	1986	1986	1988	1986	1986	1954

TENNESSEE RIVER BASIN

03503000 LITTLE TENNESSEE RIVER AT NEEDMORE, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1944 - 1997@	
ANNUAL TOTAL	472497		474842			
ANNUAL MEAN	1291		1301		1078	
HIGHEST ANNUAL MEAN					1565	1973
LOWEST ANNUAL MEAN					495	1986
HIGHEST DAILY MEAN	13800	Jan 27	6250	Dec 1	17200	Oct 5 1964
LOWEST DAILY MEAN	492	Sep 14	198	Sep 23	71	Nov 7 1954
ANNUAL SEVEN-DAY MINIMUM	549	Sep 10	315	Sep 17	142	Oct 2 1986
INSTANTANEOUS PEAK FLOW			9030	Dec 1	22100	Oct 5 1964
INSTANTANEOUS PEAK STAGE			7.44	Dec 1	12.87	Oct 5 1964
INSTANTANEOUS LOW FLOW			194	Sep 23	52*	Nov 7 1954
ANNUAL RUNOFF (CFSM)	2.96		2.98		2.47	
ANNUAL RUNOFF (INCHES)	40.31		40.51		33.61	
10 PERCENT EXCEEDS	2110		2250		1940	
50 PERCENT EXCEEDS	986		1170		825	
90 PERCENT EXCEEDS	584		537		370	

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



TENNESSEE RIVER BASIN

03504000 NANTAHALA RIVER NEAR RAINBOW SPRINGS, NC

LOCATION.--Lat 35°07'37", long 83°37'09", Macon County, Hydrologic Unit 06010202, on right bank on Forest Service Road 437 in Nantahala National Forest, 300 ft upstream from Roaring Fork, 0.2 mi downstream of Buck Creek, 4 mi northwest of town of Rainbow Springs, and at mile 34.3.

DRAINAGE AREA.--51.9 mi^2.

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 973: 1941(M).

GAGE.--Water-stage recorder. Datum of gage is 3,072.97 ft above sea level.

REMARKS.--Records good except those during periods of ice effect, Dec. 20-21, Jan. 10-11, and 17-19, which are poor. Occasional slight diurnal fluctuation at low flow caused by small ponds on tributaries upstream from station. Maximum discharge for period of record from rating curve extended above 3,000 ft^3/s on basis of slope-area measurement of peak flow. Minimum discharge for period of record occurred several days in Oct. 1987.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	409	130	1220	305	310	896	370	369	431	180	184	98
2	359	222	738	290	290	657	346	337	381	167	161	82
3	323	146	530	268	279	635	327	722	314	159	150	84
4	284	135	434	252	296	529	309	497	310	152	139	71
5	258	129	389	404	327	533	295	432	287	150	131	67
6	239	125	348	306	274	560	629	390	260	143	125	64
7	223	140	364	282	261	467	435	356	242	138	140	63
8	212	811	315	273	337	423	376	334	229	136	128	62
9	197	373	287	456	281	388	348	319	220	160	127	67
10	188	279	269	e346	268	375	325	295	210	149	132	111
11	179	234	257	e315	251	343	307	280	201	131	124	72
12	171	211	379	294	239	320	456	266	245	127	129	64
13	164	197	360	275	259	360	348	253	303	123	136	62
14	157	193	303	260	276	816	321	241	570	122	121	60
15	151	177	279	255	299	522	304	238	393	159	110	58
16	146	167	263	352	260	448	289	222	319	136	107	57
17	142	162	290	e256	246	405	277	214	296	114	99	56
18	166	208	251	e242	235	376	262	206	271	110	95	55
19	142	214	237	e232	227	797	258	201	246	106	93	53
20	134	180	e222	227	219	596	247	212	245	103	92	51
21	129	220	e216	220	382	503	243	190	239	99	90	52
22	126	213	210	263	321	450	362	180	224	108	84	53
23	159	190	205	278	276	408	409	174	207	536	82	52
24	128	178	301	334	259	378	311	169	208	261	81	310
25	123	206	240	564	246	357	283	189	200	171	79	480
26	125	326	222	388	255	470	269	265	194	150	77	157
27	169	225	241	340	359	367	296	192	227	142	76	112
28	136	210	223	525	1310	421	545	227	214	146	75	154
29	127	199	448	396	---	545	523	250	196	138	73	140
30	123	344	330	362	---	442	417	292	182	323	70	108
31	117	---	340	333	---	411	---	263	---	258	70	---
TOTAL	5706	6744	10711	9893	8842	15198	10487	8775	8064	5097	3380	2975
MEAN	184	225	346	319	316	490	350	283	269	164	109	99.2
MAX	409	811	1220	564	1310	896	629	722	570	536	184	480
MIN	117	125	205	220	219	320	243	169	182	99	70	51
CFSM	3.55	4.33	6.66	6.15	6.08	9.45	6.74	5.45	5.18	3.17	2.10	1.91
IN.	4.09	4.83	7.68	7.09	6.34	10.89	7.52	6.29	5.78	3.65	2.42	2.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1997, BY WATER YEAR (WY)

MEAN	119	157	229	282	326	327	282	216	174	141	126	109
MAX	415	376	474	568	657	572	493	491	485	335	327	374
(WY)	1965	1978	1993	1974	1957	1979	1979	1976	1989	1989	1994	1950
MIN	42.2	56.6	77.2	84.4	115	138	118	96.8	67.1	59.0	49.5	41.8
(WY)	1955	1955	1959	1981	1941	1988	1986	1986	1986	1986	1986	1986

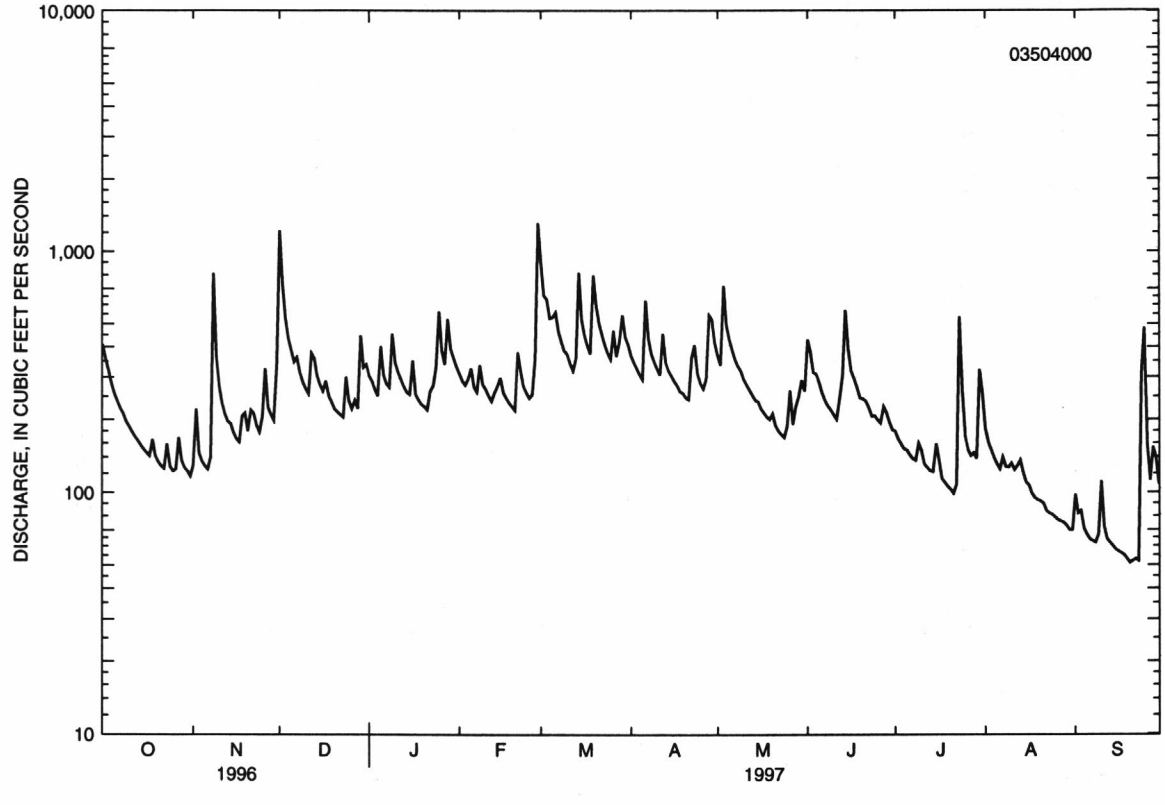
TENNESSEE RIVER BASIN

03504000 NANTAHALA RIVER NEAR RAINBOW SPRINGS, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1941 - 1997	
ANNUAL TOTAL	96079		95872			
ANNUAL MEAN	263		263		207	
HIGHEST ANNUAL MEAN					280	1949
LOWEST ANNUAL MEAN					109	1986
HIGHEST DAILY MEAN	1470	Jan 27	1310	Feb 28	3060	Jun 16 1949
LOWEST DAILY MEAN	91	Jul 11	51	Sep 20	30	Oct 6 1986
ANNUAL SEVEN-DAY MINIMUM	97	Jul 6	53	Sep 17	31	Oct 2 1986
INSTANTANEOUS PEAK FLOW			2160	Dec 1	6300*	Jun 16 1949
INSTANTANEOUS PEAK STAGE			4.89	Dec 1	9.70	Jun 16 1949
INSTANTANEOUS LOW FLOW			49	Sep 21	30*	Oct 4 1987
ANNUAL RUNOFF (CFSM)	5.06		5.06		3.98	
ANNUAL RUNOFF (INCHES)	68.87		68.72		54.08	
10 PERCENT EXCEEDS	418		434		375	
50 PERCENT EXCEEDS	217		242		164	
90 PERCENT EXCEEDS	130		99		69	

e Estimated.

* See REMARKS.



TENNESSEE RIVER BASIN

03512000 OCONALUFTEE RIVER AT BIRDTOWN, NC

LOCATION.--Lat 35°27'41", long 83°21'13", Swain County, Hydrologic Unit 06010203, in Cherokee Indian Reservation on left bank 200 ft upstream from bridge on Secondary Road 1359, 0.5 mi south of Birdtown, 0.6 mi downstream of Adams Creek, 0.6 mi upstream from Goose Creek, 2.2 mi southwest of Cherokee, and at mile 3.1.

DRAINAGE AREA.--184 mi^2.

PERIOD OF RECORD.--July 1945 to September 1946, July 1948 to current year.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 1,843.30 ft above sea level. Prior to Oct. 1, 1946, nonrecording gage at same site and datum. Tennessee Valley Authority satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Maximum gage height for period of record and current water year, from floodmarks. Minimum discharge for period of record also occurred Nov. 9, 1987. Minimum discharge for current water year also occurred Sept. 17, 19, 20.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of Nov. 19, 1906, and Mar. 27, 1913, reached stages of 18 and 14.5 ft, respectively, from studies by Tennessee Valley Authority; discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	533	249	6120	742	740	2650	980	964	1340	558	236	170
2	464	388	2550	670	680	1800	885	820	944	529	224	162
3	484	278	1480	618	642	4230	812	2420	789	465	216	149
4	422	259	1080	577	855	2720	756	1550	798	434	210	142
5	388	249	921	778	1560	2000	711	1210	680	426	227	129
6	362	243	796	657	950	1960	1280	1030	616	392	218	129
7	347	241	909	597	829	1480	1010	889	572	374	206	127
8	322	2070	786	578	893	1250	871	806	543	361	234	125
9	308	811	689	1060	767	1090	797	750	529	411	203	136
10	294	590	640	898	724	1050	733	685	515	444	212	177
11	288	491	603	785	668	915	690	635	485	367	207	193
12	276	432	1300	699	630	823	907	602	471	345	269	151
13	268	396	1270	643	656	789	769	572	671	334	236	135
14	259	421	955	600	648	1970	683	542	2330	320	213	129
15	251	407	834	582	664	1370	649	519	1710	323	193	125
16	246	379	749	777	601	1100	613	488	1030	337	188	119
17	242	366	730	566	577	979	597	474	871	324	179	117
18	279	500	653	562	555	891	563	456	817	299	187	143
19	271	632	598	545	542	2300	571	495	717	289	177	125
20	237	472	535	523	539	1700	538	523	637	283	183	118
21	231	506	527	505	1070	1340	525	442	587	276	187	185
22	226	588	499	532	974	1150	668	420	553	302	166	139
23	275	487	486	612	711	1010	956	407	515	321	161	127
24	243	447	645	732	650	910	777	399	489	301	157	2180
25	226	475	577	1560	612	835	686	414	492	268	154	914
26	227	1010	514	985	608	1190	631	588	481	256	152	429
27	288	620	533	834	954	921	629	544	930	246	158	294
28	244	551	502	1250	4190	1070	952	783	768	258	165	304
29	287	502	709	1000	---	1420	2100	687	661	263	152	346
30	249	1240	633	893	---	1160	1230	724	541	380	143	261
31	233	---	770	808	---	1160	---	651	---	280	139	---
TOTAL	9270	16300	30593	23168	24489	45233	24569	22489	23082	10766	5952	7980
MEAN	299	543	987	747	875	1459	819	725	769	347	192	266
MAX	533	2070	6120	1560	4190	4230	2100	2420	2330	558	269	2180
MIN	226	241	486	505	539	789	525	399	471	246	139	117
CFSM	1.63	2.95	5.36	4.06	4.75	7.93	4.45	3.94	4.18	1.89	1.04	1.45
IN.	1.87	3.30	6.19	4.68	4.95	9.14	4.97	4.55	4.67	2.18	1.20	1.61

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1997@, BY WATER YEAR (WY)

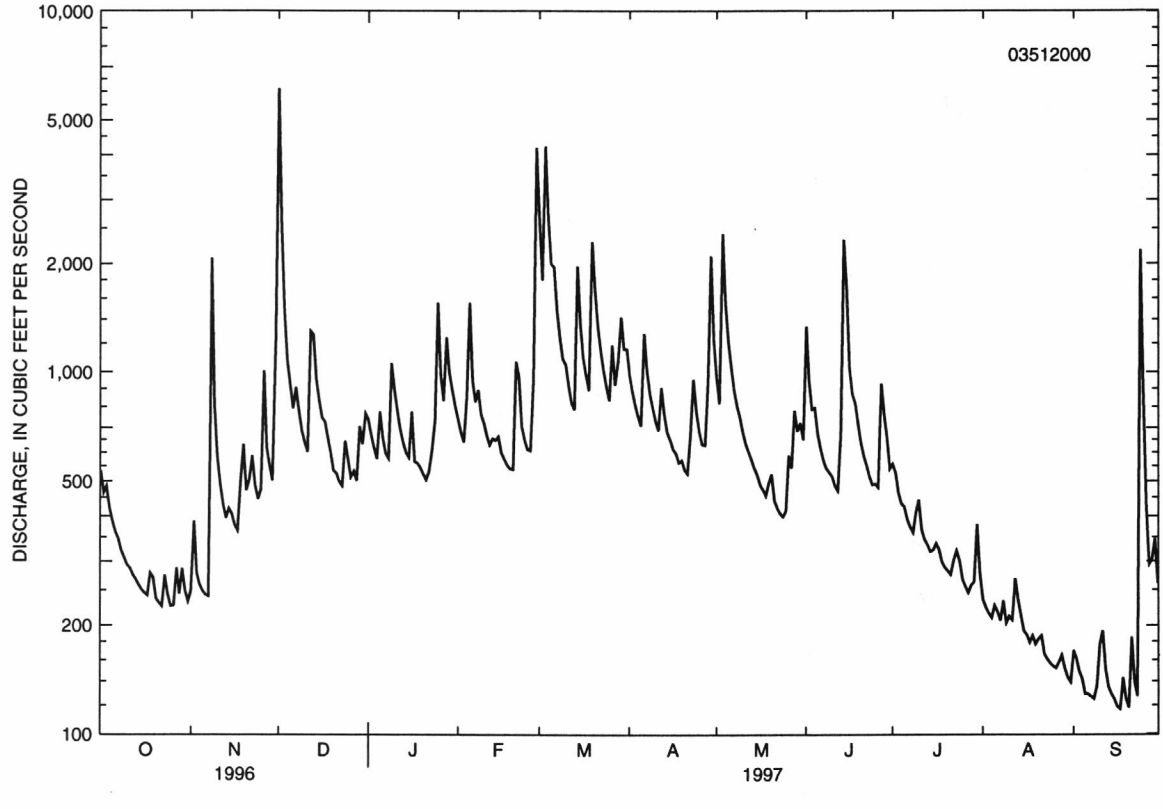
MEAN	267	389	589	721	818	898	719	533	427	380	333	261
MAX	645	777	1266	1428	1700	1714	1315	1202	1136	938	733	584
(WY)	1990	1958	1962	1974	1990	1963	1994	1984	1989	1989	1994	1989
MIN	94.5	125	162	170	392	330	277	239	175	169	161	121
(WY)	1955	1988	1966	1981	1978	1988	1986	1986	1988	1952	1987	1954

TENNESSEE RIVER BASIN

03512000 OCONALUFTEE RIVER AT BIRDTOWN, NC--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1945 - 1997@	
ANNUAL TOTAL	249340		243891			
ANNUAL MEAN	681		668		526	
HIGHEST ANNUAL MEAN					771	1994
LOWEST ANNUAL MEAN					274	1986
HIGHEST DAILY MEAN	6120	Dec 1	6120	Dec 1	8470	Mar 12 1963
LOWEST DAILY MEAN	217	Sep 26	117	Sep 17	80	Nov 8 1987
ANNUAL SEVEN-DAY MINIMUM	238	Oct 20	125	Sep 14	82	Oct 16 1954
INSTANTANEOUS PEAK FLOW			10800	Dec 1	15900	Dec 30 1969
INSTANTANEOUS PEAK STAGE			9.50	Dec 1	12.46*	Dec 30 1969
INSTANTANEOUS LOW FLOW			114*	Sep 16	79*	Nov 8 1987
ANNUAL RUNOFF (CFSM)	3.70		3.63		2.86	
ANNUAL RUNOFF (INCHES)	50.41		49.31		38.87	
10 PERCENT EXCEEDS	1110		1170		953	
50 PERCENT EXCEEDS	542		558		395	
90 PERCENT EXCEEDS	278		187		170	

* See REMARKS.
@ See PERIOD OF RECORD.



03513000 TUCKASEGEE RIVER AT BRYSON CITY, NC

LOCATION.--Lat 35°25'40", long 83°26'51", Swain County, Hydrologic Unit 06010203, on left bank 400 ft downstream of bridge on Secondary Road 1364, Everett Street, in Bryson City, 0.6 mi downstream of Deep Creek, and at mile 12.6.

DRAINAGE AREA.--655 mi^2.

PERIOD OF RECORD.--October 1897 to December 1981, October 1983 to January 1995, April 1996 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 523: 1916, 1918-20. WSP 823: Drainage area. WSP 1306: 1898-1913. WSP 1336: 1907, 1915(M), 1916-20, 1921-29(M), 1933-34(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,714.54 ft above sea level (levels by Tennessee Valley Authority). Nov. 7, 1897, to Feb. 2, 1914, and May 18, 1920, to June 27, 1927, nonrecording gage at bridge 400 ft upstream at datum of 1,716.54 ft. Feb. 3, 1914, to May 17, 1920, water-stage recorder at site 200 ft upstream at datum of 1,716.54 ft. June 28, 1927, to Sept. 30, 1960, water-stage recorder at present site at datum of 1,716.54 ft. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, Nov. 6-11, which are poor. Considerable diurnal fluctuation caused by power plants upstream from station. Flow regulated by Thorpe Reservoir, Cedar Cliff Lake, Bear Creek Lake, Tennessee Creek project lakes (stations 03507111, 03507131), and two small reservoirs with a combined capacity of 250 ft^3/s-day. Maximum discharge for period of record, from rating curve extended above 28,000 ft^3/s on basis of slope-area measurement of peak flow. Minimum discharge for period of record and minimum daily discharge for period of record also occurred Sept. 10, 1925, caused by filling reservoir on Oconaluftee River. Minimum daily discharge during normal regulation: 186 ft^3/s, Oct. 13, 1925. Minimum discharge for current water year also occurred on Sept. 20-23.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1840, Mar. 6, 1867, and June 1876 reached stages of 22, 19, and 19 ft, respectively, present site and datum, from studies by Tennessee Valley Authority; discharge not determined. The flood in May 1840 exceeded all other observed floods at this location.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2150	787	12400	2180	2470	7350	3160	3490	3490	1520	1620	700
2	1630	1380	6630	2190	2070	5300	3090	3190	3420	1960	1270	717
3	1760	810	4240	2010	2130	8840	2910	6430	2850	1660	933	720
4	1720	785	3420	1990	2670	6360	2810	4880	2910	1730	1160	673
5	1560	919	3050	2450	3580	4860	2270	4100	2810	1510	1430	628
6	1180	e900	2770	2530	2790	4940	3480	3630	2670	1100	1440	620
7	1240	e950	2880	2100	2570	4210	3420	3210	2240	1060	1160	607
8	1710	e4000	2570	2140	2970	3830	3170	2670	1900	1170	1230	599
9	1610	e1700	2000	3540	2440	3520	3000	2850	1930	1290	941	566
10	1340	e1300	2070	3030	2350	3480	2550	2480	1970	1490	893	668
11	1330	e1200	1990	2910	2350	2910	2400	2270	1780	1190	879	737
12	894	1320	3160	2550	2210	2770	2840	2150	1770	1340	1050	546
13	814	1410	3770	2380	2270	2920	2460	2250	2470	969	970	505
14	804	1510	2960	1960	2300	5900	2510	2250	5570	926	958	438
15	862	1500	2440	1890	2720	4530	2510	2180	4610	1210	922	445
16	871	1440	2160	2540	2020	3860	2430	1900	3380	1710	888	476
17	837	1230	2260	2330	2190	3540	2420	1780	2700	1670	779	441
18	1130	1570	1900	2250	2200	3380	2460	1460	2430	1540	793	489
19	1330	1660	1890	2010	1910	6540	2160	1520	2170	939	848	483
20	1060	1290	1880	1970	1990	5550	1890	1900	1840	845	839	418
21	783	1260	1420	1750	2810	4580	1900	1720	1970	882	845	444
22	769	1870	1370	1580	3070	4070	2730	1740	1490	1560	728	406
23	885	1430	1720	1980	2420	3710	3650	1630	1580	1860	713	485
24	905	1090	1760	2500	2260	3450	2950	1560	1710	2040	700	4210
25	812	1260	1820	4590	2140	3280	2570	1310	2020	1630	688	2660
26	845	2670	1580	3350	1930	4050	1900	1970	2080	1190	690	1200
27	793	1820	1640	2830	2670	3370	1850	1610	2650	806	687	972
28	730	1670	1640	3710	10400	3550	2950	2630	2140	944	722	999
29	871	1450	2170	3380	---	3910	5320	2430	1900	1310	692	912
30	789	2380	2420	2880	---	3230	4010	2520	1630	1610	664	844
31	814	---	2220	2960	---	3400	---	2230	---	2050	643	---
TOTAL	34828	44561	86200	78460	75900	135190	83770	77940	74080	42711	28775	24608
MEAN	1123	1485	2781	2531	2711	4361	2792	2514	2469	1378	928	820
MAX	2150	4000	12400	4590	10400	8840	5320	6430	5570	2050	1620	4210
MIN	730	785	1370	1580	1910	2770	1850	1310	1490	806	643	406

TENNESSEE RIVER BASIN

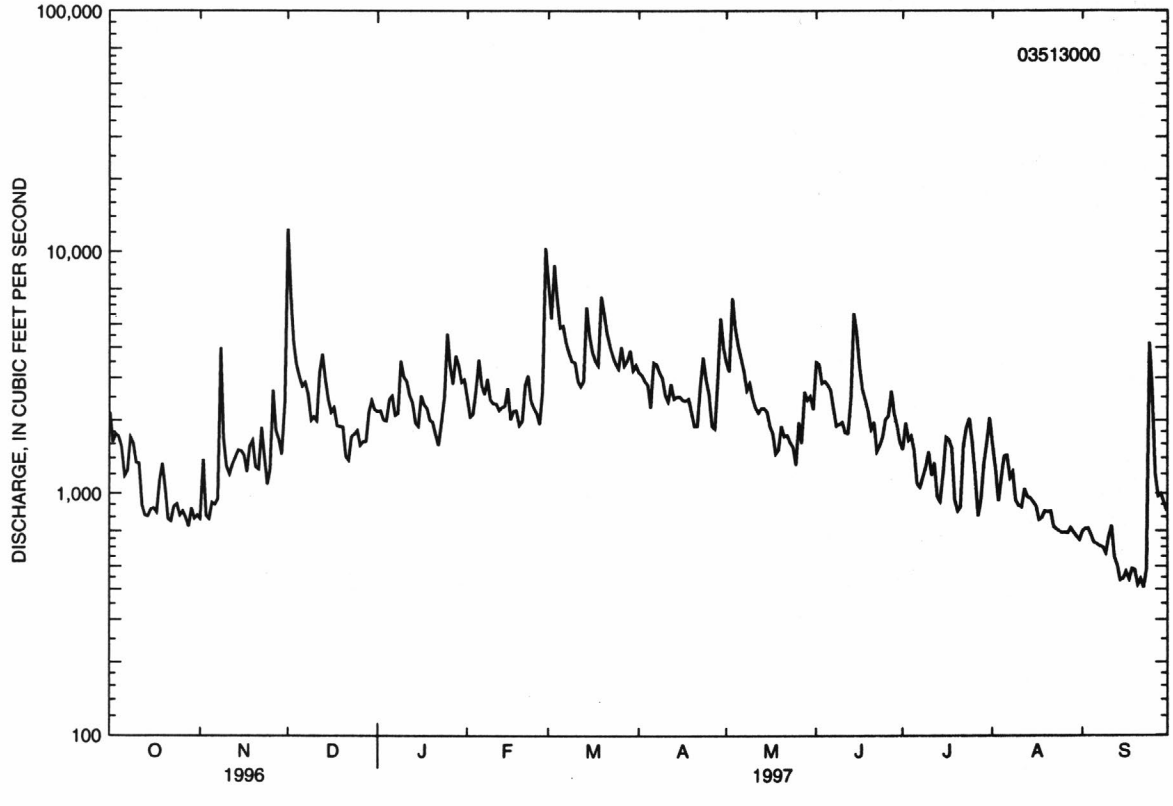
03513000 TUCKASEGEE RIVER AT BRYSON CITY, NC--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 1997@, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	930	1063	1602	2015	2290	2606	2239	1747	1410	1247	1170	962
MAX	3654	2899	3704	4819	5847	6504	4843	3744	3199	3379	4251	3589
(WY)	1899	1907	1933	1937	1899	1899	1920	1984	1909	1916	1901	1898
MIN	347	378	457	599	736	926	841	602	531	503	220	195
(WY)	1932	1932	1940	1940	1941	1988	1986	1941	1941	1925	1925	1925

SUMMARY STATISTICS	FOR 1997 WATER YEAR		WATER YEARS 1898 - 1997@	
ANNUAL TOTAL	787023			
ANNUAL MEAN	2156		1602	
HIGHEST ANNUAL MEAN		2576	1899	
LOWEST ANNUAL MEAN		879	1986	
HIGHEST DAILY MEAN	12400	Dec 1	28000	Mar 4 1917
LOWEST DAILY MEAN	406	Sep 22	31*	Sep 9 1925
ANNUAL SEVEN-DAY MINIMUM	451	Sep 16	97	Sep 4 1925
INSTANTANEOUS PEAK FLOW	20300	Dec 1	61600*	Aug 30 1940
INSTANTANEOUS PEAK STAGE	10.66	Dec 1	15.96	Aug 30 1940
INSTANTANEOUS LOW FLOW	394*	Sep 17	27*	Sep 10 1925
10 PERCENT EXCEEDS	3600		2850	
50 PERCENT EXCEEDS	1910		1270	
90 PERCENT EXCEEDS	781		610	

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



TENNESSEE RIVER BASIN

03548500 HIWASSEE RIVER ABOVE MURPHY, NC

LOCATION.--Lat 35°04'49", long 84°00'10", Cherokee County, Hydrologic Unit 06020002, on right bank on U.S. Highway 64, 600 ft upstream from Will Scott Creek, 2.0 mi southeast of Murphy, and at mile 99.1.

DRAINAGE AREA.--406 mi^2.

PERIOD OF RECORD.--June 1896 to August 1897 (gage heights only), October 1897 to current year. Published as "Hiwassee River at Murphy" 1897-1940. Records published for both sites August 1939 to April 1940. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORD.--WSP 583: 1899(M). WSP 973: Drainage area. WSP 1003: 1943. WSP 1306: 1901-2, 1904-17, 1919(M), 1922(M), 1924-26(M). WSP 1706: 1899, 1907.

GAGE.--Water-stage recorder. Datum of gage is 1,538.23 ft above sea level (levels by Tennessee Valley Authority). Prior to Jan. 30, 1921, nonrecording gage at bridge 2.8 mi downstream at 1,507.83 ft. Jan. 30, 1921, to Nov. 8, 1926, nonrecording gage 2.8 mi downstream at 1,509.83 ft. Nov. 9, 1926, to Apr. 30, 1940, water-stage recorder 2.8 mi downstream at 1,510.03 ft.

REMARKS.--No estimated daily discharges. Records good.. Considerable diurnal fluctuation since 1924 caused by Mission power plant at Andrews Dam 7 mi upstream, normal regulated storage, about 75 ft^3/s-day. Flow regulated since 1942 by Chatuge Lake (station 03546500) 22 mi upstream. Prior to regulation, maximum discharge: 23,100 ft^3/s, Mar. 19, 1899, from rating curve extended above 5,000 ft^3/s; gage height: 18.4 ft, from graph based on gage readings, site and datum then in use; minimum daily discharge: 10 ft^3/s, Dec. 3, 1924, result of freezeup and filling of Lake Andrews, site and datum then in use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage observed is that of Mar. 19, 1899.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	1050	3850	988	1470	3410	1590	2110	1390	1160	1150	419
2	1370	987	2630	1000	1140	1970	1310	2020	1070	1260	792	667
3	1450	594	2080	1090	1200	2210	1230	4090	1080	932	514	986
4	1310	451	1730	929	1280	2450	1180	2540	1130	951	834	988
5	808	367	1670	1010	1350	2240	857	2570	1060	669	1120	755
6	580	464	1690	1330	1310	2290	1520	2430	1010	443	1650	604
7	979	350	1820	1400	1290	2190	1530	2290	905	529	958	350
8	1180	1470	1690	1470	1090	1690	1510	2210	621	1100	1070	577
9	1190	925	1540	1950	721	1240	1150	2180	1010	1370	805	902
10	1170	628	1560	2000	880	1570	1400	2100	1410	1350	420	793
11	1270	543	1530	1900	1100	1630	1540	2060	1550	1230	520	940
12	804	568	1830	2090	946	1560	1100	2030	1420	1100	996	729
13	455	443	1990	1880	1140	1290	881	1690	1580	614	1090	630
14	861	445	1430	1740	1200	2210	1290	1600	1880	726	941	380
15	1110	447	1080	1690	1020	1900	1330	1630	1590	979	1010	559
16	1110	416	1310	1640	735	1730	805	1690	1350	977	794	902
17	1110	440	1660	1580	893	1660	703	1060	1640	1010	640	884
18	1200	524	1720	1330	920	1540	890	622	1520	959	902	748
19	781	770	1720	1260	943	2850	742	835	1370	776	1070	917
20	579	581	2000	1150	807	2490	696	859	1300	470	1070	785
21	733	1110	1810	1110	1030	2050	708	887	1060	927	1030	502
22	933	1610	1630	1120	929	1490	1460	941	641	1370	1050	597
23	967	1300	1560	1140	719	1040	2040	567	776	1440	650	786
24	933	1230	1810	1300	847	1260	1500	554	1050	1170	458	1210
25	914	1330	1560	2250	1090	1330	1570	556	1230	796	721	2120
26	647	1600	1600	1510	1060	1650	1570	640	958	820	962	1050
27	555	1530	1710	1810	1190	1350	1120	571	1210	726	907	767
28	759	1310	1050	2530	6470	1310	2230	603	1480	1220	974	558
29	1050	1170	1330	2230	---	2710	2560	648	1640	889	983	762
30	1040	1290	1270	1930	---	1400	2260	756	1180	1330	923	935
31	1070	---	1210	1830	---	1420	---	756	---	1230	581	---
TOTAL	30318	25943	53070	48187	34770	57130	40272	46095	37111	30523	27585	23802
MEAN	978	865	1712	1554	1242	1843	1342	1487	1237	985	890	793
MAX	1450	1610	3850	2530	6470	3410	2560	4090	1880	1440	1650	2120
MIN	455	350	1050	929	719	1040	696	554	621	443	420	350

TENNESSEE RIVER BASIN

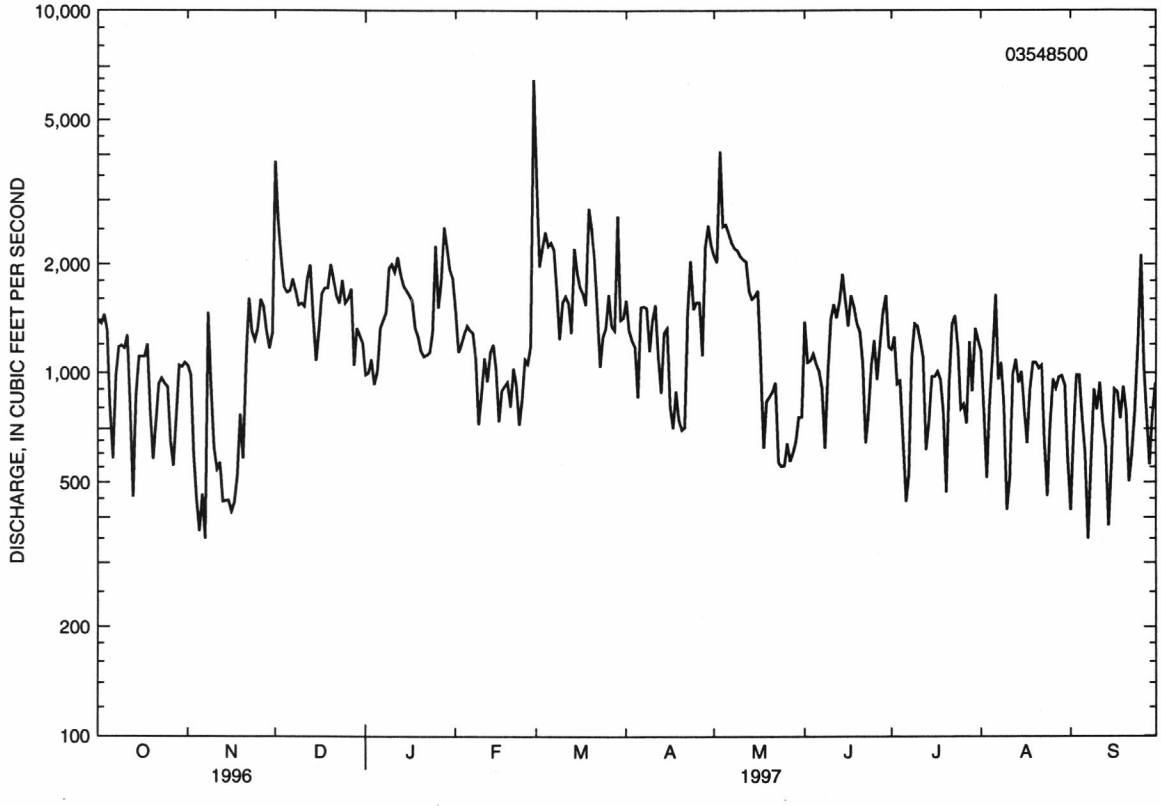
03548500 HIWASSEE RIVER ABOVE MURPHY, NC--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1997[@], BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	525	590	958	1134	1225	1125	1053	942	909	894	877	727
MAX	1530	1654	2532	2462	3076	2784	2155	2033	1852	1517	1674	1628
(WY)	1990	1990	1993	1974	1990	1990	1953	1953	1989	1989	1994	1943
MIN	98.8	106	214	223	408	373	219	212	238	228	120	141
(WY)	1953	1954	1948	1948	1954	1988	1986	1988	1953	1953	1953	1953

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1942 - 1997[@]	
ANNUAL TOTAL	421303		454806			
ANNUAL MEAN	1151		1246		912	
HIGHEST ANNUAL MEAN					1414	1990
LOWEST ANNUAL MEAN					397	1988
HIGHEST DAILY MEAN	7430	Jan 27	6470	Feb 28	11600	Feb 16 1990
LOWEST DAILY MEAN	350	Nov 7	350	Nov 7	62	Oct 19 1952
ANNUAL SEVEN-DAY MINIMUM	435	Jun 16	469	Nov 12	80	Oct 18 1952
INSTANTANEOUS PEAK FLOW			12100	Feb 28	18600	May 28 1973
INSTANTANEOUS PEAK STAGE			11.18	Feb 28	13.88	May 28 1973
INSTANTANEOUS LOW FLOW			163	Sep 20	NOT DETERMINED	
10 PERCENT EXCEEDS	1690		2010		1630	
50 PERCENT EXCEEDS	1100		1120		810	
90 PERCENT EXCEEDS	569		589		220	

[@] Regulated period only (1942-1997). See REMARKS.



TENNESSEE RIVER BASIN

03550000 VALLEY RIVER AT TOMOTLA, NC

LOCATION.--Lat 35°08'20", long 83°58'50", Cherokee County, Hydrologic Unit 06020002, on right bank at site of former bridge on Secondary Road 1373 at Tomotla, 600 ft upstream from bridge on U.S. Highways 19 and 74, 0.2 mi upstream from Roger Creek, 4.7 mi northeast of Murphy, and at mile 6.6.

DRAINAGE AREA.--104 mi^2.

PERIOD OF RECORD.--June 1904 to December 1909, January 1914 to April 1917, October 1918 to current year.

REVISED RECORDS.--WSP 503: 1905-9, 1915-17. WSP 823: Drainage area. WSP 1306: 1917(M), 1920(M), 1922(M), 1925(M), 1930(M), 1933(M). WSP 1626: 1907(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,556.46 ft above sea level (levels by Tennessee Valley Authority). Prior to May 11, 1934, nonrecording gage at same site and datum. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Maximum discharge for period of record, from flood profile by Tennessee Valley Authority, from rating curve extended above 5,800 ft^3/s on basis of slope-conveyance study. Minimum discharge for period of record occurred several days in Aug. and Sept. 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of September 1898 reached a stage of 21.2 ft, from floodmark by Tennessee Valley Authority; discharge, about 20,000 ft^3/s.

REVISIONS.--The maximum discharges for some water years have been revised, as shown in the following table. They supercede figures published in the reports for 1979 through 1994.

Water Year	Date	Discharge (ft^3/s)	Gage height (ft)	Water Year	Date	Discharge (ft^3/s)	Gage height (ft)
1979	Mar. 4, 1979	7,650	14.57	1987	Feb. 28, 1987	2,880	8.45
1980	Mar. 21, 1980	8,770	15.40	1988	Jan. 20, 1988	3,100	8.88
1981	Feb. 10, 1981	2,030	6.68	1989	Sept. 30, 1989	3,670	9.90
1982	Sept. 1, 1982	6,130	13.18	1990	Feb. 16, 1990	9,490	15.87
1983	Dec. 5, 1982	2,900	8.49	1991	Dec. 23, 1990	7,400	14.36
1984	May 8, 1984	5,340	12.29	1992	Dec. 3, 1991	2,740	8.17
1985	Feb. 1, 1985	2,980	8.65	1993	Dec. 20, 1992	5,030	11.90
1986	Feb. 18, 1986	1,600	5.69	1994	Mar. 27, 1994	11,900	17.10

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	122	2270	436	417	1720	395	395	693	365	121	63
2	265	239	1140	419	380	1020	367	350	506	309	111	73
3	401	156	645	376	354	1290	345	1610	384	269	104	60
4	239	140	473	346	352	1070	328	985	352	241	100	59
5	198	132	405	432	393	879	314	672	341	243	98	54
6	174	126	357	373	341	1020	825	539	301	212	95	52
7	161	122	386	342	322	775	658	455	279	198	96	51
8	149	635	341	332	372	650	506	405	258	189	101	50
9	139	375	307	655	337	558	439	378	255	284	97	53
10	132	274	284	580	329	535	394	339	242	241	106	89
11	129	226	268	474	310	464	365	315	228	193	102	83
12	122	197	546	406	295	417	431	297	230	181	93	60
13	118	180	610	365	339	395	392	279	325	170	114	55
14	114	194	453	336	338	931	351	264	696	167	109	53
15	110	178	386	324	342	721	331	257	684	161	93	51
16	107	165	345	560	316	575	314	237	458	161	89	49
17	105	158	344	415	301	496	300	227	397	156	85	49
18	129	243	307	371	290	451	282	218	358	149	85	47
19	117	290	287	344	277	1120	283	217	319	137	79	45
20	106	240	263	319	266	924	273	232	283	127	80	44
21	102	304	250	301	303	708	266	209	267	131	80	46
22	101	354	242	326	315	595	373	194	243	125	72	47
23	123	293	237	358	284	509	587	187	225	150	69	48
24	110	255	328	405	270	451	432	183	213	137	67	387
25	103	265	304	1070	262	413	369	225	211	122	66	684
26	103	341	278	680	267	594	333	308	263	114	64	182
27	135	285	305	526	465	470	329	248	292	109	62	121
28	117	262	284	755	3460	475	410	361	875	142	62	122
29	113	237	672	631	---	519	546	344	812	124	62	113
30	107	367	548	536	---	461	452	362	457	152	58	93
31	103	---	489	466	---	440	---	334	---	174	56	---
TOTAL	4456	7355	14354	14259	12297	21646	11990	11626	11447	5633	2676	2983
MEAN	144	245	463	460	439	698	400	375	382	182	86.3	99.4
MAX	401	635	2270	1070	3460	1720	825	1610	875	365	121	684
MIN	101	122	237	301	262	395	266	183	211	109	56	44
CFSM	1.38	2.36	4.45	4.42	4.22	6.71	3.84	3.61	3.67	1.75	.83	.96
IN.	1.59	2.63	5.13	5.10	4.40	7.74	4.29	4.16	4.09	2.01	.96	1.07

TENNESSEE RIVER BASIN

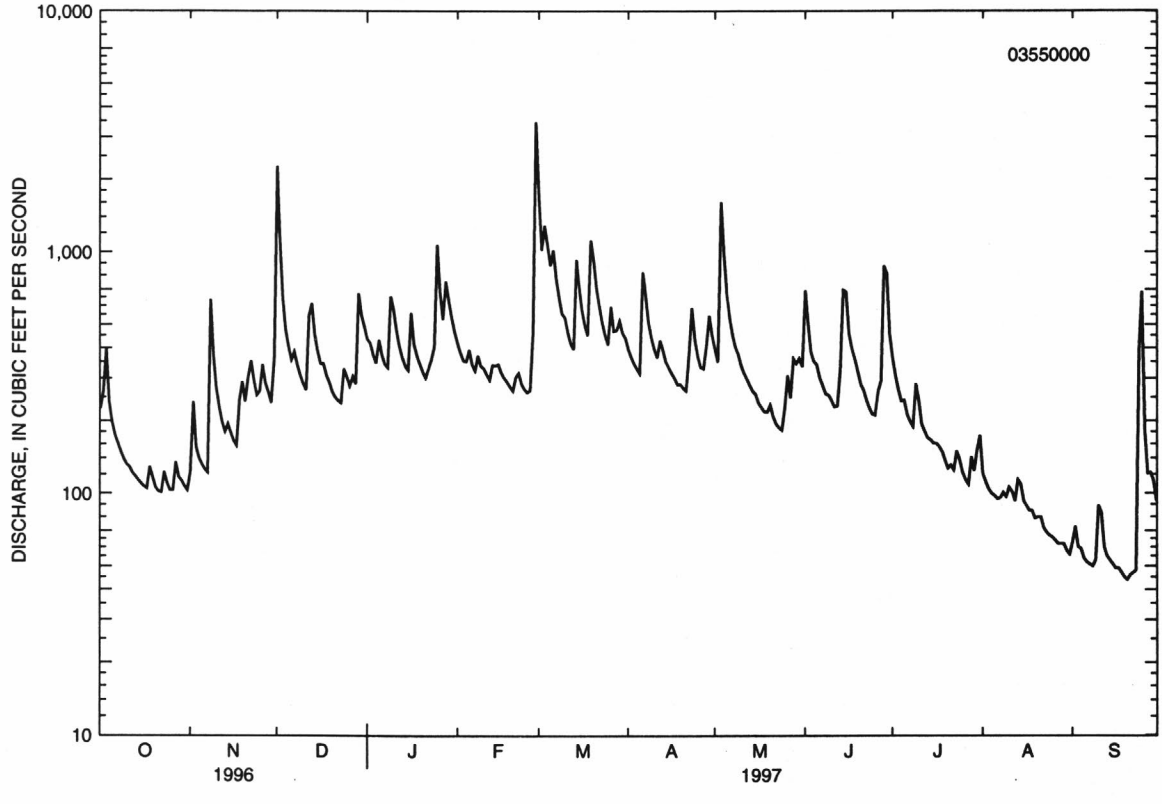
03550000 VALLEY RIVER AT TOMOTLA, NC--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1997@, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	99.6	160	295	400	460	467	369	261	190	168	138	103
MAX	442	685	1045	936	1022	1379	835	755	607	443	563	434
(WY)	1907	1930	1933	1974	1957	1917	1936	1929	1989	1949	1920	1928
MIN	25.2	38.6	57.4	69.9	92.7	155	135	88.9	44.8	42.4	24.6	21.3
(WY)	1955	1934	1934	1981	1941	1988	1986	1941	1988	1988	1925	1925

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1904 - 1997@	
ANNUAL TOTAL	121542		120722			
ANNUAL MEAN	332		331		258	
HIGHEST ANNUAL MEAN					379	1922
LOWEST ANNUAL MEAN					111	1988
HIGHEST DAILY MEAN	3680	Jan 27	3460	Feb 28	8190	Feb 16 1995
LOWEST DAILY MEAN	80	Sep 15	44	Sep 20	12	Aug 27 1925
ANNUAL SEVEN-DAY MINIMUM	95	Sep 9	47	Sep 17	13	Aug 24 1925
INSTANTANEOUS PEAK FLOW			6240	Feb 28	18000*	Nov 19 1906
INSTANTANEOUS PEAK STAGE			13.29	Feb 28	20.50	Nov 19 1906
INSTANTANEOUS LOW FLOW			43	Sep 20	12*	Aug 27 1925
ANNUAL RUNOFF (CFSM)	3.19		3.18		2.48	
ANNUAL RUNOFF (INCHES)	43.47		43.18		33.73	
10 PERCENT EXCEEDS	598		601		505	
50 PERCENT EXCEEDS	274		284		178	
90 PERCENT EXCEEDS	108		85		60	

* See REMARKS.
@ See PERIOD OF RECORD.



Lakes and Reservoirs in Ohio River Basin

03460242 WATERVILLE LAKE

LOCATION.--Lat 35°41'41", long 83°03'02", Haywood County, Hydrologic Unit 06010206, at Waterville Dam on Pigeon River, 0.1 mi downstream from Cataloochee Creek, 5.5 mi southeast of Mount Sterling, and at river mile 38.0.

DRAINAGE AREA.--455 mi^2.

PERIOD OF RECORD.--October 1961 to current year. Prior to October 1979, published as Lake Walters.

GAGE.--Nonrecording gage read once daily. Datum of gage is sea level.

REMARKS.--Reservoir is formed by a single-arch, variable-radius, concrete dam with 14 taintor gates 10 ft high by 24 ft wide. Dam was completed in 1929 and filling began October 1929; water in reservoir first reached minimum pool elevation November 1929. Total capacity is 12,800 ft^3/s-day at 2,258.60 ft (top of gate), of which 10,400 ft^3/s-day is controlled storage above 2,175 ft, normal minimum pool elevation. Reservoir is used for power. Prior to Jan. 1, 1971, records furnished by Carolina Power and Light Co. New capacity table was put into use Jan. 1, 1971.

COOPERATION.--Gage-height record furnished by Carolina Power and Light Co.; water-level storage records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum content observed: 12,950 ft^3/s-day, Mar. 27, 1994; elevation, 2,259.20 ft. Minimum content observed: 1,030 ft^3/s-day, Sept. 16, 1980; elevation, 2,141.50 ft.

EXTREMES FOR CURRENT YEAR.--Maximum content observed: 12,880 ft^3/s-day, Nov. 8,; elevation, 2,258.80 ft. Minimum content observed: 9,290 ft^3/s-day, Dec. 16; elevation, 2,235.90 ft.

03514500 FONTANA LAKE

LOCATION.--Lat 35°27'07", long 83°48'18", Graham County, Hydrologic Unit 06010202, at Fontana Dam on Little Tennessee River, 9.6 mi upstream from Cheoah Dam, 5.7 mi upstream from Twenty Mile Creek, 9.0 mi north of Robbinsville, and at river mile 61.0.

DRAINAGE AREA.--1,571 mi^2.

PERIOD OF RECORD.--October 1944 to current year. Prior to November 1944, monthend content only, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by gravity, nonoverflow-type concrete dam. Spillway is equipped with four radial gates 35 ft high by 35 ft wide. Filling began Nov. 7, 1944; dam completed March 1945; water in reservoir first reached minimum pool elevation Jan. 16, 1945. Total capacity (based on 1967 resurvey) is 727,500 ft^3/s-day, at 1,710.0 ft (top of gate) of which 476,900 ft^3/s-day is controlled storage above 1,580.0 ft, normal minimum pool elevation. Reservoir is used for navigation, flood control, and power. New capacity table put into use Jan. 1, 1971.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum content observed: 728,600 ft^3/s-day, May 28, 1973; elevation, 1,710.20 ft. Minimum content observed (after first filling): 78,300 ft^3/s-day, Jan. 29, 1955; elevation, 1,472.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum content observed: 716,400 ft^3/s-day, June 17; elevation, 1,707.93 ft. Minimum content observed: 425,100 ft^3/s-day, Feb. 26; elevation, 1,641.18 ft.

03546500 CHATUGE LAKE

LOCATION.--Lat 35°01'01", long 83°47'28", Clay County, Hydrologic Unit 06020002, at Chatuge Dam on Hiwassee River, 2.0 mi upstream from Hyatt Mill Creek, 2.5 mi downstream from Georgia-North Carolina Stateline, 2.4 mi southeast of Hayesville, and at river mile 121.0.

DRAINAGE AREA.--189 mi^2.

PERIOD OF RECORD.--February 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Aug. 4, 1942, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by a rolled, earthfill dam with side-channel spillway equipped with flashboards. Dam completed and filling began Feb. 12, 1942; water in reservoir first reached minimum pool elevation Feb. 26, 1942. Total capacity (based on 1965 resurvey) is 121,200 ft^3/s-day, at 1,928.0 ft (top of flashboard), of which 61,700 ft^3/s-day is controlled storage above 1,905.0 ft, normal minimum pool elevation. Reservoir is used for navigation, flood control, and power. New capacity table put into use Jan. 1, 1971.

COOPERATION--Records furnished by Tennessee Valley Authority. (See station 03548500.)

EXTREMES FOR PERIOD OF RECORD.--Maximum content observed: 124,200 ft^3/s-day, Apr. 20, 1943; elevation, 1,927.80 ft. Minimum content observed (after first filling): 9,400 ft^3/s-day, Sept. 5, 1947, and Jan. 27, 1956; elevation, 1,860.11 ft, Sept. 5, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum content observed: 115,600 ft^3/s-day, June 16; elevation, 1,926.41 ft. Minimum content observed: 74,300 ft^3/s-day, Jan. 22; elevation, 1,911.98 ft.

03554500 HIWASSEE LAKE

LOCATION.--Lat 35°09'01", long 84°10'40", Cherokee County, Hydrologic Unit 06020002, at Hiwassee Dam on Hiwassee River, 3.9 mi upstream from Shoal Creek, 0.3 mi northwest of village of Hiwassee Dam, and at river mile 75.8.

DRAINAGE AREA.--968 mi^2.

PERIOD OF RECORD.--September 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.63 ft below sea level.

Lakes Reservoirs in Ohio River Basin--Continued

REMARKS--Reservoir is formed by gravity overflow concrete dam with seven taintor gates 23 ft high by 32 ft wide. Slight filling began Apr. 13, 1939, during construction; systematic filling operation began Jan. 14, 1940; dam completed February 1940; water in reservoir and first reached minimum pool elevation Feb. 23, 1940. Total capacity (based on 1965 resurvey) is 218,800 ft^3/s-day at 1,526.5 ft (top of gate), of which 154,300 ft^3/s-day is controlled storage above 1,450.0 ft, normal minimum pool elevation. Reservoir is used for navigation, floodcontrol, and power. New capacity table put into use Jan. 1, 1971.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum content observed: 223,400 ft^3/s-day, May 28, 1973; elevation, 1,528.02 ft. Minimum content observed (after first filling): 35,800 ft^3/s-day, Jan. 28, 1948; elevation, 1,413.41 ft.

EXTREMES FOR CURRENT YEAR.--Maximum content observed: 210,400 ft^3/s-day, June 21; elevation, 1,523.92 ft. Minimum content observed: 85,300 ft^3/s-day, Jan. 3; elevation, 1,467.00 ft.

OTHER RESERVOIRS

The following smaller reservoirs in the Tennessee River basin are described below. Records of content are not published herein.

03447832 LAKE JULIAN

LOCATION.--Lat 35°28'37", long 82°32'51", Buncombe County, Hydrologic Unit 06010105, on Pollees Creek near Skyland.

DRAINAGE AREA.--4.78 mi^2.

PERIOD OF RECORD.--Prior to November 1967 published as Asheville Steam-Electric Generating Plant Lake.

REMARKS.--Total capacity is 4,540 ft^3/s-day, of which 2,120 ft^3/s-day is controlled storage. Filling began Mar. 27, 1963, and lake reached spillway elevation, 2,160 ft, June 3, 1963. Most of initial storage and occasional, supplemental storage provided by pumped diversion from French Broad River. Lake is a cooling-water reservoir for Carolina Power and Light Co. plant.

03448959 BURNETT LAKE

LOCATION.--Lat 35°39'44", long 82°20'43", Buncombe County, Hydrologic Unit 06010105, on North Fork Swannanoa River near Black Mountain.

DRAINAGE AREA.--21.9 mi^2.

REMARKS.--Total capacity at crest of spillway is 11,600 ft^3/s-day, of which 8,900 ft^3/s-day is controlled storage. Filling began Jan. 28, 1954. Lake is part of Asheville's municipal water supply. (See station 03451000.)

03450134 BEETREE RESERVOIR

LOCATION.--Lat 35°38'27", long 82°24'04", Buncombe County, Hydrologic Unit 06010105, on Beetree Creek near Swannanoa.

DRAINAGE AREA.-7.62 mi^2.

REMARKS.--Total capacity is 844 ft^3/s-day, of which 823 ft^3/s-day is controlled storage. Dam completed December 1926, and filling began Jan. 11, 1927; water in reservoir first reached maximum pool elevation Mar. 8, 1927. Lake is part of Asheville's municipal water supply. (See station 03451000.)

03455773 LAKE LOGAN

LOCATION.--Lat 35°25'15", long 82°55'30", Haywood County, Hydrologic Unit 06010106, on West Fork Pigeon River near Canton and at river mile 7.0.

DRAINAGE AREA.--33.3 mi^2.

REMARKS.--Total capacity is 1,040 ft^3/s-day (top of flashboards), all of which is usable. Filling began November 1931. (See station 0345577330.)

03458319 LAKE JUNALUSKA

LOCATION.--Lat 35°31'38", long 82°57'48", Haywood County, Hydrologic Unit 06010106, on Richland Creek at Lake Junaluska and at river mile 2.4.

DRAINAGE AREA.--63.6 mi^2.

REMARKS.--Total surface area is about 195 acres. The lake reached spillway elevation in the spring of 1913.

03500466 SEQUOYAH LAKE

LOCATION.--Lat 35°04'02", long 83°13'31", Macon County, Hydrologic Unit 06010202, on Cullasaja River near Highlands, and at river mile 18.4.

DRAINAGE AREA.--14.4 mi^2.

REMARKS.--Total capacity is 233 ft^3/s-day (at crest of spillway), of which approximately 116 ft^3/s-day is usable. Filling began in 1926.

Lakes and Reservoirs in Ohio River Basin--Continued

03504500 NANTAHALA LAKE

LOCATION.--Lat 35°11'56", long 83°39'17", Macon County, Hydrologic Unit 06010202, at Nantahala Dam on Nantahala River, 5.5 mi upstream from Whiteoak Creek, 4.2 mi southeast of Topton, and at river mile 22.8.

DRAINAGE AREA.--91.0 mi^2.

PERIOD OF RECORD.--January 1942 to September 1995. Prior to October 1944 monthend content only, published in WSP 1306.

REMARKS.--Reservoir is formed by rockfill dam with side-channel, gate-controlled spillway supplemented by fuse-plug dam. Dam completed and filling began Jan. 30, 1942; water in reservoir first reached minimum pool elevation Feb. 16, 1942. Total capacity (based on 1969 resurvey) is 69,200 ft^3/s-day at 2,890.0 ft (top of gates), of which 63,500 ft^3/s-day is controlled storage above 2,758.84 ft, normal minimum pool elevations. Reservoir is used for flood control and power. New capacity table put into use Jan. 1, 1971.

03507111; 03507131 EAST FORK LAKE AND WOLF CREEK LAKE

These two reservoirs are operated as a unit for storage of water for the Tennessee Creek Project.

EAST FORK DAM

LOCATION.--Lat 35°12'48", long 83°00'08", Jackson County, Hydrologic Unit 06010203, on Tuckasegee River near Tuckasegee.

DRAINAGE AREA.--24.9 mi^2.

REMARKS.--Total capacity of East Fork Lake is 671 ft^3/s-day, of which 625 ft^3/s-day is controlled storage. Filling began April 18, 1955.

WOLF CREEK DAM

LOCATION.--Lat 35°13'18", long 83°00'00", on Wolf Creek near Tuckasegee.

DRAINAGE AREA.--15.2 mi^2.

REMARKS.--Total capacity of Wolf Creek Lake is 5,070 ft^3/s-day, of which 3,850 ft^3/s-day is controlled storage. Filling began Mar. 22, 1955.

03507216 BEAR CREEK LAKE

LOCATION.--Lat 35°14'29", long 83°04'22", Jackson County, Hydrologic Unit 06010203, on Tuckasegee River near Tuckasegee.

DRAINAGE AREA.--74.8 mi^2.

REMARKS.--Total capacity is 17,500 ft^3/s-day, of which 2,290 ft^3/s-day is controlled storage. Filling began Oct. 9, 1953.

03507289 CEDAR CLIFF LAKE

LOCATION.--Lat 35°15'12", long 83°05'58", Jackson County, Hydrologic Unit 06010203, on Tuckasegee River near Tuckasegee and at river mile 51.9.

DRAINAGE AREA.--80.3 mi^2.

REMARKS.--Total capacity is 3,200 ft^3/s-day, of which 350 ft^3/s-day is controlled storage. Filling began Apr. 26, 1952.

03507500 THORPE RESERVOIR

LOCATION.--Lat 35°11'46", long 83°09'09", Jackson County, Hydrologic Unit 06010203, at Thorpe Dam on West Fork Tuckasegee River, 3.0 mi upstream from Shoal Creek, and 2.3 mi northwest of Glenville, and at river mile 9.7.

DRAINAGE AREA.--36.7 mi^2.

PERIOD OF RECORD.--February 1941 to September 1995. Prior to October 1944 monthend content only, published in WSP 1306. Prior to October 1948, published as Glenville Reservoir.

REMARKS.--Reservoir is formed by earth and rock dam and six 40 ft fuse-plug dams with side-channel spillway equipped with two taintor gates 12 ft high by 25 ft wide. Dam completed and storage began Feb. 12, 1941. Water in reservoir first reached minimum pool elevation Mar. 15, 1941. Total capacity (based on 1969 resurvey) is 35,500 ft^3/s-day, at 3,100.0 ft (top of gate), of which 33,700 ft^3/s-day is controlled storage above 3,023.25 ft, normal minimum pool elevation. Reservoir is used for flood control and power. New capacity table put into use Jan. 1, 1971.

03515152 CHEOAH LAKE

LOCATION.--Lat 35°26'54", long 83°56'11", Graham County, Hydrologic Unit 06010202, on Little Tennessee River at Cheoah and at river mile 51.4.

DRAINAGE AREA.--1,608 mi^2.

REMARKS.--Total capacity is 17,700 ft^3/s-day, of which 920 ft^3/s-day is controlled storage. Filling began Dec. 8, 1918.

03516500 SANTEETLAH LAKE

LOCATION.--Lat 35°22'38", long 83°52'33", Graham County, Hydrologic Unit 06010204, at Santeetlah Dam on Cheoah River, 1.0 mi downstream from Santeetlah Creek, 5.5 mi northwest of Robbinsville, and at river mile 9.3.

DRAINAGE AREA.--176 mi^2.

PERIOD OF RECORD.--December 1927 to September 1995. Prior to October 1946 monthend content only, published in WSP 1306.

REMARKS.--Reservoir is formed by concrete gravity and arch dam with concrete spillway controlled by six taintor gates 12 ft high by 25 ft wide. Dam completed and filling began Dec. 7, 1927. Water in reservoir first reached minimum pool elevation December 1927. Total capacity (new capacity table put into use Jan. 1, 1971) is 78,800 ft^3/s-day (top of gate) at elevation 1,817.0 ft, of which 66,600 ft^3/s-day is controlled storage above 1,740.08 ft, normal minimum pool elevation. Reservoir is used for power.

Lakes and Reservoirs in Ohio River Basin--Continued

03555500 APPALACHIA LAKE

LOCATION.--Lat 35°10'04", long 84°17'49", Cherokee County, Hydrologic Unit 06020002, at Appalachia Dam on Hiwassee River, 9.8 mi downstream from Hiwassee Dam, 0.1 mi upstream from North Carolina-Tennessee State line, 1.5 mi northeast of Farner, Tennessee, and at river mile 66.0.

DRAINAGE AREA.--1,018 mi^2.

PERIOD OF RECORD.--February 1943 to September 1995.

REMARKS.--Reservoir is formed by concrete gravity dam. Spillway is equipped with 10 radial gates. Dam completed and filling began Feb. 14, 1943; water in reservoir first reached minimum pool elevation Feb. 21, 1943. Total capacity (based on 1965 resurvey) is 29,100 ft^3/s-day at 1,280.0 ft (top of gate), of which 4,400 ft^3/s-day is controlled storage above 1,272.0 ft, normal minimum pool elevation. Reservoir is used for navigation, flood control, and power. New capacity table put into use Jan. 1, 1971.

Lakes and Reservoirs in Ohio River Basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Gage height (feet)	Contents (cfs-days)	Change in contents (cfs-days)
		03460242 Waterville Lake			03524500 Fontana Lake	
Sept. 30	2,255.40	12,320	---	1,681.67	587,300	---
Oct. 31	2,250.30	11,510	-810	1,663.35	509,000	-78,300
Nov. 30	2,249.20	11,330	-180	1,651.43	462,400	-46,600
Dec. 31	2,253.90	12,080	+750	1,651.80	463,800	+1,400
CAL YR 1996		---	-290		---	+170,500
Jan. 31	2,248.40	11,210	-870	1,646.17	443,000	-20,800
Feb. 28	2,258.50	12,830	+1,620	1,646.79	445,200	+2,200
Mar. 31	2,246.90	10,970	-1,860	1,671.14	541,200	+96,000
Apr. 30	2,251.50	11,700	+730	1,690.52	628,300	+87,100
May 31	2,247.90	11,130	-570	1,704.09	696,200	+67,900
June 30	2,249.50	11,380	+250	1,704.41	697,800	+1,600
July 31	2,246.10	10,850	-530	1,696.90	659,400	-38,400
Aug. 31	2,242.80	10,340	-510	1,682.53	591,200	-68,200
Sept. 30	2,250.00	11,460	+1,120	1,667.82	527,300	-63,900
WTR YR 1997		---	-860		---	-60,000

Date	Gage height (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
		03546500 Chatuge Lake			03554500 Hiwasee Lake	
Sep. 30	1,919.41	93,600	---	1,502.10	151,200	---
Oct. 31	1,915.23	82,300	-11,300	1,491.32	127,200	-24,000
Nov. 30	1,915.46	82,900	+600	1,475.18	98,100	-29,100
Dec. 31	1,912.96	76,700	-6,200	1,468.85	88,000	-10,100
CAL YR 1996		---	+3,100		---	-3,400
Jan. 31	1,912.52	75,600	-1,100	1,481.20	108,500	+20,500
Feb. 28	1,915.88	84,000	+8,400	1,484.71	114,600	+6,100
Mar. 31	1,921.03	98,400	+14,400	1,500.03	146,300	+31,700
Apr. 30	1,924.81	110,200	+11,800	1,513.11	179,000	+32,700
May 31	1,925.50	112,500	+2,300	1,520.90	200,900	+21,900
June 30	1,926.06	114,400	+1,900	1,523.50	209,000	+8,100
July 31	1,923.74	106,800	-7,600	1,518.47	193,600	-15,400
Aug. 31	1,919.50	93,900	-12,900	1,508.62	167,400	-26,200
Sept. 30	1,916.78	86,400	-7,500	1,500.36	147,000	-20,400
WTR YR 1997		---	-7,200		---	-4,200

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the U.S. Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to these events. These measurements and others collected for some special reason are called measurements at miscellaneous sites.

PEAK DISCHARGE STATIONS

The following table contains annual maximum discharges for peak discharge stations. A peak discharge gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

ANNUAL MAXIMUM DISCHARGE AT PEAK DISCHARGE STATIONS DURING WATER YEAR 1997

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
02084540	Durham Creek at Edward	Lat 35°19'25", long 76°52'26" Beaufort County, Hydrologic Unit 03020104, on left bank 5 ft downstream of bridge on Secondary Road 1949 at Edward, and 6.8 mi upstream from mouth.	26	1950-54, 1956-65, 1966-92†, 1993-96	10-8-96	9.98	815
02086500	Flat River at Dam near Bahama	Lat 36°08'55", long 78°49'43", Durham County, Hydrologic Unit 03020201, on right bank 900 ft downstream of Durham municipal dam, 3 mi southeast of Bahama and 5 mi upstream from confluence with Eno River.	168	1927-59† 1961-66,† 1982-90† 1994† 1995	4-29-97	12.03	5,840

†Operated as a continuous-record gaging station.

MEASUREMENTS AT LOW-FLOW PARTIAL RECORD SITES

Measurements of streamflow made at low-flow partial-record stations in the area covered by this report are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. When correlated with the simultaneous discharge of a nearby stream where continuous records are available, these measurements provide an indicator of a stream's low-flow potentiality. The column headed by "Measured Previously" lists the water years in which measurements were made at or close to the same site.

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD SITES DURING WATER YEAR 1997, IN ATLANTIC SLOPE BASINS						
NEUSE RIVER BASIN						
02085477 Flat River	Neuse River	Lat 36°12'00", long 78°53'12" Durham County, Hydrologic Unit 03020201, at bridge on Secondary Road 1614, 1.0 mile northeast of Quail Roost Farms, and 2.1 miles below Deep Creek.	146	‡	09-10-97	6.31
02086500 Flat River	Neuse River	Lat 36°08'55", long 78°49'43" Durham County, Hydrologic Unit 03020201, 900 feet below dam (at Lake Michie), 3 miles southeast of Bahama, and 5 miles above mouth.	168	1925-59†, 1961-66†, 1982-90†, 1992-93†, 1991-92, 1994-96	09-10-97	1.44
02087229 Neuse River	Atlantic Ocean (via Pamlico Sound)	Lat 35°47'35", long 78°32'21" Wake County, Hydrologic Unit 03020201, at bridge on U.S. Highway 64, 2.0 miles above Crabtree Creek, and 5.7 miles east of State Capitol Building in Raleigh.	877	1927, 1954-55, 1974	09-08-97	184
02087275 Crabtree Creek	Neuse River	Lat 35°50'15", long 78°40'26" Wake County, Hydrologic Unit 03020201, at bridge on U.S. Highway 70, 0.60 mile above Mine Creek, and 4.4 miles northwest of Raleigh.	97.6	1932, 1942,1947, 1949-50, 1952-56, 1958, 1960-63, 1968,1973, 1973,1978[b]	09-23-97	10.9
0208729610 Crabtree Creek	Neuse River	Lat 35°49'41", long 78°39'03" Wake County, Hydrologic Unit 03020201, at Secondary Road 1808 (Lassiter Mill Road), 0.1 mile above Beaverdam Creek, and 3.2 miles north-northwest of Raleigh.	110[a]	1973	09-23-97	15.5
0208731190 Crabtree Creek	Neuse River	Lat 35°49'16", long 78°37'34" Wake County, Hydrologic Unit 03020101, at bridge on Anderson Drive, and 2.3 miles north of Raleigh.	111	‡	09-23-97[b]	13.6

‡ No previous measurements at this site.
† Operated as a continuous-record gaging station.
[a] Approximately.
[b] Operated as a continuous stage station.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD SITES DURING WATER YEAR 1997--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		NEUSE RIVER BASIN--Continued				
02087322 Crabtree Creek	Neuse River	Lat 35°48'57", long 78°37'33" Wake County, Hydrologic Unit 03020201, at bridge on Secondary Road 2030 (Wake Forest Road), and 2.8 miles northeast of Raleigh.	119	1961-62, 1973	09-23-97	17.3
02087331 Crabtree Creek	Neuse River	Lat 35°47'28", long 78°35'12" Wake County, Hydrologic Unit 03020201, at bridge on U.S. Highway 64, 1.0 mile below Marsh Creek, and 3.0 miles east of Raleigh.	138	1961-62, 1973	09-23-97	17.9
02087334 Crabtree Creek	Neuse River	Lat 35°45'56", long 78°32'24" Wake County, Hydrologic Unit 03020201, above mouth, and 3.7 miles southwest of Knightdale.	146	1961-62	09-09-97 09-23-97	21.0 24.9
02087376 Walnut Creek	Neuse River	Lat 35°45'00", long 78°32'05" Wake County, Hydrologic Unit 03020201, at bridge on Secondary Road 2551, 0.2 miles above mouth, and 6.5 miles southeast of Raleigh.	46.0	1973	09-08-97	6.05
02087580 Swift Creek	Neuse River	Lat 35°43'07", long 78°45'09" Wake County, Hydrologic Unit 03020201, at bridge on Secondary Road 1152, 2.8 miles downstream from Williams Creek, and 6 miles east of Apex.	21.0	1958, 1961-71, 1992-95[c]	09-23-97	0.22
0208770150 Swift Creek	Neuse River	Lat 35°39'39", long 78°36'37" Wake County, Hydrologic Unit 03020201, at bridge on State Highway 50, 0.1 mile downstream from Lake Benson, and 3.2 miles south of Garner.	66.3	‡	09-10-97 09-23-97	6.06 6.25
0208772185 Swift Creek	Neuse River	Lat 35°36'47", long 78°32'57" Johnston County, Hydrologic Unit 03020201, at State Highway 42, and 1.4 miles northeast of Drug Store.	86.6	1984-96	09-23-97	8.01
02087851 Swift Creek	Neuse River	Lat 35°31'07", long 78°22'54" Johnston County, Hydrologic Unit 03020201, at bridge on State Highway 210, 2.2 miles above mouth, and 2.0 miles west of Smithfield.	155	‡	09-10-97 09-23-97	11.9 11.9
02088275 Mill Creek	Neuse River	Lat 35°20'42", long 78°11'04" Johnston County, Hydrologic Unit 03020201, at bridge on Secondary Road 1200, 0.8 mile above mouth, and 2.5 miles east of Cox Mill.	190[a]	1954, 1958, 1965-68, 1971	09-09-97	6.03

‡ No previous measurements at this site.
[b] Operated as a continuous stage station.
[c] Discharge measurements obtained in conjunction with water-quality sampling at site.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD SITES DURING WATER YEAR 1997--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		NEUSE RIVER BASIN--Continued				
0208832825 Thoroughfare Swamp	Neuse River	Lat 35°21'19", long 78°08'01" Wayne County, Hydrologic Unit 03020201, at mouth, and at Stevens Mill.	119	‡	09-09-97	5.23
02088332 Neuse River	Atlantic Ocean (via Pamlico Sound)	Lat 35°21'00", long 78°08'00" Wayne County, Hydrologic Unit 03020201, below bridge on Secondary Road 1224, below Thoroughfare Swamp, and 1.25 miles north of Stevens Mill.	2,010	1963-64, 1974, 1976, 1978, 1980-84	09-09-97	324
02088632 Little River	Neuse River	Lat 35°23'55", long 78°01'35" Wayne County, Hydrologic Unit 03020201, at bridge on State Highway 581, 0.2 mile northeast of Asylum, and 1.1 miles above mouth.	314	1980-81	09-09-97	8.34
02089116 Neuse River	Atlantic Ocean (via Pamlico Sound)	Lat 35°15'40", long 77°54'40" Wayne County, Hydrologic Unit 03020202, at bridge on State Highway 111, 1.5 miles below Sleepy Creek, and 4.25 miles northwest of Whitehall.	2,455	1972-73	09-09-97	319
02089380 Falling Creek	Neuse River	Lat 35°15'40", long 77°41'30" Lenoir County, Hydrologic Unit 03020201, at bridge on U.S. Highway 70, at Falling Creek, and 4.0 miles above mouth.	45.4	1949-55, 1957	09-09-97	8.38
02089628 Southwest Creek	Neuse River	Lat 35°13'16", long 77°34'30" Lenoir County, Hydrologic Unit 03020201, at bridge on State Highway 58, 1.8 miles above Kellys Pond, and 3.5 miles south of Kinston.	49.5	1954-55, 1957	09-09-97	3.84
02090500 Contentnea Creek	Neuse River	Lat 35°41'15", long 77°56'52" Wilson County, Hydrologic Unit 03020203, at bridge on U.S. Highway 301, below municipal dam, and 3 miles southwest of Wilson.	237	1930-54†	09-09-97	1.63
02090634 Contentnea Creek	Neuse River	Lat 35°35'10", long 77°48'43" Wilson County, Hydrologic Unit 03020203, at bridge on State Highway 58, 0.6 mile upstream from Toisnot Swamp, and 1.5 miles southeast of Stantonsburg.	389	1969-70, 1972-74, 1978, 1980-85	09-09-97	12.4
02091241 Contentnea Creek	Neuse River	Lat 35°27'27", long 77°40'11" Greene County, Hydrologic Unit 03020203, at bridge on U.S. Highway 258, at Snow Hill, and 0.8 mile upstream from Panther Swamp Creek.	694	1969-70, 1972-74, 1978,1980	09-09-97	44.7

[a] Approximately.
‡ No previous measurements at this site.
† Operated as a continuous-record gaging station.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD SITES DURING WATER YEAR 1997--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		NEUSE RIVER BASIN--Continued				
02091574 Contentnea Creek	Neuse River	Lat 35°24'46", long 77°29'51" Lenoir County, Hydrologic Unit 03020203, at bridge on Secondary Road 1410, 1.9 miles upstream from Little Contentnea Creek, 2.3 miles northeast of Hugo.	789	1956-57, 1969-70, 1973-74	09-10-97	68.6
02091740 Little Contentnea Creek	Neuse River	Lat 35°27'24", long 77°29'09" Pitt County, Hydrologic Unit 03020203, at bridge on State Highway 102, at Scuffleton, and 2.6 miles above mouth.	172	1956-57, 1965-66, 1969-70, 1980	09-09-97	3.60
02091814 Neuse River	Atlantic Ocean (via Pamlico Sound)	Lat 35°18'40", long 77°18'20" Craven County, Hydrologic Unit 03020202, at bridge on Secondary Road 1470, 1.5 miles upstream from Core Creek, and 2 miles east of Fort Barnwell.	3,900[a]	1970, 1972-73, 1976,1978, 1980-82, 1985-91, 1995-96	09-09-97	617
0209184590 Swift Creek	Neuse River	Lat 35°32'16", long 77°25'07" Pitt County, Hydrologic Unit 03020202, at bridge on Secondary Road 1126, 0.3 mile downstream from Gum Swamp, and 1.1 miles northwest of Winterville.	7.6	1974-76, 1978, 1980	09-09-97	0.30
02091859 Swift Creek	Neuse River	Lat 35°28'10", long 77°24'00" Pitt County, Hydrologic Unit 03020202, at bridge on State Highway 102, 1.0 mile east of Ayden, and 4.2 miles upstream from Fork Swamp.	25[a]	1956-57, 1974-75	09-09-97	1.18
02091910 Swift Creek	Neuse River	Lat 35°24'07", long 77°19'54" Pitt County, Hydrologic Unit 03020202, at bridge on Secondary Road 1753, 0.5 mile south of Coxville, and 2.7 miles downstream from Fork Swamp.	78.2	1956-57, 1960-70, 1974-75	09-09-97	2.25

[a] Approximately.

MEASUREMENTS AT MISCELLANEOUS SITES

These measurements and others collected for special reasons are called measurements at miscellaneous sites. Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table.

Station Number and Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1997, IN ATLANTIC SLOPE BASINS						
ROANOKE RIVER BASIN						
02077348 Marlowe Creek	Dan River	Lat 36°29'03", long 78°58'47", Person County, Hydrologic Unit 03010104, at bridge on Secondary Road 1322, downstream of Fishing Branch, and 1.2 mi west of Woodsdale.	17.8	1970, 1974, 1976, 1978, 1980-96	11-17-96 3-7-97 8-25-97	14.9 44.6 4.40
02079101 Grassy Creek	Roanoke River	Lat 36°29'22", long 78°37'08", Granville County, Hydrologic Unit 03010102, at bridge on Secondary Road 1436, 0.7 mi downstream of Little Grassy Creek, and 2.8 mi east-northeast of Cornwall.	61.2	1981-92, 1995-96	11-20-96 3-7-97 4-4-97 8-21-97	22.4 99.3 35.8 50.3
02079264 Nutbush Creek	Roanoke River	Lat 36°22'10", long 78°24'31", Vance County, Hydrologic Unit 03010102, at bridge on Secondary Road 1317, 0.1 mi upstream from Buggs Island Reservoir, and 3 mi north of Henderson.	6.0	1970, 1974, 1976, 1978-96	11-19-96 3-7-97 4-4-97 8-21-97	4.06 12.1 4.02 5.14
02079717 Smith Creek	Roanoke River	Lat 36°32'27", long 78°11'43", Warren County, Hydrologic Unit 03010106, at bridge on U.S. Highway 1, 0.3 mi downstream of Blue Mud Creek, and 0.1 mi west of Paschall.	52.9	1954, 1961-63, 1966, 1976, 1979-96	1-28-97 3-7-97 4-4-97 8-21-97	48.1 81.7 34.5 18.8
PAMLICO RIVER BASIN						
02081547 Fishing Creek	Tar River	Lat 36°20'09", long 78°35'38", Granville County, Hydrologic Unit 03020101, at bridge on Secondary Road 1643, 2.9 mi upstream from mouth, and 6.3 mi south of Oxford.	44.1	1970-73	4-14-97 5-13-97 7-1-97 8-21-97	25.0 17.0 3.08 80.5
0208273350 Sandy Creek	Swift Creek	Lat 36°10'40", long 78°11'29", Franklin County, Hydrologic Unit 03020101, at bridge on Secondary Road 1436, 2 mi southeast of Gupton.	76.2		4-14-97 5-13-97 7-1-97 8-21-97	67.5 56.6 19.4 51.2
NEUSE RIVER BASIN						
02086624 Knap of Reeds Creek	Neuse River	Lat 36°07'40", long 78°48'55", Granville County, Hydrologic Unit 03020201, SEO, 2.3 mi west of Butner, and 2.5 mi upstream from mouth.	43.0	1982-96	11-20-96	17.9
02086849 Ellerbee Creek	Neuse River	Lat 36°03'33", long 78°49'58", Durham County, Hydrologic Unit 03020201, bridge on Secondary Road 1636, 1.6 mi northwest of Gorman, and 3 mi upstream of mouth.	21.9	1982-89, 1991-95	11-20-96	23.1

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1997--Continued

Station Number and Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		NEUSE RIVER BASIN--Continued				
0208700780 Little Lick Creek	Neuse River	Lat 35°59'11", long 78°47'58", Durham County, Hydrologic Unit 03020201, at bridge on Secondary Road 1814, 1.3 mi northeast of Oak Grove.	10.1	1982-96	11-21-96	1.83
02087251 Crabtree Creek	Neuse River	Lat 35°50'15", long 78°46'52", Wake County, Hydrologic Unit 03020201, at bridge on Secondary Road 1795, 0.3 mi downstream from Hayleys Branch, and 3.5 mi north of Cary.	52.2	1983-91, 1996	11-21-96 2-21-97 4-17-97	15.8 91.9 10.0
0208732544 Pigeon House Creek	Crabtree Creek	Lat 35°47'37", long 78°38'35", Wake County, Hydrologic Unit 03020201, at Dortch Street, and 1.2 mi north of Raleigh.	.59	1984-92, 1996	11-21-96 2-21-97 4-17-97 8-22-97	0.54 0.68 0.64 0.52
0208772185 Swift Creek	Neuse River	Lat 35°37'46", long 78°32'57", Johnston County, Hydrologic Unit 03020201, at State Highway 42, and 1.4 mi northeast of Drug Store.	86.6	1984-96	11-19-96 2-19-97 4-15-97 8-19-97	56.2 135 64.7 9.75
		CAPE FEAR RIVER BASIN				
02093250 Haw River	Cape Fear River	Lat 36°12'47", long 79°57'24", Guilford County, Hydrologic Unit 03030002, on Secondary Road 2109, 0.2 mi downstream of Rocky Branch, and 3.3 mi northeast of Oak Ridge.	14.1	1971, 1973, 1984, 1986-96	10-22-96 3-7-97 5-22-97 8-20-97	9.88 27.5 7.83 14.0
02093423 Little Troublesome Creek	Haw River	Lat 36°16'53", long 79°36'37", Rockingham County, Hydrologic Unit 03030002, at bridge on Secondary Road 2600, 0.8 mi west of Thompsonville, and 1 mi upstream from mouth.	13.0[a]	1970-73, 1976-77, 1996	12-12-96 2-4-97 5-8-97 8-27-97	17.8 19.7 15.5 8.01
02095091 South Buffalo Creek	Buffalo Creek	Lat 36°06'45", long 79°40'19", Guilford County, Hydrologic Unit 03030002, at bridge on Secondary Road 2821, 0.8 mi northwest of McLeansville, and 1.4 mi upstream from mouth.	43.5	1969-70, 1973, 1976-81, 1983-89, 1991-96	10-22-96 1-14-97 5-7-97 7-30-97	34.0 53.6 59.5 55.8
02095500 North Buffalo Creek	Haw River	Lat 36°07'13", long 79°42'30", Guilford County, Hydrologic Unit 03030002, at bridge on Secondary Road 2832, 4.2 mi upstream from mouth, and 5.8 mi northeast of post office in Greensboro.	37.1	1928-1990,[†] 1996	3-25-96 5-24-96 8-28-96 10-22-96 2-6-97 5-7-97	52.4 35.3 78.7 43.0 42.7 53.9
02095681 Reedy Fork	Haw River	Lat 36°10'23", long 79°30'38", Alamance County, Hydrologic Unit 03030002, at bridge on State Highway 87 at Ossipee, and 0.5 mi upstream from mouth.	256	1969-70, 1973, 1976-96	1-27-97 3-16-97 5-13-97 8-25-97	187 1,840 160 78.0

[a] Approximately.
[†] Operated as a continuous-record gaging station.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1997--Continued

Station Number and Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		CAPE FEAR RIVER BASIN--Continued				
02096230 Jordan Creek	Stony Creek	Lat 36°11'20", long 79°23'43", Alamance County, Hydrologic Unit 03030002, at bridge on Secondary Road 1754, 1.0 mi south of Union Ridge, and 2.0 mi above mouth.	24.1	1949-57, 1959-62, 1966	4-2-97 5-13-97 8-25-97	10.4 7.64 0
02096879 Haw River	Cape Fear River	Lat 35°53'43", long 79°15'31", Alamance County, Hydrologic Unit 03030002, at bridge on Secondary Road 1005, 0.7 mi upstream from Cane Creek, and 5.8 mi north of Terrells.	1082	1974-75, 1979-86, 1989-91, 1993, 1996	11-18-96 2-24-97 5-13-97 8-18-97	426 903 611 152
02097521 Morgan Creek	New Hope River	Lat 35°51'48", long 79°00'35", Chatham County, Hydrologic Unit 03030002, at bridge on Secondary Road 1726, 2 mi upstream from Cub Creek, and 4 mi north of Farrington.	45.6	1970, 1973, 1976, 1978, 1980-96	1-14-97 4-3-97 5-16-97 8-22-97	45.0 18.8 18.6 15.7
02099484 Richland Creek	Deep River	Lat 35°56'26", long 79°54'08", Guilford County, Hydrologic Unit 03030003, at bridge on Secondary Road 1147, 0.2 mi upstream from mouth, and 4 mi southwest of Groomtown.	16.2	1971, 1973-76, 1978-96	12-12-96 3-7-97 5-22-97 7-30-97	43.9 37.9 26.4 19.9
02101001 Bear Creek	Deep River	Lat 35°26'26", long 79°35'20", Moore County, Hydrologic Unit 03030003, at bridge on State Highway 705, 0.5 mi north of Robbins, and 1 mi downstream of Cabin Creek.	139	1973-74, 1985-96	11-20-96 2-20-97 5-15-97 8-20-97	48.6 136 55.2 3.84
02102634 Upper Little River	Cape Fear River	Lat 35°19'33", long 78°43'26", Harnett County, Hydrologic Unit 03030004, at bridge on Secondary Road 2021, 1.5 mi upstream from mouth, and 2.8 mi west of Erwin.	217	1968, 1974-76, 1979, 1985-96	11-19-96 2-20-97 4-15-97 8-19-97	184 804 194 29.4
02102897 Lower Little River	Cape Fear River	Lat 35°12'13", long 79°12'59", Moore County, Hydrologic Unit 030300004, at bridge on Secondary Road 2023, 0.5 mi above James Creek, 1.0 mi southwest of Lobelia.	110		5-23-97 8-25-97	28.6 29.3
02103000 Little River	Cape Fear River	Lat 35°11'38", long 78°59'14", Cumberland County, Hydrologic Unit 03030004, at bridge on State Highway 87 at Manchester, and 0.3 mi upstream from Tank Creek.	347	1939-50†, 1978, 1980-96	11-19-96 2-19-97 5-23-97 8-25-97	390 962 121 76.8

† Operated as a continuous-record gaging station.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1997--Continued

Station Number and Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		CAPE FEAR RIVER BASIN--Continued				
02104279 Rockfish Creek	Cape Fear River	Lat 34°58'10", long 79°06'40", Hoke County, Hydrologic Unit 03030004, at bridge on Secondary Road 1432, 0.2 mi downstream of Puppy Creek, and 1.2 mi northeast or Arabia.	150[a]	1973-74, 1978, 1980-91	5-23-97 8-26-97	158 109
02104500 Rockfish Creek	Cape Fear River	Lat 34°57'57", long 78°55'00", Cumberland County, Hydrologic Unit 03030004, at bridge on U.S. Highway 301, 0.1 mi downstream of Little Rockfish Creek, and 1.7 mi east of Hope Mills.	292	1974-76, 1979-92, 1996	6-30-97 8-25-97	159 170
		PEE DEE RIVER BASIN				
02115860 Muddy Creek	Yadkin River	Lat 36°00'01", long 80°20'25", Forsyth County, Hydrologic Unit 03040101, 100 ft upstream from bridge on Secondary Road 2995, 0.2 mi downstream of Salem Creek and 1.8 mi east of Muddy Creek.	186	1964-87, 1988-93, 1996	12-13-96 6-9-97 8-29-97	250 145 71.7
02120521 Third Creek	South Yadkin River	Lat 35°46'13", long 80°37'34", Rowan County, Hydrologic Unit 03040102, at bridge on Secondary Road 1970, and 2.2 mi west of Woodleaf.	96.6	1985-96	11-12-96 4-3-97 6-9-97	63.9 100 78.4
0212147355 Rich Fork Creek	Abbotts Creek	Lat 35°55'36", long 80°07'31", Davidson County, Hydrologic Unit 03040103, at bridge on Secondary Road 1800, 1.4 mi downstream of High Point sewage disposal plant, and 3.9 mi northwest of Thomasville.	26.6	1970-75, 1981-84, 1986-90, 1993-96	11-13-96 2-12-97 5-22-97 8-20-97	12.0 26.4 12.0 4.55
02123500 Uwharrie River	Pee Dee River	Lat 35°25'47", long 80°01'05", Montgomery County, Hydrologic Unit 03040103, at State Highway 109, 1 mi upstream from McLeans Creek, and 3 mi south of Eldorado.	342	1938-71[†], 1981-95	11-13-96 3-27-97 6-10-97 7-22-97	120 449 113 37.2
0212388100 Rocky River	Pee Dee River	Lat 35°28'29", long 80°46'48", Mecklenburg County, Hydrologic Unit 03040105, at bridge on Secondary Road 1608, 1.3 mi upstream from West Branch, and 4.2 mi southeast of Davidson	13.4	1970-96	10-30-96 3-5-97 6-19-97 9-3-97	9.96 21.8 13.2 7.23
02124374 Irish Buffalo Creek	Rocky River	Lat 35°20'50", long 80°32'52", Cabarrus County, Hydrologic Unit 03040105, at bridge on Secondary Road 1132, 1 mi south of Faggarts Crossroads, and 1 mi upstream from mouth.	45.4	1974-84, 1986-96	11-15-96 3-11-97 5-13-97 7-23-97 9-4-97	17.2 24.5 23.7 2,450 6.90

[a] Approximately.
[†] Operated as a continuous-record gaging station.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1997--Continued

Station Number and Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		PEE DEE RIVER BASIN--Continued				
02124401 Rocky River	Pee Dee River	Lat 35°19'26", long 80°30'59", Cabarrus County, Hydrologic Unit 03040105, at bridge on U.S. Highway 601, 1 mi upstream from Hamby Branch, and 3 mi southeast of Faggarts Crossroads.	393	1970-71, 1973-96	10-3-96 3-11-97 6-10-97 9-4-97	173 283 122 77.4
02125126 Long Creek	Rocky River	Lat 35°13'05", long 80°15'28", Stanly County, Hydrologic Unit 03040105, at bridge on Secondary Road 1917, 1 mi upstream from mouth, and 4 mi east of Oakboro.	198	1970-71, 1973-96	3-11-97 7-29-97 9-4-97	216 142 13.5
02125482 Richardson Creek	Rocky River	Lat 35°04'16", long 80°24'25", Union County, Hydrologic Unit 03040105, at bridge on Secondary Road 1649, 1.2 mi downstream of Watson Creek, and 1.5 mi northwest of Fairfield.	153	1961-62, 1981-84, 1986-96	11-19-96 2-20-97 6-26-97 8-19-97	27.4 67.8 13.6 8.22
02129341 Hitchcock Creek	Pee Dee River	Lat 34°55'05", long 79°47'50", Richmond County, Hydrologic Unit 03040201, downstream of dam at Cordova, and 1.2 mi upstream from mouth.	134	1970-71, 1974, 1979-84, 1986-96	11-19-96 2-20-97 5-19-97 8-19-97	195 249 172 41.2
02129527 Jones Creek	Pee Dee River	Lat 34°54'15", long 79°55'51", Anson County, Hydrologic Unit 03040201, at bridge on State Highway 145, 2.9 mi downstream of Hale Creek, and 3.1 mi southwest of Pee Dee.	92.8	1985-96	11-19-96	73.4
02129558 Marks Creek	Pee Dee River	Lat 34°51'45", long 79°43'09", Richmond County, Hydrologic Unit 03040201, at bridge on Secondary Road 1812, 1.3 mi downstream of City Lake spillway, and 2.4 mi southwest of Hamlet.	12.9	1970-71, 1979-84, 1986-96	11-20-96 5-22-97 8-27-97	19.2 23.9 5.98
02132269 Leith Creek	Little Pee Dee River	Lat 34°44'37", long 79°25'13", Scotland County, Hydrologic Unit 03040204 at bridge on Secondary Road 1609, 4 mi west of Maxton, and 5.4 mi upstream from mouth.	21.8	1973-75, 1979-92, 1995-96	2-20-97 5-22-97 8-27-97	10.7 1.75 0
		SANTEE RIVER BASIN				
0214031250 Wilson Creek	Johns River	Lat 35°00'07", long 81°46'29", Caldwell County, Hydrologic Unit 03050101, at Secondary Road 1358 and 0.1 mi east of Edgemont.	15.1	1992-96	2-20-97 4-25-97 6-25-97	46.6 49.3 44.7

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1997--Continued

Station Number and Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		SANTEE RIVER BASIN--Continued				
02141245 Lower Creek	Catawba River	Lat 35°49'31", long 81°38'10", Burke County, Hydrologic Unit 03050102, at bridge on Secondary Road 1501, 0.8 mi downstream of Husband Creek, and 7 mi northeast of Morganton.	89.5	1949-50,[b] 1964-69,[b] 1972-73, 1975-84, 1986-92, 1993-94,[†] 1995-96	10-17-96 4-30-97 6-19-97	65.2 152 89.9
02142722 Dutchmans Creek	Catawba River	Lat 35°20'10", long 81°00'50", Gaston County, Hydrologic Unit 03050102, at bridge on Secondary Road 1918, and 0.7 mi west of Mountain Island.	116	1986-96	10-8-96 7-21-97 9-30-97	84.4 50.0 28.5
02143027 Henry Fork	South Fork Catabwa River	Lat 35°39'27", long 81°18'33", Catawba County, Hydrologic Unit 03050102, at bridge on Secondary Road 1143, 1.7 mi upstream from mouth and 2.5 mi northwest of Startown.	110	1970-71, 1973-74, 1978-80, 1996	10-11-96 12-13-96 6-19-97	91.0 268 180
02143260 Clark Creek	South Fork Catawba River	Lat 35°28'30", long 81°16'00", Lincoln County, Hydrologic Unit 03050102, at bridge on Secondary Road 1008 at Lincolnton, and 0.2 mi upstream from mouth.	91.2	1947, 1949-57, 1962-64, 1970-72, 1975, 1978-96	11-18-96 4-23-97 9-3-97	68.1 1,210 29.7
02145640 Crowders Creek	Catawba River	Lat 35°08'15", long 81°08'15", York County, South Carolina, Hydrologic Unit 03050101, at bridge on Ridge Road, 3.4 mi upstream from Beaver Dam Creek, and 3.2 mi east-southeast of Bowling Green, South Carolina.	89	1970-77, 1979-91, 1996	10-23-96 3-18-97 6-19-97 9-5-97	33.0 93.3 55.1 14.4
02146530 Little Sugar Creek	Sugar Creek	Lat 35°05'06", long 80°52'58", Mecklenburg County, Hydrologic Unit 03050103, at bridge on State Highway 51, 0.5 mi east of intersection of State Highway 51 and U.S. Highway 521 at Pineville.	49.2	1966-69, 1989-95	10-10-96 4-25-97	52.1 52.8
0214676115 McAlpine Creek	Sugar Creek	Lat 35°03'12", long 80°53'06", Lancaster County, South Carolina, Hydrologic Unit 03050103, at bridge on Secondary Road 2964, 0.5 mi north of Camp Cox, South Carolina, 0.6 mi above Sugar Creek, and 1.0 mi below North Carolina-South Carolina state line.	95.4	1996	10-15-96 3-18-97 6-19-97 7-21-97 8-29-97	76.7 115 84.1 71.3 72.2
02146800 Sugar Creek	Catawba River	Lat 35°00'21", long 80°54'09", York County, Hydrologic Unit 03050103, at bridge on State Highway 160, 0.7 mi downstream from Clems Branch, and 2.6 mi east of Fort Mill, S.C.	262	1969, 1974-78[†], 1982-96	10-10-96 7-21-97 9-5-97	347 210 118

[b] Baseflow.
[†] Operated as a continuous-record gaging station.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1997--Continued

Station Number and Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		SANTEE RIVER BASIN--Continued				
02152596 First Broad River	Broad River	Lat 35°13'03", long 81°36'28", Cleveland County, Hydrologic Unit 03050105, at bridge on Secondary Road 1140, 3 mi upstream from mouth, and 4.8 mi northwest of Earl.	296	1968-77, 1980-96	2-21-97 6-18-97	438 313
02153456 Buffalo Creek	Broad River	Lat 35°10'20", long 81°31'02", Cleveland County, Hydrologic Unit 03050105, at bridge on State Highway 198, 0.1 mi upstream from North Carolina-South Carolina State line, and 4 mi west of Grover.	161	1968-77, 1979-96	2-21-97 6-18-97	166 116
		SAVANNAH RIVER BASIN				
02184242 Horse-pasture River	Toxaway River	Lat 35°05'33", long 82°58'04", Transylvania County, Hydrologic Unit 03060101, at bridge on State Highway 281, and 4 mi southwest of Lake Toxaway.	24.1	1985-96	10-16-96 6-5-97 8-8-97	68.2 99.4 41.2
		KANAWA RIVER BASIN				
03160271 South Fork New River	New River	Lat 36°13'14", long 81°38'25", Watauga County, Hydrologic Unit 05050001, at bridge on U.S. Highway 421, and 2 mi east of Boone.	34.8	1925, 1955-56, 1960, 1962, 1974-96	10-9-96 2-24-97 6-23-97	73.3 122 65.2
03162500 North Fork New River	New River	Lat 36°30'14", long 81°23'25", Ashe County, Hydrologic Unit 05050001, 0.2 mi downstream of bridge on State Highway 16 at Crumpler, and 6 mi upstream from South Fork.	277	1930-58†, 1977, 1981-96	10-9-96 6-16-97	251 539
		TENNESSEE RIVER BASIN				
03441440 Little River	French Broad River	Lat 35°11'32", long 82°36'49", Transylvania County, Hydrologic Unit 06010105, above High Falls, 0.2 mi upstream from Grassy Creek, 1.0 mi downstream from Reasonover Creek, 3.8 mi northeast of Cedar Mountain.	26.8	1963-1990,† 1995-96	10-16-96 6-5-97 8-8-97	33.4 132 45.3
03446569 Mud Creek	French Broad River	Lat 35°21'10", long 82°27'51", Henderson County, Hydrologic Unit 06010105, at bridge on Secondary Road 1508, 0.2 mi downstream of Clear Creek, and 0.6 mi northeast of Balfour.	97.4	1968-74, 1977, 1992-96	10-16-96 6-5-97 8-8-97	89.3 198 93.8

† Operated as a continuous-record gaging station.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1997--Continued

Station Number and Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		TENNESSEE RIVER BASIN--Continued				
0344776625 French Broad River	Tennessee River	Lat 35°27'11", long 82°33'00", Buncombe County, Hydrologic Unit 06010105, at Secondary Road 3495 and 2.1 mi southwest of Arden.	652	1993-96	6-19-97 8-13-97	1,650 804
03457124 Pigeon River	French Broad River	Lat 35°32'05", long 82°54'41", Haywood County, Hydrologic Unit 06010106, at bridge on Secondary Road 1818 at Clyde, and 0.2 mi downstream of Chambers Branch.	162	1969-78, 1980-96	10-4-96 2-12-97 6-5-97 8-8-97	417 423 518 183
03458121 Richland Creek	Pigeon River	Lat 35°30'30", long 82°58'19", Haywood County, Hydrologic Unit 06010106, at bridge on Secondary Road 1184, 0.8 mi upstream from Raccoon Creek, and 1.5 mi northeast of Waynesville.	48.0	1981-96	10-4-96 2-12-97 6-5-97 8-8-97	76.0 146 131 58.5
03460766 Pigeon River	French Broad River	Lat 35°46'32", long 83°06'01", Haywood County, Hydrologic Unit 06010106, at Carolina Power and Light power plant, downstream of Big Creek, and at Waterville.	536	1968-71, 1973-78, 1980-96	1-31-97 2-3-97 2-12-97 3-3-97	1,610 2,010 435 10,500
03461976 North Toe River	Nolichucky River	Lat 35°58'51", long 82°00'59", Avery County, Hydrologic Unit 06010108, at bridge on U.S. Highway19E, 0.1 mi downstream of Jones Creek, 0.7 mi north of Ingalls, and at mile 50.9.	74.1	1969-71, 1973-74, 1976-96	10-8-96 1-6-97 2-27-97	129 180 195
03463021 North Toe River	Nolichucky River	Lat 35°55'46", long 82°06'57", Mitchell County, Hydrologic Unit 06010108, at bridge on Secondary Road 1162 at Penland, 0.4 mi downstream of Bear Creek, and at mile 27.6	145	1969-70, 1972-75, 1978, 1982-96	10-8-96 1-6-97 2-27-97	206 305 314
03463162 South Toe River	Cane River	Lat 35°43'08", long 82°14'55", Yancey County, Hydrologic Unit 06010108, 3 mi southeast of Mt. Mitchell, and 4.7 mi southwest of Busick.	1.8	1985-96	2-20-97 4-25-97 6-25-97	4.59 6.86 3.86
03464000 Cane River	Nolichucky River	Lat 36°00'52", long 82°19'40", Yancey County, Hydrologic Unit 06010108, 1.3 mi upstream from North Toe River, and 1.5 mi east of Sioux.	157	1933-71†, 1974-78, 1980-96	1-6-97 4-24-97 6-24-97 8-7-97	311 458 177 79.2
03464500 Nolichucky River	French Broad River	Lat 36°04'28", long 82°20'42", Mitchell County, Hydrologic Unit 06010108, at Poplar, and 0.7 mi upstream from Hollow Poplar Creek.	608	1922-45†, 1962-63, 1968-72, 1974-78, 1980-95	8-7-97	371

† Operated as a continuous-record gaging station.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1997--Continued

Station Number and Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		TENNESSEE RIVER BASIN--Continued				
03478819 Watauga River	South Fork Holston River	Lat 36°11'39", long 81°44'45", Watauga County, Hydrologic Unit 06010103, at bridge on State Highway 105, 300 ft upstream from Laurel Fork, and 1.4 mi north of Shulls Mills.	26.6	1971-73, 1975, 1986-96	2-24-97 6-23-97	90.9 37.5
03502000 Little Tennessee River	Tennessee River	Lat 35°14'01", long 83°23'35", Macon County, Hydrologic Unit 06010202, 0.2 mi upstream from State Highway 28 at Iotla, and 0.2 mi upstream from Iotla Creek.	323	1929-45†, 1972-79, 1982-96	10-22-96 6-10-97 8-6-97	519 944 142
03515633 Cheoah River	Little Tennessee River	Lat 35°20'04", long 83°48'21", Graham County, Hydrologic Unit 06010204, 0.1 mi upstream from Long Creek, and 0.9 mi north of Robbinsville.	55.3	1968-71, 1973-96	10-16-96 2-10-97 6-4-97 8-11-97	27.8 143 144 39.3

† Operated as a continuous-record gaging station.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SAMPLING SITES

Miscellaneous sites sampled as part of the NAWQA Program in December 1996. Water-quality miscellaneous sampling sites are particular locations where chemical-quality, biological and/or sediment data are collected once or more frequently, but not on a regular basis, to provide better areal coverage in a river basin

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
02066500 ROANOKE CREEK AT RT 612 AT SAXE, VA (LAT 36 55 49N LONG 078 39 56W)											
DEC 1996 26...	1700	--	6.8	4.5	--	12.0	--	25	5.5	2.7	3.9
02067000 ROANOKE (STAUNTON) R AT US HWY 360 NR CLOVER, VA (LAT 36 50 17N LONG 078 40 02W)											
DEC 1996 26...	1430	--	6.7	5.5	--	11.8	--	42	10	4.1	4.2
02075500 DAN RIVER AT RT 658 AT PACES, VA (LAT 36 38 32N LONG 079 05 23W)											
DEC 1996 26...	1030	--	8.3	5.0	--	12.0	--	24	5.8	2.4	7.7
02077050 BANISTER RIVER AT US HWY 360 NR FIVE FORKS, VA (LAT 36 44 44N LONG 078 50 31W)											
DEC 1996 26...	1300	--	6.8	5.5	--	11.3	--	20	4.8	2.0	4.4
02078050 HYCO RIVER AT US HWY 58 NEAR OMEGA, VA (LAT 36 40 03N LONG 078 45 20W)											
DEC 1996 27...	0730	--	6.22	5.5	--	11.3	--	32	7.2	3.5	6.5
02078300 AARONS CREEK AT RT 604 NEAR NELSON, VA (LAT 36 35 12N LONG 078 43 00W)											
DEC 1996 27...	1230	--	6.5	6.5	--	11.7	--	29	6.0	3.3	5.5
02078360 BUFFALO CREEK AT US HWY 58 AT BUFFALO SPRINGS, V(LAT 36 38 25N LONG 078 38 55W)											
DEC 1996 27...	0930	--	6.50	6.0	--	9.50	--	25	5.4	2.8	5.3
02079000 ROANOKE RIVER AT US HWY 58 AT CLARKSVILLE, VA (LAT 36 37 40N LONG 078 33 04W)											
DEC 1996 27...	1045	--	6.3	5.5	--	11.4	--	36	8.6	3.6	5.9
0207901010 GRASSY CREEK AT SR 1436 NR STOVALL, NC (LAT 36 29 23N LONG 078 37 20W)											
DEC 1996 27...	1500	--	6.3	6.5	--	11.9	--	25	5.8	2.5	4.9
02079182 LITTLE JOHNSON CREEK NR CORNWALL, NC (LAT 36 30 50N LONG 078 40 17W)											
DEC 1996 27...	1345	--	6.5	6.0	--	11.7	--	30	6.3	3.5	5.5
0209047200 BLOOMERY SWAMP NEAR WILSON ON N.C. 42 (LAT 35 43 15N LONG 077 58 23W)											
DEC 1996 09...	1530	75.0	6.20	7.0	766	12.3	101	20	4.4	2.2	5.3
02090500 CONTENTNEA CREEK NEAR WILSON, N. C. (LAT 35 41 10N LONG 077 56 50W)											
DEC 1996 09...	1430	61.0	6.20	7.5	766	12.0	100	15	3.3	1.7	4.9
02090504 CONTENTNEA CREEK NR BLACK CREEK, N.C. (LAT 35 40 06N LONG 077 54 33W)											
DEC 1996 09...	1100	70.0	6.50	8.0	767	11.1	93	16	3.5	1.7	6.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
02066500 ROANOKE CREEK AT RT 612 AT SAXE, VA (LAT 36 55 49N LONG 078 39 56W)										
DEC 1996 26...	24	.3	1.6	4.7	3.5	<.10	15	55	<.010	.080
02067000 ROANOKE (STAUNTON) R AT US HWY 360 NR CLOVER, VA (LAT 36 50 17N LONG 078 40 02W)										
DEC 1996 26...	17	.3	1.6	7.0	5.0	<.10	11	67	<.010	.270
02075500 DAN RIVER AT RT 658 AT PACES, VA (LAT 36 38 32N LONG 079 05 23W)										
DEC 1996 26...	39	.7	1.6	8.9	5.1	<.10	17	65	.020	.330
02077050 BANISTER RIVER AT US HWY 360 NR FIVE FORKS, VA (LAT 36 44 44N LONG 078 50 31W)										
DEC 1996 26...	30	.4	1.5	4.2	3.1	<.10	17	56	<.010	.210
02078050 HYCO RIVER AT US HWY 58 NEAR OMEGA, VA (LAT 36 40 03N LONG 078 45 20W)										
DEC 1996 27...	29	.5	1.9	11	6.3	.10	12	71	<.010	.220
02078300 AARONS CREEK AT RT 604 NEAR NELSON, VA (LAT 36 35 12N LONG 078 43 00W)										
DEC 1996 27...	29	.4	1.0	7.4	7.6	<.10	11	60	<.010	.140
02078360 BUFFALO CREEK AT US HWY 58 AT BUFFALO SPRINGS, V(LAT 36 38 25N LONG 078 38 55W)										
DEC 1996 27...	30	.5	1.8	7.8	6.1	<.10	12	73	<.010	<.050
02079000 ROANOKE RIVER AT US HWY 58 AT CLARKSVILLE, VA (LAT 36 37 40N LONG 078 33 04W)										
DEC 1996 27...	25	.4	1.9	8.0	6.0	<.10	13	68	<.010	.260
0207901010 GRASSY CREEK AT SR 1436 NR STOVALL, NC (LAT 36 29 23N LONG 078 37 20W)										
DEC 1996 27...	29	.4	1.0	6.5	4.8	<.10	13	63	<.010	.120
02079182 LITTLE JOHNSON CREEK NR CORNWALL, NC (LAT 36 30 50N LONG 078 40 17W)										
DEC 1996 27...	28	.4	1.0	8.6	6.1	<.10	11	66	<.010	.200
0209047200 BLOOMERY SWAMP NEAR WILSON ON N.C. 42 (LAT 35 43 15N LONG 077 58 23W)										
DEC 1996 09...	32	.5	3.2	5.7	12	.10	3.3	61	.010	.470
02090500 CONTENTNEA CREEK NEAR WILSON, N. C. (LAT 35 41 10N LONG 077 56 50W)										
DEC 1996 09...	35	.5	3.3	4.0	8.4	<.10	6.7	63	.020	.260
02090504 CONTENTNEA CREEK NR BLACK CREEK, N.C. (LAT 35 40 06N LONG 077 54 33W)										
DEC 1996 09...	40	.7	3.3	4.8	9.4	<.10	6.8	66	.030	.280

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SAMPLING SITES--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
02066500 ROANOKE CREEK AT RT 612 AT SAXE, VA (LAT 36 55 49N LONG 078 39 56W)										
DEC 1996 26...	<.015	--	--	.20	.30	.28	.38	.010	.010	<.010
02067000 ROANOKE (STAUNTON) R AT US HWY 360 NR CLOVER, VA (LAT 36 50 17N LONG 078 40 02W)										
DEC 1996 26...	<.015	--	--	<.20	<.20	--	--	.030	<.010	<.010
02075500 DAN RIVER AT RT 658 AT PACES, VA (LAT 36 38 32N LONG 079 05 23W)										
DEC 1996 26...	.070	.13	--	.20	<.20	.53	--	.020	.010	.020
02077050 BANISTER RIVER AT US HWY 360 NR FIVE FORKS, VA (LAT 36 44 44N LONG 078 50 31W)										
DEC 1996 26...	.020	--	--	<.20	<.20	--	--	<.010	<.010	<.010
02078050 HYCO RIVER AT US HWY 58 NEAR OMEGA, VA (LAT 36 40 03N LONG 078 45 20W)										
DEC 1996 27...	.020	--	--	<.20	<.20	--	--	.170	.130	.140
02078300 AARONS CREEK AT RT 604 NEAR NELSON, VA (LAT 36 35 12N LONG 078 43 00W)										
DEC 1996 27...	<.015	--	--	<.20	<.20	--	--	.010	<.010	<.010
02078360 BUFFALO CREEK AT US HWY 58 AT BUFFALO SPRINGS, V(LAT 36 38 25N LONG 078 38 55W)										
DEC 1996 27...	.020	.48	.38	.50	.40	--	--	.030	<.010	<.010
02079000 ROANOKE RIVER AT US HWY 58 AT CLARKSVILLE, VA (LAT 36 37 40N LONG 078 33 04W)										
DEC 1996 27...	.020	--	--	<.20	<.20	--	--	.020	<.010	<.010
0207901010 GRASSY CREEK AT SR 1436 NR STOVALL, NC (LAT 36 29 23N LONG 078 37 20W)										
DEC 1996 27...	<.015	--	--	.30	.20	.42	.32	.020	.010	.010
02079182 LITTLE JOHNSON CREEK NR CORNWALL, NC (LAT 36 30 50N LONG 078 40 17W)										
DEC 1996 27...	.030	.27	.17	.30	.20	.50	.40	.040	<.010	<.010
0209047200 BLOOMERY SWAMP NEAR WILSON ON N.C. 42 (LAT 35 43 15N LONG 077 58 23W)										
DEC 1996 09...	.020	.38	.38	.40	.40	.87	.87	.010	<.010	<.010
02090500 CONTENTNEA CREEK NEAR WILSON, N. C. (LAT 35 41 10N LONG 077 56 50W)										
DEC 1996 09...	.020	.38	.38	.40	.40	.66	.66	.030	.020	.020
02090504 CONTENTNEA CREEK NR BLACK CREEK, N.C. (LAT 35 40 06N LONG 077 54 33W)										
DEC 1996 09...	.200	.40	.40	.60	.60	.88	.88	.040	.030	.030

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 19971

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
02066500 ROANOKE CREEK AT RT 612 AT SAXE, VA (LAT 36 55 49N LONG 078 39 56W)										
DEC 1996 26...	170	<1.0	16	<1.0	<1.0	<1.0	<1.0	<1.0	820	<1.0
02067000 ROANOKE (STAUNTON) R AT US HWY 360 NR CLOVER, VA (LAT 36 50 17N LONG 078 40 02W)										
DEC 1996 26...	98	<1.0	23	<1.0	<1.0	<1.0	<1.0	<1.0	280	<1.0
02075500 DAN RIVER AT RT 658 AT PACES, VA (LAT 36 38 32N LONG 079 05 23W)										
DEC 1996 26...	123	<1.0	17	<1.0	<1.0	<1.0	<1.0	<1.0	360	<1.0
02077050 BANISTER RIVER AT US HWY 360 NR FIVE FORKS, VA (LAT 36 44 44N LONG 078 50 31W)										
DEC 1996 26...	113	<1.0	19	<1.0	<1.0	<1.0	<1.0	<1.0	530	<1.0
02078050 HYCO RIVER AT US HWY 58 NEAR OMEGA, VA (LAT 36 40 03N LONG 078 45 20W)										
DEC 1996 27...	83	2.0	20	<1.0	<1.0	<1.0	<1.0	1.0	400	<1.0
02078300 AARONS CREEK AT RT 604 NEAR NELSON, VA (LAT 36 35 12N LONG 078 43 00W)										
DEC 1996 27...	161	<1.0	14	<1.0	<1.0	<1.0	<1.0	<1.0	540	<1.0
02078360 BUFFALO CREEK AT US HWY 58 AT BUFFALO SPRINGS, V(LAT 36 38 25N LONG 078 38 55W)										
DEC 1996 27...	168	<1.0	31	<1.0	<1.0	<1.0	<1.0	2.0	660	<1.0
02079000 ROANOKE RIVER AT US HWY 58 AT CLARKSVILLE, VA (LAT 36 37 40N LONG 078 33 04W)										
DEC 1996 27...	132	<1.0	23	<1.0	<1.0	<1.0	<1.0	<1.0	310	<1.0
0207901010 GRASSY CREEK AT SR 1436 NR STOVALL, NC (LAT 36 29 23N LONG 078 37 20W)										
DEC 1996 27...	175	<1.0	17	<1.0	<1.0	<1.0	<1.0	<1.0	610	<1.0
02079182 LITTLE JOHNSON CREEK NR CORNWALL, NC (LAT 36 30 50N LONG 078 40 17W)										
DEC 1996 27...	35	2.0	18	<1.0	<1.0	<1.0	<1.0	1.0	200	<1.0
0209047200 BLOOMERY SWAMP NEAR WILSON ON N.C. 42 (LAT 35 43 15N LONG 077 58 23W)										
DEC 1996 09...	--	--	--	--	--	--	--	--	710	--
02090500 CONTENTNEA CREEK NEAR WILSON, N. C. (LAT 35 41 10N LONG 077 56 50W)										
DEC 1996 09...	--	--	--	--	--	--	--	--	1200	--
02090504 CONTENTNEA CREEK NR BLACK CREEK, N.C. (LAT 35 40 06N LONG 077 54 33W)										
DEC 1996 09...	--	--	--	--	--	--	--	--	1100	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SAMPLING SITES--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDIMENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
02066500 ROANOKE CREEK AT RT 612 AT SAXE, VA (LAT 36 55 49N LONG 078 39 56W)										
DEC 1996 26...	36	<1.0	<1.0	<1.0	4.0	<1.0	3.7	.30	--	--
02067000 ROANOKE (STAUNTON) R AT US HWY 360 NR CLOVER, VA (LAT 36 50 17N LONG 078 40 02W)										
DEC 1996 26...	13	<1.0	<1.0	<1.0	2.0	<1.0	2.0	.60	--	--
02075500 DAN RIVER AT RT 658 AT PACES, VA (LAT 36 38 32N LONG 079 05 23W)										
DEC 1996 26...	12	<1.0	<1.0	<1.0	2.0	<1.0	1.7	.60	--	--
02077050 BANISTER RIVER AT US HWY 360 NR FIVE FORKS, VA (LAT 36 44 44N LONG 078 50 31W)										
DEC 1996 26...	53	<1.0	<1.0	<1.0	3.0	<1.0	1.9	.60	--	--
02078050 HYCO RIVER AT US HWY 58 NEAR OMEGA, VA (LAT 36 40 03N LONG 078 45 20W)										
DEC 1996 27...	82	3.0	<1.0	<1.0	4.0	<1.0	4.2	.30	--	--
02078300 AARONS CREEK AT RT 604 NEAR NELSON, VA (LAT 36 35 12N LONG 078 43 00W)										
DEC 1996 27...	34	<1.0	<1.0	<1.0	3.0	<1.0	4.4	.80	--	--
02078360 BUFFALO CREEK AT US HWY 58 AT BUFFALO SPRINGS, V(LAT 36 38 25N LONG 078 38 55W)										
DEC 1996 27...	114	<1.0	<1.0	<1.0	5.0	<1.0	7.6	1.5	--	--
02079000 ROANOKE RIVER AT US HWY 58 AT CLARKSVILLE, VA (LAT 36 37 40N LONG 078 33 04W)										
DEC 1996 27...	38	<1.0	<1.0	<1.0	4.0	<1.0	2.7	.40	--	--
0207901010 GRASSY CREEK AT SR 1436 NR STOVALL, NC (LAT 36 29 23N LONG 078 37 20W)										
DEC 1996 27...	43	<1.0	<1.0	<1.0	5.0	<1.0	4.4	1.3	--	--
02079182 LITTLE JOHNSON CREEK NR CORNWALL, NC (LAT 36 30 50N LONG 078 40 17W)										
DEC 1996 27...	84	<1.0	<1.0	<1.0	3.0	<1.0	5.4	.90	--	--
0209047200 BLOOMERY SWAMP NEAR WILSON ON N.C. 42 (LAT 35 43 15N LONG 077 58 23W)										
DEC 1996 09...	14	--	--	--	--	--	9.8	.60	3	91
02090500 CONTENTNEA CREEK NEAR WILSON, N. C. (LAT 35 41 10N LONG 077 56 50W)										
DEC 1996 09...	22	--	--	--	--	--	9.8	.70	7	100
02090504 CONTENTNEA CREEK NR BLACK CREEK, N.C. (LAT 35 40 06N LONG 077 54 33W)										
DEC 1996 09...	26	--	--	--	--	--	10	.70	4	100

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
0209051600	HOMINY SWAMP AT SR 1606 NEAR EVANSDALE (LAT 35 41 32N LONG 077 54 22W)									
DEC 1996 09...	0930	131	6.60	7.0	767	10.5	86	39	11	2.8
02090519	CONTENTNEA CREEK NR EVANSDALE, NC (LAT 35 38 34N LONG 077 53 25W)									
DEC 1996 09...	1230	73.0	5.90	8.0	767	10.9	91	17	3.8	1.8
0209059000	GREAT SWAMP NEAR BLACK CREEK, NC (LAT 35 36 32N LONG 077 57 09W)									
DEC 1996 12...	0930	72.0	5.70	8.5	769	10.0	84	19	4.0	2.2
0209062000	AYCOCK SWAMP AT SR 1629 NR STANTONSBURG, NC (LAT 35 35 39N LONG 077 53 18W)									
DEC 1996 12...	1000	92.0	6.60	9.0	769	10.0	86	24	5.9	2.3
02090629	CONTENTNEA CREEK AT NC222 AT STANTONSBURG, NC (LAT 35 36 08N LONG 077 49 53W)									
DEC 1996 12...	1300	73.0	5.70	8.5	768	10.7	90	18	4.0	1.9
0209075800	TOISNOT SWAMP AT U.S. 264 NEAR WILSON (LAT 35 41 50N LONG 077 51 18W)									
DEC 1996 09...	1330	82.0	6.10	7.5	767	11.1	92	22	4.8	2.4
0209089050	CONTENTNEA CREEK AT SR 1225 NR LINDELL, NC (LAT 35 33 17N LONG 077 45 06W)									
DEC 1996 12...	1500	73.0	6.20	8.0	768	10.7	90	17	4.0	1.8
0209096970	MOCCASIN RUN NEAR PATETOWN, NC (LAT 35 28 46N LONG 077 54 37W)									
DEC 1996 12...	1100	61.0	6.10	8.5	769	9.2	78	16	3.7	1.7
02090980	THE SLOUGH NEAR SAULSTON, NC (LAT 35 28 15N LONG 077 51 34W)									
DEC 1996 12...	1130	90.0	6.00	10.0	768	10.7	94	25	5.7	2.5
0209110000	CONTENTNEA CR AT SR1222 NR HERRINGS X-ROADS, NC (LAT 35 30 22N LONG 077 43 35W)									
DEC 1996 12...	1400	73.0	5.90	8.0	768	10.7	90	18	4.1	1.9
0209160450	LITTLE CONTENTNEA CR AT U.S. 258 NR FARMVILLE, N(LAT 35 36 53N LONG 077 35 49W)									
DEC 1996 13...	1100	83.0	5.80	11.0	768	8.9	80	23	5.9	2.0
0209169250	UNNAMED TRIB TO LTL CONTENTNEA CR NR BELL ARTHUR (LAT 35 34 18N LONG 077 31 07W)									
DEC 1996 13...	0800	92.0	6.2	10.5	767	5.2	46	27	7.1	2.2
02091700	LITTLE CONTENTNEA CREEK NEAR FARMVILLE, N. C. (LAT 35 32 40N LONG 077 30 41W)									
DEC 1996 13...	0830	92.0	6.5	10.0	767	9.1	80	25	6.7	2.0

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SAMPLING SITES--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
0209051600 HOMINY SWAMP AT SR 1606 NEAR EVANSDALE (LAT 35 41 32N LONG 077 54 22W)									
DEC 1996 09...	7.2	26	.5	4.5	13	13	.20	8.4	95
02090519 CONTENTNEA CREEK NR EVANSDALE, NC (LAT 35 38 34N LONG 077 53 25W)									
DEC 1996 09...	6.3	39	.7	3.6	5.2	9.4	.10	6.8	68
0209059000 GREAT SWAMP NEAR BLACK CREEK, NC (LAT 35 36 32N LONG 077 57 09W)									
DEC 1996 12...	4.9	31	.5	4.0	5.3	13	<.10	3.5	62
0209062000 AYCOCK SWAMP AT SR 1629 NR STANTONSBURG, NC (LAT 35 35 39N LONG 077 53 18W)									
DEC 1996 12...	6.3	31	.6	4.4	6.1	15	.10	2.7	63
02090629 CONTENTNEA CREEK AT NC222 AT STANTONSBURG, NC (LAT 35 36 08N LONG 077 49 53W)									
DEC 1996 12...	6.3	38	.6	3.7	5.5	11	<.10	6.1	68
0209075800 TOISNOT SWAMP AT U.S. 264 NEAR WILSON (LAT 35 41 50N LONG 077 51 18W)									
DEC 1996 09...	5.1	29	.5	3.9	6.8	13	.10	4.3	69
0209089050 CONTENTNEA CREEK AT SR 1225 NR LINDELL, NC (LAT 35 33 17N LONG 077 45 06W)									
DEC 1996 12...	5.7	36	.6	3.9	5.8	11	<.10	5.5	65
0209096970 MOCCASIN RUN NEAR PATETOWN, NC (LAT 35 28 46N LONG 077 54 37W)									
DEC 1996 12...	4.1	30	.4	3.3	3.5	10	<.10	2.2	48
02090980 THE SLOUGH NEAR SAULSTON, NC (LAT 35 28 15N LONG 077 51 34W)									
DEC 1996 12...	5.6	29	.5	4.1	6.5	12	.10	5.2	65
0209110000 CONTENTNEA CR AT SR1222 NR HERRINGS X-ROADS, NC (LAT 35 30 22N LONG 077 43 35W)									
DEC 1996 12...	5.6	34	.6	4.1	5.9	11	<.10	5.3	65
0209160450 LITTLE CONTENTNEA CR AT U.S. 258 NR FARMVILLE, N(LAT 35 36 53N LONG 077 35 49W)									
DEC 1996 13...	5.2	29	.5	3.4	7.4	14	<.10	5.3	71
0209169250 UNNAMED TRIB TO LTL CONTENTNEA CR NR BELL ARTHUR (LAT 35 34 18N LONG 077 31 07W)									
DEC 1996 13...	5.2	26	.4	3.7	8.9	14	.10	1.1	63
02091700 LITTLE CONTENTNEA CREEK NEAR FARMVILLE, N. C. (LAT 35 32 40N LONG 077 30 41W)									
DEC 1996 13...	6.9	33	.6	3.8	8.8	15	.10	4.0	75

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)
0209051600 HOMINY SWAMP AT SR 1606 NEAR EVANSDALE (LAT 35 41 32N LONG 077 54 22W)									
DEC 1996									
09...	.040	1.40	.390	.51	.51	.90	.90	2.3	2.3
02090519 CONTENTNEA CREEK NR EVANSDALE, NC (LAT 35 38 34N LONG 077 53 25W)									
DEC 1996									
09...	.030	.340	.160	.44	.44	.60	.60	.94	.94
0209059000 GREAT SWAMP NEAR BLACK CREEK, NC (LAT 35 36 32N LONG 077 57 09W)									
DEC 1996									
12...	<.010	.600	<.015	--	--	.50	.40	1.1	1.0
0209062000 AYCOCK SWAMP AT SR 1629 NR STANTONSBURG, NC (LAT 35 35 39N LONG 077 53 18W)									
DEC 1996									
12...	.010	.770	.050	.35	.25	.40	.30	1.2	1.1
02090629 CONTENTNEA CREEK AT NC222 AT STANTONSBURG, NC (LAT 35 36 08N LONG 077 49 53W)									
DEC 1996									
12...	.020	.450	.070	.53	.33	.60	.40	1.0	.85
0209075800 TOISNOT SWAMP AT U.S. 264 NEAR WILSON (LAT 35 41 50N LONG 077 51 18W)									
DEC 1996									
09...	.020	.520	.030	.47	.37	.50	.40	1.0	.92
0209089050 CONTENTNEA CREEK AT SR 1225 NR LINDELL, NC (LAT 35 33 17N LONG 077 45 06W)									
DEC 1996									
12...	.010	.400	.040	.46	.36	.50	.40	.90	.80
0209096970 MOCCASIN RUN NEAR PATETOWN, NC (LAT 35 28 46N LONG 077 54 37W)									
DEC 1996									
12...	.010	.410	.030	.37	.27	.40	.30	.81	.71
02090980 THE SLOUGH NEAR SAULSTON, NC (LAT 35 28 15N LONG 077 51 34W)									
DEC 1996									
12...	.030	1.80	.060	.34	.24	.40	.30	2.2	2.1
0209110000 CONTENTNEA CR AT SR1222 NR HERRINGS X-ROADS, NC (LAT 35 30 22N LONG 077 43 35W)									
DEC 1996									
12...	<.010	.500	.040	.46	.36	.50	.40	1.0	.90
0209160450 LITTLE CONTENTNEA CR AT U.S. 258 NR FARMVILLE, N(LAT 35 36 53N LONG 077 35 49W)									
DEC 1996									
13...	.010	.530	.060	.44	.34	.50	.40	1.0	.93
0209169250 UNNAMED TRIB TO LTL CONTENTNEA CR NR BELL ARTHUR (LAT 35 34 18N LONG 077 31 07W)									
DEC 1996									
13...	.020	.480	.020	.38	.28	.40	.30	.88	.78
02091700 LITTLE CONTENTNEA CREEK NEAR FARMVILLE, N. C. (LAT 35 32 40N LONG 077 30 41W)									
DEC 1996									
13...	.020	.440	<.015	--	--	.50	.40	.94	.84

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
0209051600 HOMINY SWAMP AT SR 1606 NEAR EVANSDALE (LAT 35 41 32N LONG 077 54 22W)									
DEC 1996 09...	.070	.040	.040	840	38	8.3	1.3	9	100
02090519 CONTENTNEA CREEK NR EVANSDALE, NC (LAT 35 38 34N LONG 077 53 25W)									
DEC 1996 09...	.050	.030	.030	1100	28	10	.70	6	100
0209059000 GREAT SWAMP NEAR BLACK CREEK, NC (LAT 35 36 32N LONG 077 57 09W)									
DEC 1996 12...	.030	<.010	<.010	570	12	10	.40	2	100
0209062000 AYCOCK SWAMP AT SR 1629 NR STANTONSBURG, NC (LAT 35 35 39N LONG 077 53 18W)									
DEC 1996 12...	.040	<.010	.020	560	18	5.5	.50	<.500	100
02090629 CONTENTNEA CREEK AT NC222 AT STANTONSBURG, NC (LAT 35 36 08N LONG 077 49 53W)									
DEC 1996 12...	.070	<.010	.020	960	19	9.8	.60	6	100
0209075800 TOISNOT SWAMP AT U.S. 264 NEAR WILSON (LAT 35 41 50N LONG 077 51 18W)									
DEC 1996 09...	.030	.010	.020	640	21	8.9	.70	4	100
0209089050 CONTENTNEA CREEK AT SR 1225 NR LINDELL, NC (LAT 35 33 17N LONG 077 45 06W)									
DEC 1996 12...	.040	.020	.010	870	11	9.5	.60	4	100
0209096970 MOCCASIN RUN NEAR PATETOWN, NC (LAT 35 28 46N LONG 077 54 37W)									
DEC 1996 12...	.030	<.010	<.010	440	8.0	8.0	.50	1	100
02090980 THE SLOUGH NEAR SAULSTON, NC (LAT 35 28 15N LONG 077 51 34W)									
DEC 1996 12...	.040	<.010	.020	470	21	6.1	.50	2	100
0209110000 CONTENTNEA CR AT SR1222 NR HERRINGS X-ROADS, NC (LAT 35 30 22N LONG 077 43 35W)									
DEC 1996 12...	.050	.020	.020	740	10	9.2	.60	6	86
0209160450 LITTLE CONTENTNEA CR AT U.S. 258 NR FARMVILLE, N(LAT 35 36 53N LONG 077 35 49W)									
DEC 1996 13...	.030	.030	.030	640	26	10	.80	6	94
0209169250 UNNAMED TRIB TO LTL CONTENTNEA CR NR BELL ARTHUR (LAT 35 34 18N LONG 077 31 07W)									
DEC 1996 13...	.020	<.010	.020	310	5.0	6.7	.40	2	100
02091700 LITTLE CONTENTNEA CREEK NEAR FARMVILLE, N. C. (LAT 35 32 40N LONG 077 30 41W)									
DEC 1996 13...	.060	.040	.040	570	14	10	.90	3	100

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
0209171600		MIDDLE SWAMP NEAR LIZZIE, NC (LAT 35 32 36N LONG 077 34 01W)								
DEC 1996 13...	0930	95.0	6.50	10.5	768	7.6	68	27	6.9	2.3
0209173200		SANDY RUN NEAR LIZZIE, NC (LAT 35 31 53N LONG 077 33 32W)								
DEC 1996 13...	1000	104	6.30	10.5	768	8.3	74	30	8.1	2.4

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
0209171600	MIDDLE SWAMP NEAR LIZZIE, NC (LAT 35 32 36N LONG 077 34 01W)								
DEC 1996 13...	5.5	26	.5	5.3	7.3	14	.10	1.5	74
0209173200	SANDY RUN NEAR LIZZIE, NC (LAT 35 31 53N LONG 077 33 32W)								
DEC 1996 13...	5.6	25	.4	5.2	7.8	16	.10	1.3	80

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)
0209171600	MIDDLE SWAMP NEAR LIZZIE, NC (LAT 35 32 36N LONG 077 34 01W)								
DEC 1996 13...	.010	.370	.030	.47	.37	.50	.40	.87	.77
0209173200	SANDY RUN NEAR LIZZIE, NC (LAT 35 31 53N LONG 077 33 32W)								
DEC 1996 13...	.010	.880	<.015	--	--	.60	.50	1.5	1.4

DATE	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
0209171600	MIDDLE SWAMP NEAR LIZZIE, NC (LAT 35 32 36N LONG 077 34 01W)								
DEC 1996 13...	.060	.050	.050	570	12	10	.50	5	86
0209173200	SANDY RUN NEAR LIZZIE, NC (LAT 35 31 53N LONG 077 33 32W)								
DEC 1996 13...	.060	.050	.050	540	15	12	.60	5	100

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SAMPLING SITES

The following miscellaneous sites were sampled during the 1997 water year for the Upper Tennessee River Basin Study Unit of the National Water-Quality Assessment (NAWQA) Program. Water-quality miscellaneous sampling sites are particular locations where chemical-quality, biological or sediment data are collected once or more frequently, but not on a regular basis, to provide better areal coverage of a river basin.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
0344114090 DAVIDSON RIVER AT OLD HENDERSON WAY AT BREVARD, N(LAT 35 15 22N LONG 082 41 57W)												
JUL 1997												
08...	1530	53	24.0	7.33	20.5	710	8.68	104	K32.0	430	6	1.5
30...	0945	63	26.0	7.09	18.5	714	13.0	148	--	--	6	1.6
0344150700 LITTLE RIVER AT CASCADE LAKE RD NR LITTLE RIVER (LAT 35 13 41N LONG 082 38 29W)												
JUL 1997												
09...	1530	75	24.2	6.42	23.5	706	7.80	99	K35.0	200	4	1.1
0344602100 MILLS RIVER AT HOOPER LANE NR MILLS RIVER, NC (LAT 35 23 13N LONG 082 32 46W)												
APR 1997												
17...	1030	266	16.0	7.27	11.0	707	11.6	114	179	950	--	--
0344766600 CANE CREEK AT US HIGHWAY 25 AT FLETCHER, NC (LAT 35 25 19N LONG 082 30 16W)												
APR 1997												
17...	1500	115	50	7.7	13.5	705	11.0	114	K64	340	--	--
0344776625 FRENCH BROAD RIVER AT GLENN BRIDGE RD NR ARDEN, N(LAT 35 27 11N LONG 082 33 00W)												
JUL 1997												
29...	1615	--	55.0	6.30	23.0	713	8.70	109	980	4900	11	3.1
0344878100 HOMINY CREEK NR WEST ASHEVILLE, NC (LAT 35 33 46N LONG 082 35 52W)												
APR 1997												
16...	0930	164	63.0	7.42	10.0	718	10.7	101	K10200	>80	--	--
0345169000 NEWFOUND CREEK NR ALEXANDER, NC (LAT 35 39 58N LONG 082 38 04W)												
APR 1997												
08...	0930	36.1	89.0	7.43	10.5	719	10.8	102	2700	4400	--	--
0345182580 REEMS CR AT NEW STOCK RD NR WEAVERVILLE, NC (LAT 35 41 24N LONG 082 35 38W)												
APR 1997												
09...	1000	44.5	58.0	7.59	9.5	717	12.3	114	3800	K11500	--	--
0345195390 FLAT CREEK NEAR WEAVERVILLE, NC (LAT 35 43 07N LONG 082 37 17W)												
APR 1997												
10...	1045	19	96.0	7.70	9.0	724	12.1	110	738	K22000	--	--
0345199400 SANDYMUSH CREEK NEAR VOLGA, NC (LAT 35 44 05N LONG 082 41 45W)												
APR 1997												
08...	1530	62	73.0	7.33	13.0	720	11.0	110	320	840	--	--
0345292005 IVY RIVER AT MARSHALL, NC (LAT 35 47 39N LONG 082 36 46W)												
JUL 1997												
08...	1045	77	81.0	6.9	19.5	719	11.2	129	580	880	25	6.1
0345458780 SPRING CREEK AT NC209 NEAR HOT SPRINGS, NC (LAT 35 52 47N LONG 082 50 11W)												
APR 1997												
21...	1330	79.9	42.0	7.16	11.0	720	11.1	107	153	1200	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
0344114090 DAVIDSON RIVER AT OLD HENDERSON WAY AT BREVARD, N(LAT 35 15 22N LONG 082 41 57W)												
JUL 1997												
08...	.48	1.6	.6	7.80	6.40	1.9	.8	<.1	7.8	25	<.01	.07
30...	.48	1.5	.6	8.00	6.60	1.9	.9	<.1	7.5	24	<.01	.12
0344150700 LITTLE RIVER AT CASCADE LAKE RD NR LITTLE RIVER (LAT 35 13 41N LONG 082 38 29W)												
JUL 1997												
09...	.32	2.1	1.4	5.60	4.60	1.9	1.0	<.1	7.8	23	<.01	.12
0344602100 MILLS RIVER AT HOOPER LANE NR MILLS RIVER, NC (LAT 35 23 13N LONG 082 32 46W)												
APR 1997												
17...	--	--	--	5.90	4.80	--	--	--	--	--	--	--
0344766600 CANE CREEK AT US HIGHWAY 25 AT FLETCHER, NC (LAT 35 25 19N LONG 082 30 16W)												
APR 1997												
17...	--	--	--	--	16	--	--	--	--	--	--	--
0344776625 FRENCH BROAD RIVER AT GLENN BRIDGE RD NR ARDEN, N(LAT 35 27 11N LONG 082 33 00W)												
JUL 1997												
29...	.75	5.3	1.6	15.1	12.4	2.8	2.4	<.1	9.1	43	<.01	.38
0344878100 HOMINY CREEK NR WEST ASHEVILLE, NC (LAT 35 33 46N LONG 082 35 52W)												
APR 1997												
16...	--	--	--	18.3	15.0	--	--	--	--	--	--	--
0345169000 NEWFOUND CREEK NR ALEXANDER, NC (LAT 35 39 58N LONG 082 38 04W)												
APR 1997												
08...	--	--	--	32.0	26.0	--	--	--	--	--	--	--
0345182580 REEMS CR AT NEW STOCK RD NR WEAVERVILLE, NC (LAT 35 41 24N LONG 082 35 38W)												
APR 1997												
09...	--	--	--	19.8	16.2	--	--	--	--	--	--	--
0345195390 FLAT CREEK NEAR WEAVERVILLE, NC (LAT 35 43 07N LONG 082 37 17W)												
APR 1997												
10...	--	--	--	39.0	32.0	--	--	--	--	--	--	--
0345199400 SANDYMUSH CREEK NEAR VOLGA, NC (LAT 35 44 05N LONG 082 41 45W)												
APR 1997												
08...	--	--	--	26.6	21.8	--	--	--	--	--	--	--
0345292005 IVY RIVER AT MARSHALL, NC (LAT 35 47 39N LONG 082 36 46W)												
JUL 1997												
08...	2.5	4.3	1.8	31.0	26.0	4.3	2.9	<.1	16	80	<.01	.43
0345458780 SPRING CREEK AT NC209 NEAR HOT SPRINGS, NC (LAT 35 52 47N LONG 082 50 11W)												
APR 1997												
21...	--	--	--	13.0	11.0	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SAMPLING SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
0344114090 DAVIDSON RIVER AT OLD HENDERSON WAY AT BREVARD, N(LAT 35 15 22N LONG 082 41 57W)												
JUL 1997												
08...	.02	--	--	<.2	<.2	--	--	<.01	<.01	.01	75	10
30...	.02	--	--	<.2	<.2	--	--	<.01	<.01	.01	52	8
0344150700 LITTLE RIVER AT CASCADE LAKE RD NR LITTLE RIVER (LAT 35 13 41N LONG 082 38 29W)												
JUL 1997												
09...	<.02	--	--	<.2	<.2	--	--	<.01	<.01	<.01	130	7
0344602100 MILLS RIVER AT HOOPER LANE NR MILLS RIVER, NC (LAT 35 23 13N LONG 082 32 46W)												
APR 1997												
17...	--	--	--	--	--	--	--	--	--	--	--	--
0344766600 CANE CREEK AT US HIGHWAY 25 AT FLETCHER, NC (LAT 35 25 19N LONG 082 30 16W)												
APR 1997												
17...	--	--	--	--	--	--	--	--	--	--	--	--
0344776625 FRENCH BROAD RIVER AT GLENN BRIDGE RD NR ARDEN, N(LAT 35 27 11N LONG 082 33 00W)												
JUL 1997												
29...	.04	.32	.16	.4	.2	.73	.58	.08	.01	.02	110	17
0344878100 HOMINY CREEK NR WEST ASHEVILLE, NC (LAT 35 33 46N LONG 082 35 52W)												
APR 1997												
16...	--	--	--	--	--	--	--	--	--	--	--	--
0345169000 NEWFOUND CREEK NR ALEXANDER, NC (LAT 35 39 58N LONG 082 38 04W)												
APR 1997												
08...	--	--	--	--	--	--	--	--	--	--	--	--
0345182580 REEMS CR AT NEW STOCK RD NR WEAVERVILLE, NC (LAT 35 41 24N LONG 082 35 38W)												
APR 1997												
09...	--	--	--	--	--	--	--	--	--	--	--	--
0345195390 FLAT CREEK NEAR WEAVERVILLE, NC (LAT 35 43 07N LONG 082 37 17W)												
APR 1997												
10...	--	--	--	--	--	--	--	--	--	--	--	--
0345199400 SANDYMUSH CREEK NEAR VOLGA, NC (LAT 35 44 05N LONG 082 41 45W)												
APR 1997												
08...	--	--	--	--	--	--	--	--	--	--	--	--
0345292005 IVY RIVER AT MARSHALL, NC (LAT 35 47 39N LONG 082 36 46W)												
JUL 1997												
08...	<.02	--	--	<.2	<.2	--	--	.03	<.01	.01	35	10
0345458780 SPRING CREEK AT NC209 NEAR HOT SPRINGS, NC (LAT 35 52 47N LONG 082 50 11W)												
APR 1997												
21...	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	BRO-MACIL, WATER, DISS, REC (UG/L) (04029)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	P,P' DDE DISSOLV (UG/L) (34653)
0344114090 DAVIDSON RIVER AT OLD HENDERSON WAY AT BREVARD, N(LAT 35 15 22N LONG 082 41 57W)												
JUL 1997												
08...	1	.3	--	--	--	--	--	--	--	--	--	--
30...	1.3	.4	<.007	<.002	--	<.005	<.018	<.002	<.004	<.003	<.002	<.006
0344150700 LITTLE RIVER AT CASCADE LAKE RD NR LITTLE RIVER (LAT 35 13 41N LONG 082 38 29W)												
JUL 1997												
09...	1.3	.3	--	--	--	--	--	--	--	--	--	--
0344602100 MILLS RIVER AT HOOPER LANE NR MILLS RIVER, NC (LAT 35 23 13N LONG 082 32 46W)												
APR 1997												
17...	--	--	--	--	--	--	--	--	--	--	--	--
0344766600 CANE CREEK AT US HIGHWAY 25 AT FLETCHER, NC (LAT 35 25 19N LONG 082 30 16W)												
APR 1997												
17...	--	--	--	--	--	--	--	--	--	--	--	--
0344776625 FRENCH BROAD RIVER AT GLENN BRIDGE RD NR ARDEN, N(LAT 35 27 11N LONG 082 33 00W)												
JUL 1997												
29...	2.1	1.1	<.007	<.002	<.035	.0202	.164	<.002	<.004	<.003	<.002	<.006
0344878100 HOMINY CREEK NR WEST ASHEVILLE, NC (LAT 35 33 46N LONG 082 35 52W)												
APR 1997												
16...	--	--	--	--	--	--	--	--	--	--	--	--
0345169000 NEWFOUND CREEK NR ALEXANDER, NC (LAT 35 39 58N LONG 082 38 04W)												
APR 1997												
08...	--	--	--	--	--	--	--	--	--	--	--	--
0345182580 REEMS CR AT NEW STOCK RD NR WEAVERVILLE, NC (LAT 35 41 24N LONG 082 35 38W)												
APR 1997												
09...	--	--	--	--	--	--	--	--	--	--	--	--
0345195390 FLAT CREEK NEAR WEAVERVILLE, NC (LAT 35 43 07N LONG 082 37 17W)												
APR 1997												
10...	--	--	--	--	--	--	--	--	--	--	--	--
0345199400 SANDYMUSH CREEK NEAR VOLGA, NC (LAT 35 44 05N LONG 082 41 45W)												
APR 1997												
08...	--	--	--	--	--	--	--	--	--	--	--	--
0345292005 IVY RIVER AT MARSHALL, NC (LAT 35 47 39N LONG 082 36 46W)												
JUL 1997												
08...	1.3	.5	<.007	<.002	<.035	<.005	<.018	E.0072	<.004	<.003	<.002	<.006
0345458780 SPRING CREEK AT NC209 NEAR HOT SPRINGS, NC (LAT 35 52 47N LONG 082 50 11W)												
APR 1997												
21...	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	METHIO-CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	PRO-POXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	BENTA-ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	FLUO-METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	LINDANE DIS-SOLVED (UG/L) (39341)
0344114090 DAVIDSON RIVER AT OLD HENDERSON WAY AT BREVARD, N(LAT 35 15 22N LONG 082 41 57W)												
JUL 1997												
08...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	<.004	<.004
0344150700 LITTLE RIVER AT CASCADE LAKE RD NR LITTLE RIVER (LAT 35 13 41N LONG 082 38 29W)												
JUL 1997												
09...	--	--	--	--	--	--	--	--	--	--	--	--
0344602100 MILLS RIVER AT HOOPER LANE NR MILLS RIVER, NC (LAT 35 23 13N LONG 082 32 46W)												
APR 1997												
17...	--	--	--	--	--	--	--	--	--	--	--	--
0344766600 CANE CREEK AT US HIGHWAY 25 AT FLETCHER, NC (LAT 35 25 19N LONG 082 30 16W)												
APR 1997												
17...	--	--	--	--	--	--	--	--	--	--	--	--
0344776625 FRENCH BROAD RIVER AT GLENN BRIDGE RD NR ARDEN, N(LAT 35 27 11N LONG 082 33 00W)												
JUL 1997												
29...	<.035	<.018	<.05	<.035	<.026	<.035	<.014	<.035	<.035	<.018	.0042	<.004
0344878100 HOMINY CREEK NR WEST ASHEVILLE, NC (LAT 35 33 46N LONG 082 35 52W)												
APR 1997												
16...	--	--	--	--	--	--	--	--	--	--	--	--
0345169000 NEWFOUND CREEK NR ALEXANDER, NC (LAT 35 39 58N LONG 082 38 04W)												
APR 1997												
08...	--	--	--	--	--	--	--	--	--	--	--	--
0345182580 REEMS CR AT NEW STOCK RD NR WEAVERVILLE, NC (LAT 35 41 24N LONG 082 35 38W)												
APR 1997												
09...	--	--	--	--	--	--	--	--	--	--	--	--
0345195390 FLAT CREEK NEAR WEAVERVILLE, NC (LAT 35 43 07N LONG 082 37 17W)												
APR 1997												
10...	--	--	--	--	--	--	--	--	--	--	--	--
0345199400 SANDYMUSH CREEK NEAR VOLGA, NC (LAT 35 44 05N LONG 082 41 45W)												
APR 1997												
08...	--	--	--	--	--	--	--	--	--	--	--	--
0345292005 IVY RIVER AT MARSHALL, NC (LAT 35 47 39N LONG 082 36 46W)												
JUL 1997												
08...	<.035	<.018	<.05	<.035	<.026	<.035	<.014	<.035	<.035	<.018	E.0038	<.004
0345458780 SPRING CREEK AT NC209 NEAR HOT SPRINGS, NC (LAT 35 52 47N LONG 082 50 11W)												
APR 1997												
21...	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	MALA-THION, DIS-SOLVED (UG/L) (39532)	PARA-THION, DIS-SOLVED (UG/L) (39542)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	2,4-D, DIS-SOLVED (UG/L) (39732)	2,4,5-T DIS-SOLVED (UG/L) (39742)	SILVEX, DIS-SOLVED (UG/L) (39762)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	TRI-CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)
0344114090 DAVIDSON RIVER AT OLD HENDERSON WAY AT BREVARD, N(LAT 35 15 22N LONG 082 41 57W)											
JUL 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
30...	<.001	<.002	<.005	<.004	<.002	<.001	--	--	--	<.002	--
0344150700 LITTLE RIVER AT CASCADE LAKE RD NR LITTLE RIVER (LAT 35 13 41N LONG 082 38 29W)											
JUL 1997											
09...	--	--	--	--	--	--	--	--	--	--	--
0344602100 MILLS RIVER AT HOOPER LANE NR MILLS RIVER, NC (LAT 35 23 13N LONG 082 32 46W)											
APR 1997											
17...	--	--	--	--	--	--	--	--	--	--	--
0344766600 CANE CREEK AT US HIGHWAY 25 AT FLETCHER, NC (LAT 35 25 19N LONG 082 30 16W)											
APR 1997											
17...	--	--	--	--	--	--	--	--	--	--	--
0344776625 FRENCH BROAD RIVER AT GLENN BRIDGE RD NR ARDEN, N(LAT 35 27 11N LONG 082 33 00W)											
JUL 1997											
29...	<.001	.0067	<.005	<.004	<.002	.0069	<.035	<.035	<.021	<.002	<.05
0344878100 HOMINY CREEK NR WEST ASHEVILLE, NC (LAT 35 33 46N LONG 082 35 52W)											
APR 1997											
16...	--	--	--	--	--	--	--	--	--	--	--
0345169000 NEWFOUND CREEK NR ALEXANDER, NC (LAT 35 39 58N LONG 082 38 04W)											
APR 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
0345182580 REEMS CR AT NEW STOCK RD NR WEAVERVILLE, NC (LAT 35 41 24N LONG 082 35 38W)											
APR 1997											
09...	--	--	--	--	--	--	--	--	--	--	--
0345195390 FLAT CREEK NEAR WEAVERVILLE, NC (LAT 35 43 07N LONG 082 37 17W)											
APR 1997											
10...	--	--	--	--	--	--	--	--	--	--	--
0345199400 SANDYMUSH CREEK NEAR VOLGA, NC (LAT 35 44 05N LONG 082 41 45W)											
APR 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
0345292005 IVY RIVER AT MARSHALL, NC (LAT 35 47 39N LONG 082 36 46W)											
JUL 1997											
08...	<.001	<.002	<.005	<.004	<.002	.0103	<.035	<.035	<.021	<.002	<.05
0345458780 SPRING CREEK AT NC209 NEAR HOT SPRINGS, NC (LAT 35 52 47N LONG 082 50 11W)											
APR 1997											
21...	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PRO-PHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	PIC-LORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	ORY-ZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)	NORFLUR AZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	NEB-URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	1-NAPH THOL, WATER, FLTRD, GF 0.7U REC (UG/L) (49295)	METH-OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	FEN-URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	ESFEN-VAL-ERATE, WAT,FLT GF 0.7U REC (UG/L) (49298)	DNOC WAT,FLT GF 0.7U REC (UG/L) (49299)
0344114090 DAVIDSON RIVER AT OLD HENDERSON WAY AT BREVARD, N(LAT 35 15 22N LONG 082 41 57W)											
JUL 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
30...	--	<.002	--	--	--	--	--	--	--	--	--
0344150700 LITTLE RIVER AT CASCADE LAKE RD NR LITTLE RIVER (LAT 35 13 41N LONG 082 38 29W)											
JUL 1997											
09...	--	--	--	--	--	--	--	--	--	--	--
0344602100 MILLS RIVER AT HOOPER LANE NR MILLS RIVER, NC (LAT 35 23 13N LONG 082 32 46W)											
APR 1997											
17...	--	--	--	--	--	--	--	--	--	--	--
0344766600 CANE CREEK AT US HIGHWAY 25 AT FLETCHER, NC (LAT 35 25 19N LONG 082 30 16W)											
APR 1997											
17...	--	--	--	--	--	--	--	--	--	--	--
0344776625 FRENCH BROAD RIVER AT GLENN BRIDGE RD NR ARDEN, N(LAT 35 27 11N LONG 082 33 00W)											
JUL 1997											
29...	<.035	<.002	<.05	<.019	<.024	<.015	<.007	<.017	<.03	<.019	<.035
0344878100 HOMINY CREEK NR WEST ASHEVILLE, NC (LAT 35 33 46N LONG 082 35 52W)											
APR 1997											
16...	--	--	--	--	--	--	--	--	--	--	--
0345169000 NEWFOUND CREEK NR ALEXANDER, NC (LAT 35 39 58N LONG 082 38 04W)											
APR 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
0345182580 REEMS CR AT NEW STOCK RD NR WEAVERVILLE, NC (LAT 35 41 24N LONG 082 35 38W)											
APR 1997											
09...	--	--	--	--	--	--	--	--	--	--	--
0345195390 FLAT CREEK NEAR WEAVERVILLE, NC (LAT 35 43 07N LONG 082 37 17W)											
APR 1997											
10...	--	--	--	--	--	--	--	--	--	--	--
0345199400 SANDYMUSH CREEK NEAR VOLGA, NC (LAT 35 44 05N LONG 082 41 45W)											
APR 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
0345292005 IVY RIVER AT MARSHALL, NC (LAT 35 47 39N LONG 082 36 46W)											
JUL 1997											
08...	<.035	<.002	<.05	<.019	<.024	<.015	<.007	<.017	<.013	<.019	<.035
0345458780 SPRING CREEK AT NC209 NEAR HOT SPRINGS, NC (LAT 35 52 47N LONG 082 50 11W)											
APR 1997											
21...	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)	DICHLO-BENIL, WATER, FLTRD, GF 0.7U REC (UG/L) (49303)	DACTHAL MONO-ACID, WAT,FLT GF 0.7U REC (UG/L) (49304)	CLOPYR-ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CHLORO-THALO-NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	CHLOR-AMBEN, WATER, FLTRD, GF 0.7U REC (UG/L) (49307)	3HYDRXY CARBO-FURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	CARBO-FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	CAR-BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)
0344114090 DAVIDSON RIVER AT OLD HENDERSON WAY AT BREVARD, N(LAT 35 15 22N LONG 082 41 57W)											
JUL 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
0344150700 LITTLE RIVER AT CASCADE LAKE RD NR LITTLE RIVER (LAT 35 13 41N LONG 082 38 29W)											
JUL 1997											
09...	--	--	--	--	--	--	--	--	--	--	--
0344602100 MILLS RIVER AT HOOPER LANE NR MILLS RIVER, NC (LAT 35 23 13N LONG 082 32 46W)											
APR 1997											
17...	--	--	--	--	--	--	--	--	--	--	--
0344766600 CANE CREEK AT US HIGHWAY 25 AT FLETCHER, NC (LAT 35 25 19N LONG 082 30 16W)											
APR 1997											
17...	--	--	--	--	--	--	--	--	--	--	--
0344776625 FRENCH BROAD RIVER AT GLENN BRIDGE RD NR ARDEN, N(LAT 35 27 11N LONG 082 33 00W)											
JUL 1997											
29...	<.02	<.035	<.032	<.02	<.017	<.05	<.035	<.011	<.014	<.028	<.008
0344878100 HOMINY CREEK NR WEST ASHEVILLE, NC (LAT 35 33 46N LONG 082 35 52W)											
APR 1997											
16...	--	--	--	--	--	--	--	--	--	--	--
0345169000 NEWFOUND CREEK NR ALEXANDER, NC (LAT 35 39 58N LONG 082 38 04W)											
APR 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
0345182580 REEMS CR AT NEW STOCK RD NR WEAVERVILLE, NC (LAT 35 41 24N LONG 082 35 38W)											
APR 1997											
09...	--	--	--	--	--	--	--	--	--	--	--
0345195390 FLAT CREEK NEAR WEAVERVILLE, NC (LAT 35 43 07N LONG 082 37 17W)											
APR 1997											
10...	--	--	--	--	--	--	--	--	--	--	--
0345199400 SANDYMUSH CREEK NEAR VOLGA, NC (LAT 35 44 05N LONG 082 41 45W)											
APR 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
0345292005 IVY RIVER AT MARSHALL, NC (LAT 35 47 39N LONG 082 36 46W)											
JUL 1997											
08...	<.02	<.035	<.032	<.02	<.017	<.05	<.035	<.011	<.014	<.028	<.008
0345458780 SPRING CREEK AT NC209 NEAR HOT SPRINGS, NC (LAT 35 52 47N LONG 082 50 11W)											
APR 1997											
21...	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BRO-MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	ALDI-CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALDI-CARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICA-RB SUL-FOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	ACIFL-UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
0344114090 DAVIDSON RIVER AT OLD HENDERSON WAY AT BREVARD, N(LAT 35 15 22N LONG 082 41 57W)											
JUL 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	<.004	<.003	<.002	<.004	<.002	<.007
0344150700 LITTLE RIVER AT CASCADE LAKE RD NR LITTLE RIVER (LAT 35 13 41N LONG 082 38 29W)											
JUL 1997											
09...	--	--	--	--	--	--	--	--	--	--	--
0344602100 MILLS RIVER AT HOOPER LANE NR MILLS RIVER, NC (LAT 35 23 13N LONG 082 32 46W)											
APR 1997											
17...	--	--	--	--	--	--	--	--	--	--	--
0344766600 CANE CREEK AT US HIGHWAY 25 AT FLETCHER, NC (LAT 35 25 19N LONG 082 30 16W)											
APR 1997											
17...	--	--	--	--	--	--	--	--	--	--	--
0344776625 FRENCH BROAD RIVER AT GLENN BRIDGE RD NR ARDEN, N(LAT 35 27 11N LONG 082 33 00W)											
JUL 1997											
29...	<.035	<.016	<.016	<.021	<.035	<.004	<.003	<.002	<.004	<.002	<.007
0344878100 HOMINY CREEK NR WEST ASHEVILLE, NC (LAT 35 33 46N LONG 082 35 52W)											
APR 1997											
16...	--	--	--	--	--	--	--	--	--	--	--
0345169000 NEWFOUND CREEK NR ALEXANDER, NC (LAT 35 39 58N LONG 082 38 04W)											
APR 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
0345182580 REEMS CR AT NEW STOCK RD NR WEAVERVILLE, NC (LAT 35 41 24N LONG 082 35 38W)											
APR 1997											
09...	--	--	--	--	--	--	--	--	--	--	--
0345195390 FLAT CREEK NEAR WEAVERVILLE, NC (LAT 35 43 07N LONG 082 37 17W)											
APR 1997											
10...	--	--	--	--	--	--	--	--	--	--	--
0345199400 SANDYMUSH CREEK NEAR VOLGA, NC (LAT 35 44 05N LONG 082 41 45W)											
APR 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
0345292005 IVY RIVER AT MARSHALL, NC (LAT 35 47 39N LONG 082 36 46W)											
JUL 1997											
08...	<.035	<.016	<.016	<.021	<.035	<.004	<.003	<.002	<.004	<.002	<.007
0345458780 SPRING CREEK AT NC209 NEAR HOT SPRINGS, NC (LAT 35 52 47N LONG 082 50 11W)											
APR 1997											
21...	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)
0344114090 DAVIDSON RIVER AT OLD HENDERSON WAY AT BREVARD, N(LAT 35 15 22N LONG 082 41 57W)											
JUL 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
30...	<.002	<.006	<.002	<.004	<.010	<.004	<.003	<.002	<.003	<.013	<.003
0344150700 LITTLE RIVER AT CASCADE LAKE RD NR LITTLE RIVER (LAT 35 13 41N LONG 082 38 29W)											
JUL 1997											
09...	--	--	--	--	--	--	--	--	--	--	--
0344602100 MILLS RIVER AT HOOPER LANE NR MILLS RIVER, NC (LAT 35 23 13N LONG 082 32 46W)											
APR 1997											
17...	--	--	--	--	--	--	--	--	--	--	--
0344766600 CANE CREEK AT US HIGHWAY 25 AT FLETCHER, NC (LAT 35 25 19N LONG 082 30 16W)											
APR 1997											
17...	--	--	--	--	--	--	--	--	--	--	--
0344776625 FRENCH BROAD RIVER AT GLENN BRIDGE RD NR ARDEN, N(LAT 35 27 11N LONG 082 33 00W)											
JUL 1997											
29...	<.002	<.006	<.002	<.004	<.010	<.004	<.003	<.002	<.003	<.013	<.003
0344878100 HOMINY CREEK NR WEST ASHEVILLE, NC (LAT 35 33 46N LONG 082 35 52W)											
APR 1997											
16...	--	--	--	--	--	--	--	--	--	--	--
0345169000 NEWFOUND CREEK NR ALEXANDER, NC (LAT 35 39 58N LONG 082 38 04W)											
APR 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
0345182580 REEMS CR AT NEW STOCK RD NR WEAVERVILLE, NC (LAT 35 41 24N LONG 082 35 38W)											
APR 1997											
09...	--	--	--	--	--	--	--	--	--	--	--
0345195390 FLAT CREEK NEAR WEAVERVILLE, NC (LAT 35 43 07N LONG 082 37 17W)											
APR 1997											
10...	--	--	--	--	--	--	--	--	--	--	--
0345199400 SANDYMUSH CREEK NEAR VOLGA, NC (LAT 35 44 05N LONG 082 41 45W)											
APR 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
0345292005 IVY RIVER AT MARSHALL, NC (LAT 35 47 39N LONG 082 36 46W)											
JUL 1997											
08...	<.002	<.006	<.002	<.004	<.010	<.004	<.003	<.002	<.003	<.013	<.003
0345458780 SPRING CREEK AT NC209 NEAR HOT SPRINGS, NC (LAT 35 52 47N LONG 082 50 11W)											
APR 1997											
21...	--	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY MISCELLANEOUS SAMPLING SITES

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)
0344114090 DAVIDSON RIVER AT OLD HENDERSON WAY AT BREVARD, N(LAT 35 15 22N LONG 082 41 57W)											
JUL 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
30...	<.017	<.001	<.004	<.003	<.002	<.002	<.004	<.003	<.013	<.001	<.005
0344150700 LITTLE RIVER AT CASCADE LAKE RD NR LITTLE RIVER (LAT 35 13 41N LONG 082 38 29W)											
JUL 1997											
09...	--	--	--	--	--	--	--	--	--	--	--
0344602100 MILLS RIVER AT HOOPER LANE NR MILLS RIVER, NC (LAT 35 23 13N LONG 082 32 46W)											
APR 1997											
17...	--	--	--	--	--	--	--	--	--	--	--
0344766600 CANE CREEK AT US HIGHWAY 25 AT FLETCHER, NC (LAT 35 25 19N LONG 082 30 16W)											
APR 1997											
17...	--	--	--	--	--	--	--	--	--	--	--
0344776625 FRENCH BROAD RIVER AT GLENN BRIDGE RD NR ARDEN, N(LAT 35 27 11N LONG 082 33 00W)											
JUL 1997											
29...	<.017	<.001	<.004	E.0086	<.002	<.002	<.004	<.003	<.013	<.001	<.005
0344878100 HOMINY CREEK NR WEST ASHEVILLE, NC (LAT 35 33 46N LONG 082 35 52W)											
APR 1997											
16...	--	--	--	--	--	--	--	--	--	--	--
0345169000 NEWFOUND CREEK NR ALEXANDER, NC (LAT 35 39 58N LONG 082 38 04W)											
APR 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
0345182580 REEMS CR AT NEW STOCK RD NR WEAVERVILLE, NC (LAT 35 41 24N LONG 082 35 38W)											
APR 1997											
09...	--	--	--	--	--	--	--	--	--	--	--
0345195390 FLAT CREEK NEAR WEAVERVILLE, NC (LAT 35 43 07N LONG 082 37 17W)											
APR 1997											
10...	--	--	--	--	--	--	--	--	--	--	--
0345199400 SANDYMUSH CREEK NEAR VOLGA, NC (LAT 35 44 05N LONG 082 41 45W)											
APR 1997											
08...	--	--	--	--	--	--	--	--	--	--	--
0345292005 IVY RIVER AT MARSHALL, NC (LAT 35 47 39N LONG 082 36 46W)											
JUL 1997											
08...	<.017	<.001	<.004	<.003	<.002	<.002	<.004	.0051	<.013	<.001	<.005
0345458780 SPRING CREEK AT NC209 NEAR HOT SPRINGS, NC (LAT 35 52 47N LONG 082 50 11W)											
APR 1997											
21...	--	--	--	--	--	--	--	--	--	--	--

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
	Length	
inch (in.)	2.54×10^{1}	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^{0}	kilometer
	Area	
acre	4.047×10^{3}	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi^2)	2.590×10^{0}	square kilometer
	Volume	
gallon (gal)	3.785×10^{0}	liter
	3.785×10^{0}	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^{3}	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft^3)	2.832×10^{1}	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft^3/s) d]	2.447×10^{3}	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^{3}	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
	Flow	
cubic foot per second (ft^3/s)	2.832×10^{1}	liter per second
	2.832×10^{1}	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^{1}	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
	Mass	
ton (short)	9.072×10^{-1}	megagram or metric ton

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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