

U.S. Department of the Interior
U.S. Geological Survey

Water Resources Data North Carolina Water Year 2002

Volume 1B. Surface-Water Records

By B.C. Ragland, R.G. Barker, and J.B. Robinson

Water-Data Report NC-02-1B



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



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2003

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 two volumes.

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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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 Timothy W. Hale, Acting 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 March 28, 2003	3. REPORT TYPE AND DATES COVERED Annual Data - Oct. 1, 2001 thru Sept. 30, 2002
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4. TITLE AND SUBTITLE Water Resources Data, North Carolina, Water Year 2002 Volume 1B. Surface-Water Data	5. FUNDING NUMBERS
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6. AUTHOR(S) B.C. Ragland, R.G. Barker, and J.B. Robinson
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7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Geological Survey Water Resources Division 3916 Sunset Ridge Road Raleigh, North Carolina 27607	8. PERFORMING ORGANIZATION REPORT NUMBER USGS-WDR-NC-02-1B
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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-02-1B
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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
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13. ABSTRACT (Maximum 200 words)
Water-resources data for the 2002 water year for North Carolina consist of discharge records for 211 gaging stations; stage only records for 20 gaging stations; stage and contents for 62 lakes and reservoirs; water quality for 52 gaging stations and 7 miscellaneous sites, and continuous water quality for 30 sites; and continuous precipitation at 109 sites. Additional water data were collected at 85 sites not involved in the systematic data-collection program, and are published as miscellaneous measurements.

Data contained in this volume include discharge records for 146 gaging stations; stage and contents for 45 lakes and reservoirs; stage only for 7 gaging stations; water quality for 23 gaging stations and continuous water quality for 9 sites; continuous precipitation at 104 sites and miscellaneous measurements for 77 stations not involved in the systematic data-collection program.

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, Precipitation	15. NUMBER OF PAGES 663	16. PRICE CODE
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17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT
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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
			1986-91
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	29.90	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	1966-80
02077300	Hyco River at McGehees 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
02082610	Tar River near Rocky Mount, NC	930	1971-73
0208273070	Devils Cradle Creek at NC 39 near Kearney, NC	2.89	1984-85
02082731	Devils Cradle Creek nr Alert, NC	13.4	1993-97
02083833	Pete Mitchell Swamp at Sr1409 nr Penny Hill, NC	11.0	1993-97
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	4.76	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
0208732810	Marsh Creek at SR 2030 at Millbrook, NC	1.44	1986-89
02087570	Neuse River at Smithfield, NC	1,206	1959-90
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	8.20	1978-85
0209096970	Moccasin Run near Patetown, NC	1.89	1988-98
02090625	Turner Swamp near Eureka, NC	2.1	1968-87
02091700	Little Contentnea Creek near Farmville, NC	93.3	1956-87
0209173200	Sandy Run near Lizzie, NC	29.0	1999-00
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
02094412	Reedy Fork near Browns Summit, NC	125	1999-01
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 0.1 mile 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	1.68	1968-73
0209736050	Battle Branch near Chapel Hill, NC	0.42	1996-01
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	459	1928-71

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS--Continued

Station number	Station name	Drainage area (mi ²)	Period of record
Cape Fear River Basin--Continued			
02104000	Cape Fear River at Fayetteville, NC	4,395	1889-1903 1928-40
02104387	Buckhead Creek near Owens, NC	2.62	1976-80
02104500	Rockfish Creek near Hope Mills, NC	292	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	8.30	1983-90
0210783230	Herrings Marsh Run near Summerlins Crossroads, NC	2.25	1991-99
0210783240	Herrings Marsh Run Tributary near Summerlins Crossroads, NC	1.49	1991-00
0210783273	Herrings Marsh Run Tributary at Red Hill, NC	1.14	1991-97
0210783276	Herrings Marsh Run below SR 1306 at Red Hill, NC	9.11	1991-99
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	22.1	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	.04	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	186	1964-79 1988-91
02115900	South Fork Muddy Creek near Clemmons, NC	42.9	1964-79 1988-91
02117030	Humpy Creek near Fork, NC	1.05	1968-83
02117500	Rocky Creek at Turnersburg, NC	101	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	3,450	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	342	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

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS--Continued

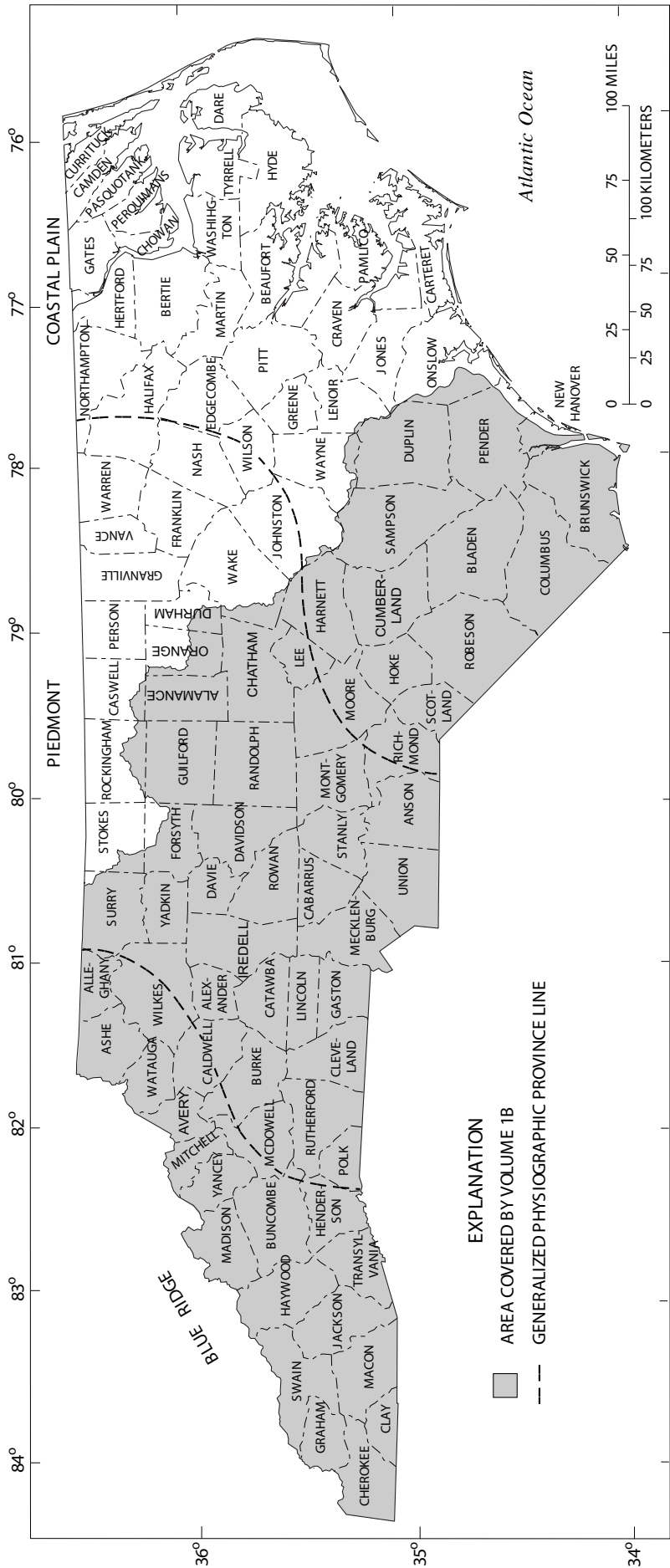
Station number	Station name	Drainage area (mi ²)	Period of record
Santee River Basin			
02137000	Mill Creek at Old Fort, NC	20.7	1960-75
02138000	Catawba River near Marion, NC	172	1941-81
0213875850	High Shoals Creek near Dysartsville, NC	2.38	1986-88
02139200	Bailey Fork near Morganton, NC	7.86	1966-70
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	31.8	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
0214399575	Long Creek Tributary at Headwaters near Bessemer City, NC	0.16	1993-01
0214399580	Long Creek Tributary below Headwaters near Bessemer City, NC	0.22	1993-01
0214620760	Irwin Creek at Starita Road at Charlotte, NC	4.40	1989-94
02146450	Briar Creek at Sharon Road, Charlotte, NC	18.5	1962-73
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
0214677974	Steele Creek above Secondary Road 1344 near Shopton, NC	3.57	1990-98
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
02151000	Second Broad River at Cliffside, NC	220	1925-97
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

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS--Continued

Station number	Station name	Drainage area (mi ²)	Period of record
Tennessee River Basin--Continued			
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	79.5	1975-77
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	190	1942-74
03548000	Hiwassee River below Hayesville, NC	252	1934-45

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS--Continued

Station number	Station name	Drainage area (mi ²)	Period of record
		Tennessee River Basin--Continued	
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



INTRODUCTION

Water-resources data for the 2002 water year for North Carolina consist of records of stage, discharge, water quality for streams; stage and contents for lakes and reservoirs; precipitation; and ground-water levels and water quality of ground water. This volume contains discharge records for 146 gaging stations; stage and contents for 45 lakes and reservoirs; stage for 7 gaging stations; water quality for 23 gaging stations and continuous water quality for 9 sites; and continuous precipitation at 104 sites. Additional water data were collected at 77 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, Branch of Information Services, Denver Federal Center, Box 25286, Denver, Colorado 80225-0425.

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-02-1B." 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 Department of Environment and Natural Resources	City of Brevard
North Carolina Department of Transportation	City of Charlotte
Water and Sewer Authority of Cabarrus County	City of Danville, Virginia
Buncombe County Soil & Water Conservation District	Town of Bethel
Triangle Area Water Supply Monitoring Steering Committee	Macon County
Winston-Salem/Forsyth County Utility Commission	Mecklenburg County
City of Brevard	Hiwassee River Watershed Coalition
City of Morganton	Middle Cape Fear River Basin Association
City of Greensboro	Lower Neuse River Basin Association
City of Raleigh	Pender County Emergency Management
City of Rocky Mount	Upper Cape Fear River Basin Association
City of Durham	Asheville-Buncombe Water Authority

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

Corps of Engineers, U.S. Army	U.S. Environmental Protection Agency
Tennessee Valley Authority	National Park Service
National Weather Service, NOAA, U.S. Department of Commerce	U.S. Fish & Wildlife Service

The following organizations aided in collecting records:

Progress Energy	Duke Power Company
Yadkin, Inc.	Dominion Power
Blue Ridge Paper Products	Tapoco, Inc.
Weyerhaeuser Corporation	Cook Industries

SUMMARY OF WATER-RESOURCES CONDITIONS

Precipitation

Precipitation amounts for the first quarter, October through December, of the 2002 water year were well below average across the State. Average precipitation amounts are mean monthly values based on data from 1971 through 2000, the 30-year base period used by the National Weather Service. Precipitation amounts varied from 6.02 (Asheville) and 6.63 (Charlotte) inches below average in the western part of the State, to 6.33 (Greensboro) and 4.82 (Raleigh) inches below average in the central part of the State, to 7.14 (Elizabeth City) and 7.54 (Wilmington) inches below average in the eastern part of the State. Rainfall data collected at six key National Weather Service stations (figs. 1 and 3) indicate that below-average rainfall amounts were recorded for all months, in all the Provinces of North Carolina, during the first quarter.

The second quarter of the 2002 water year, January through March, brought continued dry conditions to the State. However, above-average monthly mean rainfall occurred in a line from Charlotte to Elizabeth City as a result of a regional weather system that moved across the State in late January. Rainfall was below average at all index sites in February and above average at all index sites except Asheville and Greensboro in March. The most rainfall during the quarter was reported in Elizabeth City at 3.42 inches above average. Below average quarterly rainfall was recorded in Asheville (3.18 inches below average), Charlotte (1.24 inches below average), Greensboro (1.84 inches below average), Raleigh (0.10 inch below average), and Wilmington (2.98 inches below average).

The third quarter, April through June, again brought below-average amounts of rainfall across the State. Only Elizabeth City recorded 2 months of above-average precipitation. Quarterly precipitation amounts declined further below average during the third quarter at all the index sites across the State with the exception of Asheville, which was below average but not as severely as during the previous quarter. Raleigh and Wilmington were affected the most by lack of rain, recording 5.00 and 5.54 inches below average for the quarter. The remaining index sites also reported less severe conditions ranging from 1.01 to 4.18 inches below average for the quarter—Asheville (1.01 inches), Charlotte (4.18 inches), Greensboro (3.67 inches), and Elizabeth City (1.42 inches).

Rainfall conditions were close to the mean values in the central and eastern parts of the State during the fourth quarter, July through September. Index sites at Raleigh, Wilmington, and Elizabeth City all recorded above-average monthly rainfall for July and August. Index sites at Charlotte and Greensboro also reported above-average monthly rainfall in August. Above-average rainfalls were recorded for Wilmington (3.12 inches above the mean) and Elizabeth City (1.53 inches above the mean) for the entire quarter. The remaining index sites recorded below-average conditions ranging from 0.65 to 2.28 inches below average for the quarter—Asheville (1.76 inches), Charlotte (2.28 inches), Greensboro (1.01 inches), and Raleigh (0.65 inches).

In summary, drought conditions in North Carolina, which began in 1998, continued through 2002 with below-average annual rainfall at each of the six index sites. Mandatory and voluntary water restrictions were established in many regions of the State due to extremely low public-water supplies. The National Weather Service reported the following annual rainfall amounts for the 2002 water year at these selected stations: Asheville, 35.07 inches (11.97 inches below average); Charlotte, 29.18 inches (14.33 inches below average); Greensboro, 30.29 inches (12.85 inches below average); Raleigh, 33.78 inches (9.27 inches below average); Elizabeth City, 43.37 inches (3.61 inches below average); and Wilmington, 44.13 inches (12.94 inches below average).

Surface Water

Streamflow conditions in North Carolina are influenced greatly by precipitation. Rainfall can produce rapid responses in streamflow. Streamflow also declines following periods of low rainfall. The rate and magnitude of decline depend on basin size, the season, evapotranspiration, and the amount of ground water in storage at the onset of the dry period. The effects on streamflow of variable rainfall in North Carolina during the 2002 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, normal, and below-normal streamflow.

Data for the period of record from 35 index gaging stations across the State were used to compute monthly flow statistics (figs. 3 and 4). These stations are located on streams that are free of significant regulations or diversions and range in size from about 30 to 1,400 square miles. The descriptors, "above normal," "normal," and "below normal," refer to flow in the upper quartile, the middle two quartiles, and the lower quartile, respectively.

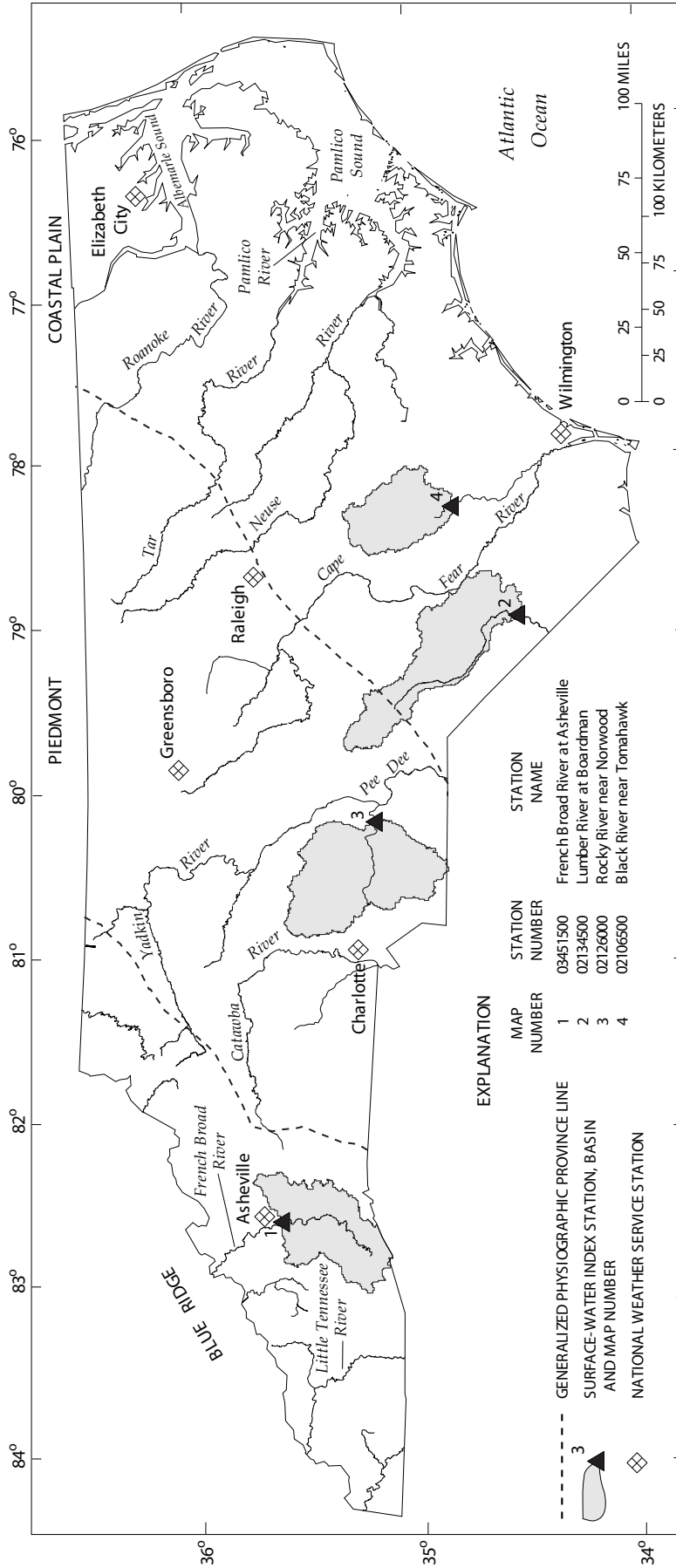


Figure 1.--Locations of selected long-term index stations for collecting precipitation and discharge data in North Carolina.

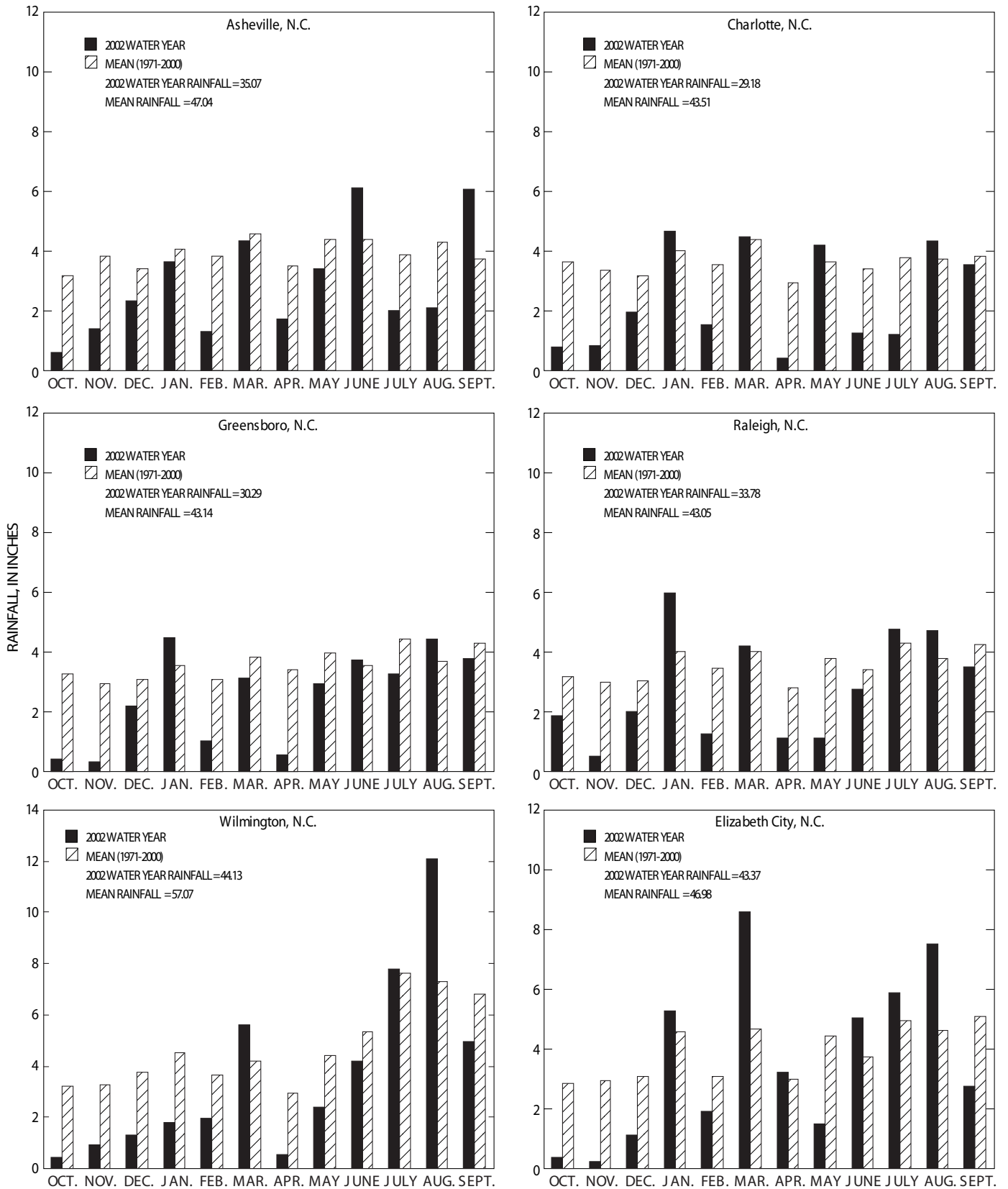
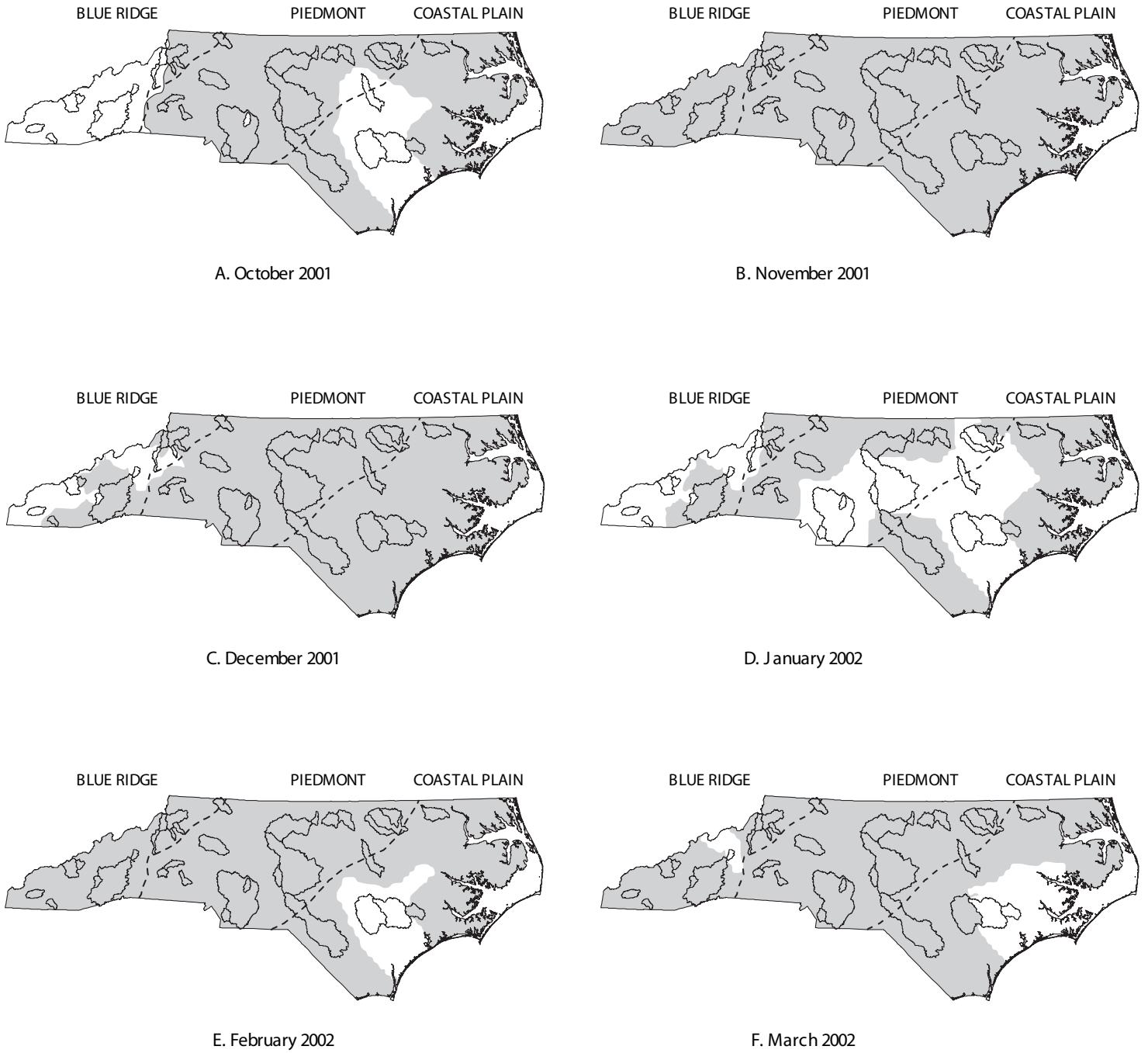


Figure 2.--Monthly rainfall and average monthly rainfall for the period 1971-2000 at index stations for the 2002 water year (data from National Oceanic and Atmospheric Administration reports).



EXPLANATION






-  ABOVE NORMAL (EXCESSIVE--Flow in the upper quartile)
-  NORMAL (Flow in the middle two quartiles)
-  BELOW NORMAL (DEFICIENT--Flow in the lower quartile)
-  GENERALIZED PHYSIOGRAPHIC PROVINCE LINE
-  WATERSHED BOUNDARIES OF INDEX SITES

Figure 3.--Monthly streamflow in North Carolina during October - March 2002 water year.

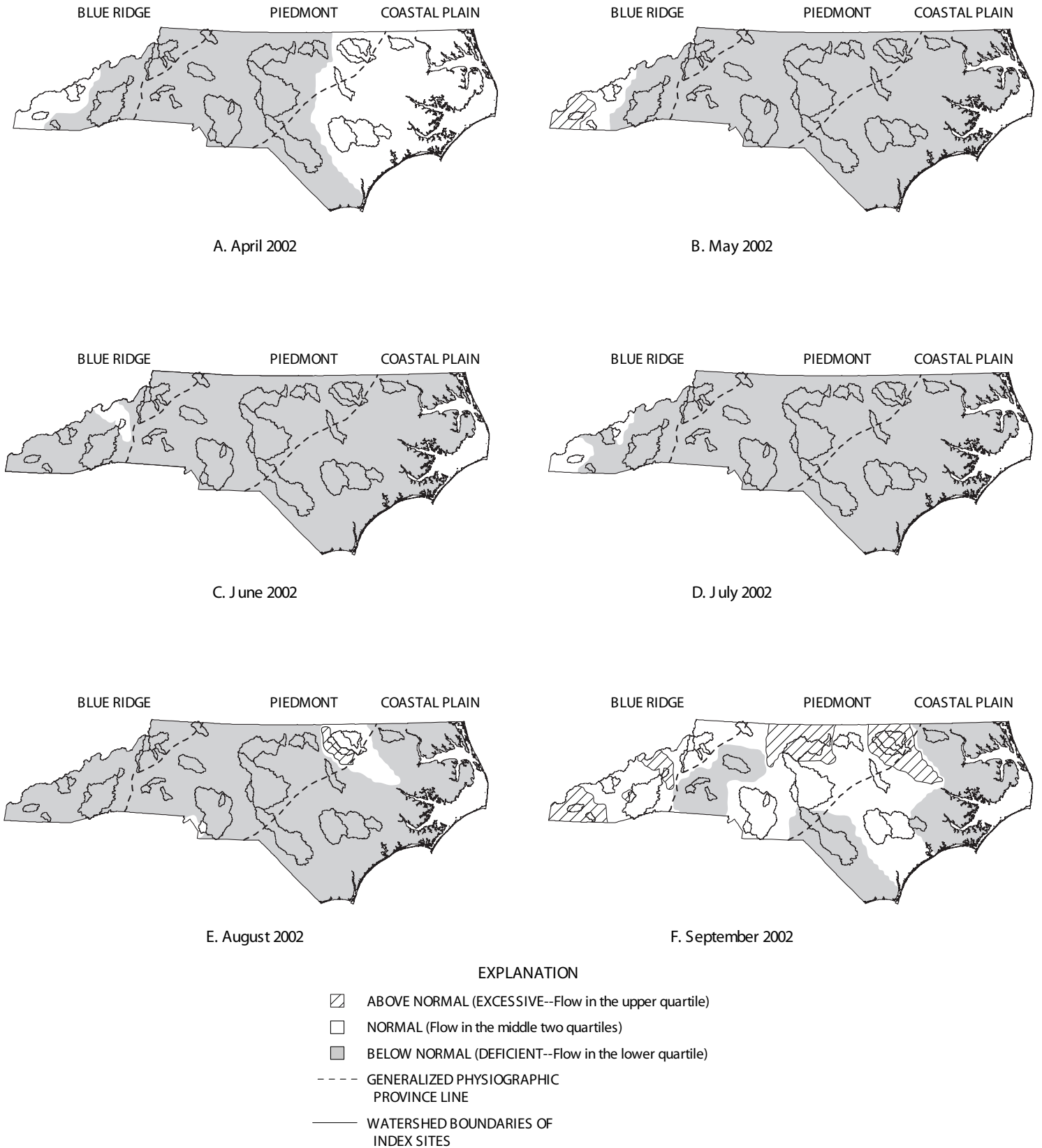


Figure 4.--Monthly streamflow in North Carolina during April - September 2002 water year.

Monthly mean flows recorded at index stations during the 2002 water year were generally below normal. Sites reporting below-normal streamflow were evident each month of the water year (figs. 3 and 4). In fact, below-normal streamflow conditions were noted at more than half of the 35 index stations for all months except January and September. All of the index stations recorded below-normal streamflow during the month of November (fig. 3).

Record low monthly mean discharges were established at one or more index sites for every month except January. Eighteen sites experienced new record low monthly mean discharges for June. New period of record low instantaneous discharges for the 2002 water year were also recorded at 11 of the 35 index sites (table 1).

Table 1.--Index stream-gaging stations recording new period of record minimum instantaneous discharges during the 2002 water year

Station name	USGS station number	Years of record	Drainage area (square miles)	Record low instantaneous discharge for period of record (cubic feet per second)
Little Fishing Creek near White Oak, N.C.	02082950	43	177	0.50
Flat River at Bahama, N.C.	02085500	78	149	0.15
Little River near Princeton, N.C.	02088500	73	232	0.00
Elk Creek at Elkville, N.C.	02111180	37	48.1	6.8
Fisher River near Copeland, N.C.	02113000	71	128	10
South Yadkin River near Mocksville, N.C.	02118000	64	306	2.8
Little River near Star, N.C.	02128000	49	106	0.00
Lumber River at Boardman, N.C.	02134500	73	1,228	40
Indian Creek near Laboratory, N.C.	02143500	52	69.2	0.25
First Broad River near Casar, N.C.	02152100	44	60.5	3.6
French Broad River at Asheville, N.C.	03451500	107	945	215

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. The daily mean discharge hydrograph for the 2002 water year is superimposed on the long-term median daily mean discharge hydrograph, for the 1971-2000 base period, for each of these index stations. Daily mean discharge fluctuated both above and below the median daily mean discharge at three of the four sites but was generally less than the median for most of the 2002 water year. The Lumber River at Boardman site was consistently below the median daily mean discharge throughout the water year.

In summary, below-average precipitation occurred during the 2002 water year throughout much of the State. Annual departure from normal precipitation totals for the six index weather stations were reported as follows: Asheville, 11.97 inches below average; Charlotte, 14.33 inches below average; Greensboro, 12.85 inches below average; Raleigh, 9.27 inches below average; Wilmington, 12.94 inches below average; Elizabeth City, 3.61 inches below average. Streamflow conditions reflected the rainfall pattern across the State, yielding below-normal streamflow conditions throughout much of the year.

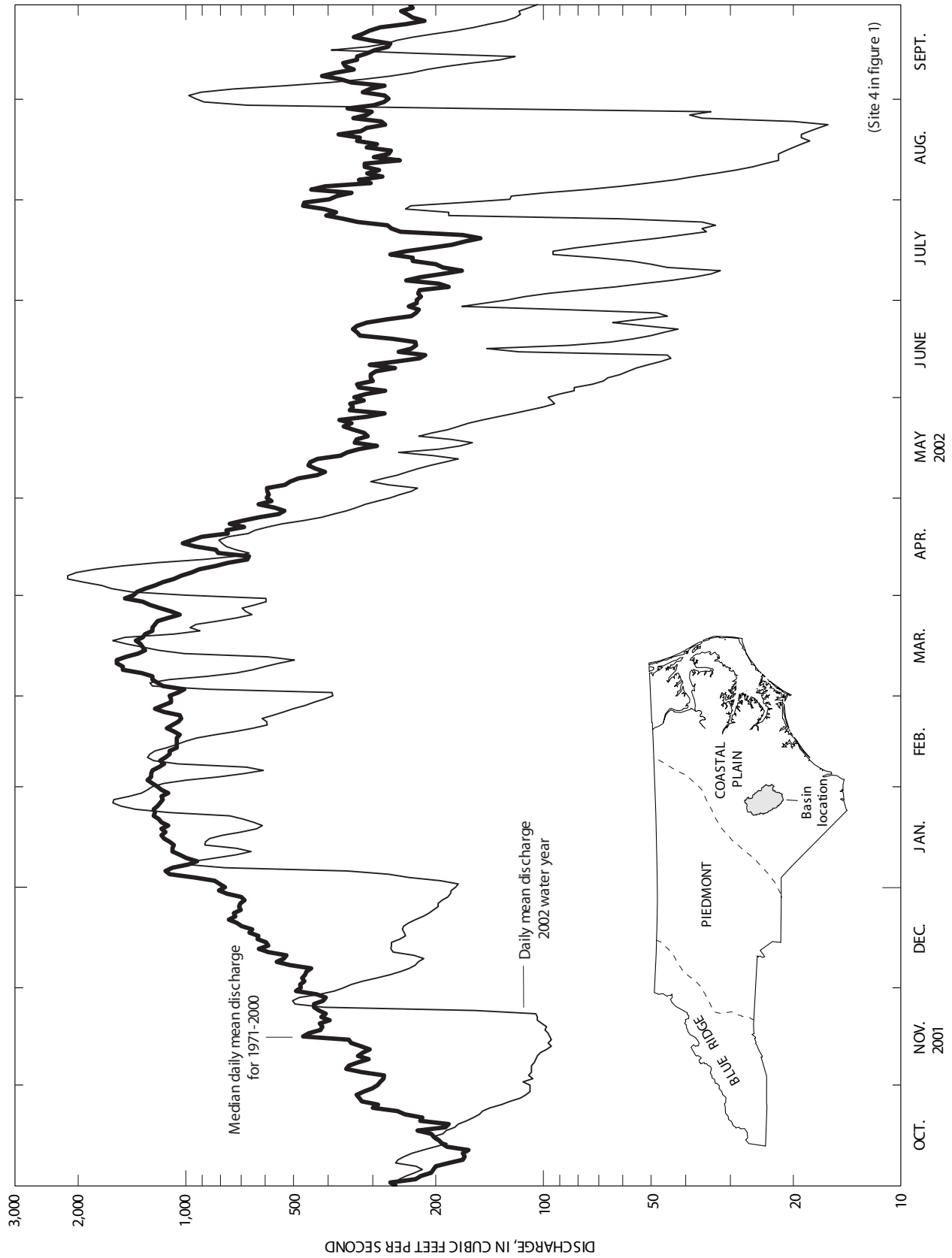


Figure 5.--Daily mean discharge for 2002 water year and median daily mean discharge for 1971-2000 water years for Black River near Tomahawk (02106500).

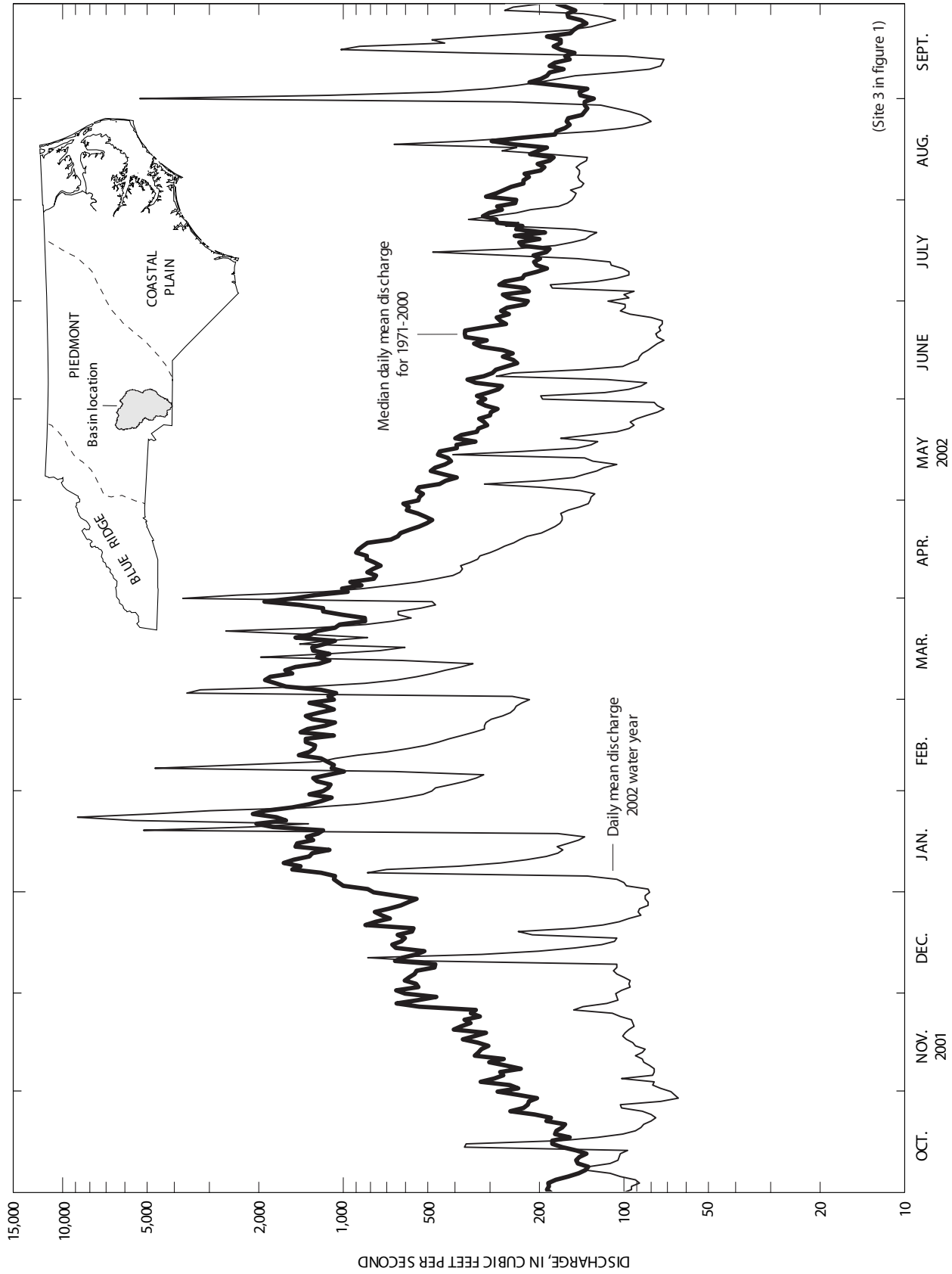


Figure 6.--Daily mean discharge for 2002 water year and median daily mean discharge for Rocky River near Norwood (02126000).

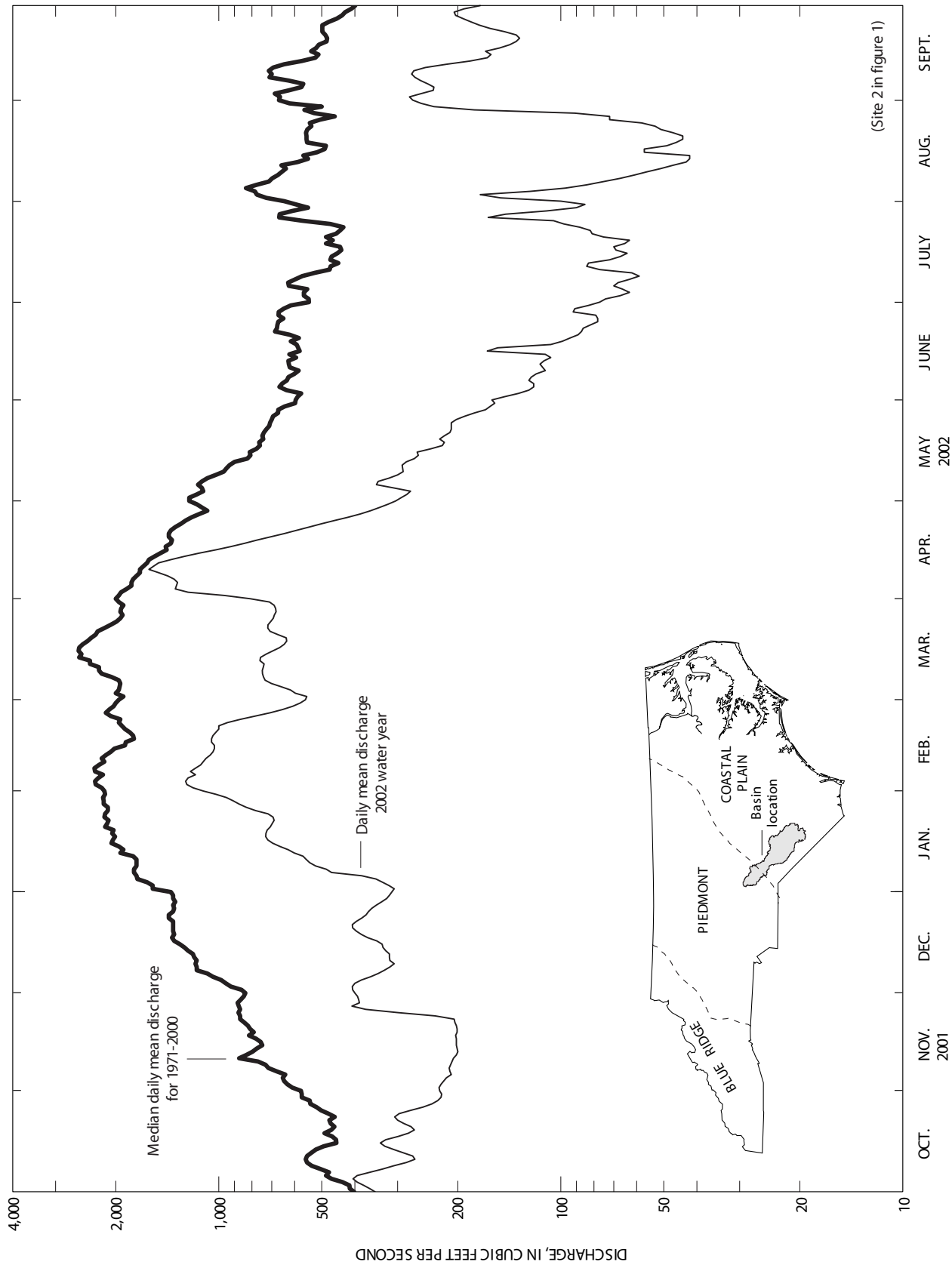


Figure 7.--Daily mean discharge for 2002 water year and median daily mean discharge for 1971-2000 water years for Lumber River at Boardman (02134500).

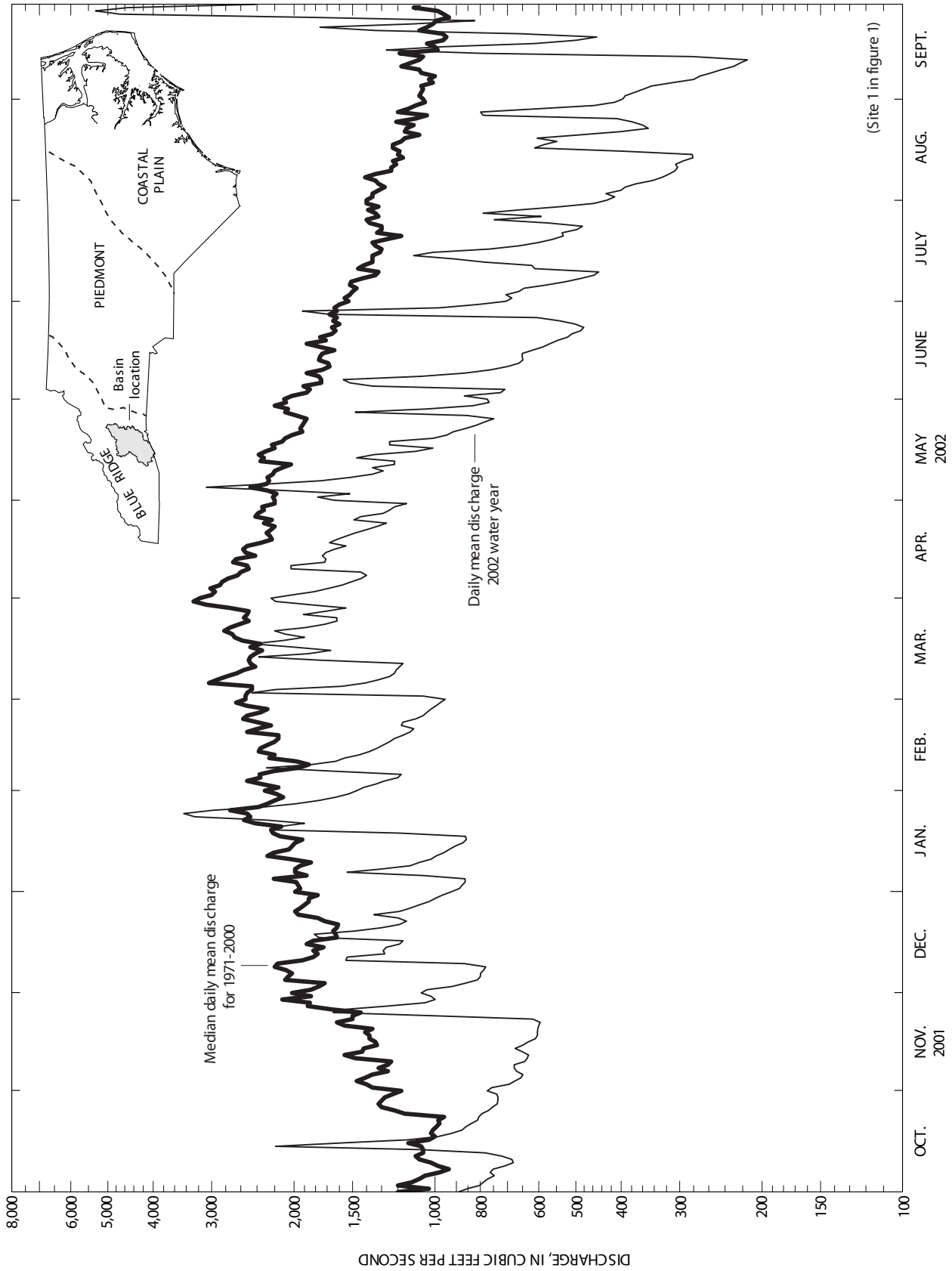


Figure 8.--Daily mean discharge for 2002 water year and median daily mean discharge for 1971-2000 water years for French Broad River at Asheville (03451500).

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 streamflow representative of 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. At 10 of these sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program can be found at <http://water.usgs.gov/hbn/>.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations was operated in the Mississippi, Columbia, Colorado, and Rio Grande basins. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia so that a network of 5 stations could be implemented on the Yukon River. 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. Additional information about the NASQAN Program can be found at <http://water.usgs.gov/nasqan/>.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 225 precipitation chemistry monitoring sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as all data from the individual sites, can be found at <http://bqs.usgs.gov/acidrain/>.

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 59 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 can be found at <http://water.usgs.gov/nawqa/>

EXPLANATION OF RECORDS

The surface-water records published in this report are for the 2002 water year that began October 1, 2001 and ended September 30, 2002. 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 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.

Downstream Order System

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 indentation in the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of indentation 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. 9).

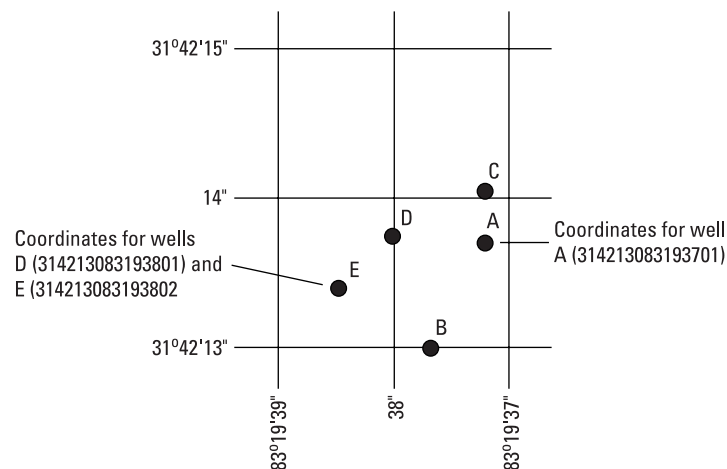


Figure 9.--System for numbering miscellaneous sites and wells.

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. Latitudes and longitudes used in this report are reported as National American Datum of 1927 unless otherwise specified.

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 errors in published stage and water discharge records are discovered after publication, appropriate updates are made in the U.S. Geological Survey's distributed data system, NWIS, and subsequently to its web-based National data system, NWISWeb [<http://waterdata.usgs.gov/nwis/>], as well as including a revision in the first report published following the discovery of the error. Potential users of U.S. Geological Survey stage and water discharge records are encouraged to obtain all required data from NWIS or NWISWeb to ensure the most recent updates.

Data Presentation--Continued

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 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.

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.)

MAXIMUM PEAK FLOW.--The maximum instantaneous peak discharge occurring for the water year or designated period. Occasionally the maximum flow for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak flow is given in the table and the maximum flow may be reported in a footnote or in the REMARKS paragraph in the manuscript.

MAXIMUM PEAK STAGE.--The maximum instantaneous peak stage occurring for the water year or designated period. Occasionally the maximum stage for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak stage is given in the table and the maximum stage may be reported in the REMARKS paragraph in the manuscript or in a footnote. If the dates of occurrence of the maximum peak stage and the maximum peak flow are different, 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.

Accuracy of the Records--Continued

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.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second (ft³/s) for values less than 1 ft³/s; to the nearest tenth, between 1.0 and 10 ft³/s; to whole numbers, between 10 and 1,000 ft³/s; and to three significant figures for values more than 1,000 ft³/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 Precipitation

Data Collection and Computation

Rainfall data were generally collected by electronic data loggers in 0.01-in. increments every 15 minutes using either tipping-bucket rain gages or collection well gages. Twenty-four hour rainfall totals are tabulated and presented. A 24-hour period extends from just past midnight the previous day to midnight the current day. Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to errors. Missing values are indicated by a "---" in the table.

Data Presentation

Precipitation records collected at surface-water gaging stations are identified by the same station number and name as the gaging station. Where a surface-water, daily-record station is not available, the precipitation record is published with its own name and latitude-longitude identification number.

Information pertinent to the history of a precipitation station is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, period of record, and general remarks.

The following information, as appropriate, is provided with each precipitation 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.

PERIOD OF RECORD.--See Data Presentation under "Records of Stage and Water Discharge", same comments apply.

INSTRUMENTATION. -- Information on the type of rainfall collection system is given.

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

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 *continuous-record station* is a site where data are collected on a regularly scheduled basis. Frequency may 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 the river basin.

A careful distinction needs to be made between *continuous 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, may 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.

Accuracy of the Records

One of four accuracy classifications is applied for measured physical properties at continuous-record stations on a scale ranging from poor to excellent. The accuracy rating is based on data values recorded before any shifts or corrections are made, as described by Wagner and others (2000). Additional consideration also is given to the amount of publishable record and to the amount of data that have been corrected or shifted.

Rating continuous water-quality records

[\leq , less than or equal to; \pm , plus or minus value shown; $^{\circ}\text{C}$, degree Celsius; $>$, greater than; %, percent; mg/L, milligram per liter; pH unit, standard pH unit]

Measured physical property	Ratings			
	Excellent	Good	Fair	Poor
Water temperature	$\leq \pm 0.2^{\circ}\text{C}$	$> \pm 0.2$ to 0.5°C	$> \pm 0.5$ to 0.8°C	$> \pm 0.8^{\circ}\text{C}$
Specific conductance	$\leq \pm 3\%$	$> \pm 3$ to 10%	$> \pm 10$ to 15%	$> \pm 15\%$
Dissolved oxygen	$\leq \pm 0.3$ mg/L	$> \pm 0.3$ to 0.5 mg/L	$> \pm 0.5$ to 0.8 mg/L	$> \pm 0.8$ mg/L
pH	$\leq \pm 0.2$ unit	$> \pm 0.2$ to 0.5 unit	$> \pm 0.5$ to 0.8 unit	$> \pm 0.8$ unit
Turbidity	$\leq \pm 5\%$	$> \pm 5$ to 10%	$> \pm 10$ to 15%	$> \pm 15\%$

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 publications on *Techniques of Water-Resources Investigations*, Book 1, Chap. D2; Book 3, Chap. A1, A3, and A4; Book 9, Chap. A1-A9. All of these references are listed on pages 43 through 47 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 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 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.

The U.S. Geological Survey National Water Quality Laboratory collects quality-control data on a continuing basis to evaluate selected analytical methods to determine long-term method detection levels (LT-MDL's) and laboratory reporting levels (LRL's). These values are re-evaluated each year on the basis of the most recent quality-control data and, consequently, may change from year to year.

This reporting procedure limits the occurrence of false positive error. The chance of falsely reporting a concentration greater than the LT-MDL for a sample in which the analyte is not present is 1 percent or less. Application of the LRL limits the occurrence of false negative error. The chance of falsely reporting a non-detection for a sample in which the analyte is present at a concentration equal to or greater than the LRL is 1 percent or less.

Accordingly, concentrations are reported as <LRL for samples in which the analyte was either not detected or did not pass identification. Analytes that are detected at concentrations between the LT-MDL and LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of "E". These data should be used with the understanding that their uncertainty is greater than that of data reported without the "E" remark code.

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 nitrite, as nitrogen, and dissolved chloride, determined concurrently with the MBAS data, are applied:

$$\text{MBASCOR} = \text{M} - 0.0088\text{N} - 0.00019\text{C}$$

where:

MBASCOR = corrected MBAS concentration, in mg/L;
 M = reported MBAS concentration, in mg/L;
 N = dissolved nitrate plus nitrite, as nitrogen concentration, 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 in the U.S. Geological Survey's distributed data system, NWIS, and subsequently to its web-based National data system, NWISWeb [<http://waterdata.usgs.gov/nwis/>]. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to ensure the most recent updates. Updates to the NWISWeb are currently made on an annual basis.

The surface-water quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following 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.
M	Presence of material verified, but not quantified.
N	Presumptive evidence of presence of material.
U	Material specifically analyzed for, but not detected.
A	Value is an average.
V	Analyte was detected in both the environmental sample and the associated blanks.
S	Most probable value.

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 Program Office, Illinois State Water Survey, 2204 Griffith Drive, Champaign, IL 61820-7495 (217-333-7873).

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 are:

Source solution blank – a blank solution that is transferred to a sample bottle in an area of the office laboratory with an atmosphere that is relatively clean and protected with respect to target analytes.

Ambient blank – a blank solution that is put in the same type of bottle used for an environmental sample, kept with the set of sample bottles before sample collection, and opened at the site and exposed to the ambient conditions.

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.

Pump blank – a blank solution that is processed through the same pump-and-tubing system used for an environmental sample.

Standpipe blank – a blank solution that is poured from the containment vessel (stand-pipe) before the pump is inserted to obtain the pump blank.

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 environment sample.

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

Canister blank – a blank solution that is taken directly from a stainless steel canister just before the VOC sampler is submerged to obtain a field blank 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:

Concurrent sample – a type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating collection of samples into two or more compositing containers.

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://waterdata.usgs.gov/nwis/>

Some water-quality and ground-water data also are available through the WWW. 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

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Definitions of common terms such as algae, water level, and precipitation are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting inch/pound units to International System (SI) units on the inside of the back cover.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an “unfiltered” sample (formerly reported as alkalinity).

Acre-foot (AC-FT, acre-ft) is a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also “Annual runoff”)

Adenosine triphosphate (ATP) is an organic, phosphate-rich compound important in the transfer of energy in organisms. Its central role in living cells makes ATP an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample. (See also “Biomass” and “Dry weight”)

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a “filtered” sample.

Annual runoff is the total quantity of water that is discharged (“runs off”) from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 through September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. 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.)

Aroclor is the registered trademark for a group of poly-chlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type, and the last two digits represent the percentage weight of the hydrogen-substituted chlorine.

Artificial substrate is a device that is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is collected. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hard-board) for benthic organism collection, and plexiglass strips for periphyton collection. (See also “Substrate”)

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. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2). (See also “Biomass” and “Dry mass”)

Aspect is the direction toward which a slope faces with respect to the compass.

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

Bankfull stage, as used in this report, is the stage at which a stream first overflows its natural banks formed by floods with 1- to 3-year recurrence intervals.

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peak flows per year will be published. (See also "Peak flow")

Base flow is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

Bedload is material in transport that is supported primarily by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to an elevation equal to the top of the bedload sampler nozzle (ranging from 0.25 to 0.5 foot) that are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler also may contain a component of the suspended load.

Bedload discharge (tons per day) is the rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also "Bedload," "Dry weight," "Sediment," and "Suspended-sediment discharge")

Bed material is the sediment mixture of which a stream-bed, lake, pond, reservoir, or estuary bottom is composed. (See also "Bedload" and "Sediment")

Benthic organisms are the group of organisms inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

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 microorganisms, such as bacteria.

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

Biomass pigment ratio is an indicator of the total proportion of periphyton that are autotrophic (plants). This is also called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Bottom material (See "Bed material")

Bulk electrical conductivity is the combined electrical conductivity of all material within a doughnut-shaped volume surrounding an induction probe. Bulk conductivity is affected by different physical and chemical properties of the material including the dissolved solids content of the pore water and lithology and porosity of the rock.

Cells/volume refers to the number of cells of any organism that 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 volume, and are generally reported as cells or units per milliliter (mL) or liter (L).

Cells volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are frequently used in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (μm^3) is determined by obtaining critical cell measurements or cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

sphere $\frac{4}{3} \pi r^3$ cone $\frac{1}{3} \pi r^2 h$ cylinder $\pi r^2 h$.

pi (π) is the ratio of the circumference to the diameter of a circle; $\pi = 3.14159\dots$

From cell volume, total algal biomass expressed as biovolume ($\mu\text{m}^3/\text{mL}$) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes for all species.

Cfs-day (See “Cubic foot per second-day”)

Channel bars, as used in this report, are the lowest prominent geomorphic features higher than the channel bed.

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 BOD or with carbonaceous organic pollution from sewage or industrial wastes. [See also “Biochemical oxygen demand (BOD)”]

Clostridium perfringens (*C. perfringens*) is a spore-forming bacterium that is common in the feces of human and other warm-blooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and presence of microorganisms that are resistant to disinfection and environmental stresses. (See also “Bacteria”)

Coliphages are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of water and of the survival and transport of viruses in the environment.

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

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well.

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.

Continuous-record station is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

Control designates a feature in the channel that physically affects the water-surface elevation and thereby determines the stage-discharge relation at the gage. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure, as used in this report, is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of saltwater.

Cubic foot per second (CFS, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term “second-foot” sometimes is used synonymously with “cubic foot per second” but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, $[(\text{ft}^3/\text{s})/\text{d}]$) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily mean discharges reported in the daily value data tables are numerically equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

Cubic foot per second per square mile [CFSM, $(\text{ft}^3/\text{s})/\text{mi}^2$] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area. (See also “Annual runoff”)

Daily mean suspended-sediment concentration is the time-weighted concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also “Sediment” and “Suspended-sediment concentration”)

Daily-record station is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to periodic sample or data collection on a daily or near-daily basis.

Data collection platform (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

Data logger is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data are usually downloaded from onsite data loggers for entry into office data systems.

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or UTM coordinates. (See also “Gage datum,” “Land-surface datum,” “National Geodetic Vertical Datum of 1929,” and “North American Vertical Datum of 1988”)

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also “Phytoplankton”)

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or flow, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediment or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, etc., within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents, such as suspended sediment, bedload, and dissolved or suspended chemicals, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of “dissolved” constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the “residue-on-evaporation” method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L CaCO₃) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index (H) (Shannon index) is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^s \frac{n_i}{n} \log_2 \frac{n_i}{n},$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth's surface that contains a drainage system with a common outlet for its surface runoff. (See "Drainage area")

Dry mass refers to the mass of residue present after drying in an oven at 105 °C, 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. (See also "Ash mass," "Biomass," and "Wet mass")

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65 °C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also "Wet weight")

Embeddedness is the degree to which gravel-sized and larger particles are surrounded or enclosed by finer-sized particles. (See also "Substrate embeddedness class")

Enterococcus bacteria are commonly found in the feces of humans and other warmblooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 °C on mE agar (nutrient medium for bacterial growth) and subsequent transfer to EIA medium. Enterococci include *Streptococcus feacalis*, *Streptococcus feacium*, *Streptococcus avium*, and their variants. (See also "Bacteria")

EPT Index is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that are generally considered pollution sensitive; the index usually decreases with pollution.

Escherichia coli (*E. coli*) are bacteria present in the intestine and feces of warmblooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Estimated (E) concentration value is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an 'E' code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an 'E' code even though the measured value is greater than the MDL. A value reported with an 'E' code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<).

Euglenoids (*Euglenophyta*) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark. (See also "Phytoplankton")

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semivolatile and extractable by ethyl acetate from air-dried streambed sediment. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediment.

Fecal coliform bacteria are present in the intestines or feces of warmblooded animals. They often are used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms that 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. (See also "Bacteria")

Fecal streptococcal bacteria are present in the intestines of warmblooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory,

they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C plus or minus 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

Fire algae (*Pyrrhophyta*) are free-swimming unicells characterized by a red pigment spot. (See also “Phytoplankton”)

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly greater than the maximum depth of water. Because the gage datum itself is not an actual physical object, the datum usually is defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any national geodetic datum. However, if the elevation of the gage datum relative to the national datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the national datum by adding the elevation of the gage datum to the gage reading.

Gage height (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height often is used interchangeably with the more general term “stage,” although gage height is more appropriate when used in reference to a reading on a gage.

Gage values are values that are recorded, transmitted, and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

Gaging station is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained.

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.

Geomorphic channel units, as used in this report, are fluvial geomorphic descriptors of channel shape and stream velocity. Pools, riffles, and runs are types of geomorphic channel units considered for National Water-Quality Assessment (NAWQA) Program habitat sampling.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating “moss” in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also “Phytoplankton”)

Habitat, as used in this report, includes all nonliving (physical) aspects of the aquatic ecosystem, although living components like aquatic macrophytes and riparian vegetation also are usually included. Measurements of habitat are typically made over a wider geographic scale than are measurements of species distribution.

Habitat quality index is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

Hardness of water is a physical-chemical characteristic that commonly is recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO₃).

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. *See NOAA web site:*
<http://www.co-ops.nos.noaa.gov/tideglos.html>

Hilsenhoff's Biotic Index (HBI) is an indicator of organic pollution that uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = \text{sum} \frac{(n)(a)}{N} ,$$

where n is the number of individuals of each taxon, a is the tolerance value of each taxon, and N is the total number of organisms in the sample.

Horizontal datum (See "Datum")

Hydrologic index stations referred to in this report are continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

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

Inch (IN., in.), as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were uniformly distributed on it. (See also "Annual runoff")

Instantaneous discharge is the discharge at a particular instant of time. (See also "Discharge")

Island, as used in this report, is a mid-channel bar that has permanent woody vegetation, is flooded once a year on average, and remains stable except during large flood events.

Laboratory reporting level (LRL) is generally equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a nondetection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory (NWQL) collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually on the basis of the most current quality-control data and, therefore, may change. [Note: In several previous NWQL documents (NWQL Technical Memorandum 98.07, 1998), the LRL was called the nondetection value or NDV—a term that is no longer used.]

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Latent heat flux (often used interchangeably with latent heat-flux density) is the amount of heat energy that converts water from liquid to vapor (evaporation) or from vapor to liquid (condensation) across a specified cross-sectional area per unit time. Usually expressed in watts per square meter.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation:

$$I = I_o e^{-\lambda L} ,$$

where I_o is the source light intensity, I is the light intensity at length L (in meters) from the source, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light-attenuation coefficient is defined as

$$\lambda = -\frac{1}{L} \log_e \frac{I}{I_o} .$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-term method detection level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. *See NOAA web site:*
<http://www.co-ops.nos.noaa.gov/tideglos.html>

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that usually are arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Mean concentration of suspended sediment (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also “Daily mean suspended-sediment concentration” and “Suspended-sediment concentration”)

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period. (See also “Discharge”)

Mean high or low tide is the average of all high or low tides, respectively, over a specific period.

Mean sea level is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also “Datum”)

Measuring point (MP) is an arbitrary permanent reference point from which the distance to water surface in a well is measured to obtain water level.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Method detection limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (UG/G, $\mu\text{g/g}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per kilogram (UG/KG, $\mu\text{g/kg}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, $\mu\text{S}/\text{cm}$) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent 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.

Minimum reporting level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method.

Miscellaneous site, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It was formerly called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations, it does not necessarily represent local mean sea level at any particular place. See NOAA web site: <http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88> (See "North American Vertical Datum of 1988")

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives. (See also "Substrate")

Nekton are the consumers in the aquatic environment and consist of large free-swimming organisms that are capable of sustained, directed mobility.

Nephelometric turbidity unit (NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

North American Vertical Datum of 1988 (NAVD 1988) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the United States. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and United States first-order terrestrial leveling networks.

Open or screened interval is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediment. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organic mass or volatile mass of a living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also "Ash mass," "Biomass," and "Dry mass")

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m²), acre, or hectare. 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 milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter code is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method utilizes the principle of Stokes law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, sedigraph) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification, as used in this report, agrees with the recommendation 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	>0.004 - 0.062	Sedimentation
Sand	>0.062 - 2.0	Sedimentation/sieve
Gravel	>2.0 - 64.0	Sieve
Cobble	>64 - 256	Manual measurement
Boulder	>256	Manual measurement

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. For the sedimentation method, most of the organic matter 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.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation of the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

Percent composition or percent of total 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, weight, mass, or volume.

Percent shading is a measure of the amount of sunlight potentially reaching the stream. A clinometer is used to measure left and right bank canopy angles. These values are added together, divided by 180, and multiplied by 100 to compute percentage of shade.

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measurements are made one or more times during a year but at a frequency insufficient to develop a daily record.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. Although primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7.0 standard units are termed "acidic," and solutions with a pH greater than 7.0 are termed "basic." Solutions with a pH of 7.0 are neutral. The presence and concentration of many dissolved chemical constituents found in water are affected, in part, by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms also are affected, in part, by the hydrogen-ion activity of water.

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

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated naphthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Pool, as used in this report, is a small part of a stream reach with little velocity, commonly with water deeper than surrounding areas.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photo-synthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [$\text{mg C}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg C}/(\text{m}^3/\text{time})$] for phytoplankton. The carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use with unenriched water samples. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [$\text{mg O}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg O}/(\text{m}^3/\text{time})$] for phytoplankton. The oxygen method defines production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Radioisotopes are isotopic forms of elements that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly

exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Reach, as used in this report, is a length of stream that is chosen to represent a uniform set of physical, chemical, and biological conditions within a segment. It is the principal sampling unit for collecting physical, chemical, and biological data.

Recoverable from bed (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 readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and 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. (See also "Bed material")

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or nonexceedance of a specified low flow). The terms "return period" and "recurrence interval" do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day, 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the nonexceedances of the $7Q_{10}$ occur less than 10 years after the previous nonexceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous nonexceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Return period (See "Recurrence interval")

Riffle, as used in this report, is a shallow part of the stream where water flows swiftly over completely or partially submerged obstructions to produce surface agitation.

River mileage is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council and typically is used to denote location along a river.

Run, as used in this report, is a relatively shallow part of a stream with moderate velocity and little or no surface turbulence.

Runoff is the quantity of water that is discharged ("runs off") from a drainage basin during a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also "Annual runoff")

Sea level, as used in this report, refers to one of the two commonly used national vertical datums (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as "fluvial sediment." Sediment 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 affected by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

Sensible heat flux (often used interchangeably with latent sensible heat-flux density) is the amount of heat energy that moves by turbulent transport through the air across a specified cross-sectional area per unit time and goes to heating (cooling) the air. Usually expressed in watts per square meter.

Seven-day, 10-year low flow ($7Q_{10}$) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-term average. The recurrence interval of the $7Q_{10}$ is 10 years; the chance that the annual 7-day minimum flow will be less than the $7Q_{10}$ is 10 percent in any given year. (See also “Annual 7-day minimum” and “Recurrence interval”)

Shelves, as used in this report, are streambank features extending nearly horizontally from the flood plain to the lower limit of persistent woody vegetation.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Soil heat flux (often used interchangeably with soil heat-flux density) is the amount of heat energy that moves by conduction across a specified cross-sectional area of soil per unit time and goes to heating (or cooling) the soil. Usually expressed in watts per square meter.

Soil-water content is the water lost from the soil upon drying to constant mass at 105 °C; expressed either as mass of water per unit mass of dry soil or as the volume of water per unit bulk volume of soil.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stable isotope ratio (per MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific water, to evaluate mixing of different water, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage (See “Gage height”)

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

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.

Substrate is the physical surface upon which an organism lives.

Substrate embeddedness class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2mm, sand or finer). Below are the class categories expressed as the percentage covered by fine sediment:

0 no gravel or larger substrate	3 26-50 percent
1 > 75 percent	4 5-25 percent
2 51-75 percent	5 < 5 percent

Surface area of a lake is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

Surficial bed material is the upper surface (0.1 to 0.2 foot) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is defined operationally as the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative suspended water-sediment sample that is retained on a 0.45-micrometer membrane filter 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 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 are 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 directly analyzing the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also “Suspended”)

Suspended sediment is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (See also “Sediment”)

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 foot above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also “Sediment” and “Suspended sediment”)

Suspended-sediment discharge (tons/d) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/s) x 0.0027. (See also “Sediment,” “Suspended sediment,” and “Suspended-sediment concentration”)

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as “annual suspended-sediment load” or “sand-size suspended-sediment load,” and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also “Sediment”)

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

Suspended solids, total residue at 105 °C concentration is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydro-logic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxa (Species) richness is the number of species (taxa) present in a defined area or sampling unit.

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:	<i>Hexagenia</i>
Species:	<i>Hexagenia limbata</i>

Thalweg is the line formed by connecting points of minimum streambed elevation (deepest part of the channel).

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term “temperature recorder” is used in the table descriptions and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (acre-foot) of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY, tons/d) is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

Total is the amount of a given constituent in a representative whole-water (unfiltered) 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” does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined at least 95 percent of the constituent in the sample.)

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warmblooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35 °C. In the laboratory, these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C plus or minus 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters of sample. (See also “Bacteria”)

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as “total sediment discharge,” “total chloride discharge,” and so on.

Total in bottom material is the 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.”

Total length (fish) is the straight-line distance from the anterior point of a fish specimen’s snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

Total organism count is the number of organisms collected and enumerated in any particular sample. (See also “Organism count/volume”)

Total recoverable is the amount of a given constituent in a whole-water sample after a 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, and 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 for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Total sediment discharge is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also “Bedload,” “Bedload discharge,” “Sediment,” “Suspended sediment,” and “Suspended-sediment concentration”)

Total sediment load or **total load** is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as “annual suspended-sediment load” or “sand-size suspended-sediment load,” and so on. It differs from total sediment discharge in that load refers to the material, whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also “Sediment,” “Suspended-sediment load,” and “Total load”)

Transect, as used in this report, is a line across a stream perpendicular to the flow and along which measurements are taken, so that morphological and flow characteristics along the line are described from bank to bank. Unlike a cross section, no attempt is made to determine known elevation points along the line.

Turbidity is the reduction in the transparency of a solution due to the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of turbidity in the USGS include those that conform to U.S. EPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of pathlength of UV light through a sample.

Unconfined aquifer is an aquifer whose upper surface is a water table free to fluctuate under atmospheric pressure. (See “Water-table aquifer”)

Vertical datum (See “Datum”)

Volatile organic compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens.

Water table is that surface in a ground-water body at which the water pressure is equal to the atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which the water table is found.

Water year in USGS reports dealing with surface-water supply 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, 2002, is called the “2002 water year.”

WDR is used as an abbreviation for “Water-Data Report” in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports. (WRD was used as an abbreviation for “Water-Resources Data” in reports published prior to 1976.)

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

Wet mass is the mass of living matter plus contained water. (See also “Biomass” and “Dry mass”)

Wet weight refers to the weight of animal tissue or other substance including its contained water. (See also “Dry weight”)

WSP is used as an acronym for “Water-Supply Paper” in reference to previously published reports.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and often are 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. (See also “Plankton”)

TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS OF THE U.S. GEOLOGICAL SURVEY

The USGS publishes a series of manuals titled the "Techniques of Water-Resources Investigations" that describe procedures for planning and conducting specialized work in water-resources investigations. The material in these manuals 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. Each chapter then is limited to a narrow field of the section subject matter. This publication format permits flexibility when revision or printing is required.

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Section D. Water Quality

- 1-D1. *Water temperature—Influential factors, field measurement, and data presentation*, by H.H. Stevens, Jr., J.F. Ficke, and G.F. Smoot: USGS-TWRI book 1, chap. D1. 1975. 65 p.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS-TWRI book 1, chap. D2. 1976. 24 p.

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

- 2-D1. *Application of surface geophysics to ground-water investigations*, by A.A.R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS-TWRI book 2, chap. D1. 1974. 116 p.
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Section E. Subsurface Geophysical Methods

- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W.S. Keys and L.M. MacCary: USGS-TWRI book 2, chap. E1. 1971. 126 p.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W.S. Keys: USGS-TWRI book 2, chap. E2. 1990. 150 p.

Section F. Drilling and Sampling Methods

- 2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W.E. Teasdale: USGS-TWRI book 2, chap. F1. 1989. 97 p.

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

- 3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS-TWRI book 3, chap. A1. 1967. 30 p.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS-TWRI book 3, chap. A2. 1967. 12 p.
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- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS-TWRI book 3, chap. A4. 1967. 44 p.

- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS-TWRI book 3, chap. A5. 1967. 29 p.
- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS-TWRI book 3, chap. A6. 1968. 13 p.
- 3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS-TWRI book 3, chap. A7. 1968. 28 p.
- 3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS-TWRI book 3, chap. A8. 1969. 65 p.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS-TWRI book 3, chap. A9. 1989. 27 p.
- 3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS-TWRI book 3, chap. A10. 1984. 59 p.
- 3-A11. *Measurement of discharge by the moving-boat method*, by G.F. Smoot and C.E. Novak: USGS-TWRI book 3, chap. A11. 1969. 22 p.
- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS-TWRI book 3, chap. A12. 1986. 34 p.
- 3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS-TWRI book 3, chap. A13. 1983. 53 p.
- 3-A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS-TWRI book 3, chap. A14. 1983. 46 p.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS-TWRI book 3, chap. A15. 1984. 48 p.
- 3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS-TWRI book 3, chap. A16. 1985. 52 p.
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- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS-TWRI book 3, chap. A19. 1990. 31 p.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS-TWRI book 3, chap. A20. 1993. 38 p.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS-TWRI book 3, chap. A21. 1995. 56 p.

Section B. Ground-Water Techniques

- 3-B1. *Aquifer-test design, observation, and data analysis*, by R.W. Stallman: USGS-TWRI book 3, chap. B1. 1971. 26 p.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G.D. Bennett: USGS-TWRI book 3, chap. B2. 1976. 172 p.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS-TWRI book 3, chap. B3. 1980. 106 p.
- 3-B4. *Regression modeling of ground-water flow*, by R.L. Cooley and R.L. Naff: USGS-TWRI book 3, chap. B4. 1990. 232 p.
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- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS-TWRI book 3, chap. B5. 1987. 15 p.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS-TWRI book 3, chap. B6. 1987. 28 p.

- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E.J. Wexler: USGS-TWRI book 3, chap. B7. 1992. 190 p.
- 3-B8. *System and boundary conceptualization in ground-water flow simulation*, by T.E. Reilly: USGS-TWRI book 3, chap. B8. 2001. 29 p.

Section C. Sedimentation and Erosion Techniques

- 3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS-TWRI book 3, chap. C1. 1970. 55 p.
- 3-C2. *Field methods for measurement of fluvial sediment*, by T.K. Edwards and G.D. Glysson: USGS-TWRI book 3, chap. C2. 1999. 89 p.
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Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

- 4-A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS-TWRI book 4, chap. A1. 1968. 39 p.
- 4-A2. *Frequency curves*, by H.C. Riggs: USGS-TWRI book 4, chap. A2. 1968. 15 p.
- 4-A3. *Statistical methods in water resources*, by D.R. Helsel and R.M. Hirsch: USGS-TWRI book 4, chap. A3. 1991. Available only online at <http://water.usgs.gov/pubs/twri/twri4a3/>. (Accessed August 30, 2002.)

Section B. Surface Water

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- 4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS-TWRI book 4, chap. B2. 1973. 20 p.
- 4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS-TWRI book 4, chap. B3. 1973. 15 p.

Section D. Interrelated Phases of the Hydrologic Cycle

- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C.T. Jenkins: USGS-TWRI book 4, chap. D1. 1970. 17 p.

Book 5. Laboratory Analysis

Section A. Water Analysis

- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L.C. Friedman, editors: USGS-TWRI book 5, chap. A1. 1989. 545 p.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P.R. Barnett and E.C. Mallory, Jr.: USGS-TWRI book 5, chap. A2. 1971. 31 p.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS-TWRI book 5, chap. A3. 1987. 80 p.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L.J. Britton and P.E. Greeson, editors: USGS-TWRI book 5, chap. A4. 1989. 363 p.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS-TWRI book 5, chap. A5. 1977. 95 p.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L.C. Friedman and D.E. Erdmann: USGS-TWRI book 5, chap. A6. 1982. 181 p.

Section C. Sediment Analysis

5–C1. *Laboratory theory and methods for sediment analysis*, by H.P. Guy: USGS–TWRI book 5, chap. C1. 1969. 58 p.

Book 6. Modeling Techniques**Section A. Ground Water**

- 6–A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS–TWRI book 6, chap. A1. 1988. 586 p.
- 6–A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 p.
- 6–A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L.J. Torak: USGS–TWRI book 6, chap. A3. 1993. 136 p.
- 6–A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R.L. Cooley: USGS–TWRI book 6, chap. A4. 1992. 108 p.
- 6–A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L.J. Torak: USGS–TWRI book 6, chap. A5. 1993. 243 p.
- 6–A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI book 6, chap. A6. 1996. 125 p.
- 6–A7. *User's guide to SEAWAT: A computer program for simulation of three-dimensional variable-density ground-water flow*, by Weixing Guo and Christian D. Langevin: USGS–TWRI book 6, chap. A7. 2002. 77 p.

Book 7. Automated Data Processing and Computations**Section C. Computer Programs**

- 7–C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI book 7, chap. C1. 1976. 116 p.
- 7–C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI book 7, chap. C2. 1978. 90 p.
- 7–C3. *A model for simulation of flow in singular and interconnected channels*, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI book 7, chap. C3. 1981. 110 p.

Book 8. Instrumentation**Section A. Instruments for Measurement of Water Level**

- 8–A1. *Methods of measuring water levels in deep wells*, by M.S. Garber and F.C. Koopman: USGS–TWRI book 8, chap. A1. 1968. 23 p.
- 8–A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI book 8, chap. A2. 1983. 57 p.

Section B. Instruments for Measurement of Discharge

- 8–B2. *Calibration and maintenance of vertical-axis type current meters*, by G.F. Smoot and C.E. Novak: USGS–TWRI book 8, chap. B2. 1968. 15 p.

Book 9. Handbooks for Water-Resources Investigations**Section A. National Field Manual for the Collection of Water-Quality Data**

- 9-A1. *National field manual for the collection of water-quality data: Preparations for water sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A1. 1998. 47 p.
- 9-A2. *National field manual for the collection of water-quality data: Selection of equipment for water sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A2. 1998. 94 p.
- 9-A3. *National field manual for the collection of water-quality data: Cleaning of equipment for water sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A3. 1998. 75 p.
- 9-A4. *National field manual for the collection of water-quality data: Collection of water samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A4. 1999. 156 p.
- 9-A5. *National field manual for the collection of water-quality data: Processing of water samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A5. 1999, 149 p.
- 9-A6. *National field manual for the collection of water-quality data: Field measurements*, edited by F.D. Wilde and D.B. Radtke: USGS-TWRI book 9, chap. A6. 1998. Variously paginated.
- 9-A7. *National field manual for the collection of water-quality data: Biological indicators*, edited by D.N. Myers and F.D. Wilde: USGS-TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.
- 9-A8. *National field manual for the collection of water-quality data: Bottom-material samples*, by D.B. Radtke: USGS-TWRI book 9, chap. A8. 1998. 48 p.
- 9-A9. *National field manual for the collection of water-quality data: Safety in field activities*, by S.L. Lane and R.G. Fay: USGS-TWRI book 9, chap. A9. 1998. 60 p.

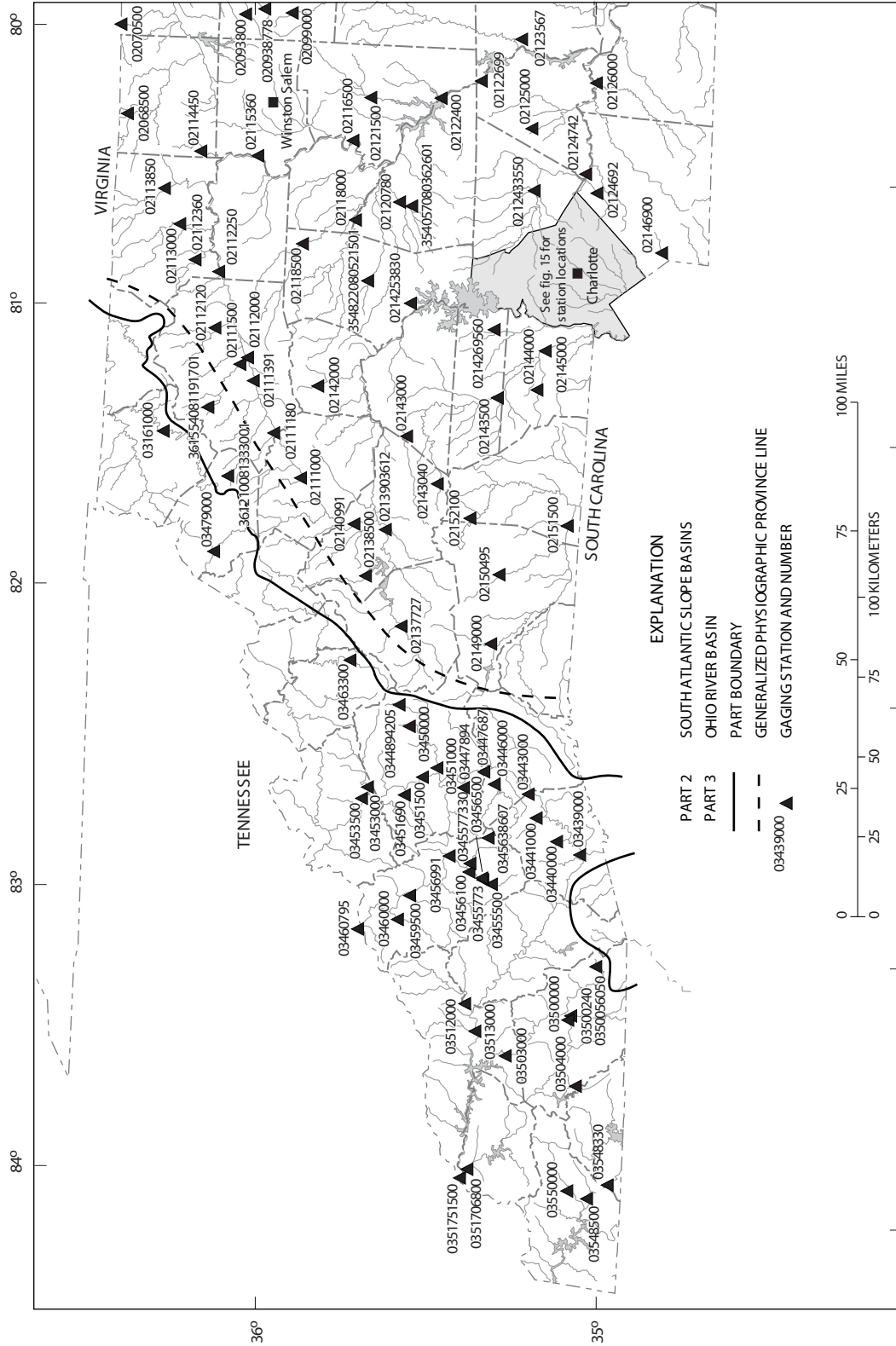


Figure 10.--Locations of gaging stations in western North Carolina.

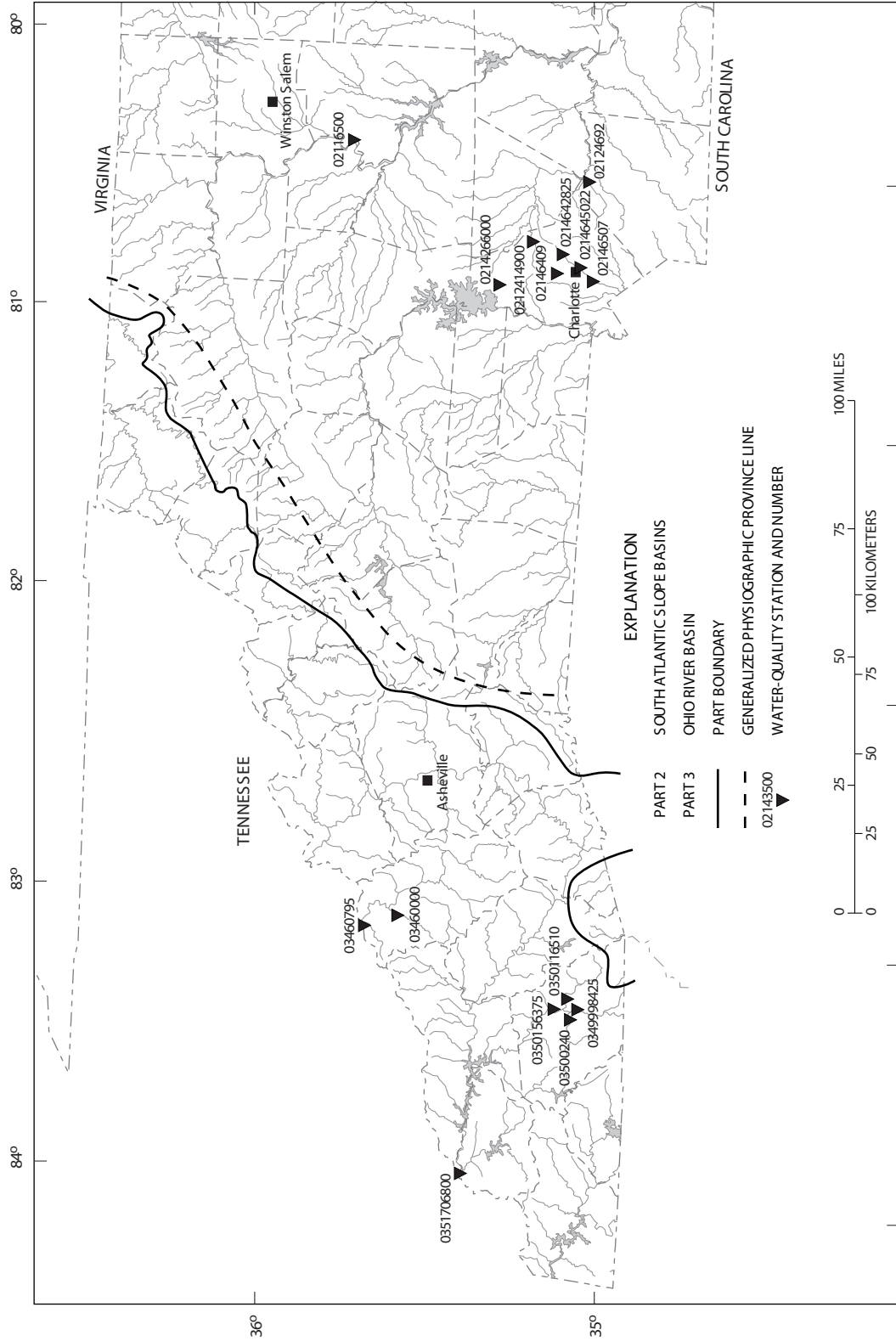


Figure 12.--Locations of water-quality stations in western North Carolina.

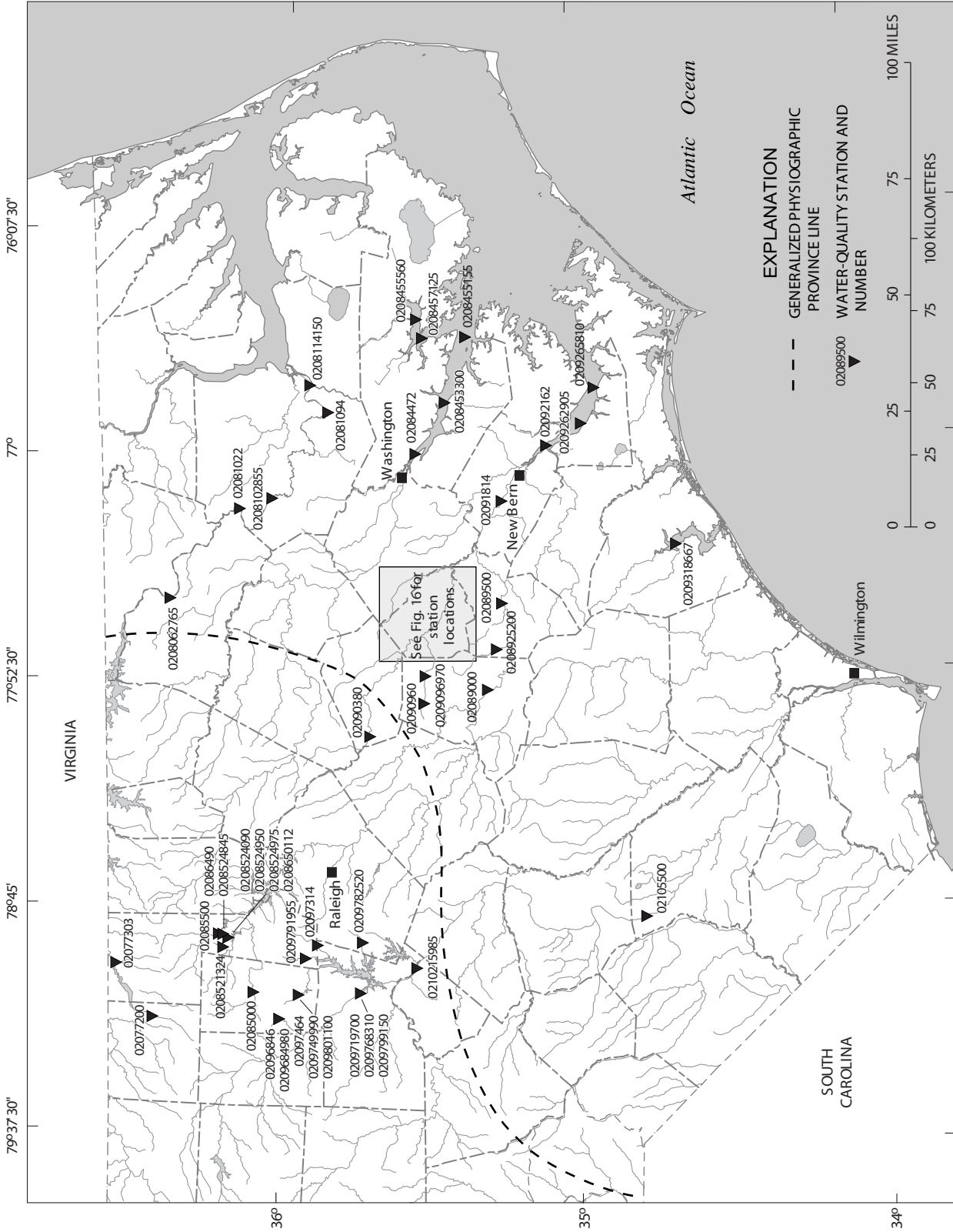
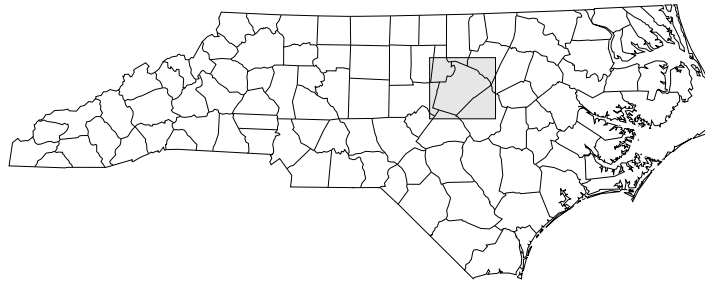


Figure 13.--Locations of water-quality stations in eastern North Carolina.



LOCATION OF SITES IN AND AROUND WAKE COUNTY, NORTH CAROLINA

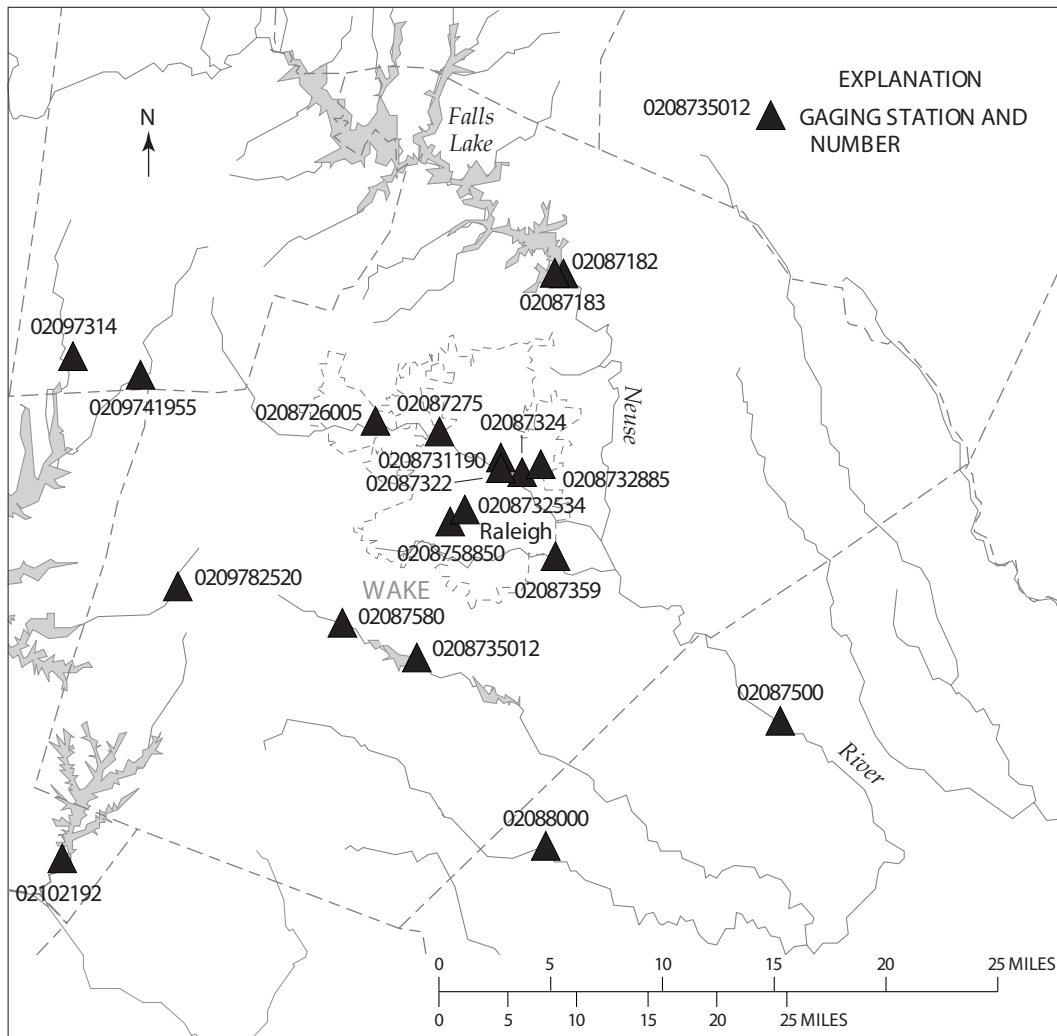
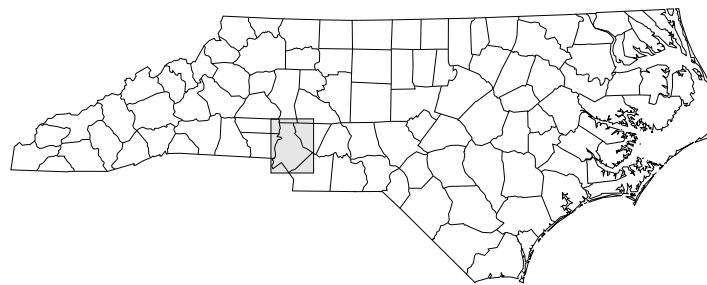


Figure 14.--Locations of gaging stations in and around Wake County, North Carolina.



LOCATION OF SITES IN AND AROUND MECKLENBURG COUNTY, NORTH CAROLINA

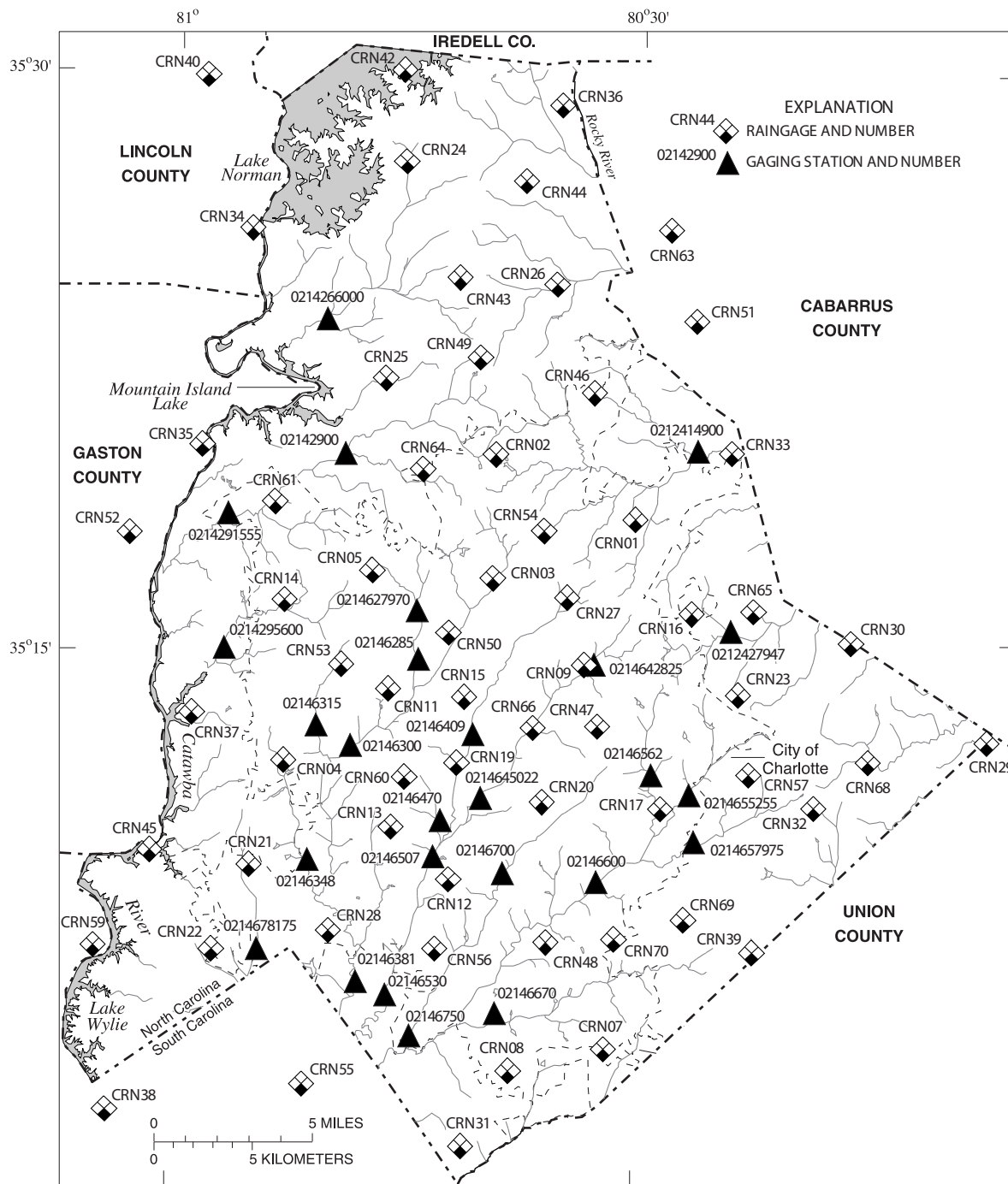
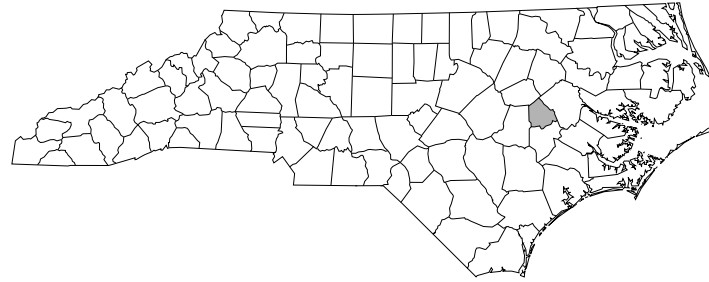


Figure 15.--Locations of gaging stations in and around Mecklenburg County, North Carolina.



LOCATION OF SITES IN GREENE COUNTY, NORTH CAROLINA

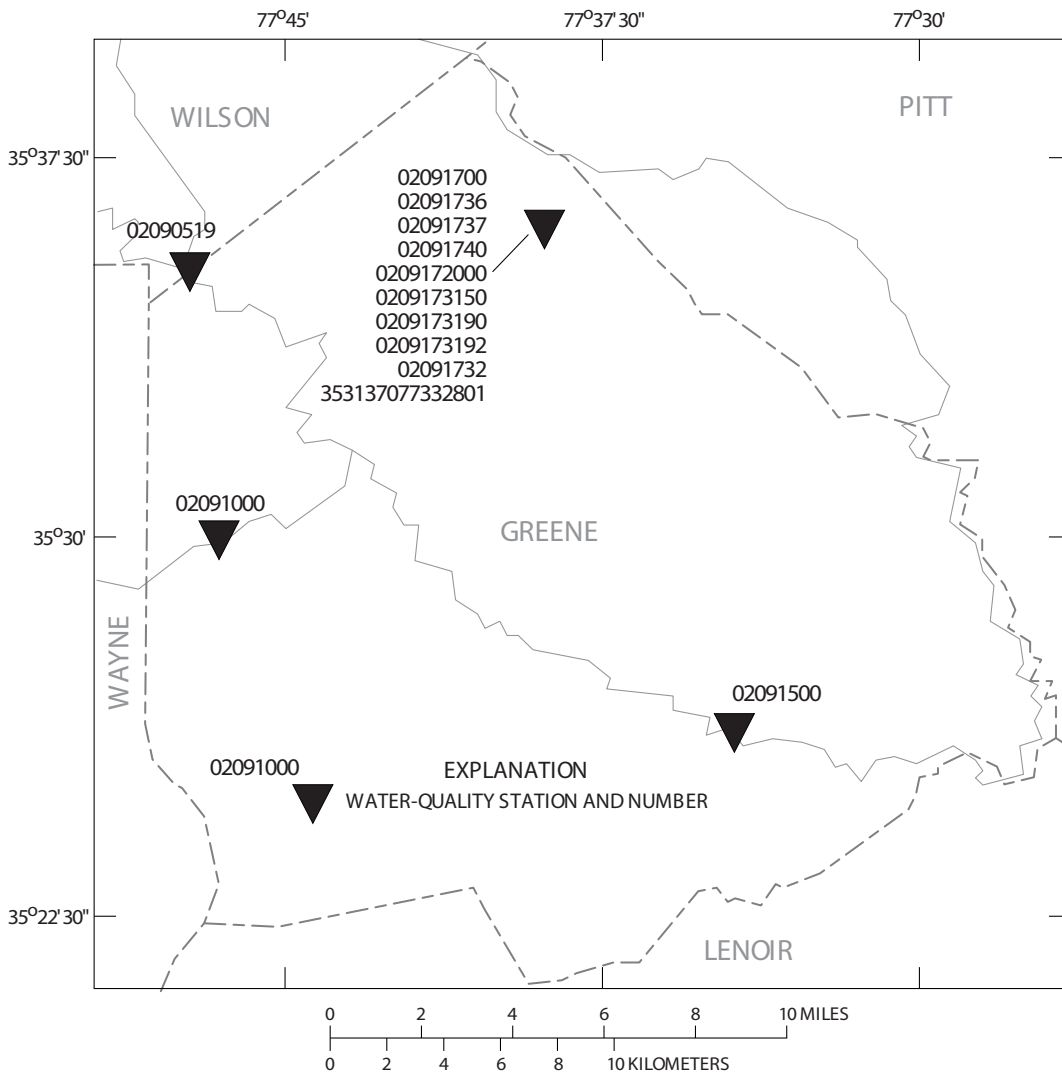
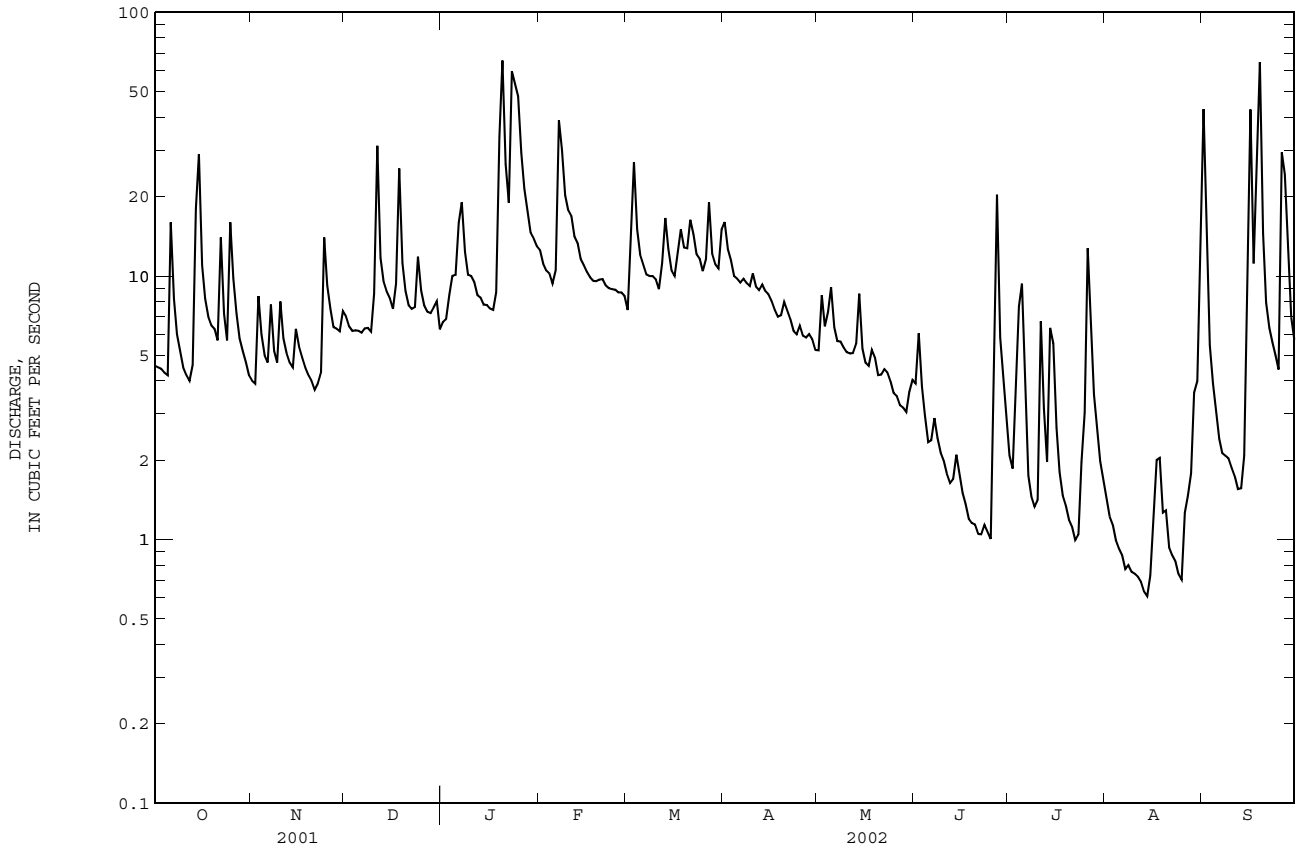


Figure 16.--Locations of water-quality stations in Greene County, North Carolina.



Gaging station and raingage at Ryan Creek below US 220 at Greensboro, North Carolina.

02093800 REEDY FORK NEAR OAK RIDGE, NC--Continued



CAPE FEAR RIVER BASIN

02093800 REEDY FORK NEAR OAK RIDGE, NC--Continued

PRECIPITATION RECORDS

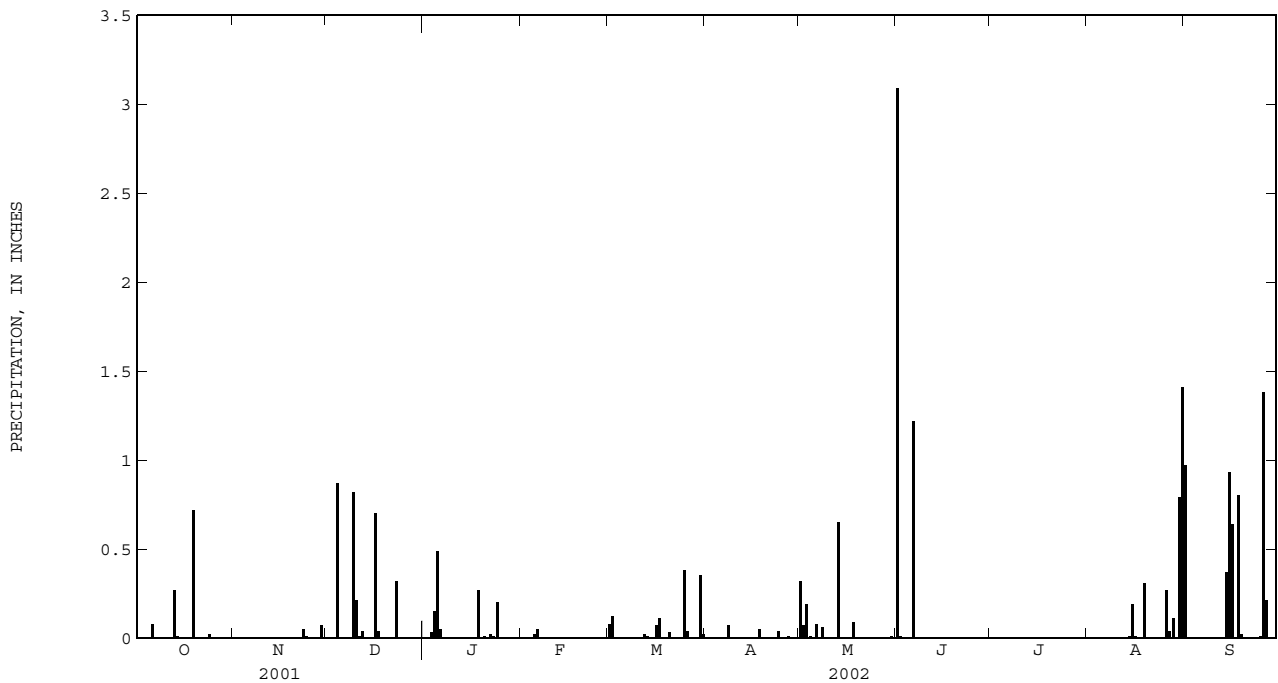
PERIOD OF RECORD.--November 1999 to current year. Records for November 1999 to September 2000 are unpublished and available in the USGS District Office in Raleigh, NC.

INSTRUMENTATION.--Tipping-bucket raingage and data collection platform. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.32	3.09	---	0.00	0.97
2	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.07	0.01	---	0.00	0.00
3	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.19	0.00	---	0.00	0.00
4	0.00	0.00	0.87	0.15	0.00	0.00	0.00	0.01	0.00	---	0.00	0.00
5	0.00	0.00	0.00	0.49	0.02	0.00	0.00	0.00	0.00	---	0.00	0.00
6	0.08	0.00	0.00	0.05	0.05	0.00	0.00	0.08	1.22	---	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.06	---	---	0.00	0.00
9	0.00	0.00	0.82	0.00	0.00	0.00	0.00	0.00	---	---	0.00	0.00
10	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	---	---	0.00	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	---	---	0.00	0.00
12	0.00	0.00	0.04	0.00	0.00	0.02	0.00	0.00	---	---	0.00	0.00
13	0.27	0.00	0.00	0.00	0.00	0.01	0.00	0.65	---	---	0.00	0.00
14	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	0.01	0.37
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	0.19	0.93
16	0.00	0.00	0.70	0.00	0.00	0.07	0.00	0.00	---	---	0.01	0.64
17	0.00	0.00	0.04	0.00	0.00	0.11	0.00	0.00	---	---	---	0.00
18	0.00	0.00	0.00	0.27	0.00	0.00	0.05	0.09	---	---	---	0.80
19	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	0.31	0.02
20	0.00	0.00	0.00	0.01	0.00	0.03	0.00	0.00	---	---	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	0.00	0.00
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	---	---	0.00	0.00
23	0.00	0.05	0.32	0.01	0.00	0.00	0.00	0.00	---	---	0.00	0.00
24	0.02	0.01	0.00	0.20	0.00	0.00	0.04	0.00	---	---	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	---	---	0.00	0.01
26	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	---	---	0.27	1.38
27	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	---	---	0.04	0.21
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	0.11	0.00
29	0.00	0.07	0.00	0.00	---	0.00	0.00	0.00	---	---	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.35	0.00	0.01	---	---	0.79	0.00
31	0.00	---	0.00	0.00	---	0.02	---	0.00	---	---	1.41	---
TOTAL	1.10	0.13	3.01	1.23	0.07	1.23	0.17	1.48	---	---	---	5.33





Gaging station at South Buffalo Creek near Pamona, North Carolina.

CAPE FEAR RIVER BASIN

0209387778 BRUSH CREEK AT FLEMING ROAD AT GREENSBORO, NC

LOCATION.--Lat 36°08'24", long 79°54'50", Guilford County, Hydrologic Unit 03030002, on left bank downstream at Fleming Road and 0.5 mi above Lake Higgins in Greensboro.

DRAINAGE AREA.--7.42 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 780 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records poor. Minimum discharge for period of record and current water year also occurred on June 22, 25, Sept. 12, 13, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.97	e1.1	e2.8	e3.8	4.3	2.7	7.1	1.5	2.2	1.4	0.84	47
2	e0.99	e1.2	e2.6	e3.6	3.9	10	3.8	3.7	2.5	1.5	0.78	6.0
3	e0.97	e2.8	e2.5	e3.9	3.8	13	3.4	2.3	1.2	4.0	0.75	3.5
4	e0.96	e2.2	e2.4	e6.5	3.8	4.5	3.0	4.1	1.1	15	0.70	2.5
5	e0.95	e1.8	e2.4	e6.0	3.8	3.6	2.9	3.1	0.86	6.7	0.59	1.3
6	e6.1	e1.4	e2.3	e18	5.2	3.3	3.0	2.1	4.0	1.8	0.48	0.47
7	e3.1	e2.3	e2.3	e12	25	3.1	2.9	1.9	6.7	1.4	0.52	0.40
8	e2.2	e1.7	e2.2	e6.4	9.8	2.9	2.8	1.7	0.86	1.2	0.38	0.35
9	e1.7	e1.6	e2.1	e5.4	9.8	3.1	3.0	1.6	0.71	1.1	0.41	0.32
10	e1.5	e2.5	e31	e5.0	7.3	3.2	3.4	1.5	0.65	1.1	0.31	0.34
11	e1.3	e2.0	e13	3.9	4.6	2.8	2.8	1.5	0.49	3.3	0.33	0.33
12	e1.2	e1.7	e5.9	3.7	3.8	4.9	2.7	1.5	0.43	1.4	0.39	0.22
13	e1.9	e1.6	e3.4	3.7	3.5	5.0	2.7	2.5	0.40	1.2	0.37	0.22
14	e14	e1.5	e2.6	3.5	3.4	3.6	2.6	3.4	0.78	3.8	0.44	1.5
15	e5.6	e1.4	e2.1	3.5	3.3	3.3	2.5	1.4	0.48	1.8	0.42	21
16	e2.8	e1.4	e2.4	3.4	3.2	3.3	2.3	1.2	0.38	1.3	1.00	20
17	e2.2	e1.3	e19	3.5	3.1	6.4	2.2	1.2	0.34	1.0	1.5	2.7
18	e1.8	e1.3	e12	3.5	2.9	6.0	2.0	2.4	0.32	0.93	2.5	4.4
19	e1.5	e1.2	e5.8	43	2.8	4.2	2.3	1.6	0.30	1.3	0.63	10
20	e1.3	e1.3	e3.2	29	2.9	4.8	2.7	1.3	0.29	0.71	0.45	4.0
21	e1.1	e1.3	e2.4	8.8	2.9	7.7	1.9	1.2	0.28	0.58	0.47	2.0
22	e1.2	e1.4	e2.1	5.9	2.8	4.6	1.9	1.2	0.28	0.55	0.53	0.73
23	e1.1	e1.6	e2.3	44	2.8	3.8	1.7	1.1	0.30	0.53	0.48	0.62
24	e1.0	e5.1	e8.6	19	2.8	3.5	1.7	1.0	0.35	4.9	0.49	0.50
25	e3.2	e3.0	e5.0	23	2.7	3.3	1.8	0.99	0.26	2.7	0.46	0.45
26	e1.9	e2.4	e2.9	11	2.8	6.7	1.7	0.96	14	11	1.1	18
27	e1.6	e2.0	e2.7	6.8	2.7	8.3	1.6	0.93	17	5.3	0.95	5.8
28	e1.3	e1.8	e2.6	5.1	2.7	3.7	1.7	0.91	6.8	2.0	2.2	2.1
29	e1.2	e1.6	e2.9	4.6	---	3.4	1.7	0.87	2.0	1.3	1.6	1.1
30	e1.1	e3.6	e3.6	4.4	---	3.5	1.5	2.5	1.6	1.1	13	0.89
31	e1.0	---	e4.0	4.3	---	7.8	---	1.8	---	0.94	24	---
TOTAL	68.74	57.1	161.1	308.2	132.4	150.0	77.3	54.96	67.86	82.84	59.07	158.74
MEAN	2.217	1.903	5.197	9.942	4.729	4.839	2.577	1.773	2.262	2.672	1.905	5.291
MAX	14	5.1	31	44	25	13	7.1	4.1	17	15	24	47
MIN	0.95	1.1	2.1	3.4	2.7	2.7	1.5	0.87	0.26	0.53	0.31	0.22
CFSM	0.30	0.26	0.70	1.34	0.64	0.65	0.35	0.24	0.31	0.36	0.26	0.71
IN.	0.35	0.29	0.81	1.55	0.66	0.75	0.39	0.28	0.34	0.42	0.30	0.80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
MEAN	4.096	4.030	5.623	8.832	6.992	8.348	8.022	4.490	3.893	5.583	5.605	14.36
MAX	6.75	5.84	6.64	9.94	8.88	14.5	13.2	6.02	4.77	8.54	9.37	30.7
(WY)	2000	2000	2000	2002	2001	2001	2001	2000	2000	2001	1999	2000
MIN	2.22	1.90	5.03	7.58	4.73	4.84	2.58	1.77	2.26	2.67	1.91	1.46
(WY)	2002	2002	2001	2000	2002	2002	2002	2002	2002	2002	2002	2001

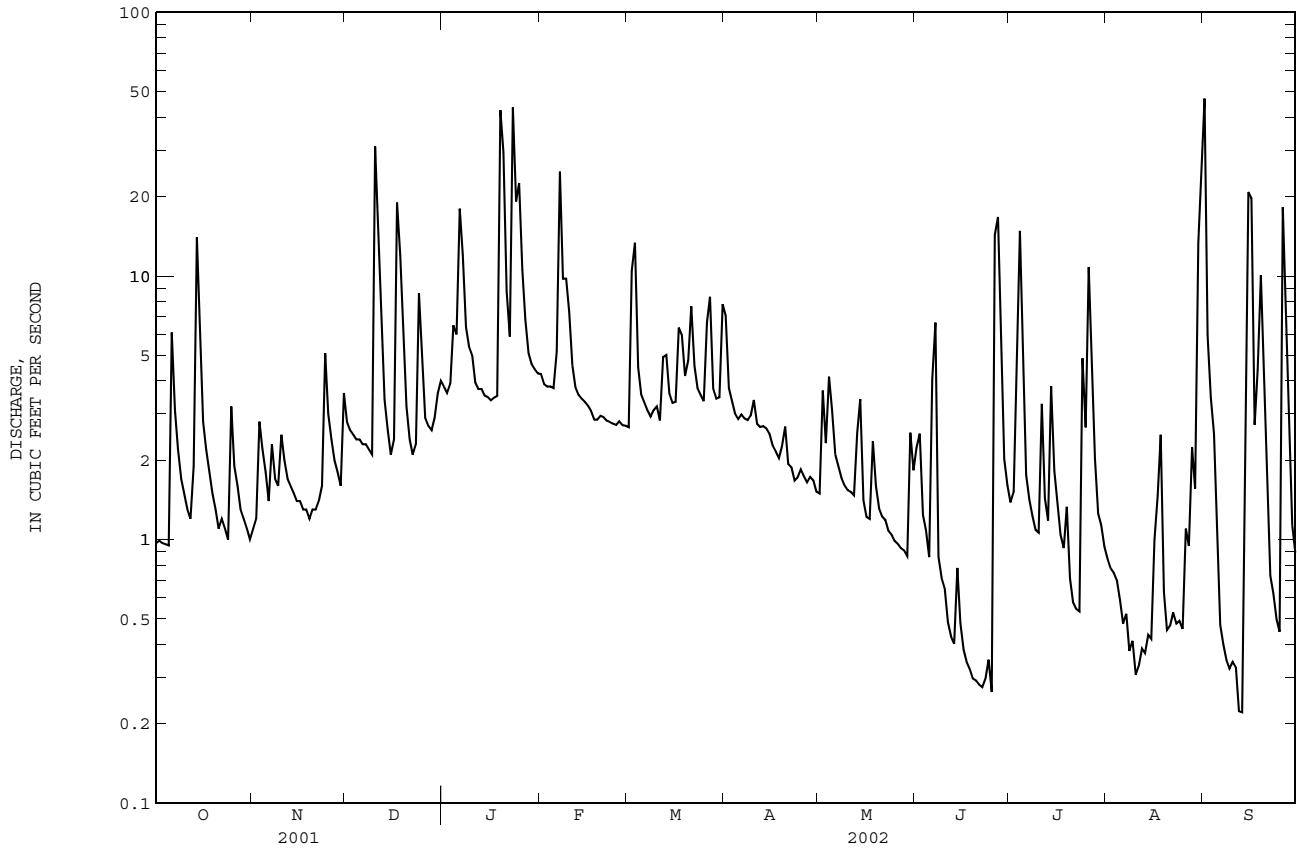
SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1999 - 2002

ANNUAL TOTAL	2402.62	1378.31		
ANNUAL MEAN	6.583	3.776		
HIGHEST ANNUAL MEAN			6.342	
LOWEST ANNUAL MEAN			8.38	2000
HIGHEST DAILY MEAN	98	Apr 1	3.78	2002
LOWEST DAILY MEAN	0.54	Sep 19	149	Sep 15 2000
ANNUAL SEVEN-DAY MINIMUM	0.65	Sep 13	0.22	Sep 12 2002
MAXIMUM PEAK FLOW			0.29	Jun 19 2002
MAXIMUM PEAK STAGE			114	Jan 19
INSTANTANEOUS LOW FLOW			5.13	Jan 19
ANNUAL RUNOFF (CFSM)	0.89		0.19*	Jun 22 2002
ANNUAL RUNOFF (INCHES)	12.06			8.96
10 PERCENT EXCEEDS	13			11.63
50 PERCENT EXCEEDS	3.3			3.4
90 PERCENT EXCEEDS	1.2			1.1

e Estimated.

* See REMARKS.

0209387778 BRUSH CREEK AT FLEMING ROAD AT GREENSBORO, NC--Continued



CAPE FEAR RIVER BASIN

0209387778 BRUSH CREEK AT FLEMING ROAD AT GREENSBORO, NC--Continued

PRECIPITATION RECORDS

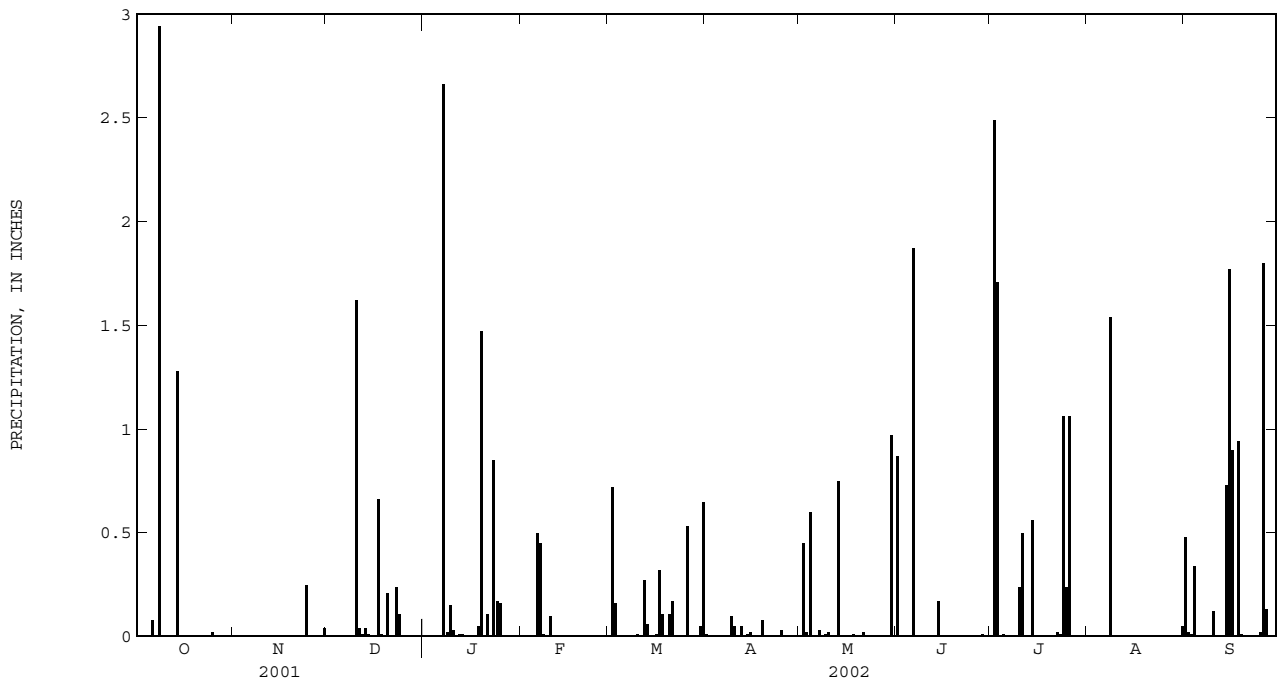
PERIOD OF RECORD.--July 1999 to current year.

INSTRUMENTATION.--Tipping bucket raingage and data collection platform. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.87	0.00	0.00	0.48
2	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.45	0.00	2.49	0.00	0.02
3	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.02	0.00	1.71	0.00	0.01
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	---	0.00	0.34
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
6	0.08	0.00	0.00	0.00	0.50	0.00	0.00	0.00	1.87	0.00	0.00	0.00
7	0.00	0.00	0.00	2.66	0.45	0.00	0.00	0.03	0.00	0.00	0.00	0.00
8	2.94	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	1.54	0.00
9	0.00	0.00	0.00	0.15	0.00	0.00	0.10	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.62	0.03	0.10	0.01	0.05	0.02	0.00	0.24	0.00	0.12
11	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00
12	0.00	0.00	0.01	0.01	0.00	0.27	0.05	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.04	0.01	0.00	0.06	0.00	0.75	0.00	0.00	0.00	0.00
14	1.28	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.17	0.56	0.00	0.73
15	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	1.77
16	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.90
17	0.00	0.00	0.66	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.01	0.05	0.00	0.11	0.00	0.01	0.00	0.00	0.00	0.94
19	0.00	0.00	0.00	1.47	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.01
20	0.00	0.00	0.21	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.11	0.00	0.17	0.00	0.02	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
23	0.00	0.00	0.24	0.85	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
24	0.00	0.25	0.11	0.17	0.00	0.00	0.00	0.00	0.00	1.06	0.00	0.00
25	0.02	0.00	0.00	0.16	0.00	0.00	0.03	0.00	0.00	0.24	0.00	0.02
26	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.00	---	1.06	0.00	1.80
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	0.00	0.13
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	---	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.04	0.00	0.00	---	0.05	0.00	0.97	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.65	---	0.00	---	0.00	0.05	---
TOTAL	4.32	0.29	2.95	5.69	1.06	3.17	0.35	2.88	---	---	1.59	7.27





Gaging station and raingage at Abbotts Creek at Lexington, North Carolina.

CAPE FEAR RIVER BASIN

0209399200 HORSE PEN CREEK AT US HIGHWAY 220 NEAR GREENSBORO, NC

LOCATION.--Lat 36°08'12", long 79°51'40", Guilford County, Hydrologic Unit 03030002, on right bank, 300 ft downstream of U.S. Highway 220 bridge on gravel road to city lift station, 2.9 mi above Lake Brandt dam and 6.3 mi northwest of Greensboro.

DRAINAGE AREA.--15.9 mi²

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 740 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	e3.1	e11	e4.9	6.4	3.4	21	2.6	9.3	2.0	0.70	159
2	e1.7	e2.9	e9.2	e5.5	5.6	33	8.9	7.4	4.4	7.0	0.67	16
3	e1.7	e7.1	e8.0	e6.7	5.3	38	7.3	3.1	2.2	17	0.59	7.1
4	e1.6	e4.7	e7.2	e8.9	5.2	14	6.2	7.7	2.0	21	0.57	4.2
5	e1.6	e4.1	e6.7	e8.7	4.7	9.4	5.5	4.4	1.9	6.0	0.52	3.0
6	e20	e3.7	e6.0	e33	7.4	8.4	6.7	3.0	31	2.5	0.52	2.5
7	e14	e7.0	e5.3	e25	75	6.7	4.6	2.7	17	1.9	0.46	2.2
8	e5.7	e4.8	e4.7	e16	26	5.9	4.6	2.6	3.5	1.7	0.50	2.0
9	e3.9	e4.2	e4.4	e12	14	5.9	4.5	2.5	2.5	1.5	0.55	1.8
10	e3.1	e8.0	e42	e9.3	15	5.8	6.6	2.4	2.1	1.4	0.50	3.1
11	e2.6	e5.3	e25	e8.4	11	4.8	4.7	2.5	1.9	8.4	0.39	2.2
12	e2.4	e4.4	e11	e7.5	7.6	13	4.5	2.8	1.8	2.1	0.34	1.7
13	e2.3	e3.9	e7.4	e6.7	6.6	14	4.6	9.1	1.8	1.7	0.25	1.6
14	e34	e3.6	e5.6	e6.1	5.8	8.0	9.0	7.1	2.3	3.6	0.16	3.1
15	e23	e6.4	e4.8	e5.7	5.4	6.5	13	2.8	1.8	2.0	1.3	49
16	e12	e4.6	e4.5	e5.5	5.5	5.8	5.2	2.5	1.7	1.7	1.6	27
17	e6.5	e3.8	e23	e5.4	5.0	13	4.4	2.6	1.7	1.5	0.91	6.2
18	e5.6	e3.4	e12	e5.3	4.7	12	3.9	6.4	1.7	1.4	1.7	10
19	e4.7	e3.2	e8.6	e60	4.4	7.5	4.6	2.5	1.6	1.3	0.66	17
20	e4.2	e3.0	e7.4	e45	4.5	8.4	4.5	2.2	1.8	1.3	0.36	5.9
21	e4.0	e2.8	e5.5	e23	4.7	18	3.6	2.2	1.7	1.2	0.28	4.1
22	e12	e3.0	e4.9	e17	4.3	9.1	3.4	2.1	1.5	1.1	0.32	3.4
23	e6.2	e3.1	e4.8	e98	4.2	6.6	3.0	2.1	1.5	1.3	0.77	3.3
24	e5.0	e12	e11	e78	4.1	5.7	2.8	2.0	1.5	3.9	0.34	2.9
25	e18	e8.0	e7.3	e40	4.0	5.2	3.1	2.0	1.4	3.0	0.14	2.6
26	e8.5	e6.3	e6.2	e27	4.1	46	2.9	2.0	13	15	1.1	45
27	e5.8	e5.1	e5.5	e17	3.9	43	2.7	1.9	15	8.6	0.98	14
28	e4.4	e4.6	e5.3	e12	3.5	15	2.8	1.9	6.8	3.2	9.4	7.0
29	e3.9	e4.3	e5.0	e9.5	---	10	2.7	1.8	2.3	1.4	2.8	4.9
30	e3.6	e12	e7.1	e8.0	---	8.6	2.6	3.3	1.8	1.00	43	3.9
31	e3.3	---	e5.3	6.8	---	18	---	2.7	---	0.81	82	---
TOTAL	227.1	152.4	281.7	621.9	257.9	408.7	163.9	102.9	140.5	127.51	154.38	415.7
MEAN	7.326	5.080	9.087	20.06	9.211	13.18	5.463	3.319	4.683	4.113	4.980	13.86
MAX	34	12	42	98	75	46	21	9.1	31	21	82	159
MIN	1.6	2.8	4.4	4.9	3.5	3.4	2.6	1.8	1.4	0.81	0.14	1.6
CFSM	0.46	0.32	0.57	1.26	0.58	0.83	0.34	0.21	0.29	0.26	0.31	0.87
IN.	0.53	0.36	0.66	1.46	0.60	0.96	0.38	0.24	0.33	0.30	0.36	0.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

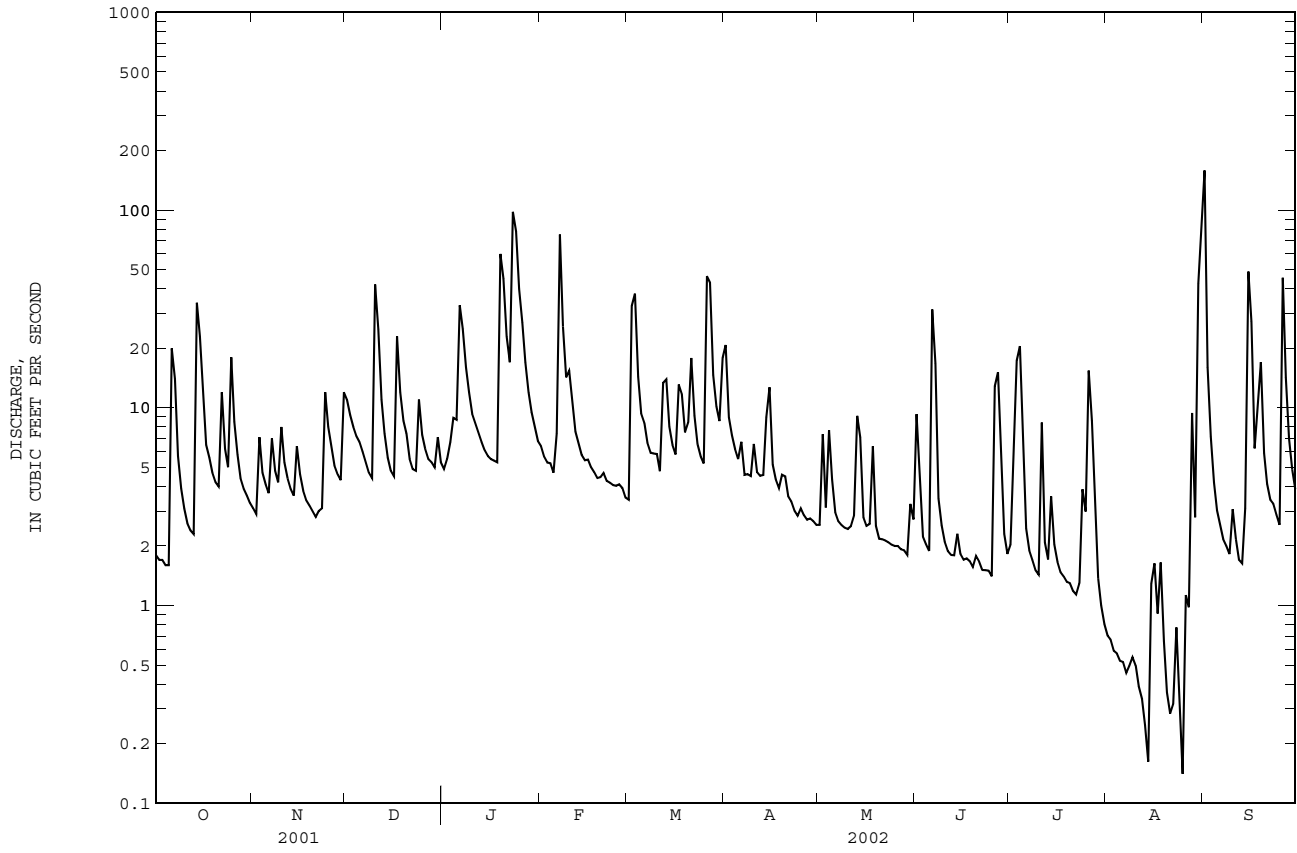
	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
MEAN	9.157	7.662	10.44	19.14	22.39	27.57	20.22	9.085	8.521	11.15	9.614	31.49
MAX	13.4	9.33	13.4	21.9	30.4	48.8	28.7	14.6	12.6	19.4	14.3	79.5
(WY)	2000	2001	2000	2000	2001	2001	2000	2001	2000	2001	2000	2000
MIN	6.74	5.08	8.86	15.4	9.21	13.2	5.46	3.32	4.68	4.11	4.98	5.95
(WY)	2001	2002	2001	2001	2002	2002	2002	2002	2002	2002	2002	2001

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1999 - 2002

ANNUAL TOTAL	6043.26	3054.59		
ANNUAL MEAN	16.56	8.369		15.50
HIGHEST ANNUAL MEAN				21.3
LOWEST ANNUAL MEAN				8.37
HIGHEST DAILY MEAN	220	Feb 17	159	Sep 1
LOWEST DAILY MEAN	0.54	Sep 19	0.14	Aug 25
ANNUAL SEVEN-DAY MINIMUM	0.68	Sep 13	0.38	Aug 8
MAXIMUM PEAK FLOW			NOT DETERMINED	NOT DETERMINED
MAXIMUM PEAK STAGE			NOT DETERMINED	10.64
INSTANTANEOUS LOW FLOW			0.06	Aug 14
ANNUAL RUNOFF (CFSM)	1.04		0.53	0.97
ANNUAL RUNOFF (INCHES)	14.14		7.15	13.24
10 PERCENT EXCEEDS	40		17	36
50 PERCENT EXCEEDS	7.2		4.6	6.9
90 PERCENT EXCEEDS	2.2		1.5	2.1

e Estimated.

0209399200 HORSE PEN CREEK AT US HIGHWAY 220 NEAR GREENSBORO, NC--Continued



CAPE FEAR RIVER BASIN

0209399200 HORSE PEN CREEK AT US HIGHWAY 220 NEAR GREENSBORO, NC--Continued

PRECIPITATION RECORDS

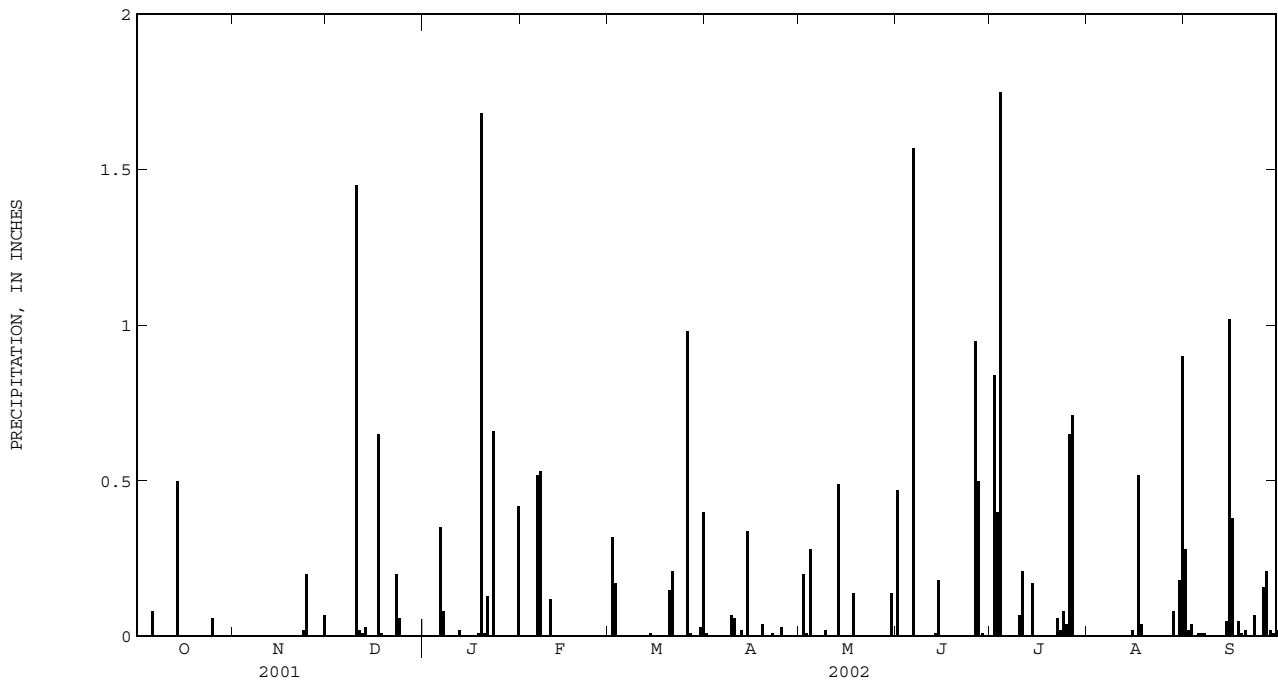
PERIOD OF RECORD.--August 1999 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and data collection platform. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record, but are included in monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.47	0.00	0.00	0.28
2	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.20	0.00	0.84	0.00	0.02
3	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.01	0.00	0.40	0.00	0.04
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	1.75	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
6	0.08	0.00	0.00	0.35	0.52	0.00	0.00	0.00	1.57	0.00	0.00	0.01
7	0.00	0.00	0.00	0.08	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.01
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.02	0.00	0.00	0.00	0.00
10	0.00	0.00	1.45	0.00	0.12	0.00	0.06	0.00	0.00	0.07	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00
12	0.00	0.00	0.01	0.02	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.49	0.01	0.00	0.00	0.00
14	0.50	0.00	0.00	0.00	0.00	0.01	0.34	0.00	0.18	0.17	0.00	0.05
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	1.02
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38
17	0.00	0.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00
18	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.14	0.00	0.00	0.04	0.05
19	0.00	0.00	0.00	1.68	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.01
20	0.00	0.00	0.00	0.01	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.02
21	0.00	0.00	0.00	0.13	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.06	0.00	0.00
23	0.00	0.02	0.20	0.66	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.07
24	0.00	0.20	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00
25	0.06	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.04	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.95	0.65	0.00	0.16
27	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.50	0.71	0.00	0.21
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.08	0.02
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.01
30	0.00	0.07	0.00	0.00	---	0.03	0.00	0.14	0.00	0.00	0.18	0.02
31	0.00	---	0.00	0.42	---	0.40	---	0.00	---	0.00	0.90	---
TOTAL	0.64	0.29	2.43	3.36	1.17	2.28	0.58	1.28	3.69	5.00	1.74	2.39





Gaging station at North Buffalo Creek at Westover Terrace at Greensboro, North Carolina.

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 mi².

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 NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records poor. 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 a daily average of 18.5 ft³/s from Lake Brandt and a daily average of 24.9 ft³/s from Lake Townsend for municipal water supply. Prior to regulation, maximum discharge: 11,600 ft³/s, Sept. 25, 1947; gage height: 20.77 ft; minimum discharge not determined.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1916 reached a stage of 17.90 ft, from information by local resident; discharge, 8,640 ft³/s.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	4.3	6.5	6.5	17	12	18	6.2	3.7	2.7	3.6	1580
2	4.7	13	8.7	7.2	16	18	16	6.3	3.6	2.8	3.4	139
3	7.9	15	7.4	7.6	14	55	12	6.2	3.9	2.8	2.7	46
4	8.3	11	6.4	8.9	16	35	11	6.1	5.3	2.5	2.3	24
5	6.5	12	8.4	9.1	23	21	11	8.3	7.1	2.3	1.9	12
6	4.8	8.0	9.5	14	27	17	11	7.0	7.4	2.0	1.7	6.1
7	4.7	10	15	16	54	15	9.5	6.4	8.9	1.8	1.5	4.6
8	3.9	11	25	8.7	47	13	9.1	6.0	10	1.5	1.4	4.3
9	4.4	16	31	6.3	30	13	9.8	6.2	9.6	1.1	1.3	4.3
10	5.1	18	34	7.2	23	14	15	5.6	8.1	0.63	1.1	4.4
11	7.3	16	62	5.7	22	13	12	5.3	7.0	0.73	1.0	4.4
12	9.8	14	36	4.7	18	14	10	5.2	5.9	1.4	0.84	4.1
13	13	12	24	4.5	16	21	11	6.1	5.0	3.0	0.67	4.3
14	23	11	16	5.0	15	22	10	6.7	4.9	3.1	0.56	5.2
15	34	11	13	6.2	16	19	11	6.4	4.9	3.1	0.49	12
16	13	12	13	6.7	17	16	10	5.4	5.1	3.3	0.42	23
17	5.8	12	10	5.3	14	15	11	5.9	4.6	3.5	0.27	19
18	7.4	12	26	7.0	13	25	8.3	4.4	3.6	3.2	1.8	14
19	6.2	13	14	20	12	27	8.8	5.4	2.9	2.8	2.0	17
20	7.6	14	9.5	17	13	21	8.0	5.9	2.4	2.2	1.9	19
21	7.1	13	6.9	4.5	15	23	8.2	5.4	1.8	1.7	1.7	15
22	8.8	13	4.7	16	13	23	7.1	5.4	1.4	1.3	1.4	14
23	12	14	4.5	103	12	17	7.0	6.4	1.2	2.4	1.2	12
24	13	11	5.9	87	12	15	6.6	5.7	1.2	6.5	0.96	10
25	15	13	7.4	63	12	14	6.1	4.8	1.1	7.0	0.93	8.3
26	18	11	6.5	43	12	13	6.6	4.1	0.87	9.1	1.3	8.0
27	17	8.7	6.1	29	12	22	6.8	3.2	1.0	28	1.4	21
28	17	8.1	6.7	24	12	18	6.5	3.0	1.1	22	1.4	9.6
29	17	7.2	7.2	21	---	14	6.2	2.7	1.1	6.6	1.3	5.0
30	21	6.0	7.5	18	---	13	5.9	2.4	2.1	3.7	2.0	5.8
31	7.2	---	7.0	19	---	13	---	2.8	---	3.6	15	---
TOTAL	335.2	350.3	445.8	601.1	523	591	289.5	166.9	126.77	138.36	59.44	2055.4
MEAN	10.81	11.68	14.38	19.39	18.68	19.06	9.650	5.384	4.226	4.463	1.917	68.51
MAX	34	18	62	103	54	55	18	8.3	10	28	15	1580
MIN	3.9	4.3	4.5	4.5	12	12	5.9	2.4	0.87	0.63	0.27	4.1

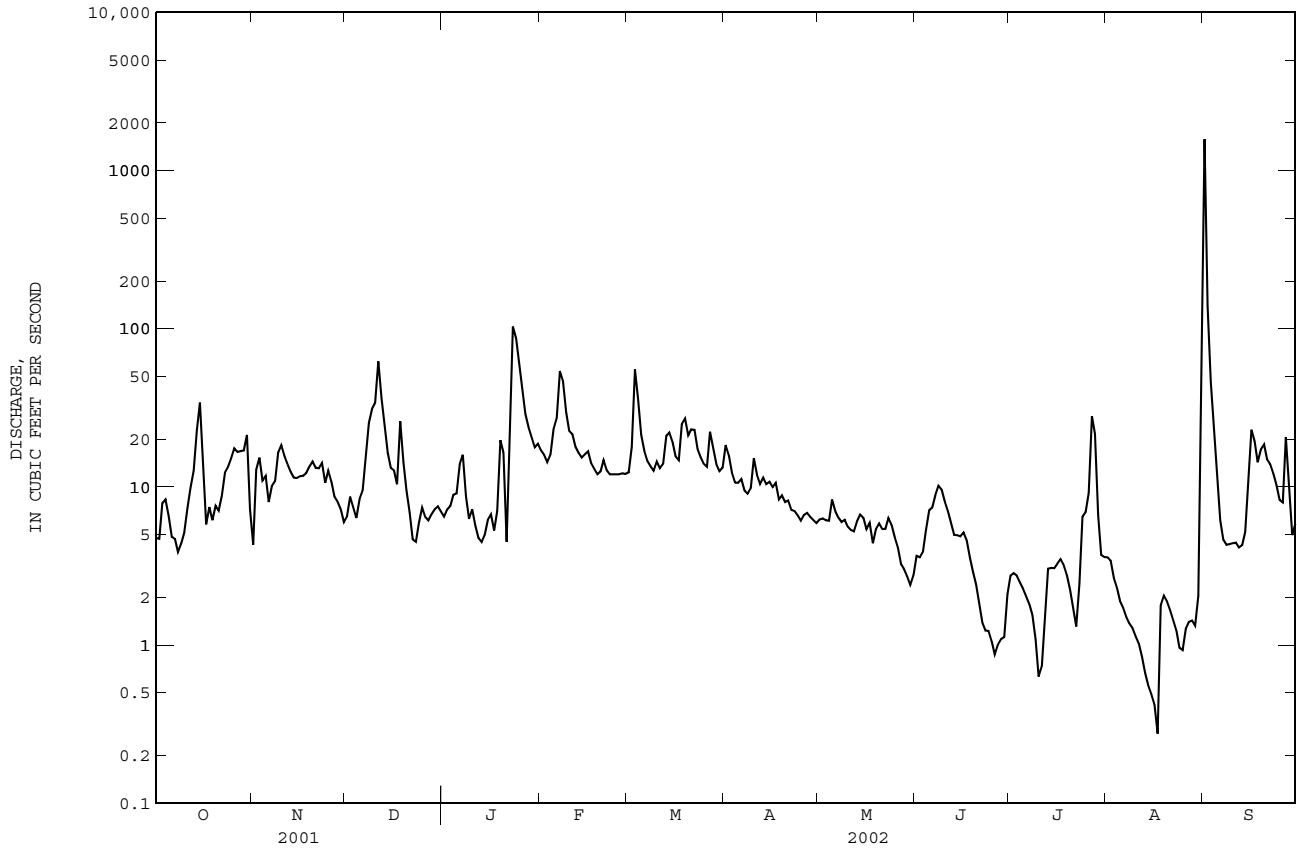
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2002,* BY WATER YEAR (WY)

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002					
MEAN	51.29	42.88	83.80	171.5	151.7	168.0	138.1	90.96	59.86	58.57	39.67	72.80																											
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	18.7	16.4	9.65	5.38	4.23	2.83	1.92	3.31																											
(WY)	1969	1970	1969	1981	2002	1976	2002	2002	2002	1986	2002	1983																											

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1969 - 2002*	
ANNUAL TOTAL	16182.6		5682.77			
ANNUAL MEAN	44.34		15.57		93.83	
HIGHEST ANNUAL MEAN					188	1984
LOWEST ANNUAL MEAN					15.6	2002
HIGHEST DAILY MEAN	1100	Mar 30	1580	Sep 1	5230	Sep 6 1996
LOWEST DAILY MEAN	2.9	Sep 28	0.27	Aug 17	0.27	Aug 17 2002
ANNUAL SEVEN-DAY MINIMUM	4.0	Sep 26	0.61	Aug 11	0.61	Aug 11 2002
MAXIMUM PEAK FLOW			3110	Sep 1	6330	Sep 6 1996
MAXIMUM PEAK STAGE			10.56	Sep 1	15.65	Sep 6 1996
INSTANTANEOUS LOW FLOW			0.22	Aug 17	0.22	Aug 17 2002
10 PERCENT EXCEEDS	66		22		251	
50 PERCENT EXCEEDS	14		8.0		21	
90 PERCENT EXCEEDS	7.1		1.8		5.6	

* Regulated period only (1969-2002). See REMARKS.

02094500 REEDY FORK NEAR GIBSONVILLE, NC--Continued



CAPE FEAR RIVER BASIN

02094659 SOUTH BUFFALO CREEK NEAR POMONA, NC

LOCATION.--Lat 36°02'59", long 79°51'22", Guilford County, Hydrologic Unit 03030002, on right bank 300 ft upstream of culvert under Merritt Road, 0.7 mi south of post office at Pomona, and 1.0 mi below South Railway trestle.

DRAINAGE AREA.--7.33 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is 771.84 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Minimum discharge for period of record and current water year occurred several days.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.60	e0.52	2.0	2.2	2.0	1.2	11	1.9	5.6	0.21	0.15	130
2	0.56	e0.50	1.2	1.9	1.7	54	3.0	24	2.4	0.35	0.14	4.6
3	0.54	e2.7	0.49	3.9	1.8	26	2.4	2.0	0.40	16	0.13	2.0
4	0.47	e1.1	0.62	8.5	1.7	5.6	1.8	17	0.35	47	0.12	e1.3
5	0.45	e0.80	0.56	5.5	1.9	3.3	1.5	3.8	0.33	4.3	0.11	e1.4
6	2.9	e0.70	0.59	64	13	2.4	1.6	2.0	14	0.71	0.17	e1.3
7	0.87	e1.5	0.71	14	52	1.8	1.5	2.4	3.8	0.39	0.23	e0.85
8	0.47	e0.80	1.1	6.9	7.1	1.5	1.5	1.5	0.30	0.29	0.12	e0.69
9	0.48	e0.68	0.65	5.4	3.7	1.6	1.6	1.2	0.22	0.31	0.11	e0.56
10	0.69	e1.6	58	4.1	7.4	1.9	3.4	0.94	0.20	3.9	0.11	e0.37
11	1.1	e0.90	43	3.9	3.3	1.2	1.5	1.1	0.18	35	0.11	0.92
12	1.2	e0.78	6.6	2.8	2.0	16	2.9	1.00	0.17	1.5	0.12	0.53
13	1.0	e0.72	5.2	4.0	1.7	14	1.9	18	0.16	0.42	0.13	0.36
14	200	e0.68	3.8	2.8	1.5	3.9	3.1	5.5	0.16	5.4	0.53	1.7
15	55	e0.66	4.0	3.2	1.2	2.4	4.1	1.9	0.16	1.2	0.29	50
16	e1.6	e0.90	2.8	2.9	1.2	1.9	1.5	1.2	0.15	0.43	1.6	11
17	e0.76	e0.62	26	2.4	1.1	19	1.8	0.93	0.14	0.57	0.20	2.4
18	e0.70	e0.53	18	3.0	1.1	6.4	1.2	10	0.14	0.26	0.43	6.9
19	e0.62	e0.51	4.7	168	1.1	2.9	3.1	1.8	0.14	0.24	0.16	7.1
20	e0.53	e0.50	3.3	24	1.1	4.9	2.0	0.90	0.15	0.21	0.14	1.8
21	e0.50	e0.49	2.7	16	1.3	15	0.88	1.6	0.14	0.22	0.13	1.3
22	e1.8	e0.48	2.3	7.0	1.1	3.6	0.79	1.0	0.11	0.20	0.13	1.1
23	e0.68	e0.48	2.1	118	1.1	2.5	0.67	0.66	0.12	0.46	0.13	1.1
24	e0.58	8.5	17	15	1.1	2.1	0.76	0.64	0.16	15	0.13	0.79
25	e3.4	1.0	4.0	31	1.1	2.1	1.4	0.48	1.2	4.4	0.12	0.71
26	e1.6	0.45	3.2	6.1	1.2	6.3	0.90	0.37	21	20	0.52	40
27	e0.90	0.41	2.8	4.0	1.2	11	1.1	0.42	14	2.5	0.24	6.5
28	e0.77	0.46	2.3	3.0	1.2	2.5	1.3	0.42	3.7	1.1	20	3.8
29	e0.68	0.49	2.1	2.7	---	2.0	1.5	0.35	0.32	0.35	1.2	1.5
30	e0.60	2.2	2.3	3.0	---	2.1	1.8	7.4	0.27	0.27	28	1.2
31	e0.55	---	2.3	1.8	---	13	---	1.9	---	0.19	87	---
TOTAL	282.60	32.66	226.42	541.0	116.9	234.1	63.50	114.31	70.17	163.38	142.70	283.78
MEAN	9.116	1.089	7.304	17.45	4.175	7.552	2.117	3.687	2.339	5.270	4.603	9.459
MAX	200	8.5	58	168	52	54	11	24	21	47	87	130
MIN	0.45	0.41	0.49	1.8	1.1	1.2	0.67	0.35	0.11	0.19	0.11	0.36
CFSM	1.25	0.15	1.00	2.39	0.57	1.03	0.29	0.51	0.32	0.72	0.63	1.30
IN.	1.44	0.17	1.15	2.76	0.60	1.19	0.32	0.58	0.36	0.83	0.73	1.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

MEAN	5.502	3.083	4.992	12.02	8.933	13.01	8.589	5.754	6.912	8.095	9.353	23.20
MAX	9.12	4.42	7.30	17.5	11.5	22.5	14.0	9.33	12.4	14.0	12.8	35.1
(WY)	2002	2000	2002	2002	2001	2001	2000	2001	2000	2001	2001	2000
MIN	1.90	1.09	2.56	7.14	4.18	7.55	2.12	3.69	2.34	5.27	4.60	9.46
(WY)	2001	2002	2001	2001	2002	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

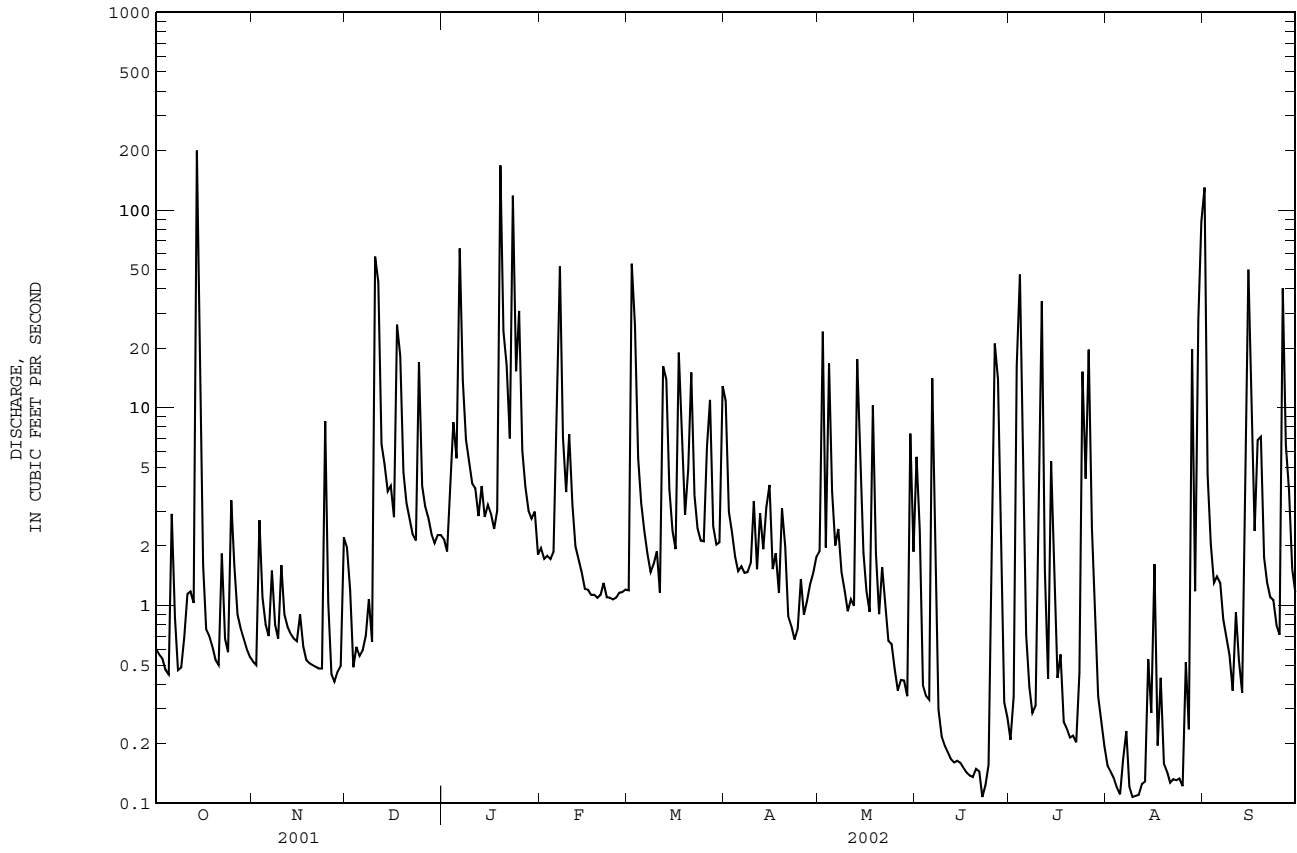
WATER YEARS 1999 - 2002

ANNUAL TOTAL	4164.66	2271.52		
ANNUAL MEAN	11.41	6.223	9.195	
HIGHEST ANNUAL MEAN			10.7	2000
LOWEST ANNUAL MEAN			6.22	2002
HIGHEST DAILY MEAN	320	Sep 24	320	Sep 24 2001
LOWEST DAILY MEAN	0.20	Sep 16	0.11	Jun 22 2002
ANNUAL SEVEN-DAY MINIMUM	0.24	Sep 13	0.13	Aug 7 2002
MAXIMUM PEAK FLOW			NOT DETERMINED	1170 Sep 15 2000
MAXIMUM PEAK STAGE			6.93	Oct 14 2000
INSTANTANEOUS LOW FLOW			0.10*	Jun 22 2002
ANNUAL RUNOFF (CFSM)	1.56		0.85	1.26
ANNUAL RUNOFF (INCHES)	21.22		11.58	17.11
10 PERCENT EXCEEDS	28		14	23
50 PERCENT EXCEEDS	2.2		1.4	2.0
90 PERCENT EXCEEDS	0.52		0.20	0.52

e Estimated.

* See REMARKS.

02094659 SOUTH BUFFALO CREEK NEAR POMONA, NC--Continued



CAPE FEAR RIVER BASIN

02094659 SOUTH BUFFALO CREEK NEAR POMONA, NC--Continued

PRECIPITATION RECORDS

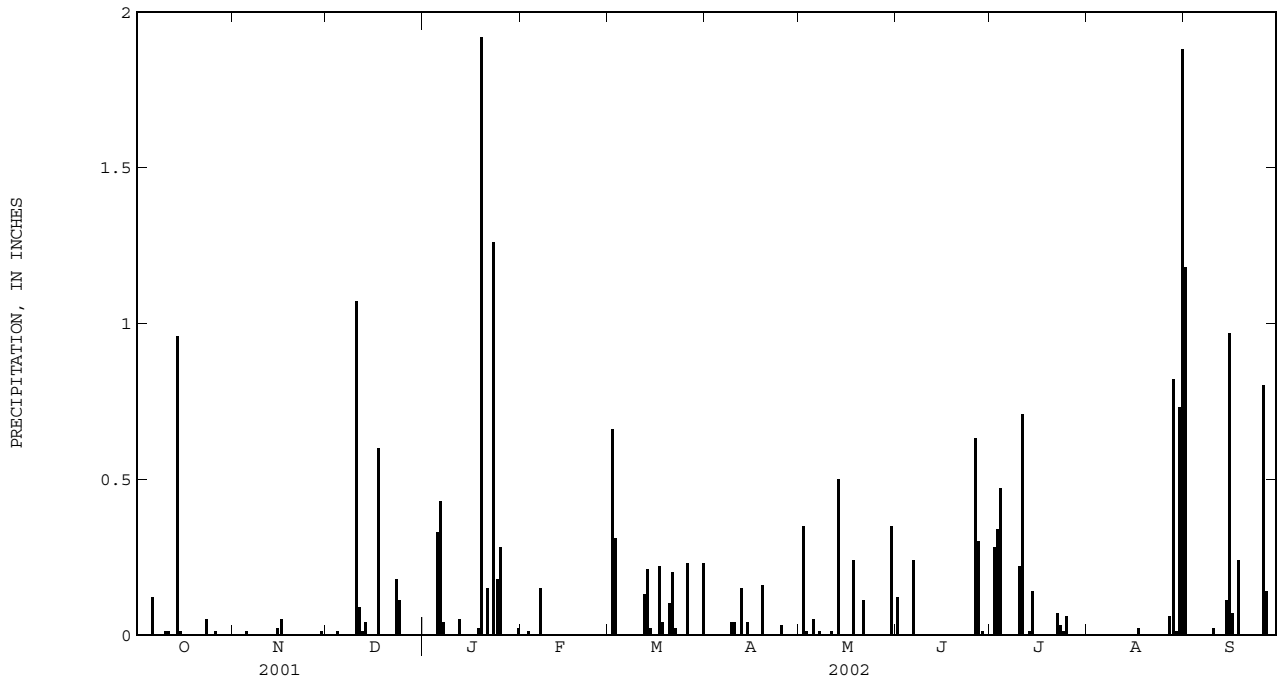
PERIOD OF RECORD.--January 2000 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	1.18
2	0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.35	0.00	0.28	0.00	0.00
3	0.00	0.00	0.00	0.00	0.01	0.31	0.00	0.01	0.00	0.34	0.00	0.00
4	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00
5	0.00	0.01	0.00	0.33	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
6	0.12	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00
7	0.00	0.00	0.00	0.04	0.15	0.00	0.00	0.01	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
10	0.01	0.00	1.07	0.00	0.00	0.00	0.04	0.00	0.00	0.22	0.00	0.02
11	0.01	0.00	0.09	0.00	0.00	0.00	0.00	0.01	0.00	0.71	0.00	0.00
12	0.00	0.00	0.01	0.05	0.00	0.13	0.15	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.04	0.00	0.00	0.21	0.00	0.50	0.00	0.01	0.00	0.00
14	0.96	0.00	0.00	0.00	0.00	0.02	0.04	0.00	0.00	0.14	0.00	0.11
15	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97
16	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
17	0.00	0.00	0.60	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.02	0.00
18	0.00	0.00	0.00	0.02	0.00	0.04	0.00	0.24	0.00	0.00	0.00	0.24
19	0.00	0.00	0.00	1.92	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.15	0.00	0.20	0.00	0.11	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.07	0.00	0.00
23	0.05	0.00	0.18	1.26	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
24	0.00	0.00	0.11	0.18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
25	0.00	0.00	0.00	0.28	0.00	0.00	0.03	0.00	0.00	0.06	0.00	0.00
26	0.01	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.63	0.00	0.00	0.80
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.06	0.14
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.82	0.00
29	0.00	0.01	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.35	0.00	0.00	0.73	0.00
31	0.00	---	0.00	0.02	---	0.23	---	0.00	---	0.00	1.88	---
MEAN	0.04	0.00	0.07	0.15	0.01	0.08	0.02	0.05	0.04	0.08	0.11	0.12
MAX	0.96	0.05	1.07	1.92	0.15	0.66	0.16	0.50	0.63	0.71	1.88	1.18
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00





Gaging station at Cape Fear River at William O. Huske Lock near Tarheel, North Carolina.

CAPE FEAR RIVER BASIN

02094770 SOUTH BUFFALO CREEK AT US 220 AT GREENSBORO, NC

LOCATION.--Lat 36°02'16", long 79°48'01", Guilford County, Hydrologic Unit 03030002, on left bank at downstream side of bridge on US 220, and 0.8 mi upstream from Ryan Creek in Greensboro.

DRAINAGE AREA.--15.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 730 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	e2.3	4.7	2.3	5.5	3.6	22	e3.5	2.8	1.3	0.93	395
2	1.4	e2.3	3.3	2.3	4.5	96	5.2	26	6.7	2.2	0.64	8.8
3	1.3	e3.4	2.7	3.7	4.4	54	4.2	2.5	1.7	16	0.46	4.2
4	1.4	e3.0	2.3	11	4.4	9.6	3.5	20	0.89	48	0.39	3.1
5	1.3	e2.7	3.0	11	4.1	6.3	3.3	5.6	0.68	12	0.35	2.0
6	2.2	e2.6	2.1	110	15	5.2	3.2	2.1	6.3	4.8	0.20	1.6
7	2.1	e3.0	2.4	24	101	5.0	3.1	1.9	9.1	2.9	0.15	1.0
8	1.3	e2.9	2.4	10	13	4.0	3.1	1.8	1.3	2.6	0.42	0.63
9	1.2	e2.9	2.6	6.2	7.5	4.0	3.2	1.3	0.66	3.0	0.27	0.60
10	1.5	e2.8	79	5.4	14	4.1	5.7	1.2	0.45	3.0	0.18	0.53
11	2.3	e2.7	89	4.8	8.1	4.0	3.8	1.2	0.56	79	0.14	0.69
12	2.4	e2.7	5.7	4.2	5.7	18	6.2	1.3	e0.46	4.8	0.15	0.47
13	2.7	e2.7	4.4	5.2	5.2	23	4.3	22	e0.46	3.2	0.11	0.38
14	118	e2.6	3.8	4.4	4.8	7.3	3.3	10	e0.46	7.4	0.10	1.6
15	13	e2.7	3.2	4.0	4.6	5.1	6.5	3.0	e0.42	3.9	1.1	89
16	3.5	e2.5	2.6	4.0	4.4	4.0	3.3	1.7	e0.42	2.4	3.1	18
17	2.4	e2.6	25	3.7	4.2	26	3.3	1.4	e0.42	0.81	2.6	3.6
18	2.3	e2.7	38	4.0	4.0	11	3.6	12	0.27	0.54	3.0	7.2
19	2.2	e2.6	5.1	298	3.9	6.2	4.9	3.8	0.27	0.41	1.1	14
20	2.0	e2.5	3.4	62	4.2	6.8	6.1	1.7	0.25	0.34	0.48	2.3
21	2.3	e2.7	3.0	30	5.3	23	2.9	2.3	0.26	0.27	0.37	1.2
22	2.3	e2.6	2.7	10	4.0	7.0	2.6	2.9	0.26	0.23	0.28	0.89
23	2.9	e2.5	2.6	235	4.1	4.4	e1.9	1.4	0.32	0.98	0.23	0.72
24	3.4	13	25	29	4.1	4.0	e1.7	1.3	0.32	26	0.22	0.67
25	5.6	5.3	4.6	60	3.9	3.7	e2.0	1.4	1.3	9.9	0.19	0.49
26	2.7	2.9	3.1	11	4.1	4.9	e1.5	1.00	22	61	0.33	66
27	e2.5	2.6	2.8	7.8	3.6	19	e1.4	0.92	20	11	1.2	17
28	e2.5	2.5	2.5	7.2	3.1	4.3	e1.4	0.91	11	6.4	37	6.4
29	e2.4	2.5	2.4	6.0	---	3.6	e1.8	0.86	2.8	3.1	6.8	2.1
30	e2.4	2.9	2.4	6.3	---	3.8	e2.7	8.1	1.6	1.8	61	1.3
31	e2.3	---	2.4	5.2	---	19	---	5.8	---	0.93	160	---
TOTAL	197.3	93.7	338.2	987.7	254.7	399.9	121.7	150.89	94.43	320.21	283.49	651.47
MEAN	6.365	3.123	10.91	31.86	9.096	12.90	4.057	4.867	3.148	10.33	9.145	21.72
MAX	118	13	89	298	101	96	22	26	22	79	160	395
MIN	1.2	2.3	2.1	2.3	3.1	3.6	1.4	0.86	0.25	0.23	0.10	0.38
CFSM	0.41	0.20	0.71	2.07	0.59	0.84	0.26	0.32	0.20	0.67	0.59	1.41
IN.	0.48	0.23	0.82	2.39	0.62	0.97	0.29	0.36	0.23	0.77	0.68	1.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2002, BY WATER YEAR (WY)

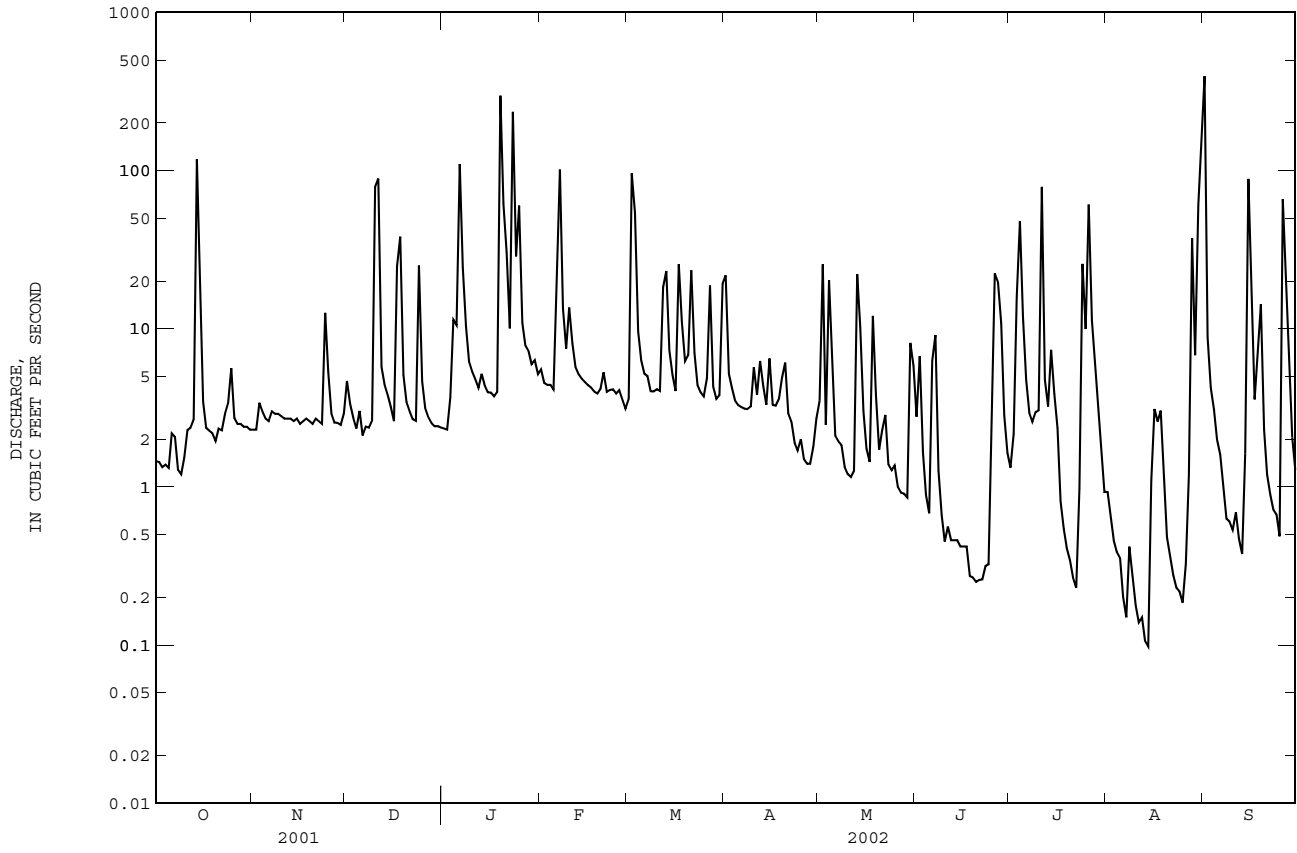
	1998	1999	2000	2001	2002
MEAN	6.189	5.790	13.85	38.34	15.84
MAX	11.3	9.03	27.2	82.6	21.6
(WY)	2000	2001	1999	1999	2000
MIN	3.59	2.89	5.78	14.7	9.97
(WY)	1999	2002	2001	2001	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1998 - 2002

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1998 - 2002
ANNUAL TOTAL	5992.18	3893.69	
ANNUAL MEAN	16.42	10.67	22.17
HIGHEST ANNUAL MEAN			34.4
LOWEST ANNUAL MEAN			11.0
HIGHEST DAILY MEAN	338	Mar 29	395
LOWEST DAILY MEAN	0.16	Sep 17	0.10
ANNUAL SEVEN-DAY MINIMUM	0.19	Sep 13	0.20
MAXIMUM PEAK FLOW			978
MAXIMUM PEAK STAGE			10.04
INSTANTANEOUS LOW FLOW			0.08
ANNUAL RUNOFF (CFSM)	1.07		0.69
ANNUAL RUNOFF (INCHES)	14.47		9.41
10 PERCENT EXCEEDS	37		19
50 PERCENT EXCEEDS	4.2		3.0
90 PERCENT EXCEEDS	1.4		0.46

e Estimated.

02094770 SOUTH BUFFALO CREEK AT US 220 AT GREENSBORO, NC--Continued



CAPE FEAR RIVER BASIN

02094770 SOUTH BUFFALO CREEK AT US 220 AT GREENSBORO, NC--Continued

PRECIPITATION RECORDS

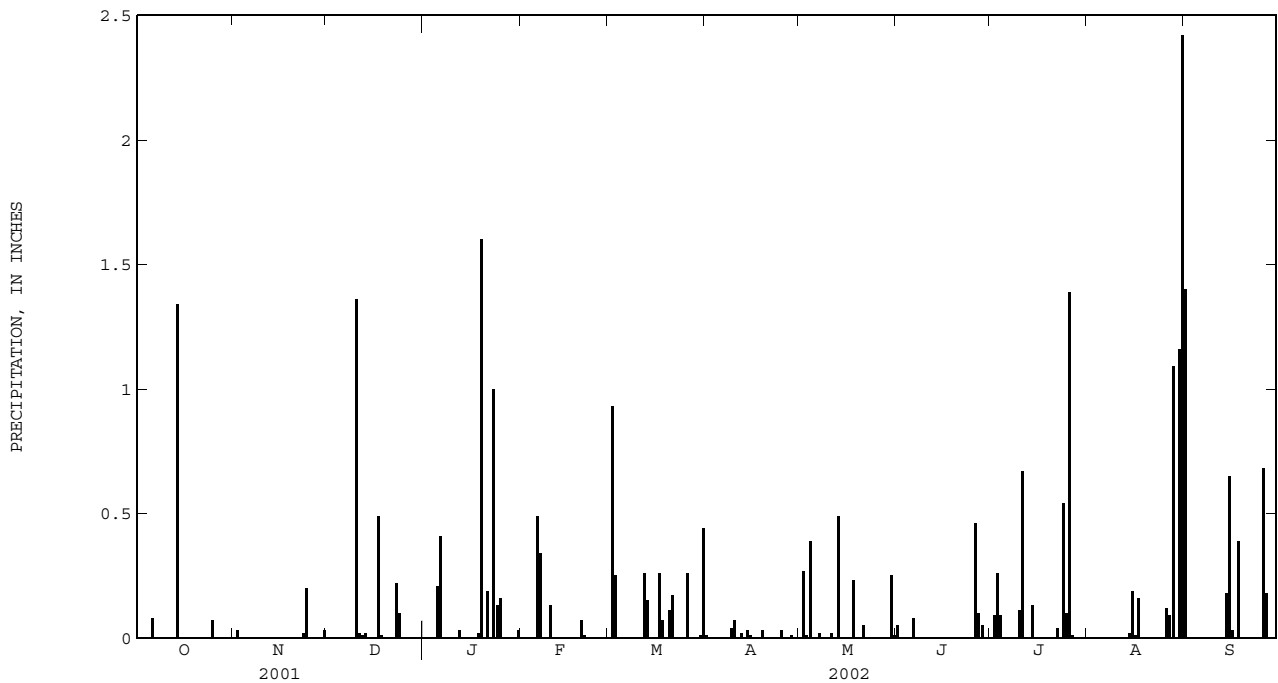
PERIOD OF RECORD.--August 1998 to current year. Records for August 1998 to December 1999 are unpublished and available in the USGS District Office in Raleigh, NC.

INSTRUMENTATION.--Tipping bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.05	0.00	0.00	1.40
2	0.00	0.03	0.00	0.00	0.00	0.00	0.93	0.00	0.27	0.00	0.09	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.01	0.00	0.26	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.09	0.00
5	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.08	0.00	0.00	0.41	0.49	0.00	0.00	0.00	0.08	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.02	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.36	0.00	0.13	0.00	0.07	0.00	0.00	0.11	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.67	0.00	0.00
12	0.00	0.00	0.01	0.03	0.00	0.00	0.26	0.02	0.00	0.00	0.00	0.00
13	0.00	0.00	0.02	0.00	0.00	0.00	0.15	0.00	0.49	0.00	0.00	0.00
14	1.34	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.13	0.02	0.18
15	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.19	0.65
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03
17	0.00	0.00	0.49	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.16	0.00
18	0.00	0.00	0.01	0.02	0.00	0.07	0.00	0.23	0.00	0.00	0.00	0.39
19	0.00	0.00	0.00	1.60	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.07	0.11	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.19	0.01	0.17	0.00	0.05	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
23	0.00	0.02	0.22	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.20	0.10	0.13	0.00	0.00	0.00	0.00	0.54	0.00	0.00	0.00
25	0.07	0.00	0.00	0.16	0.00	0.00	0.03	0.00	0.00	0.10	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.46	1.39	0.12	0.68
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.01	0.09	0.18
28	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.05	0.00	1.09	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.03	0.00	0.00	---	0.01	0.00	0.25	0.00	0.00	1.16	0.00
31	0.00	---	0.00	0.03	---	0.44	---	0.01	---	0.00	2.42	---
TOTAL	1.49	0.28	2.23	3.78	1.04	2.91	0.25	1.74	0.74	3.43	5.26	3.51





Acoustic Doppler Current Profiler (ADCP) equipment measuring flow at New Hope Creek near Blands, North Carolina.

CAPE FEAR RIVER BASIN

02094775 RYAN CREEK BELOW US HIGHWAY 220 AT GREENSBORO, NC

LOCATION.--Lat 36°01'51", long 79°47'56", Guilford County, Hydrologic Unit 03030002, on left bank 0.6 mi upstream of South Buffalo Creek, and .2 mi below US Highway 220 in Greensboro.

DRAINAGE AREA.--4.12 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1998 to current year.

REVISED RECORDS.--WDR NC-99-1B, WDR NC-00-1B, WDR NC-01-1B: maximum discharges only.

GAGE.--Water-stage recorder. Elevation of gage is 730 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No flow occurred several days.

REVISIONS.--The maximum discharges for some water years have been revised, as shown in the following table. They supersede figures published in the reports 1999, 2000 and 2001.

Water Year	Date	Discharge ft ³ /s	Gage Height (ft)
1999	Aug. 26, 1999	348	4.65
2000	Sep. 15, 2000	834	10.13
2001	Aug. 11, 2001	363	4.83

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.23	0.51	e0.71	e0.40	1.8	0.53	6.4	0.37	0.15	0.05	0.02	137
2	e0.23	0.44	e0.50	e0.41	e1.2	32	1.2	3.0	0.20	0.05	0.01	2.4
3	e0.24	0.48	e0.42	e0.60	e1.0	19	0.87	0.46	0.10	0.70	0.01	1.1
4	e0.31	0.40	e0.40	e3.2	e0.88	2.7	0.63	6.3	0.09	0.21	0.01	0.42
5	e0.27	0.52	e0.52	e1.6	e0.84	1.2	0.59	1.2	0.09	0.10	0.01	0.35
6	e0.47	0.52	e0.44	e26	e1.5	0.87	0.57	0.34	0.08	0.06	0.00	0.35
7	e0.39	e0.50	e0.40	e6.0	31	0.76	0.53	0.29	0.14	0.05	0.00	0.29
8	e0.27	e0.49	e0.38	e2.6	3.8	0.73	0.60	0.25	0.08	0.04	0.00	0.26
9	e0.23	e0.48	e0.44	e1.4	1.9	0.96	0.63	0.26	0.07	0.04	0.00	0.26
10	e0.22	e0.48	e24	e0.96	4.1	0.77	1.1	0.23	0.06	0.09	0.00	0.26
11	0.21	e0.47	e15	e0.72	2.2	0.56	0.68	0.90	0.06	30	0.00	0.24
12	0.19	e0.46	e1.7	e0.65	1.4	2.6	0.62	0.45	0.06	0.08	0.00	0.23
13	0.19	e0.46	e1.0	e1.4	1.2	8.3	0.72	8.3	0.09	0.03	0.00	0.22
14	40	e0.45	e0.78	e0.88	0.92	2.0	0.62	1.7	0.10	0.07	0.00	1.6
15	1.3	e0.45	e0.62	e0.72	0.96	1.1	0.56	0.24	0.06	0.05	0.02	19
16	0.28	e0.44	e0.54	e0.60	0.88	0.89	0.51	0.18	0.05	0.03	0.02	1.6
17	0.37	e0.44	e5.2	e0.56	0.66	6.2	0.46	0.16	0.04	0.03	0.01	0.52
18	0.39	e0.43	e7.3	e0.51	0.65	3.7	0.46	5.4	0.04	0.02	0.02	2.7
19	0.36	e0.43	e1.1	130	0.69	1.4	0.50	0.28	0.05	0.02	0.01	2.5
20	0.34	e0.43	e0.80	26	0.80	1.9	0.51	0.16	0.05	0.02	0.00	0.45
21	0.37	e0.43	e0.68	19	1.6	8.3	0.43	0.27	0.04	0.02	0.00	0.28
22	0.37	e0.42	e0.58	5.8	0.62	1.8	0.46	0.26	0.03	0.02	0.00	0.25
23	0.34	e0.50	e0.52	114	0.52	0.99	0.40	0.18	0.05	0.02	0.01	0.27
24	0.35	e3.9	e5.4	6.1	0.53	0.89	0.39	0.17	0.05	0.43	0.03	0.23
25	0.44	e1.6	e1.6	32	0.52	0.84	0.47	0.16	0.05	0.10	0.02	0.22
26	0.27	e0.80	e0.92	e6.0	0.55	1.9	0.35	0.15	0.82	17	0.04	14
27	0.22	e0.56	e0.68	e3.0	0.52	8.3	0.36	0.14	1.0	0.98	0.03	5.2
28	0.24	e0.50	e0.54	e2.4	0.48	1.0	0.40	0.14	0.30	0.05	1.9	1.9
29	0.28	e0.46	e0.48	e1.8	---	0.82	0.39	0.12	0.07	0.03	0.07	0.40
30	0.35	e0.49	e0.44	e1.6	---	0.80	0.33	0.32	0.06	0.02	9.0	0.31
31	0.48	---	e0.42	e1.5	---	5.3	---	0.28	---	0.02	47	---
TOTAL	50.20	18.94	74.51	398.41	63.72	119.11	22.74	32.66	4.13	50.43	58.24	194.81
MEAN	1.619	0.631	2.404	12.85	2.276	3.842	0.758	1.054	0.138	1.627	1.879	6.494
MAX	40	3.9	24	130	31	32	6.4	8.3	1.0	30	47	137
MIN	0.19	0.40	0.38	0.40	0.48	0.53	0.33	0.12	0.03	0.02	0.00	0.22
CFSM	0.39	0.15	0.58	3.12	0.55	0.93	0.18	0.26	0.03	0.39	0.46	1.58
IN.	0.45	0.17	0.67	3.60	0.58	1.08	0.21	0.29	0.04	0.46	0.53	1.76

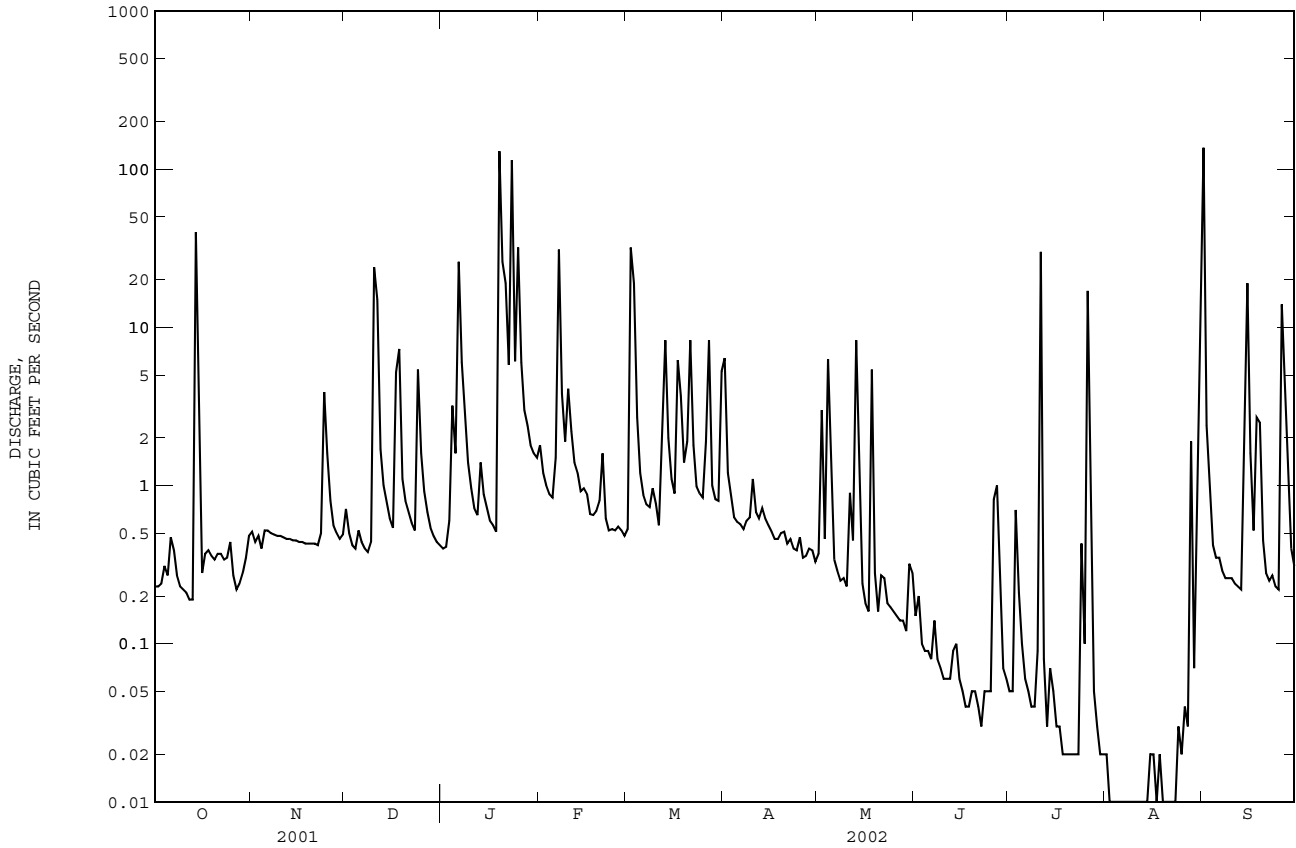
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2002, BY WATER YEAR (WY)

	1998	1999	2000	2001	2002
MEAN	1.299	0.979	2.390	7.366	3.644
MAX	2.55	1.49	3.65	12.9	5.32
(WY)	2000	2001	1999	2002	2001
MIN	0.31	0.42	1.35	2.92	2.13
(WY)	1999	1999	2001	2001	1999

02094775 RYAN CREEK BELOW US HIGHWAY 220 AT GREENSBORO, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1998 - 2002	
ANNUAL TOTAL	1229.14		1087.90		3.872	
ANNUAL MEAN	3.368		2.981		6.03	
HIGHEST ANNUAL MEAN					2.98	
LOWEST ANNUAL MEAN					2.98	
HIGHEST DAILY MEAN	84	Mar 29	137	Sep 1	393	Sep 15 2000
LOWEST DAILY MEAN	0.15	Sep 28	0.00	Aug 6	0.00	Aug 6 2002
ANNUAL SEVEN-DAY MINIMUM	0.20	Sep 26	0.00	Aug 6	0.00	Aug 6 2002
MAXIMUM PEAK FLOW			517	Sep 1	843	Sep 15 2000
MAXIMUM PEAK STAGE			6.62	Sep 1	10.13	Sep 15 2000
INSTANTANEOUS LOW FLOW			0.00*	Aug 6	0.00*	Aug 6 2002
ANNUAL RUNOFF (CFSM)	0.82		0.72		0.94	
ANNUAL RUNOFF (INCHES)	11.10		9.82		12.77	
10 PERCENT EXCEEDS	6.7		4.5		7.0	
50 PERCENT EXCEEDS	0.67		0.46		0.83	
90 PERCENT EXCEEDS	0.30		0.03		0.17	

e Estimated.
 * See REMARKS.



CAPE FEAR RIVER BASIN

02094775 RYAN CREEK BELOW US 220 AT GREENSBORO, NC--Continued

PRECIPITATION RECORDS

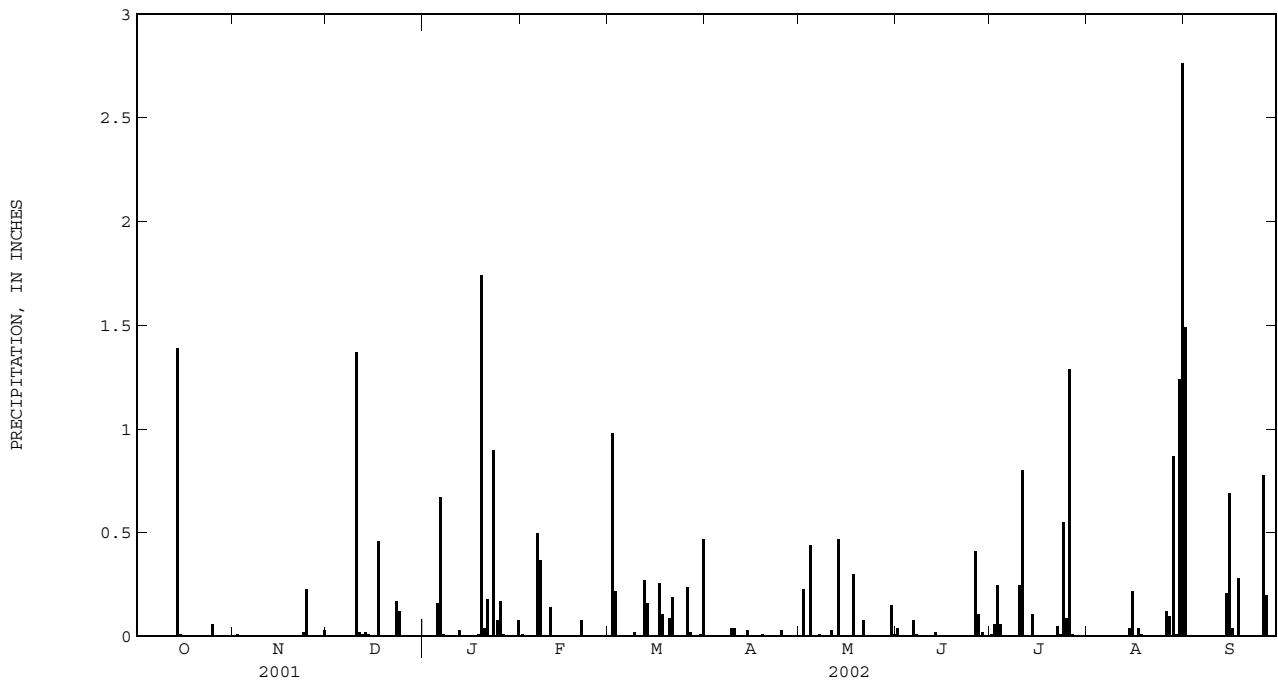
PERIOD OF RECORD.--August 1998 to current year.

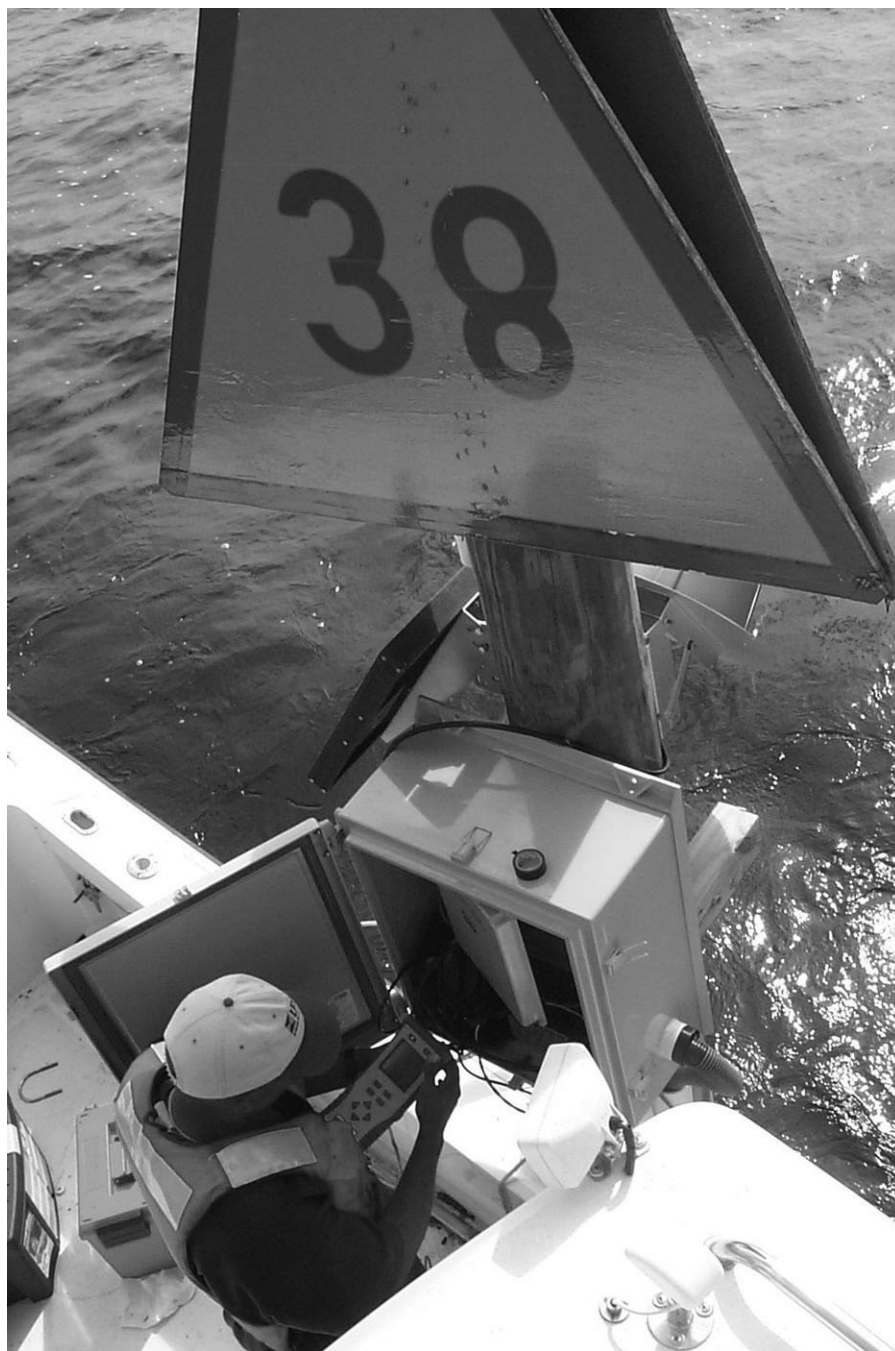
INSTRUMENTATION.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

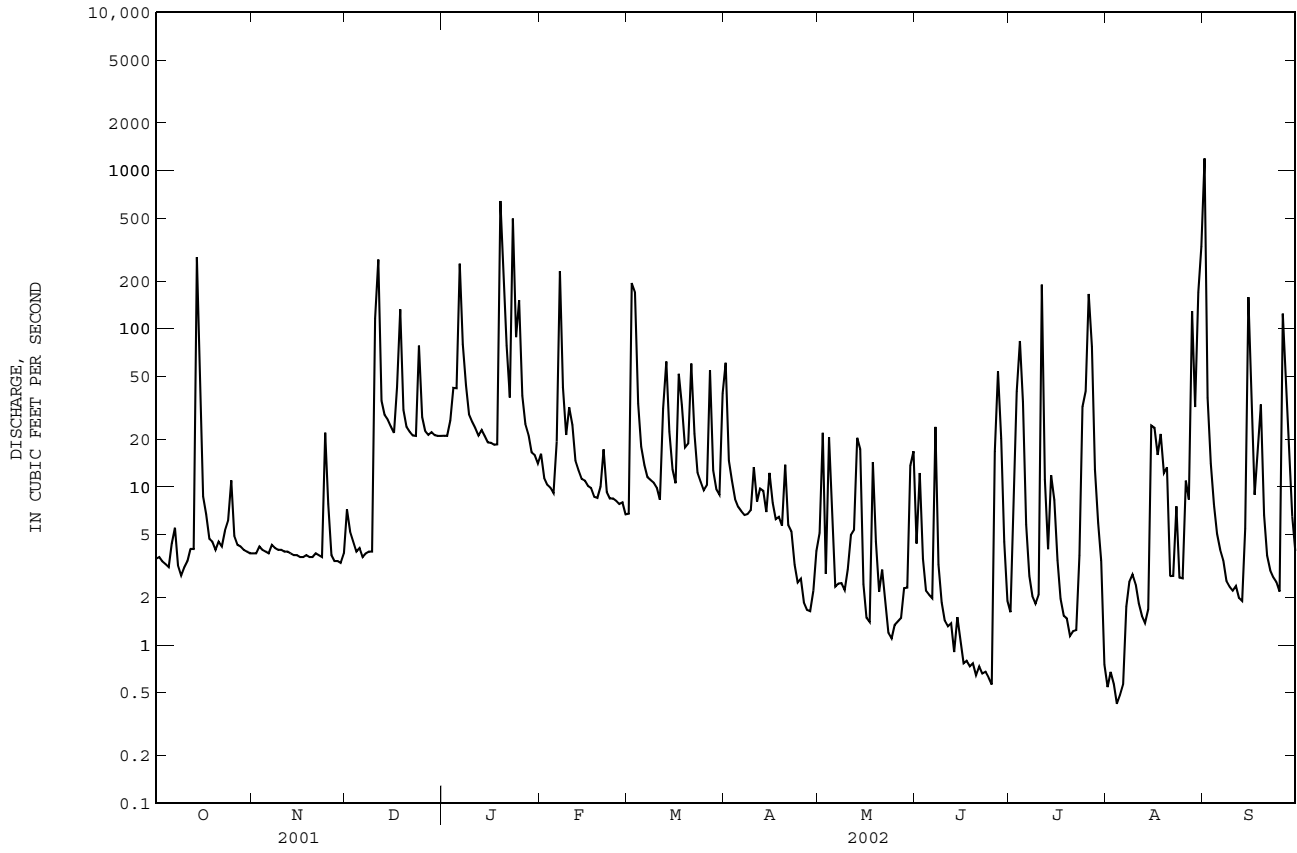
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.04	0.01	0.00	1.49
2	---	0.01	0.00	0.00	0.00	0.98	0.00	0.23	0.00	0.06	0.00	0.00
3	---	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.25	0.00	0.00
4	---	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.06	0.00	0.00
5	---	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	---	0.00	0.00	0.67	0.50	0.00	0.00	0.00	0.08	0.00	0.00	0.00
7	---	0.00	0.00	0.01	0.37	0.00	0.00	0.01	0.01	0.00	0.00	0.00
8	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	---	0.00	0.00	0.00	0.00	0.02	0.04	0.00	0.00	0.00	0.00	0.00
10	---	0.00	1.37	0.00	0.14	0.00	0.04	0.00	0.00	0.25	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.03	0.00	0.80	0.00	0.00
12	0.00	0.00	0.01	0.03	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.02	0.00	0.00	0.16	0.00	0.47	0.02	0.00	0.00	0.00
14	1.39	0.00	0.01	0.00	0.00	0.00	0.03	0.00	0.00	0.11	0.04	0.21
15	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.69
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
17	0.00	0.00	0.46	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.04	0.00
18	0.00	0.00	0.00	0.01	0.00	0.11	0.00	0.30	0.00	0.00	0.01	0.28
19	0.00	0.00	0.00	1.74	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.04	0.08	0.09	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.18	0.00	0.19	0.00	0.08	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00
23	0.00	0.02	0.17	0.90	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
24	0.00	0.23	0.12	0.08	0.00	0.00	0.00	0.00	0.00	0.55	0.00	0.00
25	0.06	0.00	0.00	0.17	0.00	0.00	0.03	0.00	0.00	0.09	0.00	0.00
26	0.00	0.00	0.00	0.01	0.00	0.24	0.00	0.00	0.41	1.29	0.12	0.78
27	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.11	0.01	0.10	0.20
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.87	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
30	0.00	0.03	0.00	0.00	---	0.01	0.00	0.15	0.00	0.00	1.24	0.00
31	0.00	---	0.00	0.08	---	0.47	---	0.01	---	0.00	2.76	---
TOTAL	---	0.29	2.18	4.08	1.10	3.04	0.15	1.72	0.69	3.54	5.41	3.69





Water Quality monitor at Neuse River at channel marker 38, North Carolina.

02095000 SOUTH BUFFALO CREEK NEAR GREENSBORO, NC--Continued



CAPE FEAR RIVER BASIN

02095000 SOUTH BUFFALO CREEK NEAR GREENSBORO, NC--Continued

PRECIPITATION RECORDS

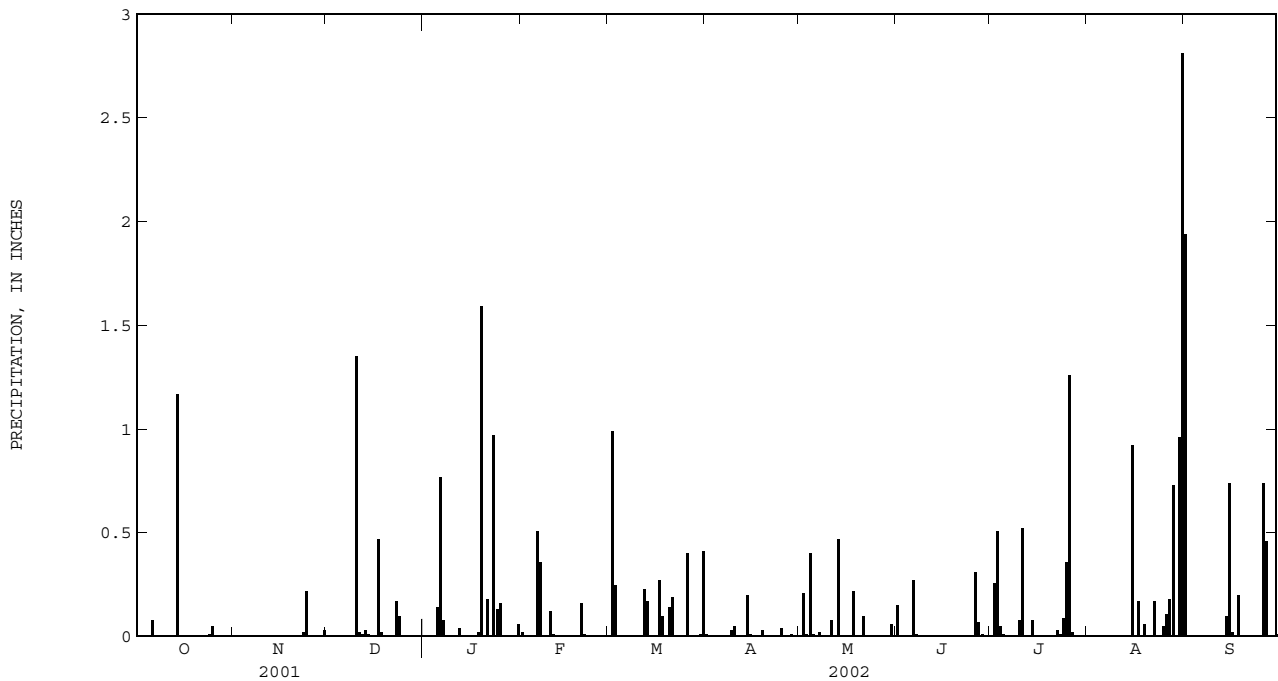
PERIOD OF RECORD.--August 1998 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.15	0.00	0.00	1.94
2	0.00	0.00	0.00	0.00	0.00	0.99	0.00	0.21	0.00	0.26	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.01	0.00	0.51	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.05	0.00	0.00
5	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00
6	0.08	0.00	0.00	0.77	0.51	0.00	0.00	0.00	0.27	0.00	0.00	0.00
7	0.00	0.00	0.00	0.08	0.36	0.00	0.00	0.02	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.35	0.00	0.12	0.00	0.05	0.00	0.00	0.08	0.00	0.00
11	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.08	0.00	0.52	0.00	0.00
12	0.00	0.00	0.01	0.04	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.03	0.00	0.00	0.17	0.00	0.47	0.00	0.00	0.00	0.00
14	1.17	0.00	0.01	0.00	0.00	0.00	0.20	0.00	0.00	0.08	0.00	0.10
15	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.92	0.74
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
17	0.00	0.00	0.47	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.17	0.00
18	0.00	0.00	0.02	0.02	0.00	0.10	0.00	0.22	0.00	0.00	0.00	0.20
19	0.00	0.00	0.00	1.59	0.00	0.00	0.03	0.00	0.00	0.00	0.06	0.00
20	0.00	0.00	0.00	0.00	0.16	0.14	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.18	0.01	0.19	0.00	0.10	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.17	0.00
23	0.00	0.02	0.17	0.97	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
24	0.01	0.22	0.10	0.13	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00
25	0.05	0.00	0.00	0.16	0.00	0.00	0.04	0.00	0.00	0.36	0.05	0.00
26	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.31	1.26	0.11	0.74
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.02	0.18	0.46
28	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.73	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.03	0.00	0.00	---	0.01	0.00	0.06	0.00	0.00	0.96	0.01
31	0.00	---	0.00	0.06	---	0.41	---	0.00	---	0.00	2.81	---
TOTAL	1.31	0.27	2.18	4.14	1.19	3.16	0.38	1.58	0.82	3.28	6.16	4.21





Crest stage at North Buffalo Creek near Greensboro, North Carolina.

02095181 NORTH BUFFALO CREEK AT WESTOVER TERRACE AT GREENSBORO, NC

LOCATION.--Lat 36°04'39", long 79°48'48", Guilford County, Hydrologic Unit 03030002, on right bank at termination of Westover Terrace in Greensboro, 0.7 mi above Southern Railway.

DRAINAGE AREA.--9.55 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is 736.25 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minimum discharge for period of record and current water year also occurred on Aug. 10, 11, 12, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	e1.2	2.1	3.3	3.6	3.5	10	1.7	13	0.05	0.11	e182
2	1.2	e1.4	1.5	3.6	3.6	65	3.3	21	3.4	2.8	0.14	2.8
3	1.2	e4.0	1.6	5.2	3.5	23	3.0	2.6	0.50	15	0.09	0.97
4	1.2	e2.2	1.8	7.9	3.9	5.0	2.7	16	0.34	47	0.08	0.59
5	1.3	e1.9	1.8	5.1	4.0	3.5	2.5	3.3	0.28	2.1	0.07	0.41
6	2.6	e1.7	1.7	73	16	3.1	2.7	1.7	46	0.33	0.06	0.35
7	1.9	e2.6	1.7	8.6	57	3.0	2.6	1.6	4.7	0.16	0.09	0.42
8	1.4	e1.9	1.8	3.5	7.6	2.9	3.1	1.6	0.37	0.15	0.04	0.47
9	1.4	e1.7	1.7	2.4	4.5	3.8	3.4	1.4	0.17	0.14	0.00	0.63
10	1.8	e2.7	71	2.5	9.2	3.4	4.7	1.1	0.15	0.28	0.00	0.83
11	1.9	e2.0	35	2.7	4.7	2.8	3.0	1.4	0.30	30	0.00	1.1
12	2.2	e1.8	2.3	2.5	3.8	18	5.3	2.0	0.33	0.53	0.00	1.2
13	2.6	e1.7	1.8	3.3	3.6	11	2.7	26	0.66	0.21	0.01	1.4
14	74	e1.7	1.5	2.7	3.4	3.9	5.9	3.9	0.79	2.6	0.03	1.9
15	3.5	e1.6	1.4	2.9	3.5	3.2	5.1	1.0	0.34	0.66	0.55	58
16	1.5	e1.6	1.3	2.7	3.6	2.9	2.4	0.81	0.24	0.24	1.8	8.4
17	e1.4	e1.5	35	2.7	3.9	20	2.2	0.82	0.26	0.13	2.4	0.78
18	e1.3	e1.5	13	3.6	3.2	7.9	2.6	8.3	0.29	0.14	0.86	4.8
19	e1.2	e1.6	1.7	184	3.3	3.8	3.0	1.1	0.30	0.11	0.18	4.6
20	e1.1	e1.6	1.5	19	3.6	6.3	2.5	0.59	0.29	0.23	0.11	0.60
21	e1.1	e1.6	1.3	13	3.5	15	1.9	1.2	0.25	0.22	0.13	0.42
22	e1.5	e1.5	1.3	3.7	3.4	4.2	1.9	0.92	0.14	1.0	0.11	0.39
23	e1.3	e1.9	1.6	127	3.4	3.3	1.7	0.70	0.41	3.5	0.11	0.49
24	e1.2	8.6	14	12	3.5	3.3	1.8	0.62	0.32	12	0.08	0.55
25	e4.1	2.6	1.6	30	3.4	3.1	2.2	0.60	0.19	4.1	0.08	0.68
26	e1.6	1.8	1.6	5.2	3.6	8.7	1.9	0.58	11	24	0.01	44
27	e1.4	1.7	1.6	3.8	4.6	10	1.9	0.62	17	8.5	0.43	7.3
28	e1.3	1.4	2.4	3.4	3.6	3.1	2.0	0.63	2.3	1.7	51	2.3
29	e1.2	1.4	3.0	3.1	---	2.9	1.9	0.74	0.21	0.26	4.0	0.72
30	e1.2	2.4	3.5	3.1	---	3.0	1.8	3.0	0.09	0.11	72	0.63
31	e1.1	---	3.5	3.1	---	17	---	1.1	---	0.09	144	---
TOTAL	123.0	62.8	216.6	548.6	178.5	269.6	91.7	108.63	104.62	158.34	278.57	329.73
MEAN	3.968	2.093	6.987	17.70	6.375	8.697	3.057	3.504	3.487	5.108	8.986	10.99
MAX	74	8.6	71	184	57	65	10	26	46	47	144	182
MIN	1.1	1.2	1.3	2.4	3.2	2.8	1.7	0.58	0.09	0.05	0.00	0.35
CFSM	0.42	0.22	0.73	1.85	0.67	0.91	0.32	0.37	0.37	0.53	0.94	1.15
IN.	0.48	0.24	0.84	2.14	0.70	1.05	0.36	0.42	0.41	0.62	1.09	1.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

	1999	2000	2001	2002
MEAN	4.285	4.320	6.256	13.68
MAX	6.22	5.52	6.99	17.7
(WY)	2000	2001	2002	2002
MIN	2.67	2.09	5.02	10.8
(WY)	2001	2002	2001	2001

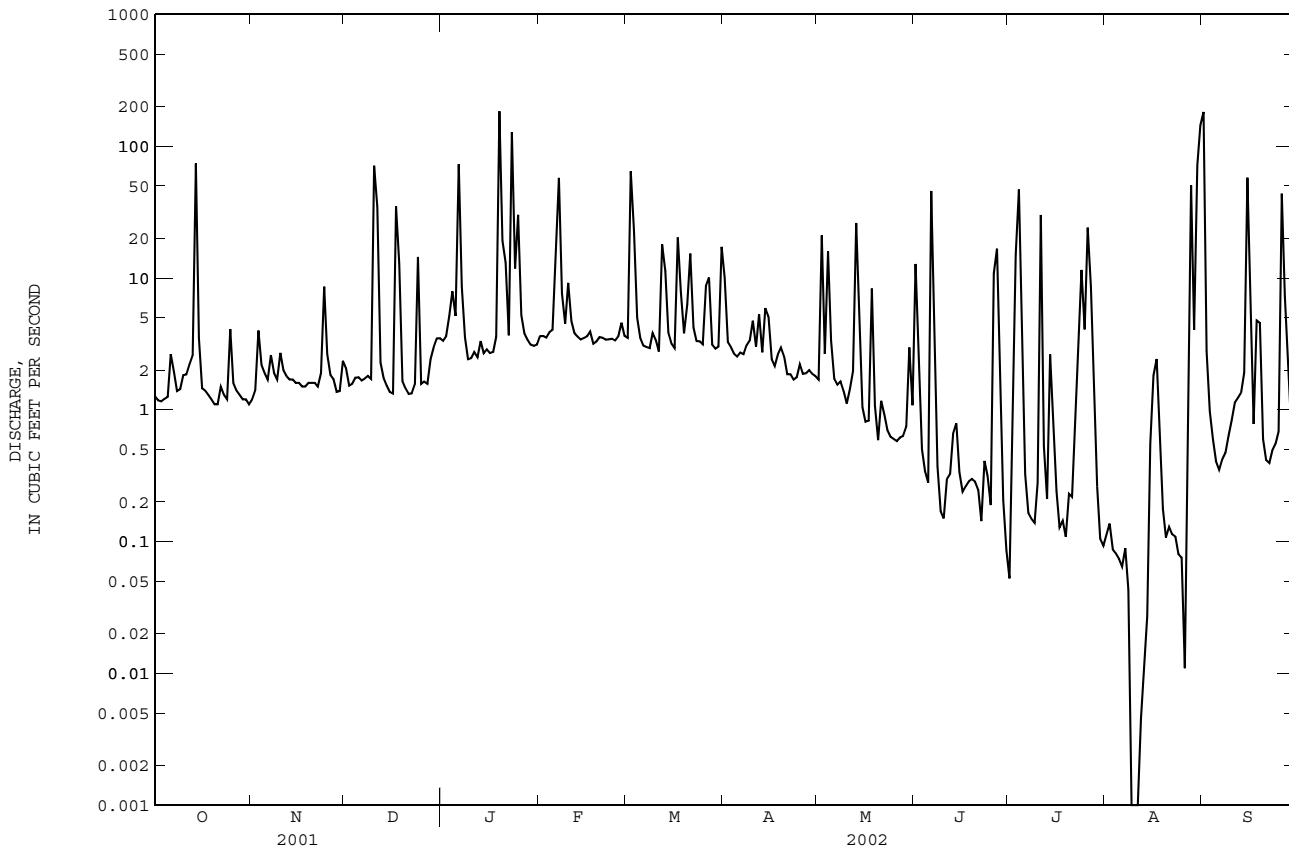
SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1999 - 2002
ANNUAL TOTAL	4100.01	2470.69	
ANNUAL MEAN	11.23	6.769	10.97
HIGHEST ANNUAL MEAN			14.9
LOWEST ANNUAL MEAN			6.77
HIGHEST DAILY MEAN	206	184	371
LOWEST DAILY MEAN	0.78	0.00	0.00
ANNUAL SEVEN-DAY MINIMUM	1.0	0.01	0.01
MAXIMUM PEAK FLOW		NOT DETERMINED	NOT DETERMINED
MAXIMUM PEAK STAGE		7.79	13.00
INSTANTANEOUS LOW FLOW		0.00*	0.00
ANNUAL RUNOFF (CFSM)	1.18	0.71	1.15
ANNUAL RUNOFF (INCHES)	15.97	9.62	15.61
10 PERCENT EXCEEDS	25	12	24
50 PERCENT EXCEEDS	3.6	1.9	3.3
90 PERCENT EXCEEDS	1.3	0.20	1.1

e Estimated.

* See REMARKS.

02095181 NORTH BUFFALO CREEK AT WESTOVER TERRACE AT GREENSBORO, NC--Continued



CAPE FEAR RIVER BASIN

02095181 NORTH BUFFALO CREEK AT WESTOVER TERRACE AT GREENSBORO, NC--Continued

PRECIPITATION RECORDS

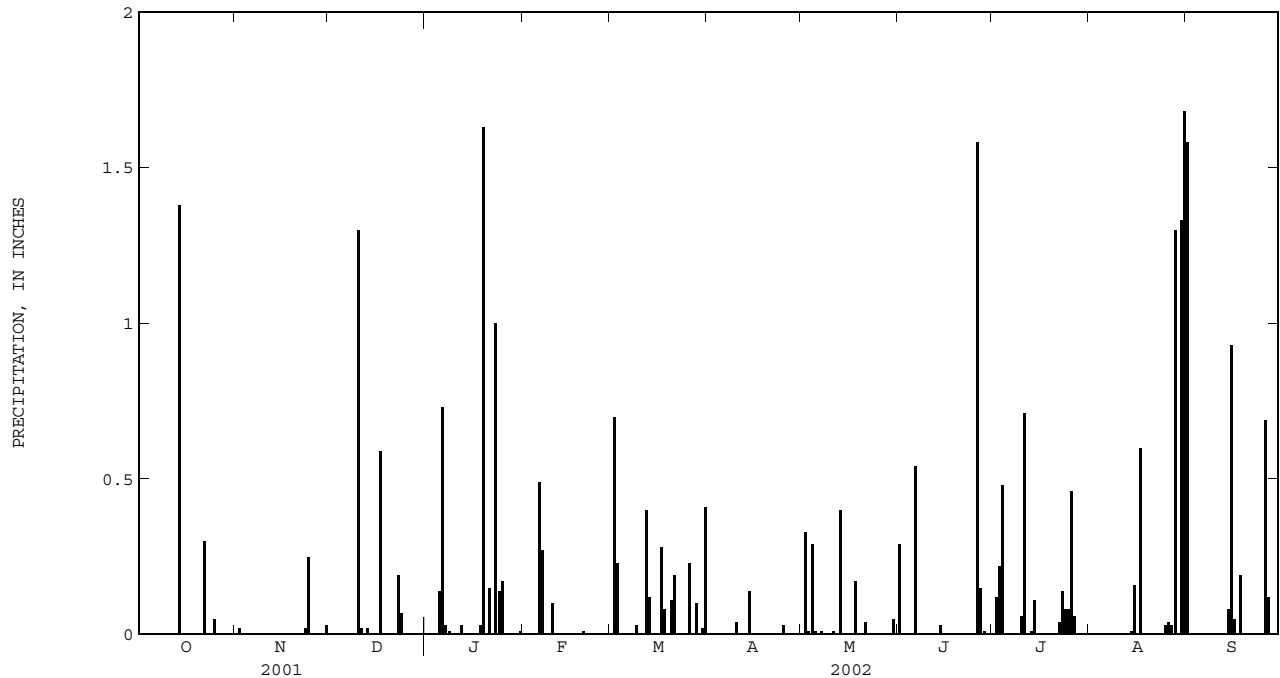
PERIOD OF RECORD.--June 1999 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00	1.58
2	0.00	0.02	0.00	0.00	0.00	0.70	0.00	0.33	0.00	0.12	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.01	0.00	0.22	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.48	0.00	0.00
5	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.73	0.49	0.00	0.00	0.00	0.54	0.00	0.00	0.00
7	0.00	0.00	0.00	0.03	0.27	0.00	0.00	0.01	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.30	0.00	0.10	0.00	0.04	0.00	0.00	0.06	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.71	0.00	0.00
12	0.00	0.00	0.00	0.03	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.02	0.00	0.00	0.12	0.00	0.40	0.00	0.01	0.00	0.00
14	1.38	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.03	0.11	0.01	0.08
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.93
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
17	0.00	0.00	0.59	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.60	0.00
18	0.00	0.00	0.00	0.03	0.00	0.08	0.00	0.17	0.00	0.00	0.00	0.19
19	0.00	0.00	0.00	1.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.01	0.11	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.15	0.00	0.19	0.00	0.04	0.00	0.00	0.00	0.00
22	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
23	0.00	0.02	0.19	1.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00
24	0.00	0.25	0.07	0.14	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00
25	0.05	0.00	0.00	0.17	0.00	0.00	0.03	0.00	0.00	0.08	0.03	0.00
26	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	1.58	0.46	0.04	0.69
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.06	0.03	0.12
28	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.01	0.00	1.30	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.03	0.00	0.00	---	0.02	0.00	0.05	0.00	0.00	1.33	0.00
31	0.00	---	0.00	0.01	---	0.41	---	0.00	---	0.00	1.68	---
TOTAL	1.73	0.32	2.19	4.07	0.87	2.90	0.21	1.32	2.60	2.57	5.18	3.64
MEAN	0.06	0.01	0.07	0.13	0.03	0.09	0.01	0.04	0.09	0.08	0.17	0.12
MAX	1.38	0.25	1.30	1.63	0.49	0.70	0.14	0.40	1.58	0.71	1.68	1.58
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00





Control at Rocky River near Concord, North Carolina.

CAPE FEAR RIVER BASIN

02095271 NORTH BUFFALO CREEK AT CHURCH STREET AT GREENSBORO, NC

LOCATION.--Lat 36°05'32", long 79°46'58", Guilford County, Hydrologic Unit 03030002, on right bank at upstream side of Church Street, and .1 mi upstream of Southern Railway bridge in Greensboro.

DRAINAGE AREA.--14.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1998 to current year.

REVISED RECORDS.--WDR NC-98-1, WDR NC-99-1B, WDR NC-00-1B, WDR-01-1B: maximum discharges only.

GAGE.--Water-stage recorder. Datum of gage is 738.52 ft above NGVD of 1929. 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. 2, 2002.

REVISIONS.--The maximum discharges for some water years have been revised, as shown in the following table. They supersede figures published in the reports 1998, 1999, 2000, 2001.

Water Year	Date	Discharge (ft ³ /s)	Gage Height (ft)
1998	Aug. 8, 1998	399	6.98
1999	Apr. 29, 1999	1280	11.49
2000	Sep. 15, 2000	2860	16.41
2001	Jul. 4, 2001	2190	14.55

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	3.9	3.2	4.9	5.3	4.0	23	6.0	27	5.0	1.5	366
2	3.2	4.3	2.3	4.9	4.7	93	5.7	41	11	11	e1.4	11
3	3.2	4.6	2.3	6.5	4.5	49	5.1	8.9	5.8	32	e1.9	6.0
4	3.2	3.6	2.3	11	4.8	11	4.7	39	5.2	73	e1.9	5.2
5	2.8	3.6	2.4	8.6	4.4	7.8	4.5	12	4.6	10	e2.1	4.5
6	3.9	3.8	2.3	107	24	7.2	5.7	7.3	54	5.6	e2.4	4.2
7	3.4	3.8	2.2	18	100	7.2	7.4	5.9	18	5.0	2.2	4.5
8	2.8	4.2	2.2	8.0	12	6.0	5.5	7.6	5.4	4.3	2.4	4.2
9	2.8	4.0	2.2	5.7	8.4	8.8	4.6	5.0	5.5	4.8	2.7	4.2
10	3.0	3.6	89	5.5	19	6.6	7.0	5.9	4.3	5.2	2.7	4.2
11	3.1	3.9	73	5.2	8.5	6.1	4.8	7.0	3.5	55	2.4	4.1
12	2.9	3.8	6.1	6.0	5.6	33	7.8	8.2	3.8	5.1	2.4	3.3
13	2.9	3.9	5.2	5.5	5.1	25	5.7	42	3.5	4.4	2.4	3.6
14	116	4.0	6.6	4.6	4.8	8.7	9.4	16	5.0	8.5	2.1	4.7
15	9.4	3.9	5.5	4.6	4.8	7.1	10	8.4	5.3	5.4	3.6	91
16	5.4	3.7	5.2	4.4	5.4	7.1	4.6	6.9	5.3	4.6	5.7	23
17	3.9	4.0	45	4.5	7.5	40	4.4	6.3	4.9	4.2	24	9.6
18	3.8	4.0	36	5.1	7.4	15	4.5	22	4.5	4.0	5.6	13
19	3.8	4.1	5.9	237	6.2	7.7	6.1	7.5	3.1	3.7	3.9	20
20	3.8	4.1	5.2	46	5.6	13	5.8	6.5	2.7	3.7	2.7	8.4
21	4.0	4.1	5.0	28	5.7	31	6.0	8.6	4.8	4.2	2.7	8.0
22	4.1	3.9	4.8	9.2	4.9	10	4.9	7.2	5.2	4.2	2.5	7.4
23	4.3	4.0	4.8	174	4.9	8.7	4.1	6.1	5.4	e7.3	2.0	6.9
24	4.1	12	31	20	4.7	8.5	4.2	5.9	5.2	e32	1.9	6.7
25	6.0	3.6	5.4	55	5.7	5.6	4.6	6.1	4.7	11	2.7	6.4
26	3.5	2.9	5.2	9.6	5.3	13	5.3	6.3	34	46	4.5	83
27	3.4	2.6	5.0	7.3	5.1	20	5.2	5.4	29	21	3.6	24
28	3.6	2.5	4.9	7.3	4.2	6.3	5.9	3.7	11	7.4	99	11
29	3.8	2.4	5.0	6.8	---	6.3	5.1	4.5	5.3	4.2	9.7	7.4
30	3.9	3.0	4.9	6.5	---	7.5	4.3	8.5	5.0	e3.6	123	6.9
31	4.0	---	5.0	6.1	---	33	---	6.8	---	3.0	178	---
TOTAL	231.2	119.8	385.1	832.8	288.5	513.2	185.9	338.5	292.0	398.4	505.6	762.4
MEAN	7.458	3.993	12.42	26.86	10.30	16.55	6.197	10.92	9.733	12.85	16.31	25.41
MAX	116	12	89	237	100	93	23	42	54	73	178	366
MIN	2.8	2.4	2.2	4.4	4.2	4.0	4.1	3.7	2.7	3.0	1.4	3.3
CFSM	0.53	0.28	0.87	1.89	0.73	1.17	0.44	0.77	0.69	0.91	1.15	1.79
IN.	0.61	0.31	1.01	2.18	0.76	1.34	0.49	0.89	0.76	1.04	1.32	2.00

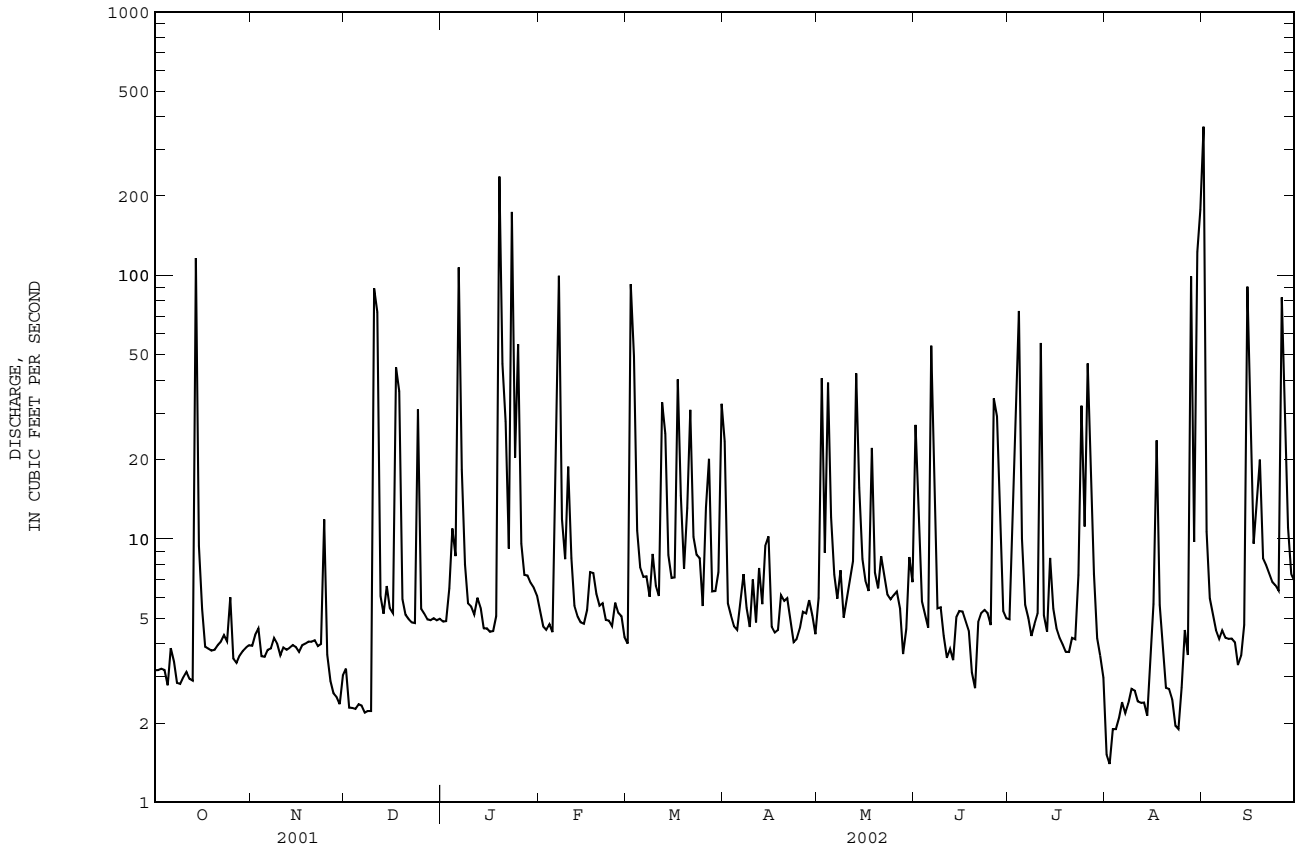
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2002, BY WATER YEAR (WY)

	1998	1999	2000	2001	2002
MEAN	8.576	8.912	13.48	23.67	17.50
MAX	16.1	12.9	20.3	29.4	23.3
(WY)	2000	2000	1999	1999	2001
MIN	4.71	3.99	10.1	17.1	10.3
(WY)	1999	2002	2001	2000	2002

02095271 NORTH BUFFALO CREEK AT CHURCH STREET AT GREENSBORO, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1998 - 2002	
ANNUAL TOTAL	6681.7		4853.4			
ANNUAL MEAN	18.31		13.30		17.57	
HIGHEST ANNUAL MEAN					21.5 2000	
LOWEST ANNUAL MEAN					13.3 2002	
HIGHEST DAILY MEAN	248	Jul 4	366	Sep 1	366	Sep 1 2002
LOWEST DAILY MEAN	2.2	Dec 7	1.4	Aug 2	1.4	Aug 2 2002
ANNUAL SEVEN-DAY MINIMUM	2.3	Dec 3	1.9	Aug 1	1.9	Aug 1 2002
MAXIMUM PEAK FLOW			1240	Sep 1	2860	Sep 15 2002
MAXIMUM PEAK STAGE			11.32	Sep 1	16.41	Sep 15 2000
INSTANTANEOUS LOW FLOW			1.2	Aug 2	1.2*	Oct 17 1998
ANNUAL RUNOFF (CFSM)	1.29		0.94		1.24	
ANNUAL RUNOFF (INCHES)	17.50		12.71		16.81	
10 PERCENT EXCEEDS	40		27		43	
50 PERCENT EXCEEDS	7.6		5.2		7.2	
90 PERCENT EXCEEDS	3.5		2.9		3.3	

e Estimated.



CAPE FEAR RIVER BASIN

02095271 NORTH BUFFALO CREEK AT CHURCH STREET AT GREENSBORO, NC--Continued

PRECIPITATION RECORDS

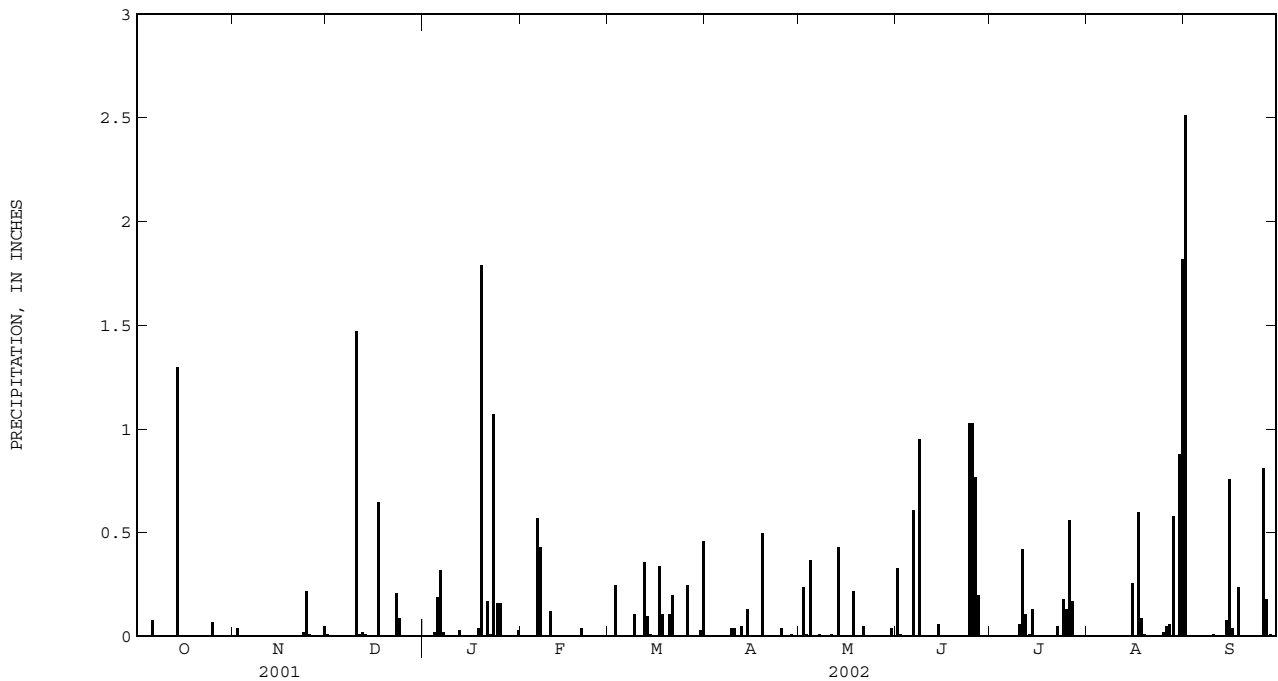
PERIOD OF RECORD.--August 1998 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00	2.51
2	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.24	0.01	0.00	---	0.00
3	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.01	0.00	0.00	---	0.00
4	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.37	0.00	0.00	---	0.00
5	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00
6	0.08	0.00	0.00	0.32	0.57	0.00	0.00	0.00	0.61	0.00	---	0.00
7	0.00	0.00	0.00	0.02	0.43	0.00	0.00	0.01	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.11	0.04	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.47	0.00	0.12	0.00	0.04	0.00	0.00	0.06	0.00	0.01
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.42	0.00	0.00
12	0.00	0.00	0.02	0.03	0.00	0.36	0.05	0.00	0.00	0.11	0.00	0.00
13	0.00	0.00	0.01	0.00	0.00	0.10	0.00	0.43	0.00	0.01	0.00	0.00
14	1.30	0.00	0.00	0.00	0.00	0.01	0.13	0.00	0.06	0.13	0.00	0.08
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.26	0.76
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
17	0.00	0.00	0.65	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.60	0.00
18	0.00	0.00	0.00	0.04	0.00	0.11	0.00	0.22	0.00	0.00	0.09	0.24
19	0.00	0.00	0.00	1.79	0.00	0.00	0.50	0.00	0.00	0.00	0.01	0.00
20	0.00	0.00	0.00	0.00	0.04	0.11	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.17	0.00	0.20	0.00	0.05	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00
23	0.00	0.02	0.21	1.07	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
24	0.00	0.22	0.09	0.16	0.00	0.00	0.00	0.00	1.03	0.18	0.00	0.00
25	0.07	0.01	0.00	0.16	0.00	0.00	0.04	0.00	1.03	0.13	0.02	0.00
26	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.77	0.56	0.05	0.81
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.17	0.06	0.18
28	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.58	0.01
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	---	0.00	0.00
30	0.00	0.05	0.00	0.00	---	0.03	0.00	0.04	0.00	---	0.88	0.00
31	0.00	---	0.00	0.03	---	0.46	---	0.00	---	0.00	1.82	---
TOTAL	1.45	0.34	2.47	4.01	1.16	2.33	0.81	1.38	4.99	---	---	4.64





Raingage at Statesville, North Carolina.



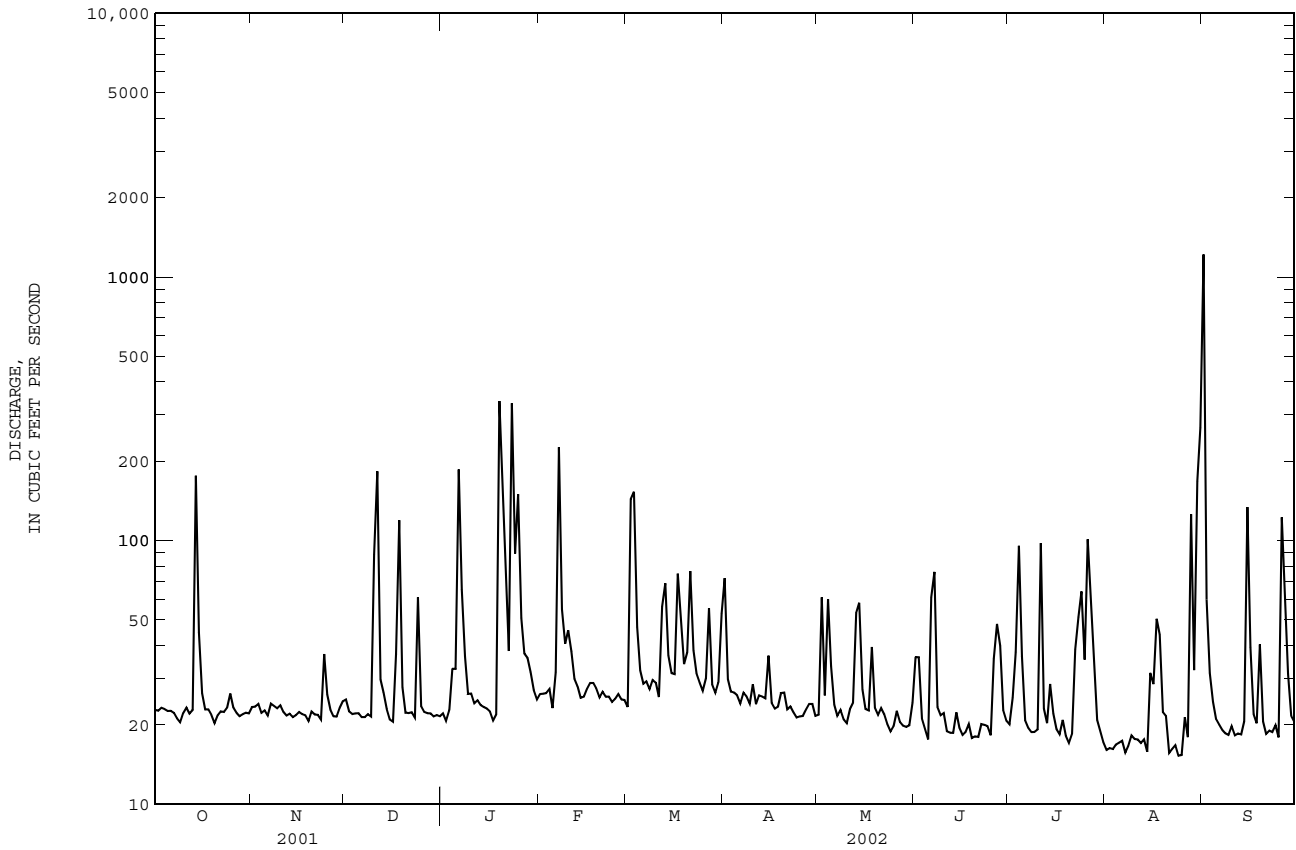
Raingage at Tuckertown Reservoir
Montgomery County, North Carolina.

02095500 NORTH BUFFALO CREEK NEAR GREENSBORO, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1928 - 2002 [®]	
ANNUAL TOTAL	20514		13948		56.94	
ANNUAL MEAN	56.20		38.21		106	
HIGHEST ANNUAL MEAN					1984	
LOWEST ANNUAL MEAN					30.6	
HIGHEST DAILY MEAN	523	Feb 17	1220	Sep 1	4400	Sep 22 1979
LOWEST DAILY MEAN	20	Oct 9	15	Aug 24	3.4	Aug 28 1932
ANNUAL SEVEN-DAY MINIMUM	22	Nov 13	16	Aug 1	6.2	Aug 28 1930
MAXIMUM PEAK FLOW			3380	Sep 1	9140*	Sep 22 1979
MAXIMUM PEAK STAGE			13.25	Sep 1	20.12*	Sep 22 1979
INSTANTANEOUS LOW FLOW			11*	Aug 3	1.6	Aug 28 1932
ANNUAL RUNOFF (CFSM)	1.51		1.03		1.53	
ANNUAL RUNOFF (INCHES)	20.57		13.99		20.85	
10 PERCENT EXCEEDS	97		59		99	
50 PERCENT EXCEEDS	35		23		31	
90 PERCENT EXCEEDS	22		19		16	

[®] See PERIOD OF RECORD.

* See REMARKS.



CAPE FEAR RIVER BASIN

02095500 NORTH BUFFALO CREEK NEAR GREENSBORO, NC--Continued

PRECIPITATION RECORDS

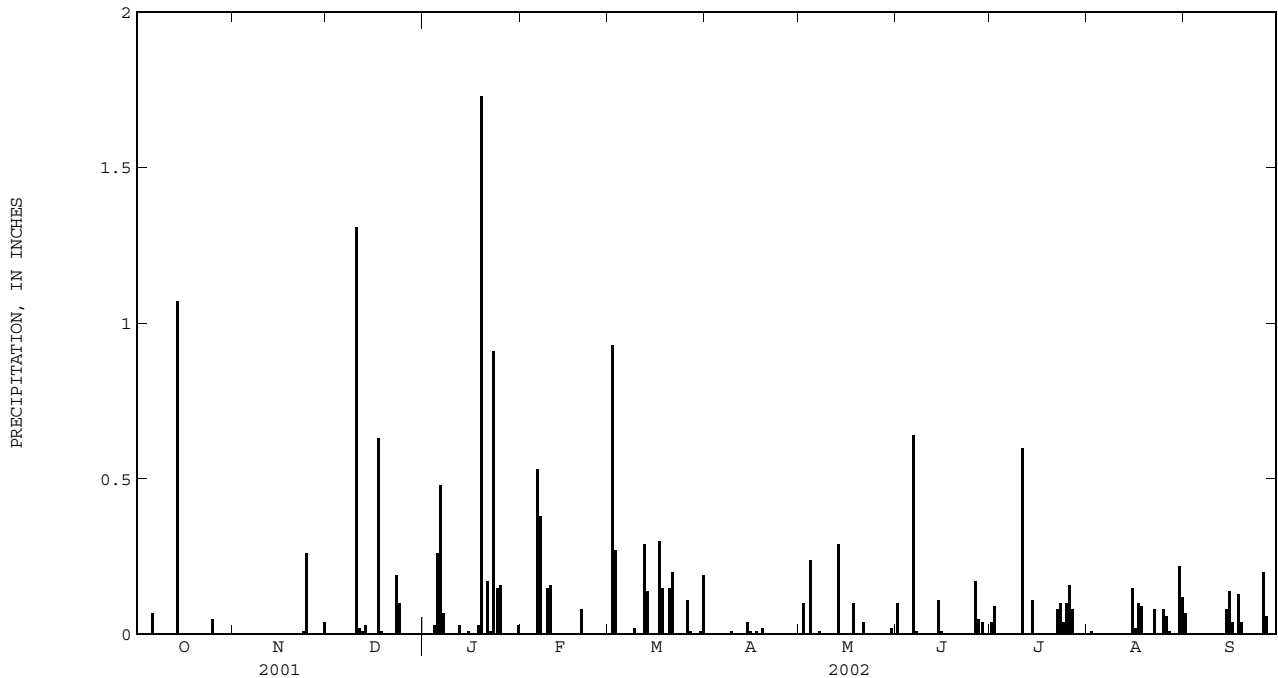
PERIOD OF RECORD.--August 1998 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.04	0.00	0.07
2	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.10	0.00	0.09	0.01	0.00
3	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.07	0.00	0.00	0.48	0.53	0.00	0.00	0.00	0.64	0.00	0.00	0.00
7	0.00	0.00	0.00	0.07	0.38	0.00	0.00	0.01	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.15	0.02	0.01	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.31	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00
12	0.00	0.00	0.01	0.03	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.03	0.00	0.00	0.14	0.00	0.29	0.00	0.00	0.00	0.00
14	1.07	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.11	0.11	0.00	0.08
15	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.15	0.14
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04
17	0.00	0.00	0.63	0.00	0.00	0.30	0.01	0.00	0.00	0.00	0.10	0.00
18	0.00	0.00	0.01	0.03	0.00	0.15	0.00	0.10	0.00	0.00	0.09	0.13
19	0.00	0.00	0.00	1.73	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.04
20	0.00	0.00	0.00	0.00	0.08	0.15	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.17	0.00	0.20	0.00	0.04	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.08	0.08	0.00
23	0.00	0.01	0.19	0.91	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00
24	0.00	0.26	0.10	0.15	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
25	0.05	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.10	0.08	0.00
26	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.17	0.16	0.06	0.20
27	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.05	0.08	0.01	0.06
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.04	0.00	0.00	---	0.01	0.00	0.02	0.00	0.00	0.22	0.00
31	0.00	---	0.00	0.03	---	0.19	---	0.00	---	0.00	0.12	---
TOTAL	1.19	0.31	2.30	4.07	1.30	2.77	0.09	0.80	1.13	1.40	0.94	0.76
MEAN	0.04	0.01	0.07	0.13	0.05	0.09	0.00	0.03	0.04	0.05	0.03	0.03
MAX	1.07	0.26	1.31	1.73	0.53	0.93	0.04	0.29	0.64	0.60	0.22	0.20
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00





Gaging station at Little River near Star, North Carolina.

CAPE FEAR RIVER BASIN

0209553650 BUFFALO CREEK AT SECONDARY ROAD 2819 NEAR McLEANSVILLE, NC

LOCATION.--Lat 36°07'40", long 79°39'443", Guilford County, Hydrologic Unit 03030002, on left bank of upstream side of bridge on Secondary Road 2819, 300 ft below the confluence of North Buffalo Creek and South Buffalo Creek, and 1.3 mi north of McLeansville.

DRAINAGE AREA.--88.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 650 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

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

REVISIONS.--The maximum discharge for water year 1999 has been revised to 4,320 ft³/s, Apr. 30, 1999, gage height, 14.36 ft.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	58	62	45	100	90	191	69	55	45	41	3520
2	64	61	58	48	91	216	87	147	86	46	42	250
3	66	57	60	50	90	585	75	74	55	69	38	107
4	64	55	59	66	89	153	69	110	53	134	40	80
5	66	55	53	81	90	96	66	124	50	139	41	67
6	61	57	56	415	88	81	66	68	50	52	45	61
7	67	59	60	221	524	78	66	60	153	41	44	57
8	66	58	56	112	196	75	68	62	55	41	38	55
9	64	59	53	74	124	74	68	60	44	44	42	56
10	64	55	95	67	122	80	77	59	47	44	37	54
11	68	53	619	64	137	70	71	58	47	249	37	55
12	67	54	e80	59	105	107	69	62	48	65	41	54
13	65	56	e61	60	100	183	72	61	44	42	42	56
14	330	59	59	59	96	117	67	185	47	50	41	53
15	286	58	e52	60	97	86	84	63	44	57	46	274
16	65	59	e46	57	94	78	73	58	40	47	89	112
17	59	56	e53	59	95	149	70	57	42	43	55	56
18	55	56	e224	59	95	137	67	87	44	41	100	48
19	56	57	71	684	93	96	69	71	47	45	60	95
20	49	56	56	1010	92	91	80	56	41	39	60	56
21	51	56	51	202	106	184	67	59	45	40	45	52
22	54	56	50	152	94	115	70	64	43	47	44	49
23	53	50	47	953	91	86	66	57	42	75	47	45
24	55	82	129	390	90	81	65	53	41	95	44	46
25	62	75	56	369	91	77	69	49	41	107	42	46
26	63	57	48	160	92	75	70	46	41	205	52	216
27	52	56	49	120	91	158	65	49	134	202	53	177
28	50	56	e48	109	91	86	67	49	86	83	192	83
29	54	58	48	104	---	74	69	50	50	51	128	52
30	56	60	46	99	---	74	71	50	44	48	286	48
31	57	---	48	97	---	114	---	75	---	44	458	---
TOTAL	2354	1744	2553	6105	3264	3766	2234	2192	1659	2330	2370	5980
MEAN	75.94	58.13	82.35	196.9	116.6	121.5	74.47	70.71	55.30	75.16	76.45	199.3
MAX	330	82	619	1010	524	585	191	185	153	249	458	3520
MIN	49	50	46	45	88	70	65	46	40	39	37	45
CFSM	0.86	0.66	0.93	2.23	1.32	1.37	0.84	0.80	0.62	0.85	0.86	2.25
IN.	0.99	0.73	1.07	2.57	1.37	1.58	0.94	0.92	0.70	0.98	1.00	2.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2002, BY WATER YEAR (WY)

	1998	1999	2000	2001	1999	2000	2001	2002	2002	2002	2002	1998	2002
MEAN	78.90	70.12	99.13	190.1	145.5	160.5	159.8	99.04	129.0	133.1	115.1	219.5	
MAX	114	85.5	129	271	196	251	204	133	255	196	187	389	
(WY)	2000	2001	1999	1999	2000	2001	1999	2001	2000	2001	2000	2000	
MIN	57.6	53.1	77.5	132	100	112	74.5	70.7	55.3	75.2	76.5	76.6	
(WY)	1999	1999	2001	2001	1999	1999	2002	2002	2002	2002	2002	1998	

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

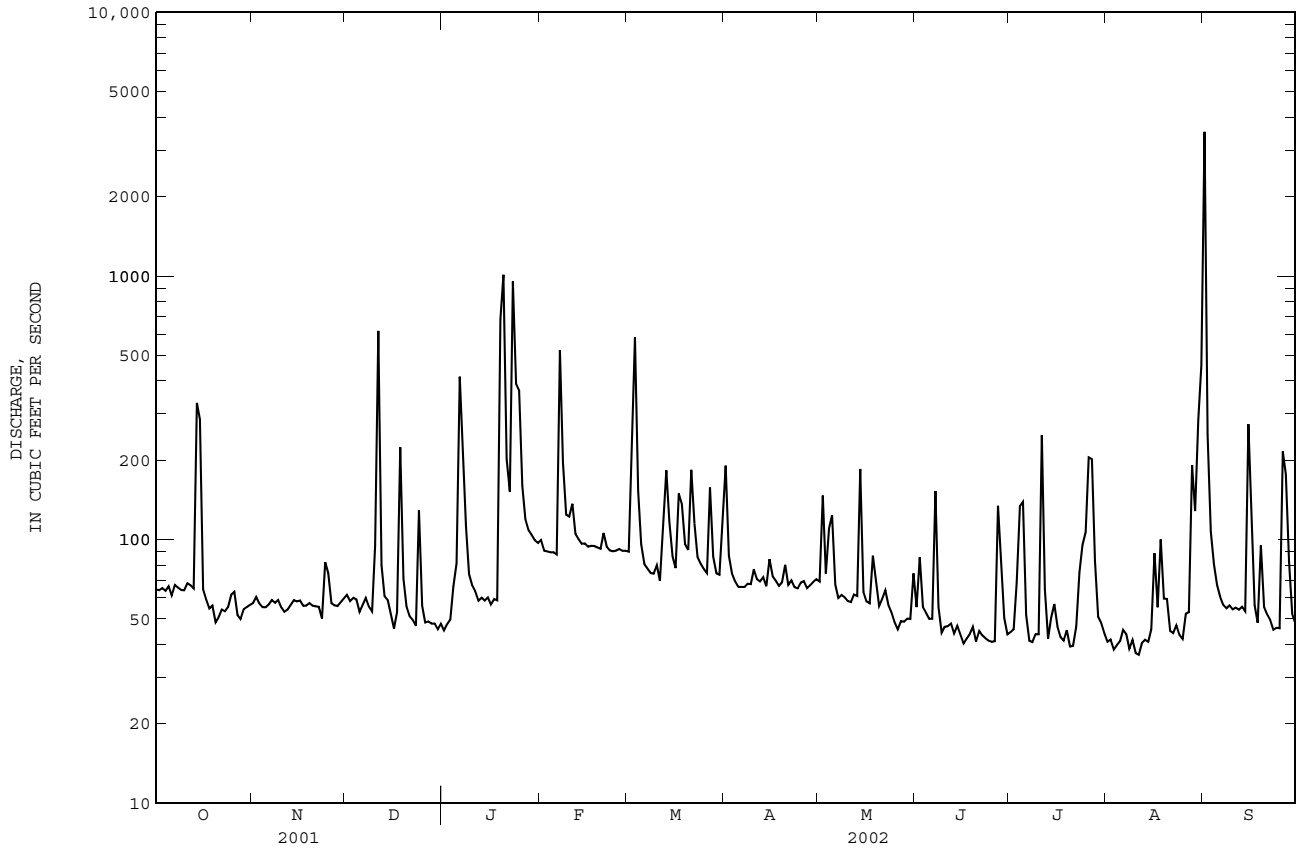
FOR 2002 WATER YEAR

WATER YEARS 1998 - 2002

ANNUAL TOTAL	48353	36551	
ANNUAL MEAN	132.5	100.1	136.6
HIGHEST ANNUAL MEAN			172
LOWEST ANNUAL MEAN			100
HIGHEST DAILY MEAN	1600	Mar 30	3520
LOWEST DAILY MEAN	46	Dec 16	37
ANNUAL SEVEN-DAY MINIMUM	49	Dec 25	40
MAXIMUM PEAK FLOW			5730
MAXIMUM PEAK STAGE			17.53
INSTANTANEOUS LOW FLOW			22
ANNUAL RUNOFF (CFSM)	1.50		1.13
ANNUAL RUNOFF (INCHES)	20.32		15.36
10 PERCENT EXCEEDS	232		150
50 PERCENT EXCEEDS	81		61
90 PERCENT EXCEEDS	56		44

e Estimated.

0209553650 BUFFALO CREEK AT SECONDARY ROAD 2819 NEAR McLEANSVILLE, NC--Continued



PRECIPITATION RECORDS

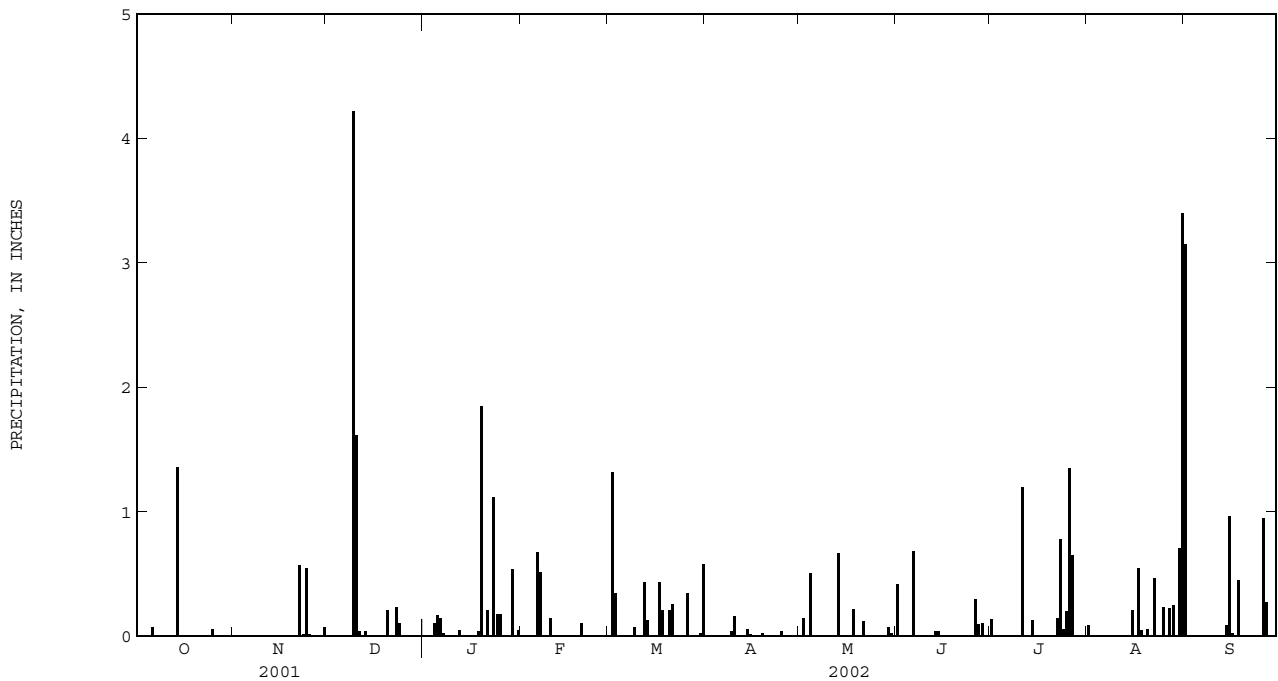
PERIOD OF RECORD.--August 1998 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.42	0.14	0.09	3.15
2	0.0	0.0	0.0	0.0	0.0	1.32	0.0	0.15	0.0	0.01	0.00	0.0
3	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.01	0.0	0.0	0.00	0.0
4	0.0	0.0	0.01	0.11	0.0	0.0	0.0	0.51	0.0	0.0	0.00	0.0
5	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.01	0.0	0.0	0.00	0.0
6	0.08	0.0	0.0	0.15	0.68	0.0	0.0	0.0	0.69	0.0	0.00	0.0
7	0.0	0.0	0.0	0.03	0.52	0.0	0.0	0.0	0.0	0.0	0.00	0.0
8	0.0	0.0	0.0	0.01	0.01	0.0	0.0	0.0	0.0	0.0	0.00	0.0
9	0.0	0.0	4.22	0.0	0.0	0.08	0.04	0.0	0.0	0.0	0.00	0.0
10	0.0	0.0	1.62	0.0	0.15	0.0	0.16	0.0	0.0	0.0	0.00	0.0
11	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.01	0.0	1.20	0.00	0.0
12	0.0	0.0	0.01	0.05	0.0	0.44	0.0	0.0	0.0	0.0	0.00	0.0
13	0.0	0.0	0.04	0.01	0.0	0.13	0.0	0.67	0.04	0.0	0.00	0.0
14	1.36	0.0	0.01	0.01	0.0	0.0	0.06	0.0	0.04	0.13	0.00	0.09
15	0.01	0.0	---	0.0	0.0	0.0	0.02	0.0	0.01	0.0	0.21	0.97
16	0.0	0.0	---	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.03
17	0.0	0.0	---	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.55	0.0
18	0.0	0.0	---	0.04	0.0	0.21	0.0	0.22	0.0	0.0	0.05	0.45
19	0.0	0.0	0.0	1.85	0.0	0.0	0.03	0.0	0.0	0.0	0.00	0.0
20	0.0	0.0	0.21	0.01	0.11	0.21	0.0	0.0	0.0	0.0	0.06	0.01
21	0.0	0.0	0.0	0.21	0.01	0.26	0.0	0.12	0.0	0.00	0.00	0.0
22	0.0	0.57	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.15	0.47	0.0
23	0.0	0.02	0.24	1.12	0.0	0.0	0.0	0.0	0.0	0.78	0.00	0.0
24	0.0	0.55	0.11	0.18	0.0	0.0	0.0	0.0	0.0	0.06	0.00	0.0
25	0.06	0.02	0.0	0.18	0.0	0.0	0.04	0.0	0.0	0.20	0.24	0.0
26	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.30	1.35	0.01	0.95
27	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.10	0.65	0.23	0.28
28	0.0	0.0	---	0.0	0.0	0.0	0.01	0.0	0.11	0.01	0.25	0.01
29	0.0	0.0	0.0	0.54	---	0.0	0.0	0.08	0.0	0.00	0.01	0.0
30	0.0	0.08	0.0	0.0	---	0.03	0.0	0.03	0.0	0.01	0.71	0.0
31	0.0	---	0.0	0.05	---	0.58	---	0.01	---	0.00	3.40	---
TOTAL	1.51	1.24	---	4.74	1.48	4.41	0.37	1.82	1.71	4.69	6.29	5.94



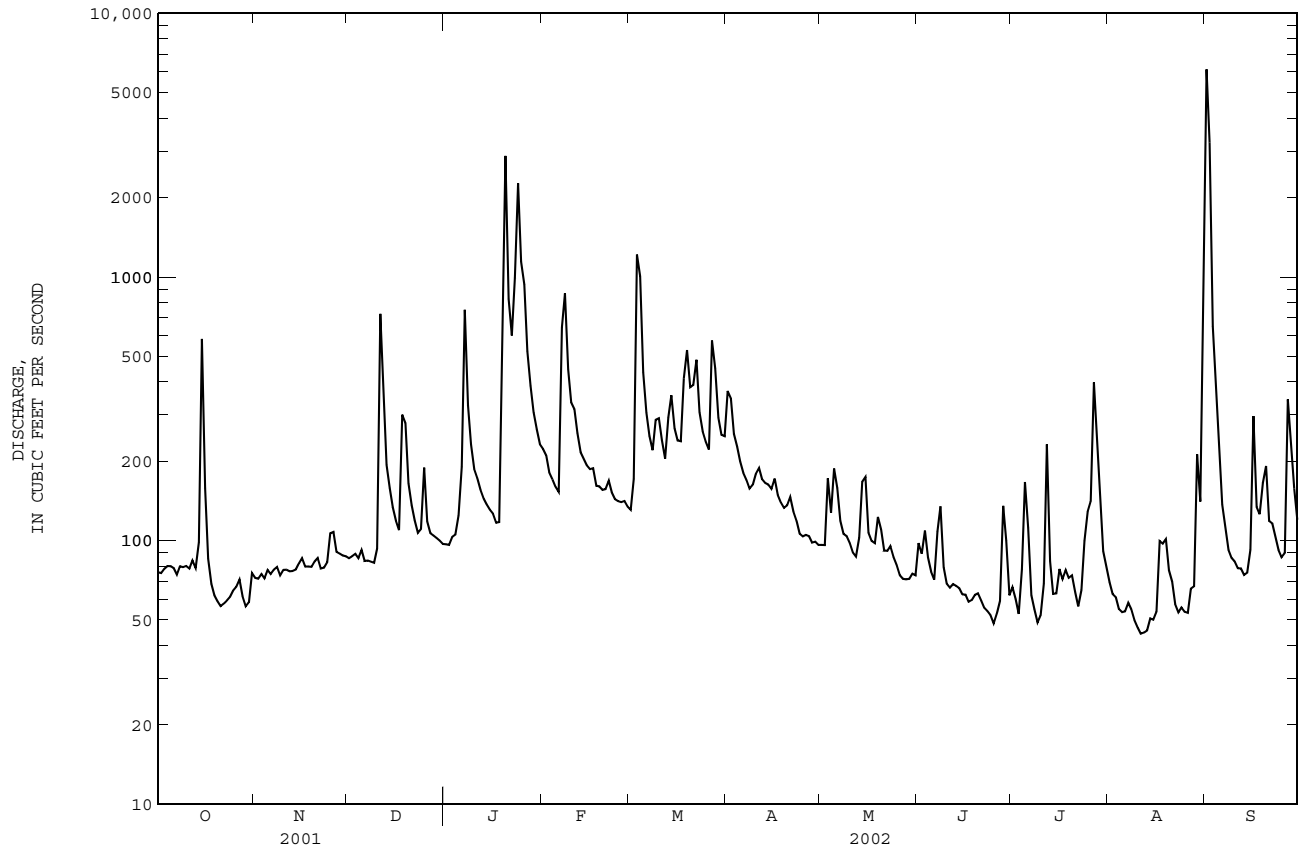


Gaging station at Long Creek near Bessemer City, North Carolina.

02096500 HAW RIVER AT HAW RIVER, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1929 - 2002	
ANNUAL TOTAL	135452		73109		591.5	
ANNUAL MEAN	371.1		200.3		1082	
HIGHEST ANNUAL MEAN					200	
LOWEST ANNUAL MEAN					1996	
HIGHEST DAILY MEAN	6790	Mar 30	6140	Sep 1	42000	Sep 7 1996
LOWEST DAILY MEAN	56	Oct 21	44	Aug 11	5.0	Sep 6 1930
ANNUAL SEVEN-DAY MINIMUM	60	Oct 19	48	Aug 9	16	Oct 7 1954
MAXIMUM PEAK FLOW			9860		51400*	
MAXIMUM PEAK STAGE			17.98		32.83*	
INSTANTANEOUS LOW FLOW			40		3.0	
ANNUAL RUNOFF (CFSM)	0.61		0.33		0.98	
ANNUAL RUNOFF (INCHES)	8.31		4.49		13.26	
10 PERCENT EXCEEDS	689		341		1230	
50 PERCENT EXCEEDS	170		103		292	
90 PERCENT EXCEEDS	78		59		100	

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 mi²

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 510 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Maximum discharge for period of record from rating curve extended above 500 ft³/s, based on contracted-opening measurement of peak flow; maximum gage-height, 7.90 ft, from flood mark. No flow occurs at times most years.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.09	0.08	0.03	0.29	1.2	0.50	5.8	0.17	0.07	0.00	0.01	10
2	0.09	0.09	0.02	0.30	1.0	0.83	4.3	0.19	0.08	0.00	0.00	2.7
3	0.09	0.10	0.02	0.50	0.89	6.8	2.6	0.16	0.07	0.00	0.00	0.67
4	0.07	0.10	0.02	0.53	0.83	5.8	1.9	0.19	0.06	0.02	0.00	0.31
5	0.06	0.09	0.02	0.50	0.78	2.7	1.4	0.23	0.05	0.06	0.00	0.16
6	0.07	0.09	0.02	0.76	0.78	1.9	1.2	0.24	0.04	0.02	0.00	0.09
7	0.11	0.09	0.02	1.6	15	1.5	1.1	0.20	0.06	0.00	0.00	0.06
8	0.08	0.09	0.02	1.3	12	1.3	1.1	0.15	0.05	0.00	0.00	0.04
9	0.07	0.08	0.02	1.2	5.6	1.4	0.98	0.14	0.04	0.00	0.00	0.03
10	0.08	0.08	0.11	1.2	3.4	1.7	1.3	0.12	0.03	0.00	0.00	0.02
11	0.08	0.09	1.4	1.2	2.4	1.4	1.2	0.12	0.03	0.00	0.00	0.01
12	0.09	0.08	0.77	1.2	2.0	1.4	0.99	0.12	0.03	0.00	0.00	0.00
13	0.08	0.07	0.52	1.2	1.7	1.9	0.96	0.15	0.03	0.00	0.00	0.00
14	0.16	0.05	0.42	1.1	1.4	1.9	0.92	0.18	0.02	0.00	0.00	0.01
15	0.27	0.06	0.34	0.97	1.2	1.6	0.79	0.13	0.02	0.00	0.00	0.07
16	0.27	0.06	0.29	0.79	1.1	1.3	0.71	0.11	0.02	0.00	0.00	0.07
17	0.21	0.05	0.29	0.72	0.97	2.6	0.63	0.10	0.01	0.00	0.00	0.06
18	0.16	0.04	0.37	0.68	0.84	7.2	0.55	0.13	0.01	0.00	0.00	0.06
19	0.10	0.04	0.32	9.5	0.81	4.4	0.47	0.13	0.01	0.00	0.00	0.05
20	0.09	0.04	0.32	28	0.81	3.1	0.40	0.10	0.00	0.00	0.00	0.03
21	0.09	0.04	0.31	6.3	0.84	5.0	0.40	0.09	0.00	0.00	0.00	0.02
22	0.07	0.04	0.31	4.8	0.77	6.0	0.36	0.09	0.00	0.00	0.00	0.01
23	0.06	0.03	0.30	37	0.70	3.1	0.31	0.09	0.00	0.09	0.00	0.00
24	0.08	0.06	0.42	18	0.64	2.3	0.26	0.10	0.00	0.49	0.26	0.00
25	0.09	0.06	0.39	13	0.63	2.0	0.23	0.09	0.00	0.08	0.41	0.00
26	0.09	0.06	0.37	7.0	0.63	1.7	0.21	0.08	0.00	0.16	0.07	0.00
27	0.08	0.05	0.33	3.7	0.63	3.1	0.19	0.07	0.00	0.10	0.03	0.04
28	0.07	0.04	0.33	2.8	0.54	2.8	0.19	0.07	0.00	0.07	0.02	0.06
29	0.07	0.04	0.31	2.3	---	2.1	0.20	0.07	0.01	0.05	0.01	0.02
30	0.07	0.03	0.30	1.8	---	1.9	0.16	0.07	0.01	0.03	0.03	0.00
31	0.06	---	0.30	1.5	---	1.7	---	0.07	---	0.02	0.29	---
TOTAL	3.15	1.92	9.01	151.74	60.09	82.93	31.81	3.95	0.75	1.19	1.13	14.59
MEAN	0.102	0.064	0.291	4.895	2.146	2.675	1.060	0.127	0.025	0.038	0.036	0.486
MAX	0.27	0.10	1.4	37	15	7.2	5.8	0.24	0.08	0.49	0.41	10
MIN	0.06	0.03	0.02	0.29	0.54	0.50	0.16	0.07	0.00	0.00	0.00	0.00
CFSM	0.01	0.01	0.04	0.65	0.28	0.35	0.14	0.02	0.00	0.01	0.00	0.06
IN.	0.02	0.01	0.04	0.75	0.30	0.41	0.16	0.02	0.00	0.01	0.01	0.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2002, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	2.324	3.249	4.709	12.84	12.55	18.07	9.139	4.989	3.960	2.451	0.948	4.338		
MAX	8.72	15.5	11.2	28.3	34.3	46.3	16.7	18.7	16.4	13.5	4.47	25.9		
(WY)	1996	1996	1997	1998	1998	1998	1993	1989	1995	2000	1995	1996		
MIN	0.005	0.009	0.29	2.94	2.15	2.68	1.06	0.13	0.025	0.038	0.036	0.018		
(WY)	1999	1999	2002	2001	2002	2002	2002	2002	2002	2002	2002	1990		

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

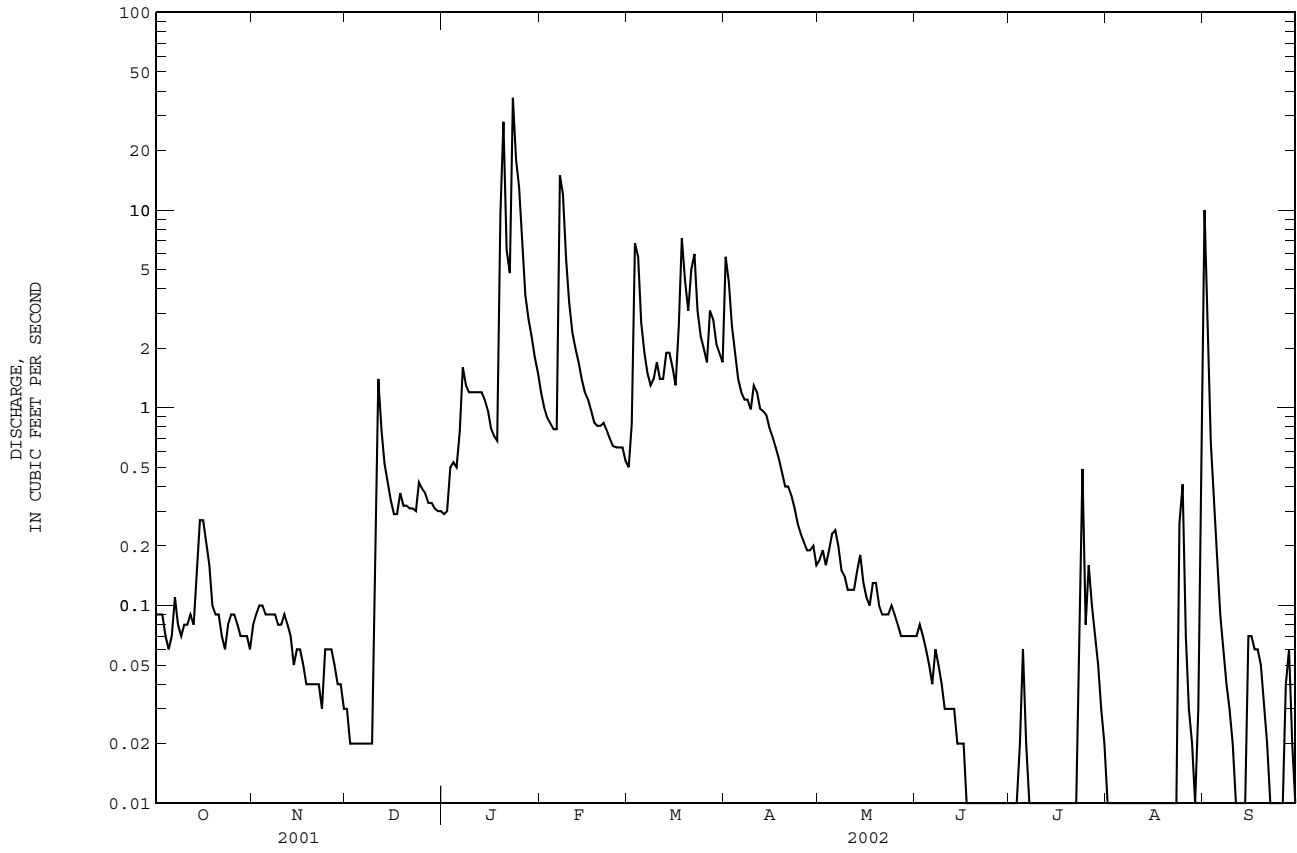
FOR 2002 WATER YEAR

WATER YEARS 1989 - 2002

ANNUAL TOTAL	1467.82	362.26		
ANNUAL MEAN	4.021	0.992		
HIGHEST ANNUAL MEAN			6.413	
LOWEST ANNUAL MEAN			10.8	1998
HIGHEST DAILY MEAN	171	Mar 30	37	Jan 23
LOWEST DAILY MEAN	0.02	Dec 2	0.00	Jun 20
ANNUAL SEVEN-DAY MINIMUM	0.02	Dec 2	0.00	Jun 20
MAXIMUM PEAK FLOW			117	Jan 23
MAXIMUM PEAK STAGE			2.79	Jan 23
INSTANTANEOUS LOW FLOW			0.00*	Jun 20
ANNUAL RUNOFF (CFSM)	0.53		0.13	
ANNUAL RUNOFF (INCHES)	7.24		1.79	
10 PERCENT EXCEEDS	5.4		2.0	
50 PERCENT EXCEEDS	0.59		0.10	
90 PERCENT EXCEEDS	0.07		0.00	

* See REMARKS.

02096846 CANE CREEK NEAR ORANGE GROVE, NC--Continued



CAPE FEAR RIVER BASIN

02096846 CANE CREEK NEAR ORANGE GROVE, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT						
11...	<2.0	<2	<.3	<20	2.8	.0
DEC						
05...	--	--	--	--	3.8	.0
JAN						
23...	<2.0	<2	<.3	<20	103	22.0
FEB						
13...	--	--	--	--	3.5	.02
APR						
19...	<2.0	<2	<.3	<20	5.8	.01
JUN						
20...	--	--	--	--	7.9	--
AUG						
13...	--	--	--	--	5.2	--

Remark codes used in this report:

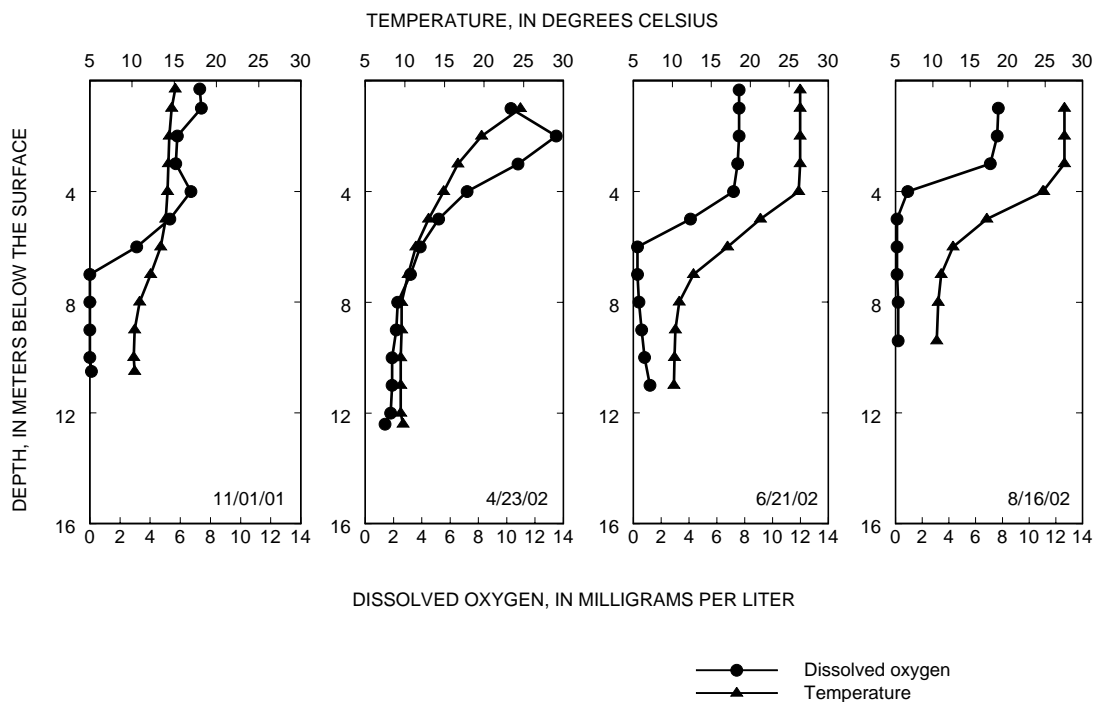
- < -- Less than
- E -- Estimated value
- M -- Presence verified, not quantified

0209684980 CANE CREEK RESERVOIR AT DAM NEAR WHITE CROSS, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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 RECOVERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
NOV							
01...	267	--	<2	<2.0	<4	<.3	<20
01...	2970	--	--	--	--	--	--
01...	3490	--	--	--	--	--	--
APR							
18...	36.2	.05	<2	<2.0	<2	<.3	<20
18...	82.3	--	--	--	--	--	--
18...	990	--	--	--	--	--	--
JUN							
21...	58.9	--	--	--	--	--	--
21...	905	--	--	--	--	--	--
21...	3450	--	--	--	--	--	--
AUG							
16...	71.8	--	--	--	--	--	--
16...	578	--	--	--	--	--	--
16...	4460	--	--	--	--	--	--

Remark codes used in this report:
 < -- Less than
 E -- Estimated value



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 mi².

WATER-DISCHARGE RECORDS

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 NGVD of 1929. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. 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 ft³/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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	81	129	146	483	220	1270	168	112	99	116	6900
2	100	93	127	153	494	291	1040	172	115	100	116	6560
3	111	93	128	177	466	994	786	173	162	85	110	1540
4	122	93	126	182	376	2380	624	242	130	84	95	865
5	124	93	127	187	324	1320	490	233	131	90	80	438
6	140	89	130	201	444	872	418	288	118	168	88	388
7	125	97	134	572	763	640	368	284	112	190	84	188
8	115	95	126	877	1990	561	354	192	113	125	81	200
9	113	98	122	444	1370	485	353	166	183	60	81	151
10	113	102	137	245	1000	735	416	182	144	68	84	127
11	113	99	337	341	689	661	438	165	107	84	82	128
12	109	100	946	295	679	570	407	159	77	83	77	122
13	109	97	629	301	616	531	330	145	87	226	73	115
14	133	100	198	237	497	735	303	148	83	178	70	127
15	178	101	126	248	477	657	315	251	96	111	78	142
16	622	101	130	230	386	601	300	250	91	102	102	191
17	279	107	189	208	395	516	313	174	85	83	107	395
18	150	110	178	199	410	764	276	156	101	84	102	193
19	95	106	402	387	337	1060	253	172	68	105	159	189
20	81	106	340	4400	326	931	252	156	104	106	140	261
21	90	116	212	2460	354	851	250	189	97	115	111	284
22	88	111	204	1370	335	1110	250	158	93	125	87	211
23	86	114	176	3010	343	961	238	135	91	117	114	156
24	86	110	169	5530	291	568	214	122	84	106	93	128
25	89	120	173	2680	305	597	205	137	65	124	87	124
26	90	139	269	2200	301	577	169	127	81	219	120	125
27	86	184	169	1380	291	965	203	118	99	353	125	172
28	88	146	137	975	295	1400	196	111	106	617	87	473
29	85	131	169	814	---	923	175	108	201	405	100	352
30	82	129	170	634	---	652	179	108	131	224	256	185
31	79	---	157	596	---	644	---	111	---	145	411	---
TOTAL	4014	3261	6766	31679	15037	24772	11385	5300	3267	4781	3516	21430
MEAN	129.5	108.7	218.3	1022	537.0	799.1	379.5	171.0	108.9	154.2	113.4	714.3
MAX	622	184	946	5530	1990	2380	1270	288	201	617	411	6900
MIN	79	81	122	146	291	220	169	108	65	60	70	115
CFSM	0.10	0.09	0.17	0.80	0.42	0.63	0.30	0.13	0.09	0.12	0.09	0.56
IN.	0.12	0.10	0.20	0.92	0.44	0.72	0.33	0.15	0.10	0.14	0.10	0.63

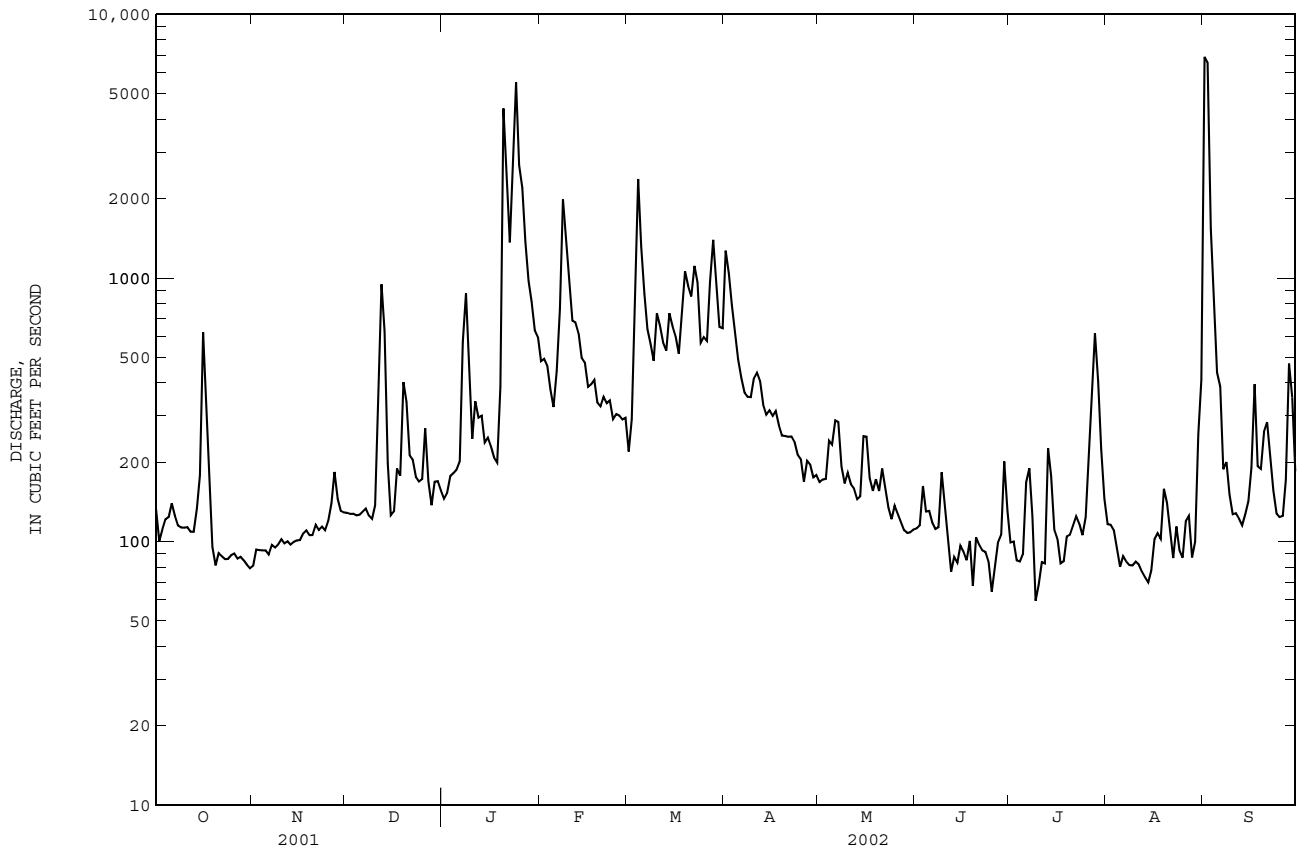
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2002, BY WATER YEAR (WY)

MEAN	638.0	693.3	1069	2186	2121	2498	1662	1090	842.2	758.7	545.7	887.0
MAX	2906	2888	2681	5895	5465	6110	4044	3936	4632	4477	1893	4904
(WY)	1991	1986	1984	1978	1979	1975	1987	1978	1982	1975	1985	1996
MIN	129	109	218	262	537	648	380	171	109	135	113	111
(WY)	2002	2002	2002	1981	2002	1988	2002	2002	2002	1986	2002	1983

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1973 - 2002	
ANNUAL TOTAL	234530		135208			
ANNUAL MEAN	642.5		370.4		1245	
HIGHEST ANNUAL MEAN					2181	
LOWEST ANNUAL MEAN					370	
HIGHEST DAILY MEAN	15700	Mar 30	6900	Sep 1	58000	Sep 6 1996
LOWEST DAILY MEAN	79	Oct 31	60	Jul 9	0.18	Sep 10 1983
ANNUAL SEVEN-DAY MINIMUM	84	Oct 26	78	Aug 9	46	Sep 7 1983
MAXIMUM PEAK FLOW			11200	Sep 1	76700*	Sep 6 1996
MAXIMUM PEAK STAGE			10.14	Sep 1	21.76*	Sep 6 1996
INSTANTANEOUS LOW FLOW			42*	Jul 9	0.18*	Sep 10 1983
ANNUAL RUNOFF (CFSM)	0.50		0.29		0.98	
ANNUAL RUNOFF (INCHES)	6.84		3.94		13.27	
10 PERCENT EXCEEDS	1150		746		2680	
50 PERCENT EXCEEDS	289		169		554	
90 PERCENT EXCEEDS	107		87		157	

* See REMARKS.

02096960 HAW RIVER NEAR BYNUM, NC--Continued



02096960 HAW RIVER NEAR BYNUM, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
AUG					
14...	--	--	--	5.7	1.1
20...	--	--	--	7.3	2.5
27...	--	--	--	9.0	3.4
SEP					
04...	--	--	--	17	38.3
11...	--	--	--	8.9	3.1
17...	--	--	--	8.6	8.8
17...	<2	<.3	40	7.3	7.5
25...	--	--	--	18	7.1

Remark codes used in this report:

< -- Less than

E -- Estimated value

M -- Presence verified, not quantified

CAPE FEAR RIVER BASIN

0209719700 B. EVERETT 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 (station 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 2001 TO SEPTEMBER 2002

Date	Time	COLOR (PLAT-INUM-COBALT UNITS) (00080)	SAMPLING DEPTH (M) (00098)	TRANSPAR-ENCY (SECCHI DISK) (M) (00078)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301)	PH WATER FIELD (STAND-ARD UNITS) (00400)	SPE-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV													
02...	0915	30	1.0	.40	768	9.8	99	8.8	232	16.5	35	8.68	3.15
02...	0920	--	3.5	--	768	10.0	101	8.7	252	16.1	--	--	--
02...	0925	--	4.2	--	768	10.4	102	8.2	342	14.9	--	--	--
APR													
16...	0915	40	1.0	1.10	763	7.4	85	7.5	233	22.4	42	9.92	4.14
16...	0920	--	3.0	--	763	7.1	75	7.1	173	18.5	--	--	--
16...	0925	--	5.0	--	763	3.6	37	6.8	180	16.5	--	--	--
JUN													
18...	0915	40	1.0	.60	760	7.5	94	8.7	453	26.4	40	9.44	4.08
18...	0920	--	2.0	--	760	8.5	105	8.5	450	26.3	--	--	--
18...	0925	--	3.0	--	760	9.0	112	8.1	514	26.2	--	--	--
SEP													
03...	1315	150	1.0	.40	762	8.0	92	6.9	93	22.3	23	5.57	2.24
03...	1320	--	2.0	--	762	8.1	91	6.8	93	21.1	--	--	--
03...	1325	--	4.0	--	762	8.1	91	6.8	92	20.9	--	--	--

Date	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD IT FIELD (MG/L AS CACO3) (00419)	BICAR-BONATE (MG/L AS HCO3) (99440)	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)	SULFATE (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)
NOV													
02...	5.04	31.2	59	72	26.7	.3	3.8	27.3	152	<.015	1.8	E.010	.009
02...	--	--	--	--	--	--	--	--	--	<.015	1.5	.054	.016
02...	--	--	--	--	--	--	--	--	--	<.015	1.2	.226	.011
APR													
16...	4.72	32.0	42	51	26.2	.2	2.2	28.2	141	.060	.85	1.01	.007
16...	--	--	--	--	--	--	--	--	--	.080	.70	.626	.007
16...	--	--	--	--	--	--	--	--	--	.278	1.0	.575	.008
JUN													
18...	8.07	64.1	59	72	47.0	.5	3.0	55.2	257	E.009	1.7	.568	.016
18...	--	--	--	--	--	--	--	--	--	E.009	1.6	.584	.016
18...	--	--	--	--	--	--	--	--	--	.135	1.8	1.07	.017
SEP													
03...	3.39	6.03	17	21	5.40	.1	7.2	11.1	76	.127	.88	.742	.010
03...	--	--	--	--	--	--	--	--	--	.127	.83	.736	.010
03...	--	--	--	--	--	--	--	--	--	.133	.86	.717	.010

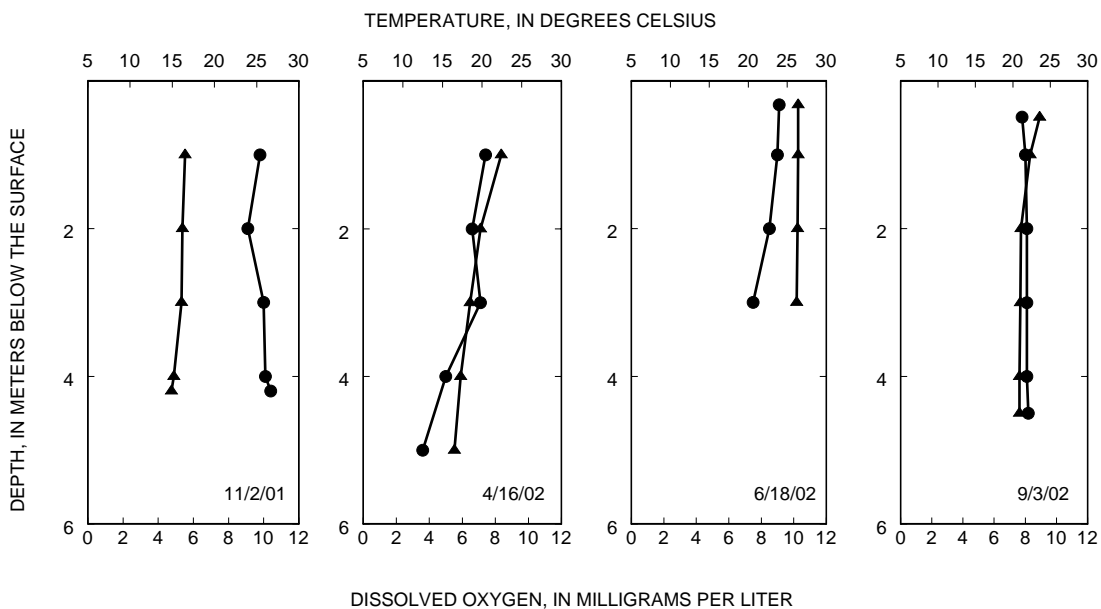
Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70954)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC 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)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)
NOV													
02...	<.007	.14	14.7	50.7	E.9	50	<4	<.1	<.8	<2.0	1.4	150	<1
02...	<.007	.11	--	--	--	--	--	--	--	--	--	160	--
02...	.023	.15	--	--	--	--	--	--	--	--	--	270	--
APR													
16...	.089	.14	7.0	E4.8	<.1	70	<2	<.1	E.6	E1.2	6.1	500	M
16...	.030	.08	--	--	--	--	--	--	--	--	--	440	--
16...	.037	.11	--	--	--	--	--	--	--	--	--	710	--
JUN													
18...	.073	.23	11.1	E36.1	E1.1	--	--	--	--	--	--	260	--
18...	.075	.22	--	--	--	--	--	--	--	--	--	270	--
18...	.182	.33	--	--	--	--	--	--	--	--	--	700	--
SEP													
03...	.041	--	10.6	.9	<.1	--	--	--	--	--	--	1290	--
03...	.044	--	--	--	--	--	--	--	--	--	--	390	--
03...	.042	--	--	--	--	--	--	--	--	--	--	1640	--

0209719700 B. EVERETT JORDAN LAKE, HAW RIVER ARM, ABOVE B. EVERETT JORDAN DAM, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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 RECOVERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
NOV 02...	47.2	<.01	5	E1.9	<4	<.3	<20
NOV 02...	47.7	--	--	--	--	--	--
NOV 02...	49.0	--	--	--	--	--	--
APR 16...	77.3	.02	4	2.4	<2	<.3	<20
APR 16...	62.7	--	--	--	--	--	--
APR 16...	305	--	--	--	--	--	--
JUN 18...	101	--	--	--	--	--	--
JUN 18...	103	--	--	--	--	--	--
JUN 18...	210	--	--	--	--	--	--
SEP 03...	208	--	--	--	--	--	--
SEP 03...	223	--	--	--	--	--	--
SEP 03...	268	--	--	--	--	--	--

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified



● Dissolved oxygen
 ▲ Temperature

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 mi².

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 230 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Considerable diurnal fluctuation at low flow. An average of 48.5 ft³/s was diverted from the Neuse River Basin for Durham municipal water supply; 20.0 ft³/s was returned to the Cape Fear River Basin, and about 11.6 ft³/s was returned to the Neuse River Basin. Maximum discharge for period of record 12,700 ft³/s, from rating curve extended above 3,500 ft³/s, by logarithmic plotting. Maximum gage height for period of record 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 not determined due to regulation. Minimum discharge unregulated, 4.2 ft³/s, Apr. 28, 29, May 1, 2, and July 10, 1985. Minimum discharge for current water year due to regulation.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	16	18	12	40	25	255	17	14	12	12	321
2	15	16	17	12	34	26	249	17	21	12	11	210
3	14	16	17	14	29	131	90	17	20	13	17	53
4	15	18	17	14	26	149	54	17	15	10	14	28
5	15	25	17	17	23	91	40	39	15	11	12	19
6	15	19	17	24	22	48	35	24	14	11	11	16
7	19	16	17	72	83	40	31	19	14	9.5	11	14
8	19	17	16	87	233	33	30	18	13	10	10	13
9	16	18	16	69	184	30	29	18	13	10	10	13
10	15	17	17	53	130	37	39	17	13	10	10	13
11	15	17	106	45	96	30	41	16	13	13	9.7	13
12	15	17	104	40	72	28	31	15	13	21	10	12
13	14	17	41	42	57	41	28	16	12	13	11	12
14	17	17	28	44	47	41	26	28	12	10	11	14
15	147	17	23	37	42	33	26	21	11	20	11	114
16	72	17	20	31	37	29	26	17	11	15	36	132
17	25	17	19	25	33	36	25	16	11	11	20	70
18	20	17	47	23	30	111	24	16	11	10	13	26
19	18	16	25	36	29	91	22	29	11	11	15	55
20	17	19	3.7	298	27	60	23	19	11	11	14	39
21	16	19	3.0	389	27	72	23	16	11	37	12	18
22	17	17	3.1	235	27	114	22	16	10	16	11	15
23	17	15	3.4	219	25	68	21	16	9.8	12	11	14
24	17	17	3.9	527	24	45	20	15	10	49	11	13
25	18	28	4.7	397	24	39	19	15	10	147	13	13
26	17	26	6.7	250	23	35	19	14	10	107	23	13
27	16	23	8.3	165	102	132	18	14	11	48	45	13
28	16	19	9.7	117	105	88	18	15	11	19	112	14
29	17	18	11	87	---	47	19	15	25	16	40	15
30	17	19	11	64	---	36	18	15	17	14	39	13
31	17	---	11	49	---	36	---	15	---	13	195	---
TOTAL	703	550	661.5	3494	1631	1822	1321	562	392.8	721.5	780.7	1328
MEAN	22.68	18.33	21.34	112.7	58.25	58.77	44.03	18.13	13.09	23.27	25.18	44.27
MAX	147	28	106	527	233	149	255	39	25	147	195	321
MIN	14	15	3.0	12	22	25	18	14	9.8	9.5	9.7	12
CFSM	0.30	0.24	0.28	1.48	0.77	0.77	0.58	0.24	0.17	0.31	0.33	0.58
IN.	0.34	0.27	0.32	1.71	0.80	0.89	0.65	0.28	0.19	0.35	0.38	0.65

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2002, BY WATER YEAR (WY)

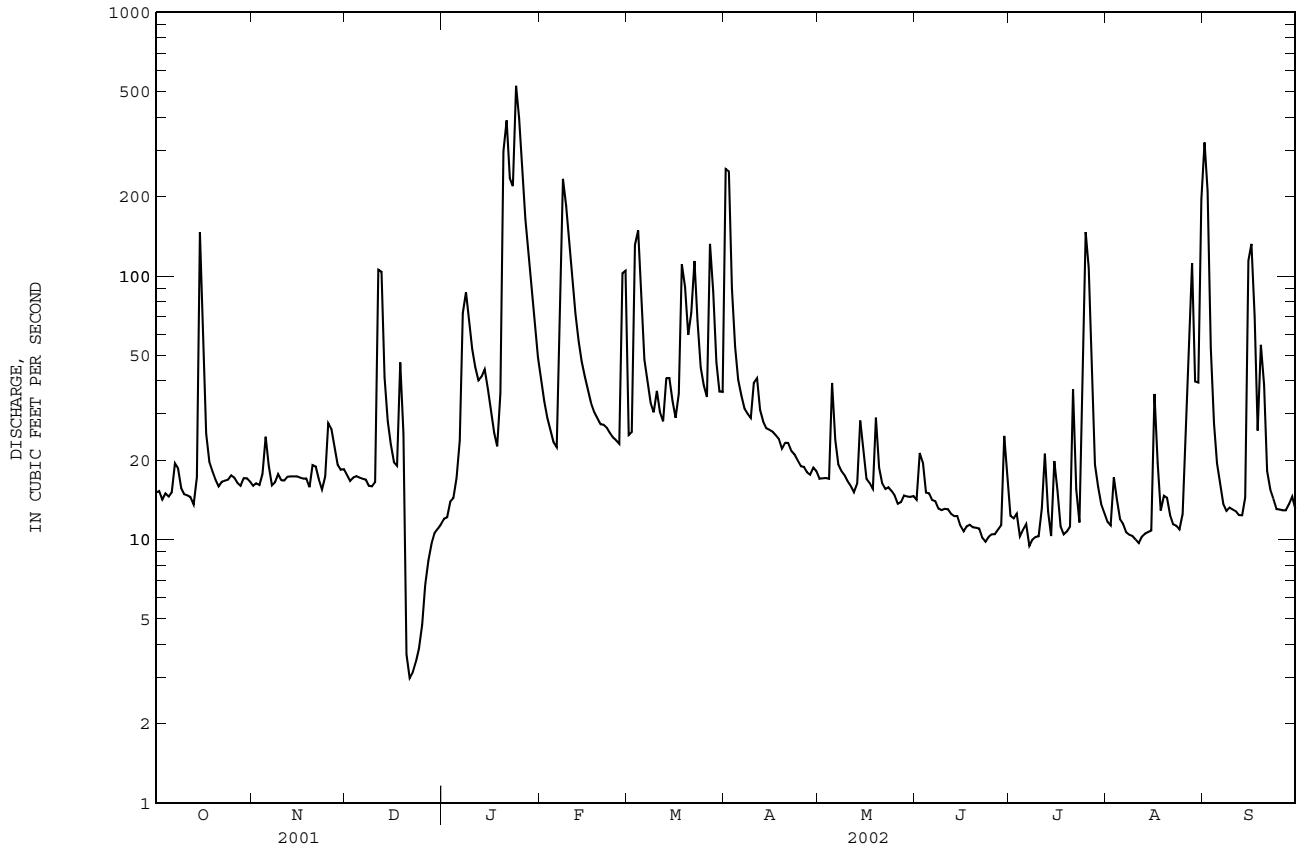
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	45.05	71.19	76.14	159.8	197.3	199.8	139.8	88.30	45.14	45.02	41.40	67.07								
MAX	122	371	264	509	463	493	618	411	154	156	97.8	507								
(WY)	1990	1986	1984	1991	1998	1998	1987	1997	1995	1995	1986	1999								
MIN	12.8	16.1	17.0	31.6	58.2	42.0	13.5	18.1	13.1	12.9	14.5	10.8								
(WY)	1987	1985	1989	2001	2002	1985	1985	2002	2002	1993	1997	1984								

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1983 - 2002	
ANNUAL TOTAL	23373.5		13967.5			
ANNUAL MEAN	64.04		38.27		97.44	
HIGHEST ANNUAL MEAN					156	1984
LOWEST ANNUAL MEAN					38.3	2002
HIGHEST DAILY MEAN	2000	Apr 1	527	Jan 24	6300	Sep 6 1996
LOWEST DAILY MEAN	3.0	Dec 21	3.0	Dec 21	0.39	Dec 30 1988
ANNUAL SEVEN-DAY MINIMUM	4.1	Dec 20	4.1	Dec 20	4.1	Dec 20 2001
MAXIMUM PEAK FLOW			603	Jan 24	12700*	Sep 6 1996
MAXIMUM PEAK STAGE			8.98	Jan 24	18.74*	Sep 12 1996
INSTANTANEOUS LOW FLOW			2.8	Dec 21	NOT DETERMINED	
ANNUAL RUNOFF (CFSM)	0.84		0.50		1.28	
ANNUAL RUNOFF (INCHES)	11.46		6.85		17.44	
10 PERCENT EXCEEDS	118		89		212	
50 PERCENT EXCEEDS	22		18		33	
90 PERCENT EXCEEDS	15		11		13	

* See REMARKS.

02097314 NEW HOPE CREEK NEAR BLANDS, NC--Continued



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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to January 1994, August 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 229.01 ft above NGVD of 1929, by levels. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records poor. An average of 48.5 ft³/s was diverted from the Neuse River basin for municipal water supply; 20.0 ft³/s was returned to the Cape Fear River basin, of which 5.2 ft³/s entered upstream from station as treated effluent. About 11.6 ft³/s was returned to the Neuse River basin as treated effluent. Maximum discharge for period of record from rating curve extended above 2,000 ft³/s, by logarithmic plotting.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	7.3	3.9	4.4	10	7.9	72	7.2	3.7	6.1	4.7	281
2	6.2	7.3	3.8	4.9	9.8	8.3	20	7.2	6.1	6.2	4.8	42
3	6.4	6.5	4.0	4.9	9.8	14	10	6.9	3.8	5.9	5.2	15
4	6.5	6.5	4.0	5.8	10	8.6	7.8	6.8	3.4	5.3	4.6	12
5	6.6	7.2	4.0	6.7	11	7.2	7.4	8.5	4.0	5.2	4.9	11
6	8.2	7.0	4.0	16	11	6.5	6.9	6.3	3.6	5.7	4.9	11
7	9.3	7.0	3.9	33	134	6.2	7.3	5.6	3.6	5.4	4.5	11
8	7.3	7.0	3.6	9.7	104	6.0	7.8	5.3	3.8	6.3	4.3	11
9	7.1	6.8	3.5	4.8	19	5.7	7.8	5.1	3.9	6.4	4.0	12
10	7.3	6.8	3.9	4.9	12	5.6	13	4.9	4.7	9.0	3.7	12
11	7.4	5.9	17	5.2	11	5.4	10	4.5	5.1	15	3.7	12
12	7.3	6.7	4.9	3.6	9.2	5.2	8.7	4.4	5.3	7.0	3.8	12
13	7.2	7.1	3.1	7.3	8.4	5.7	9.0	4.8	5.3	5.3	4.3	12
14	10	7.2	2.8	4.1	8.3	5.2	9.7	5.3	5.4	5.0	5.2	14
15	63	7.5	2.8	2.8	8.7	4.5	11	4.6	4.9	5.5	5.8	34
16	11	7.4	2.8	2.6	8.6	4.3	11	3.9	4.5	6.0	5.7	94
17	8.1	6.7	3.1	2.6	8.4	5.3	11	3.7	4.7	6.0	7.5	40
18	7.2	5.6	6.9	2.9	8.6	7.1	10	3.5	5.1	6.1	5.8	13
19	6.8	6.1	4.6	25	8.8	6.5	10	3.5	5.3	6.7	8.6	41
20	6.5	6.3	3.8	353	8.9	6.7	11	3.3	5.1	5.9	5.0	27
21	6.3	6.1	3.7	42	9.3	11	10	3.3	4.7	9.1	5.0	5.9
22	7.1	5.3	3.6	14	9.4	19	9.9	3.3	4.1	6.0	4.8	5.0
23	7.6	4.8	3.5	138	8.9	12	9.3	3.3	3.7	5.4	4.8	5.3
24	7.7	4.9	3.8	293	8.7	10	8.8	3.2	4.1	5.1	4.6	5.3
25	8.0	4.8	3.9	66	8.8	11	8.9	3.1	4.3	23	5.0	5.2
26	7.9	4.6	3.9	27	8.6	12	8.5	3.1	4.7	50	43	5.5
27	7.2	4.3	4.1	12	8.4	44	7.7	3.1	5.2	8.8	18	6.1
28	7.1	4.2	4.1	10	8.1	15	7.6	3.4	7.2	5.5	18	6.3
29	7.5	4.2	4.1	9.4	---	9.9	8.1	3.4	11	4.9	7.8	5.4
30	7.8	4.2	4.1	9.6	---	9.4	7.6	3.6	5.5	4.8	11	5.8
31	7.6	---	4.3	9.2	---	9.8	---	3.5	---	4.9	132	---
TOTAL	287.1	183.3	133.5	1134.4	489.7	295.0	347.8	141.6	145.8	257.5	355.0	772.8
MEAN	9.261	6.110	4.306	36.59	17.49	9.516	11.59	4.568	4.860	8.306	11.45	25.76
MAX	63	7.5	17	353	134	44	72	8.5	11	50	132	281
MIN	5.9	4.2	2.8	2.6	8.1	4.3	6.9	3.1	3.4	4.8	3.7	5.0
CFSM	0.44	0.29	0.20	1.73	0.83	0.45	0.55	0.22	0.23	0.39	0.54	1.22
IN.	0.51	0.32	0.24	2.00	0.86	0.52	0.61	0.25	0.26	0.45	0.63	1.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2002,® BY WATER YEAR (WY)

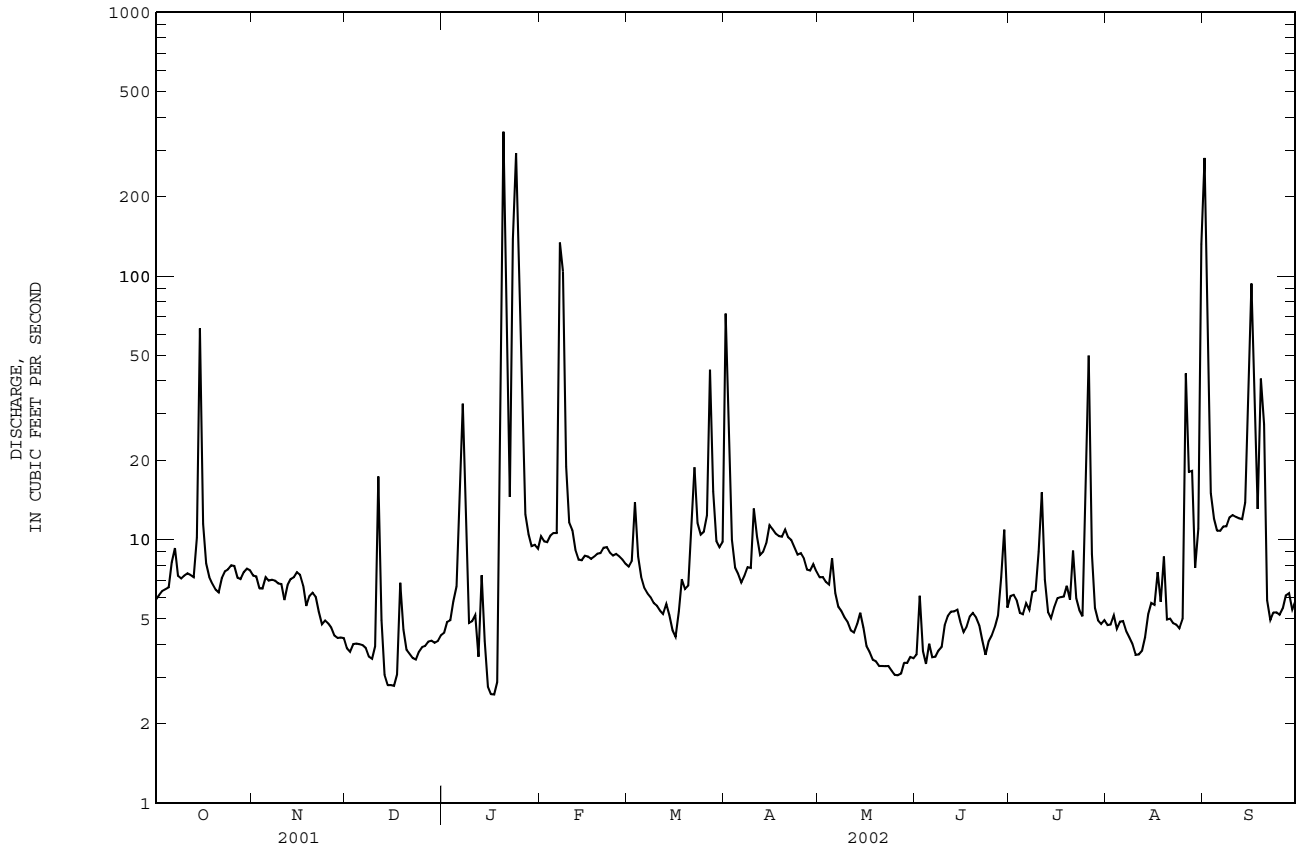
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	18.27	24.54	29.46	56.33	56.34	59.25	34.32	18.49	11.86	14.44	16.63	33.82								
MAX	60.2	82.7	86.3	134	111	128	84.5	59.1	44.4	48.6	66.7	247								
(WY)	1996	1993	1984	1998	1998	1998	1993	1990	1992	1989	1986	1999								
MIN	3.27	3.89	4.31	12.6	10.8	8.18	4.00	4.57	4.55	3.33	3.50	2.49								
(WY)	1986	1985	2002	1986	1991	1985	1985	2002	1987	1983	1983	1983								

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1983 - 2002®

ANNUAL TOTAL	7876.5	4543.5	
ANNUAL MEAN	21.58	12.45	31.40
HIGHEST ANNUAL MEAN			49.1
LOWEST ANNUAL MEAN			12.4
HIGHEST DAILY MEAN	722	Mar 30	353
LOWEST DAILY MEAN	2.2	Jun 21	2.6
ANNUAL SEVEN-DAY MINIMUM	3.4	Jul 31	3.2
MAXIMUM PEAK FLOW			467
MAXIMUM PEAK STAGE			9.49
INSTANTANEOUS LOW FLOW			2.1
ANNUAL RUNOFF (CFSM)	1.02		0.59
ANNUAL RUNOFF (INCHES)	13.89		8.01
10 PERCENT EXCEEDS	30		14
50 PERCENT EXCEEDS	7.6		6.5
90 PERCENT EXCEEDS	4.0		3.7

® See PERIOD OF RECORD.
* See REMARKS.

0209741955 NORTHEAST CREEK AT SECONDARY ROAD 1100 NEAR GENLEE, NC--Continued



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983-86, 1988-1995, 1999, 2001.

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.

COOPERATION.--Sample for October 1994 and April 1995 were collected by the North Carolina Department of Environment, Health, and Natural Resources. A GC/FID scan for trace organic compounds was performed on these samples by the U.S. Geological Survey Water Quality Lab. Results may be obtained from the District Office in Raleigh, NC. Instantaneous discharge is not available for April and August 1994.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 872 microsiemens, Oct. 15, 1984; minimum, 29 microsiemens, Jan. 11, Apr. 5, 1984.

WATER TEMPERATURE: Maximum, 29.0°C, Aug. 23, 1983; minimum, 0.0°C, Dec. 28, 1983, Jan. 2, 22, 23, 1984.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, PH DIS-SOLVED WHOLE FIELD (STAND-ARD ANCE ATION) (00301)	PH WATER SPE-CIFIC CON-DUCT-ATURE (US/CM) (00095)	HARD-NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS-SOLVED AS CA (00915)	MAGNE-SIUM, DIS-SOLVED AS MG (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)			
SEP 16...	1045	86	375	756	6.8	80	6.8	114	22.7	30	8.14	2.23	3.24	
Date	Time	ANC SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	BICAR-BONATE IT-FLD FIELD (MG/L AS CACO3) (00419)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + DIS-SOLVED (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	
SEP 16...	11.1	33	41	9.59	.1	5.2	8.1	93	.030	1.4	1.66	.007	.071	
Date	Time	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	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)	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)
SEP 16...	17.7	3810	<2	<.1	5.3	5.0	16.3	5220	9	453	.02	6	6.7	
Date	Time	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)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (T/DAY) (80155)									
SEP 16...		<2	E.2	70	428	99.3								

Remark codes used in this report:
 < -- Less than
 E -- Estimated value



Gaging station at Long Creek near Rhyne, North Carolina.

CAPE FEAR RIVER BASIN

02097464 MORGAN CREEK NEAR WHITE CROSS, NC

LOCATION.--Lat 35°55'25", long 79°06'56", Orange County, Hydrologic Unit 03020002, at downstream side of culvert on State Highway 54, 2 mi upstream from University Lake, and 3.5 mi east of White Cross.

DRAINAGE AREA.--8.35 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 420 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records poor. Maximum discharge for period of record from rating curve extended above 2,700 ft³/s, by logarithmic plotting. No flow many days June to Sept. 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.11	0.15	0.12	0.18	2.5	2.9	12	0.67	0.05	0.04	0.01	0.57
2	0.09	0.16	0.14	0.23	2.8	4.1	4.6	0.83	0.05	0.04	0.01	0.12
3	0.08	0.17	0.14	0.28	2.6	8.8	3.0	0.84	0.03	0.04	0.01	0.01
4	0.08	0.15	0.12	0.42	3.2	5.3	2.2	1.7	0.03	0.04	0.01	0.02
5	0.07	0.12	0.09	0.43	3.7	3.6	1.9	2.2	0.02	0.06	0.01	0.02
6	0.08	0.12	0.08	0.41	4.0	3.1	1.8	1.4	0.02	0.04	0.01	0.01
7	0.10	0.11	0.09	0.51	20	3.0	1.6	0.79	0.03	0.03	0.01	0.01
8	0.08	0.12	0.12	0.70	10	2.9	1.5	0.67	0.03	0.03	0.00	0.00
9	0.08	0.13	0.11	0.82	5.4	3.1	1.6	0.64	0.04	0.02	0.00	0.00
10	0.09	0.12	0.17	0.96	4.0	3.3	1.9	0.46	0.02	0.03	0.00	0.00
11	0.09	0.13	1.4	2.5	3.4	2.7	1.7	0.17	0.01	0.03	0.00	0.00
12	0.08	0.14	0.29	2.0	2.8	3.0	1.5	0.66	0.01	0.02	0.00	0.01
13	0.07	0.14	0.23	1.9	2.7	3.7	1.5	0.48	0.01	0.01	0.00	0.01
14	0.24	0.13	0.20	1.3	2.2	3.5	1.4	2.1	0.01	0.01	0.00	0.01
15	0.67	0.12	0.19	1.1	2.1	3.1	1.4	2.0	0.01	0.02	0.01	0.02
16	0.30	0.14	0.19	0.94	2.3	3.1	1.3	1.4	0.00	0.02	0.01	0.03
17	0.14	0.14	0.25	0.87	2.5	4.9	1.3	1.2	0.00	0.01	0.02	0.02
18	0.07	0.14	0.46	0.84	2.4	8.0	1.2	1.6	0.00	0.01	0.02	0.03
19	0.10	0.14	0.40	18	2.0	6.3	1.2	0.60	0.00	0.00	0.01	0.02
20	0.10	0.13	0.29	22	2.1	5.6	1.7	0.31	0.00	0.00	0.01	0.03
21	0.09	0.12	0.25	7.4	2.3	8.4	1.6	0.55	0.00	0.00	0.01	0.03
22	0.09	0.11	0.22	5.9	1.9	7.6	1.5	0.23	0.01	0.00	0.01	0.02
23	0.10	0.12	0.22	68	2.0	4.7	1.4	0.08	0.01	0.01	0.01	0.02
24	0.09	0.19	0.37	24	2.2	3.7	0.98	0.03	0.00	0.11	0.00	0.02
25	0.09	0.24	0.31	17	2.2	3.2	1.3	0.07	0.00	0.16	0.01	0.02
26	0.10	0.23	0.38	8.3	2.4	2.8	1.1	0.14	0.00	0.22	0.00	0.02
27	0.12	0.20	0.34	5.1	2.9	3.1	1.1	0.15	0.01	0.12	0.01	0.02
28	0.12	0.14	0.33	3.7	2.9	2.4	1.5	0.07	0.09	0.06	0.01	0.03
29	0.13	0.10	0.52	3.0	---	2.2	0.99	0.06	0.32	0.02	0.02	0.02
30	0.12	0.11	0.31	2.6	---	2.2	0.88	0.06	0.11	0.01	0.03	0.01
31	0.13	---	0.21	2.3	---	3.2	---	0.08	---	0.01	0.13	---
TOTAL	3.90	4.26	8.54	203.69	101.5	127.5	58.65	22.24	0.92	1.22	0.39	1.15
MEAN	0.126	0.142	0.275	6.571	3.625	4.113	1.955	0.717	0.031	0.039	0.013	0.038
MAX	0.67	0.24	1.4	68	20	8.8	12	2.2	0.32	0.22	0.13	0.57
MIN	0.07	0.10	0.08	0.18	1.9	2.2	0.88	0.03	0.00	0.00	0.00	0.00
CFSM	0.02	0.02	0.03	0.79	0.43	0.49	0.23	0.09	0.00	0.00	0.00	0.00
IN.	0.02	0.02	0.04	0.91	0.45	0.57	0.26	0.10	0.00	0.01	0.00	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2002, BY WATER YEAR (WY)

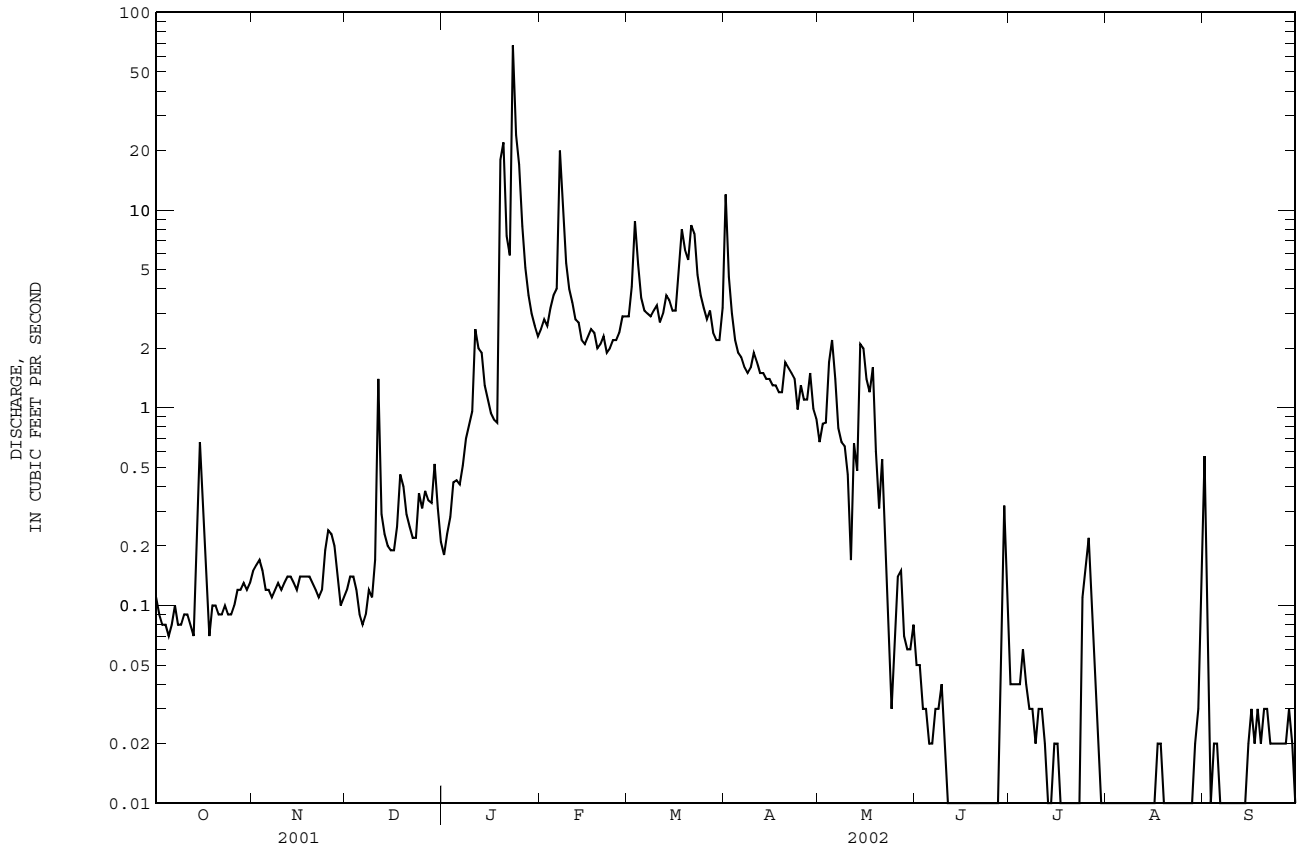
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	3.717	4.365	4.498	12.56	13.71	18.69	9.896	6.524	4.706	2.874	2.687	6.429		
MAX	13.1	15.3	13.2	33.4	39.7	53.0	18.2	30.1	19.9	12.3	18.7	40.4		
(WY)	1990	1996	1990	1998	1998	1998	1993	1989	1995	2000	1995	1999		
MIN	0.13	0.13	0.28	2.44	3.63	4.11	1.95	0.72	0.031	0.039	0.013	0.038		
(WY)	2002	1999	2002	2001	2002	2002	2002	2002	2002	2002	2002	2002		

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1989 - 2002

ANNUAL TOTAL	1443.45	533.96	
ANNUAL MEAN	3.955	1.463	
HIGHEST ANNUAL MEAN			12.5 1998
LOWEST ANNUAL MEAN			1.46 2002
HIGHEST DAILY MEAN	151 Mar 30	68 Jan 23	737 Sep 6 1996
LOWEST DAILY MEAN	0.06 Sep 18	0.00 Jun 16	0.00 Jun 16 2002
ANNUAL SEVEN-DAY MINIMUM	0.08 Oct 3	0.00 Aug 8	0.00 Aug 8 2002
MAXIMUM PEAK FLOW		236 Jan 23	3100* Aug 27 1995
MAXIMUM PEAK STAGE		5.57 Jan 23	11.20 Aug 27 1995
INSTANTANEOUS LOW FLOW		0.00* Jun 16	0.00* Jun 16 2002
ANNUAL RUNOFF (CFSM)	0.47	0.18	0.88
ANNUAL RUNOFF (INCHES)	6.43	2.38	11.91
10 PERCENT EXCEEDS	5.9	3.2	14
50 PERCENT EXCEEDS	1.3	0.14	2.7
90 PERCENT EXCEEDS	0.12	0.01	0.20

* See REMARKS.

02097464 MORGAN CREEK NEAR WHITE CROSS, NC--Continued



02097464 MORGAN CREEK NEAR WHITE CROSS, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT						
11...	<2.0	<2	<.3	<20	4.2	.0
DEC						
04...	--	--	--	--	6.8	.0
JAN						
23...	2.8	<2	<.3	40	640	390
FEB						
13...	--	--	--	--	3.4	.02
APR						
19...	<2.0	<2	<.3	<20	14	.04
JUN						
20...	--	--	--	--	8.6	--
AUG						
13...	--	--	--	--	11	--

Remark codes used in this report:

< -- Less than

E -- Estimated value

M -- Presence verified, not quantified

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 mi².

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 2001 TO SEPTEMBER 2002

Date	Time	COLOR (PLAT- INUM- COBALT UNITS) (00080)	SAM- PLING DEPTH (M) (00098)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	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)
OCT													
12...	0900	40	1.0	.50	758	5.6	60	7.2	96	18.2	33	8.80	2.76
12...	0905	--	3.0	--	758	.1	1	7.0	114	16.8	--	--	--
12...	0910	--	6.0	--	758	.2	2	7.6	416	14.1	--	--	--
APR													
22...	1130	25	1.0	.90	760	8.4	102	7.5	101	24.6	30	7.50	2.64
22...	1135	--	4.0	--	760	1.5	15	6.4	106	13.8	--	--	--
22...	1140	--	8.0	--	760	.5	5	6.9	169	10.5	--	--	--
JUN													
21...	1115	30	1.0	.50	765	6.9	84	7.5	122	25.8	37	9.48	3.17
21...	1120	--	3.0	--	765	.5	6	7.1	148	22.7	--	--	--
21...	1125	--	6.0	--	765	.3	3	7.0	251	12.9	--	--	--
AUG													
16...	1015	40	1.0	1.00	757	5.0	64	7.3	142	27.8	45	11.7	3.73
16...	1020	--	3.0	--	757	.1	1	7.0	193	24.5	--	--	--
16...	1025	--	6.0	--	757	.2	3	7.3	381	15.1	--	--	--

Date	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD IT FIELD (MG/L AS CACO3) (00419)	BICAR- BONATE IT-FLD AS (MG/L AS HCO3) (99440)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, AM- MONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT													
12...	2.76	5.18	38	47	5.17	E.1	16.8	2.8	82	E.009	.86	<.013	<.002
12...	--	--	--	--	--	--	--	--	--	.318	1.3	<.013	<.002
12...	--	--	--	--	--	--	--	--	--	3.83	10	<.065	E.008
APR													
22...	2.00	7.15	25	30	7.89	<.1	11.5	7.4	70	<.015	.48	<.013	<.002
22...	--	--	--	--	--	--	--	--	--	E.011	.57	<.013	<.002
22...	--	--	--	--	--	--	--	--	--	.995	1.8	<.013	<.002
JUN													
21...	2.55	7.59	32	39	8.33	E.1	13.1	6.0	84	<.015	.84	<.013	<.002
21...	--	--	--	--	--	--	--	--	--	.057	1.0	<.013	<.002
21...	--	--	--	--	--	--	--	--	--	1.83	3.0	E.010	<.002
AUG													
16...	3.40	7.47	47	58	7.87	E.1	15.5	8.9	96	<.015	.83	<.013	<.002
16...	--	--	--	--	--	--	--	--	--	.163	1.0	<.013	<.002
16...	--	--	--	--	--	--	--	--	--	5.29	6.6	<.013	E.002

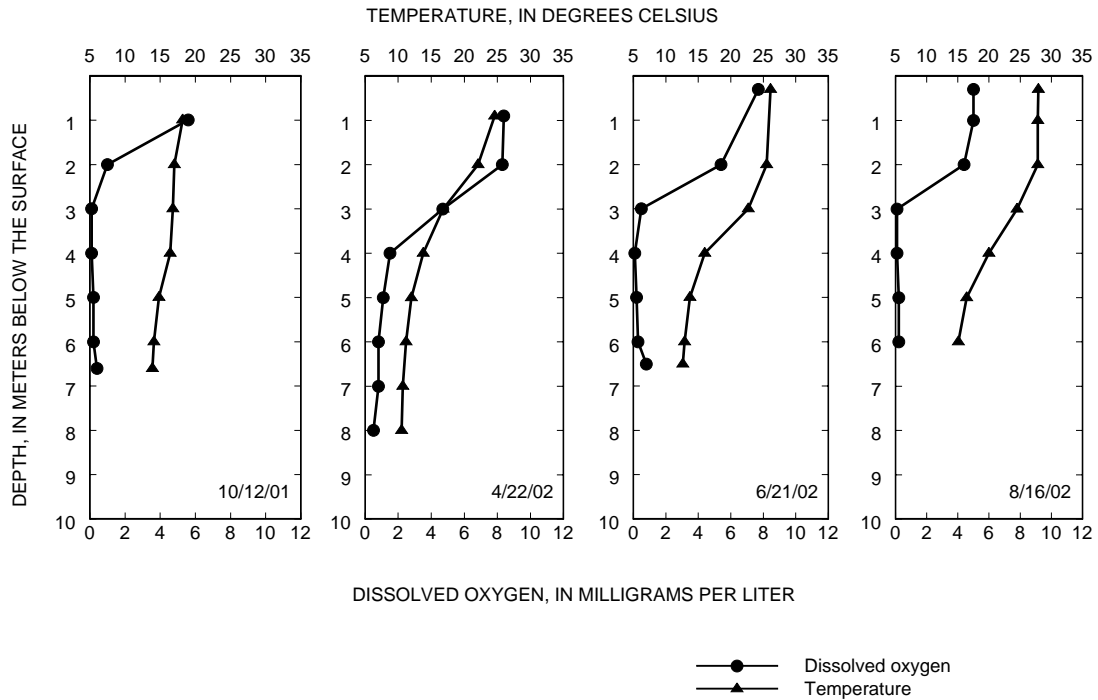
Date	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70954)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM WATER TOTAL UNFLTRD RECOV- ERABLE (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													
12...	<.007	E.05	9.3	24.8	E.8	30	<2	<.1	<.8	E1.3	<1.0	800	<1
12...	<.007	.08	--	--	--	--	--	--	--	--	--	--	--
12...	<.035	<.30	--	--	--	--	--	--	--	--	--	2480	--
APR													
22...	<.007	<.06	7.6	10.8	.8	30	<2	<.1	<.8	<2.0	E1.1	250	M
22...	<.007	E.04	--	--	--	--	--	--	--	--	--	590	--
22...	.102	.16	--	--	--	--	--	--	--	--	--	8840	--
JUN													
21...	<.007	E.05	9.4	23.9	.5	--	--	--	--	--	--	260	--
21...	<.007	E.05	--	--	--	--	--	--	--	--	--	2650	--
21...	.037	.09	--	--	--	--	--	--	--	--	--	23600	--
AUG													
16...	<.007	--	9.5	E24.8	E1.7	--	--	--	--	--	--	340	--
16...	<.007	--	--	--	--	--	--	--	--	--	--	550	--
16...	.044	--	--	--	--	--	--	--	--	--	--	37400	--

0209749990 UNIVERSITY LAKE AT INTAKES NEAR CHAPEL HILL, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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 RECOVERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
OCT							
12...	1140	.01	<2	<2.0	<2	<.3	<20
12...	--	--	--	--	--	--	--
12...	2280	--	--	--	--	--	--
APR							
22...	70.5	.01	<2	<2.0	<2	<.3	<20
22...	981	--	--	--	--	--	--
22...	2800	--	--	--	--	--	--
JUN							
21...	276	--	--	--	--	--	--
21...	8010	--	--	--	--	--	--
21...	7370	--	--	--	--	--	--
AUG							
16...	336	--	--	--	--	--	--
16...	2370	--	--	--	--	--	--
16...	11400	--	--	--	--	--	--

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified



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 mi²

PERIOD OF RECORD.--November 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is 239.02 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. The City of Chapel Hill diverted an average of 16.0 ft³/s for water supply upstream of station, and an average of 12.6 ft³/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 ft³/s, by logarithmic plotting; maximum gage height, 16.18 ft, from floodmark.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	24	19	20	28	20	85	16	16	17	12	39
2	18	24	19	21	28	50	53	16	17	35	12	13
3	17	24	19	23	27	44	36	17	16	23	11	12
4	17	24	19	24	28	27	28	21	15	18	12	11
5	18	26	19	25	26	25	23	19	15	19	11	9.7
6	21	25	19	51	26	25	22	17	14	16	9.7	10
7	19	25	20	41	131	24	21	16	15	15	11	9.9
8	18	25	19	32	88	23	21	16	13	16	9.9	10
9	18	25	19	28	54	22	20	16	13	15	9.7	11
10	17	24	25	28	42	22	24	16	14	16	9.4	12
11	18	23	69	30	39	20	20	15	13	16	8.8	11
12	18	23	28	27	33	22	19	15	14	15	10	13
13	17	24	27	33	30	23	20	16	14	14	9.7	11
14	60	24	24	27	29	22	19	17	15	23	8.4	46
15	37	24	23	25	30	22	19	16	14	18	9.7	32
16	26	20	23	25	27	20	19	15	13	16	14	26
17	23	18	26	24	26	32	18	16	14	15	11	17
18	22	17	34	23	26	35	19	16	16	15	10	15
19	21	18	24	146	24	31	20	16	16	15	12	14
20	22	18	23	90	24	26	20	16	15	33	11	14
21	21	16	24	53	24	34	18	16	14	19	9.5	13
22	23	15	21	40	22	32	18	15	15	16	8.8	12
23	24	16	21	227	20	25	17	15	14	16	9.4	13
24	25	22	21	206	19	23	17	15	16	34	8.8	12
25	26	20	20	115	19	22	17	14	16	38	9.7	12
26	25	20	20	73	19	23	16	13	16	22	11	13
27	23	20	21	52	20	33	15	15	24	17	28	14
28	23	19	21	44	19	22	15	15	45	15	24	14
29	24	19	21	39	---	21	16	16	36	15	11	13
30	24	19	21	35	---	21	16	16	17	14	26	12
31	24	---	21	29	---	37	---	16	---	14	71	---
TOTAL	705	641	730	1656	928	828	691	494	505	590	429.5	464.6
MEAN	22.74	21.37	23.55	53.42	33.14	26.71	23.03	15.94	16.83	19.03	13.85	15.49
MAX	60	26	69	227	131	50	85	21	45	38	71	46
MIN	16	15	19	20	19	20	15	13	13	14	8.4	9.7
CFSM	0.55	0.52	0.57	1.30	0.81	0.65	0.56	0.39	0.41	0.46	0.34	0.38
IN.	0.64	0.58	0.66	1.50	0.84	0.75	0.63	0.45	0.46	0.54	0.39	0.42

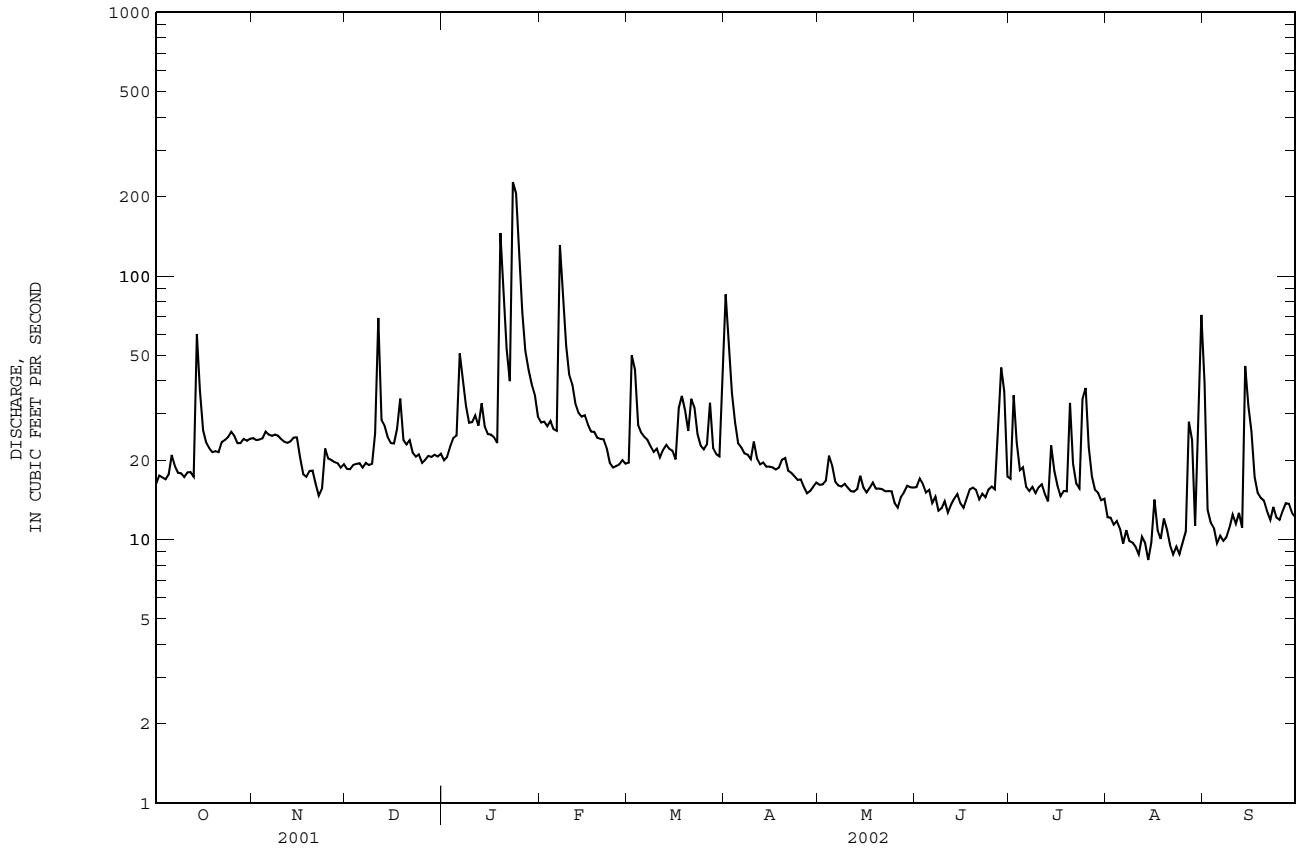
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2002, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	24.15	34.48	34.90	68.90	76.22	94.33	55.14	32.02	25.14	20.49	21.78	34.08									
MAX	50.7	141	105	184	206	226	131	91.2	84.9	51.5	65.0	272									
(WY)	2000	1986	1984	1998	1998	1993	1984	1990	1992	1984	1985	1999									
MIN	12.9	10.5	12.9	15.2	17.2	18.0	17.5	14.5	11.1	8.93	12.1	8.77									
(WY)	1999	1983	1989	1989	1991	1988	1986	1986	1986	1988	1988	1983									

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1983 - 2002
ANNUAL TOTAL	13850	8662.1	
ANNUAL MEAN	37.95	23.73	42.55
HIGHEST ANNUAL MEAN			75.6
LOWEST ANNUAL MEAN			21.7
HIGHEST DAILY MEAN	1000	Mar 30	2600
LOWEST DAILY MEAN	11	Jun 21	0.60
ANNUAL SEVEN-DAY MINIMUM	15	Aug 2	2.1
MAXIMUM PEAK FLOW		490	4210*
MAXIMUM PEAK STAGE		7.65	16.18*
INSTANTANEOUS LOW FLOW		2.4	NOT DETERMINED
ANNUAL RUNOFF (CFSM)	0.93	0.58	1.04
ANNUAL RUNOFF (INCHES)	12.57	7.86	14.10
10 PERCENT EXCEEDS	56	34	78
50 PERCENT EXCEEDS	23	19	19
90 PERCENT EXCEEDS	16	12	12

* See REMARKS.

02097517 MORGAN CREEK NEAR CHAPEL HILL, NC--Continued

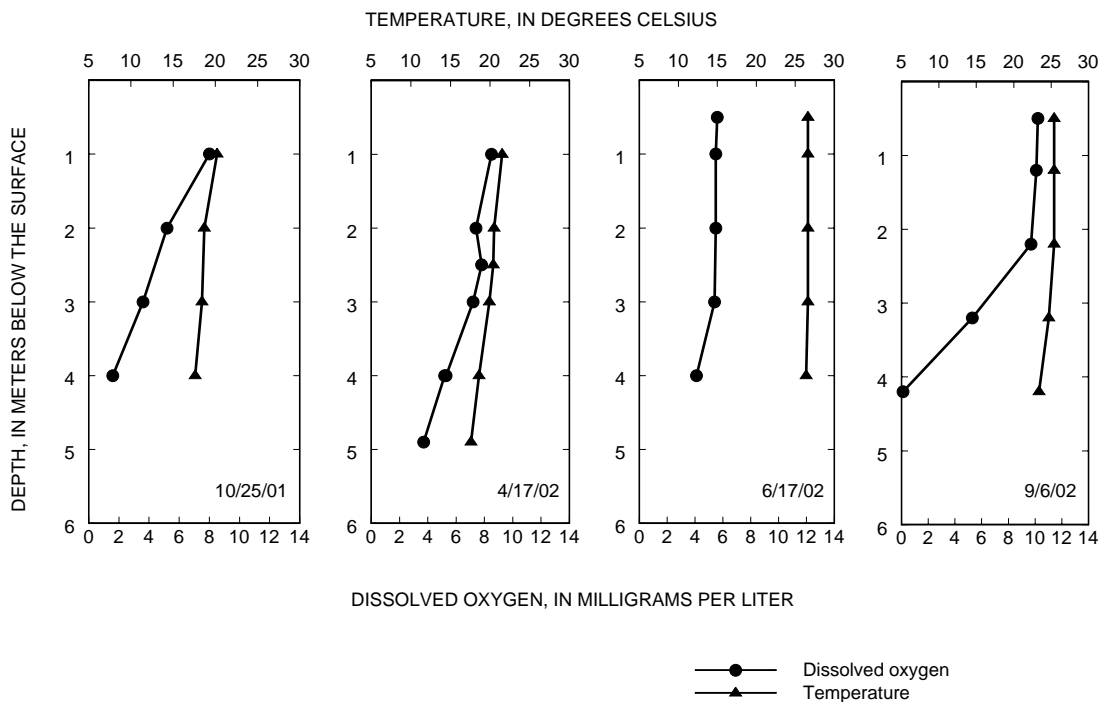


0209768310 B. EVERETT JORDAN LAKE AT BUOY 12 AT FARRINGTON, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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 RECOVERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
OCT							
25...	162	.04	3	<2.0	<2	<.3	<20
25...	256	--	--	--	--	--	--
25...	378	--	--	--	--	--	--
APR							
17...	89.4	.02	E2	<2.0	<2	<.3	<20
17...	108	--	--	--	--	--	--
17...	104	--	--	--	--	--	--
JUN							
18...	401	--	--	--	--	--	--
18...	402	--	--	--	--	--	--
18...	421	--	--	--	--	--	--
SEP							
06...	223	--	--	--	--	--	--
06...	--	--	--	--	--	--	--
06...	309	--	--	--	--	--	--

Remark codes used in this report:
 < -- Less than
 E -- Estimated value



CAPE FEAR RIVER BASIN

0209782520 WHITE OAK CREEK AT GREEN LEVEL, NC

LOCATION.--Lat 35°46'32", long 78°54'11", Wake County, Hydrologic Unit 03030002, on left bank at State Road 1603, 1.7 mi west of Green Level.

DRAINAGE AREA.--6.97 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 265 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records poor. No flow occurred several days in May to Sept. 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.02	0.16	0.38	1.2	8.4	1.6	208	0.67	0.00	0.00	0.00	24
2	0.02	0.16	0.38	1.2	6.6	3.0	39	0.58	0.00	0.00	0.00	3.0
3	0.02	0.16	0.39	1.5	5.5	14	27	0.50	0.00	0.00	0.00	0.60
4	0.02	0.16	0.42	2.2	5.4	6.7	21	0.53	0.00	0.00	0.00	0.22
5	0.02	0.20	0.42	3.3	4.7	3.4	17	0.50	0.00	0.02	0.00	0.09
6	0.03	0.20	0.43	16	4.6	3.3	14	0.69	0.00	0.00	0.00	0.05
7	0.04	0.17	0.43	34	64	2.5	13	0.53	0.00	0.00	0.00	0.03
8	0.04	0.17	0.45	16	39	1.9	11	0.39	0.00	0.00	0.00	0.02
9	0.03	0.17	0.50	9.3	17	1.7	11	0.32	0.00	0.00	0.00	0.01
10	0.04	0.17	0.50	9.7	12	1.7	21	0.24	0.00	0.00	0.00	0.00
11	0.05	0.16	21	12	9.6	1.3	15	0.20	0.00	0.00	0.00	0.00
12	0.05	0.16	7.6	9.1	6.6	1.4	11	0.16	0.00	0.00	0.00	0.00
13	0.05	0.16	2.7	13	4.9	2.2	10	0.14	0.00	0.00	0.00	0.00
14	0.21	0.15	1.8	9.9	3.6	2.6	8.9	0.12	0.00	0.00	0.00	0.00
15	18	0.16	1.3	7.4	3.2	1.8	7.8	0.09	0.00	0.00	0.00	0.02
16	1.5	0.18	1.2	6.3	3.0	1.3	6.6	0.07	0.00	0.00	0.00	23
17	1.2	0.17	1.1	5.7	2.6	2.5	5.5	0.06	0.00	0.00	0.00	12
18	0.48	0.19	3.6	5.0	2.1	6.2	4.7	0.05	0.00	0.00	0.00	2.4
19	0.23	0.20	3.1	41	2.0	2.7	3.9	0.04	0.00	0.00	0.00	0.91
20	0.18	0.20	e26	175	1.8	2.4	3.4	0.04	0.00	0.00	0.00	0.41
21	0.15	0.21	1.3	34	1.7	6.1	3.0	0.03	0.00	0.00	0.00	0.21
22	0.14	0.21	1.2	27	1.5	5.9	2.8	0.02	0.00	0.00	0.00	0.13
23	0.13	0.22	1.0	172	1.4	2.4	2.3	0.03	e0.00	0.00	0.00	0.07
24	0.13	0.27	1.2	104	1.2	1.8	1.8	0.04	e0.00	0.00	0.00	0.05
25	0.13	0.28	1.4	49	1.2	1.3	1.5	0.02	e0.00	0.00	0.00	0.05
26	0.14	0.28	1.3	25	1.2	8.5	1.3	0.01	e0.00	0.00	0.00	0.03
27	0.14	0.28	1.2	17	1.4	93	1.1	0.01	e0.00	0.00	0.04	0.03
28	0.13	0.30	1.2	14	1.5	18	0.99	0.00	e0.00	0.10	0.00	0.03
29	0.14	0.33	1.2	11	---	9.7	0.89	0.00	0.00	0.09	0.00	0.02
30	0.15	0.35	1.3	10	---	7.2	0.77	0.00	0.00	0.00	0.00	0.02
31	0.16	---	1.2	9.1	---	33	---	0.00	---	0.00	26	---
TOTAL	23.77	6.18	87.20	850.9	217.7	251.1	475.25	6.08	0.00	0.21	26.04	67.40
MEAN	0.767	0.206	2.813	27.45	7.775	8.100	15.84	0.196	0.000	0.007	0.840	2.247
MAX	18	0.35	26	175	64	93	208	0.69	0.00	0.10	26	24
MIN	0.02	0.15	0.38	1.2	1.2	1.3	0.77	0.00	0.00	0.00	0.00	0.00
CFSM	0.11	0.03	0.40	3.94	1.12	1.16	2.27	0.03	0.00	0.00	0.12	0.32
IN.	0.13	0.03	0.47	4.54	1.16	1.34	2.54	0.03	0.00	0.00	0.14	0.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

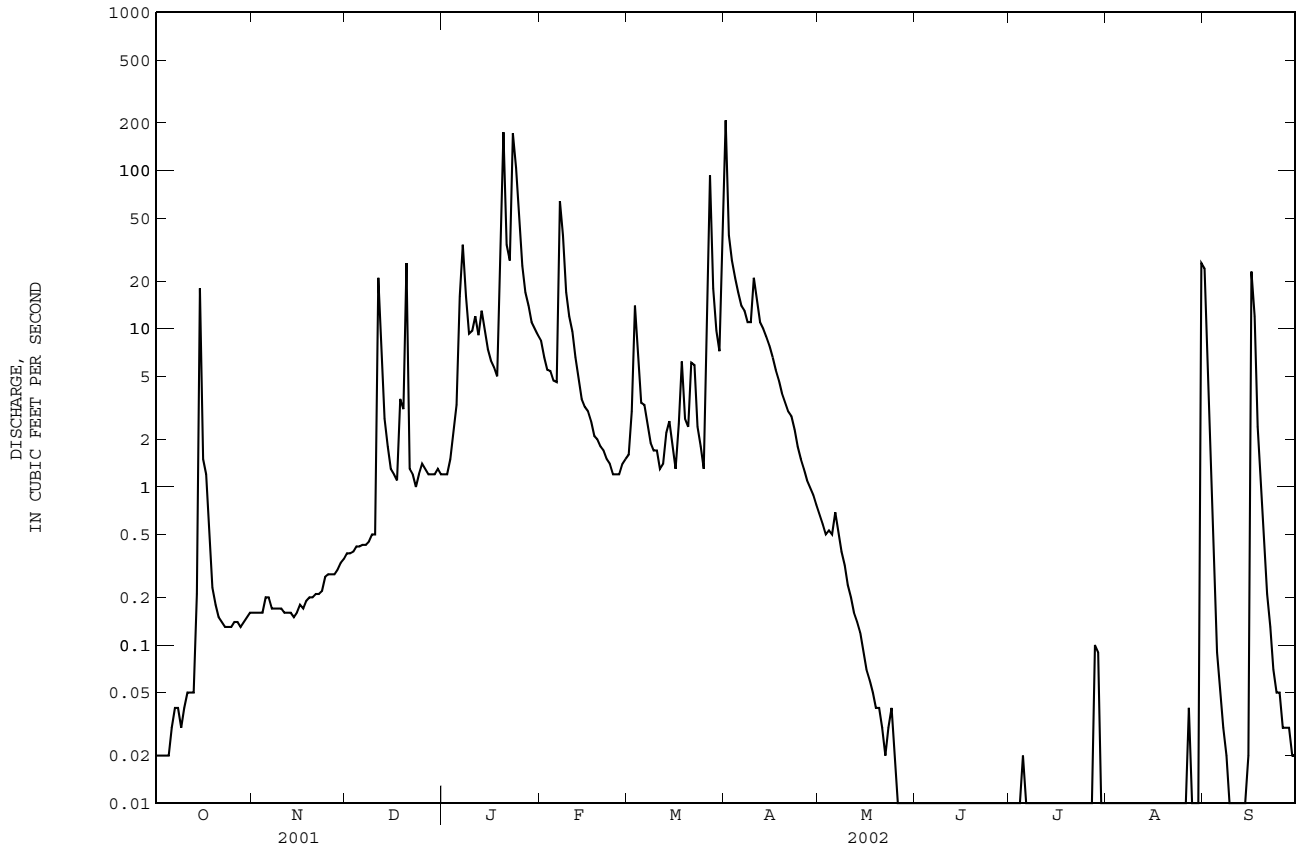
	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
MEAN	4.285	2.576	4.481	19.60	16.38	17.80	14.31	0.617	5.872	3.161	7.226	7.515
MAX	11.2	4.69	9.29	28.6	27.7	37.8	16.4	1.08	17.3	5.19	10.9	18.9
(WY)	2000	2001	2000	2000	2000	2001	2001	2001	2001	2001	2000	2000
MIN	0.67	0.053	1.81	3.26	7.94	7.49	10.8	0.20	0.000	0.009	0.97	0.61
(WY)	2002	2002	2002	2001	2002	2000	2000	2002	2002	2002	2002	2001

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 2000 - 2002

ANNUAL TOTAL	3288.51	2011.83	
ANNUAL MEAN	9.010	5.512	8.607
HIGHEST ANNUAL MEAN			11.0
LOWEST ANNUAL MEAN			5.44
HIGHEST DAILY MEAN	275	208	275
LOWEST DAILY MEAN	0.02	0.00	0.00
ANNUAL SEVEN-DAY MINIMUM	0.02	0.00	0.00
MAXIMUM PEAK FLOW		451	517
MAXIMUM PEAK STAGE		8.24	8.54
INSTANTANEOUS LOW FLOW		0.00*	0.00*
ANNUAL RUNOFF (CFSM)	1.29	0.79	1.23
ANNUAL RUNOFF (INCHES)	17.55	10.74	16.78
10 PERCENT EXCEEDS	14	12	18
50 PERCENT EXCEEDS	1.3	0.22	1.5
90 PERCENT EXCEEDS	0.13	0.00	0.01

e Estimated.
* See REMARKS.

0209782520 WHITE OAK CREEK AT GREEN LEVEL, NC--Continued



CAPE FEAR RIVER BASIN

0209782520 WHITE OAK CREEK AT GREEN LEVEL, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1999 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 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	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)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	
OCT														
11...	0845	.05	60	756	2.6	25	6.5	103	12.4	37	8.75	3.60	2.96	
DEC														
04...	0830	.43	100	768	6.6	55	6.7	182	7.9	27	6.41	2.62	3.43	
JAN														
20...	0830	291	240	767	11.4	86	6.0	67	4.1	14	3.18	1.39	3.79	
FEB														
13...	1415	4.6	80	766	8.7	73	6.7	22	8.0	19	4.52	1.94	2.44	
APR														
01...	0945	278	125	752	8.4	80	6.1	53	12.8	10	2.36	1.05	2.34	
19...	0830	4.1	75	765	6.5	72	6.8	103	20.8	32	7.66	3.18	2.89	
SEP														
16...	1245	19	100	758	6.9	79	6.2	87	22.0	20	4.88	1.86	3.51	
Date		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD IT FIELD (MG/L AS CACO3) (00419)	BICAR-BONATE (MG/L AS HCO3) (99440)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)
OCT														
11...	5.87	36	44	6.07	E.1	11.2	1.4	84	.021	.53	<.013	<.002	<.007	
DEC														
04...	6.81	22	27	9.28	E.1	9.5	1.6	74	.039	.53	<.013	<.002	.010	
JAN														
20...	4.51	--	--	7.44	E.1	5.0	8.5	66	.030	.71	.242	.005	.025	
FEB														
13...	6.56	13	16	8.01	E.1	7.6	9.8	62	E.012	.44	.020	<.002	E.004	
APR														
01...	4.26	--	--	5.01	.1	6.4	6.3	61	E.011	.72	.068	.003	.013	
19...	7.39	31	37	7.46	.1	6.0	3.9	80	.038	.61	.016	E.002	<.007	
SEP														
16...	6.07	8	9.5	6.82	E.1	8.0	14.6	77	<.015	.69	.10	.003	.016	
Date		PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	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)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)
OCT														
11...	E.05	12.2	60	E1	<.1	<.8	4.2	E.7	2950	<1	1320	.01	<2	
DEC														
04...	E.04	9.6	--	--	--	--	--	--	--	--	--	--	--	
JAN														
20...	.10	12.0	1010	<2	<.1	E.7	<2.0	2.5	1120	2	136	.01	<2	
FEB														
13...	E.04	8.6	--	--	--	--	--	--	--	--	--	--	--	
APR														
01...	.08	15.5	580	<2	<.1	E.7	E1.1	2.0	910	2	124	.01	<2	
19...	<.06	12.7	100	<2	<.1	<.8	<2.0	E1.2	1790	M	140	E.01	E1	
SEP														
16...	--	15.2	390	<2	<.1	<.8	E1.8	2.6	2220	1	326	.01	<2	

0209782520 WHITE OAK CREEK AT GREEN LEVEL, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT						
11...	<2.0	<2	<.3	<20	8.6	.0
DEC						
04...	--	--	--	--	3.2	.0
JAN						
20...	E1.3	<2	<.3	<20	85	66.7
FEB						
13...	--	--	--	--	11	.13
APR						
01...	E1.4	<2	<.3	E20	27	20.4
19...	<2.0	<2	<.3	E30	4.7	.05
SEP						
16...	E1.4	<2	<.3	30	39	2.0

Remark codes used in this report:

< -- Less than

E -- Estimated value

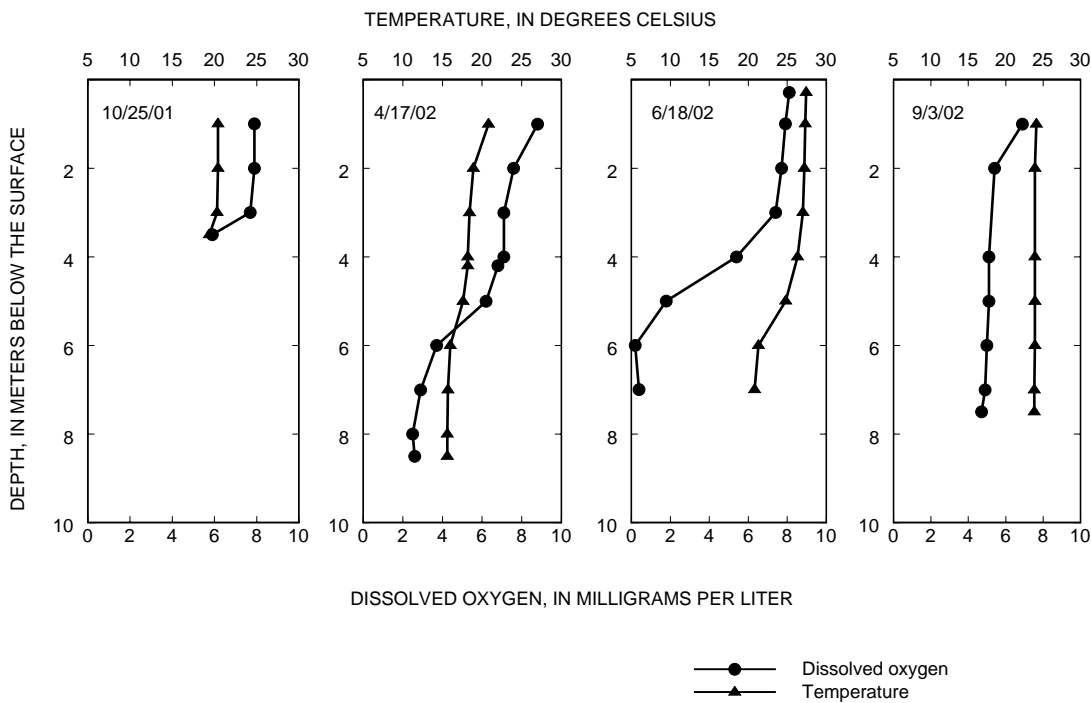
M -- Presence verified, not quantified

0209799150 B. EVERETT JORDAN LAKE ABOVE U.S. HIGHWAY 64 NEAR WILSONVILLE, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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 RECOVERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
OCT							
25...	141	.05	E1	<2.0	<2	<.3	<20
25...	169	--	--	--	--	--	--
25...	179	--	--	--	--	--	--
APR							
17...	40.3	.02	E1	18.4	<2	<.3	<20
17...	52.2	--	--	--	--	--	--
17...	303	--	--	--	--	--	--
JUN							
18...	112	--	--	--	--	--	--
18...	119	--	--	--	--	--	--
18...	1790	--	--	--	--	--	--
SEP							
03...	525	--	--	--	--	--	--
03...	561	--	--	--	--	--	--
03...	589	--	--	--	--	--	--

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

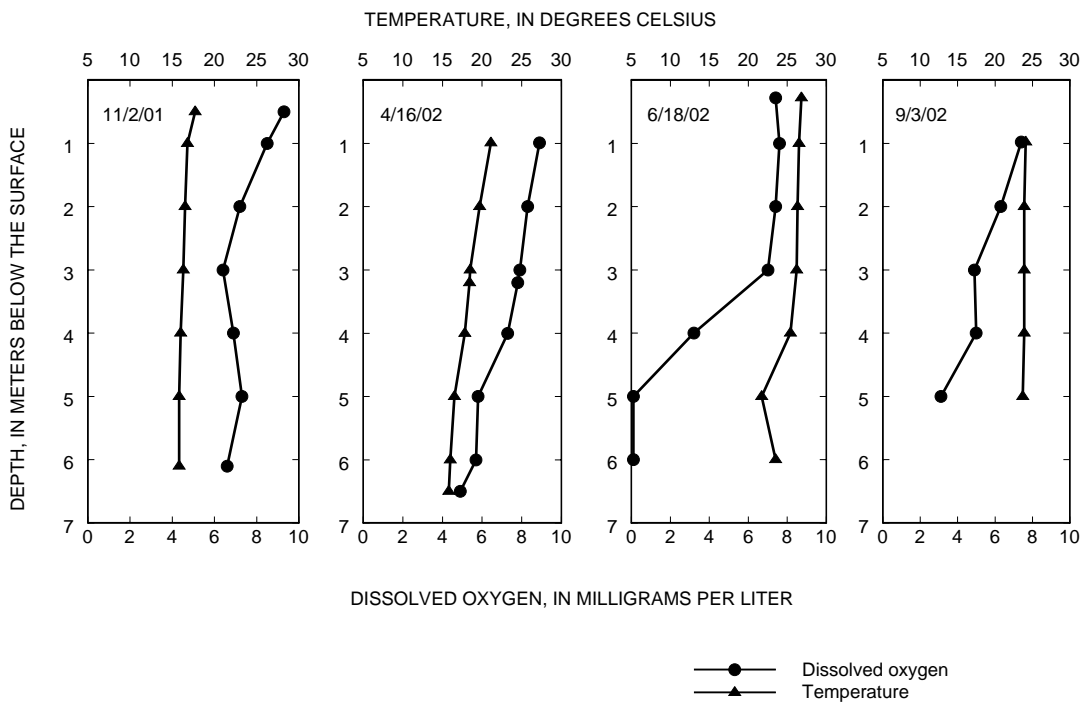


0209801100 B. EVERETT JORDAN LAKE AT BELLS LANDING NEAR GRIFFINS CROSSROADS, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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 RECOVERABLE (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
NOV							
02...	93.2	E.01	2	<4.0	<4	<.5	<50
02...	108	--	--	--	--	--	--
02...	150	--	--	--	--	--	--
APR							
16...	40.0	.04	E1	<2.0	<2	<.3	<20
16...	44.1	--	--	--	--	--	--
16...	76.5	--	--	--	--	--	--
JUN							
18...	74.9	--	--	--	--	--	--
18...	155	--	--	--	--	--	--
18...	1000	--	--	--	--	--	--
SEP							
03...	463	--	--	--	--	--	--
03...	466	--	--	--	--	--	--
03...	535	--	--	--	--	--	--

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified



02098197 B. EVERETT JORDAN LAKE AT DAM NEAR MONCURE, NC

LOCATION.--Lat 35°39'16", long 79°04'06", 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 mi².

PERIOD OF RECORD.--May 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Lake elevations controlled by reservoir operations at B. Everett Jordan Dam. 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 ft³ at 240.0 ft, of which 23,454,011,000 ft³ is controlled flood storage. (See station 02098198.)

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded elevation, 233.59 ft, Sept. 8, 1996; minimum recorded elevation, 207.85 ft, Nov. 12, 1986.

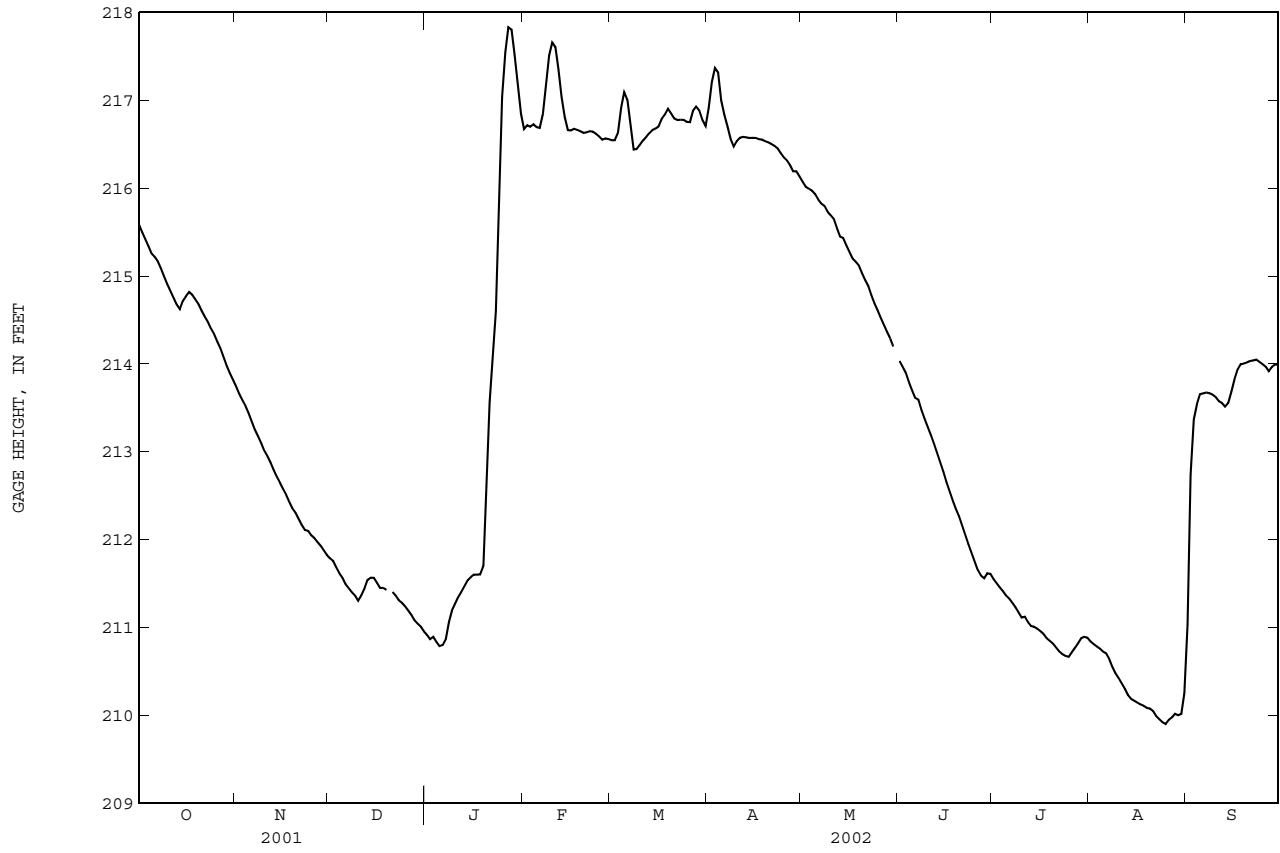
EXTREMES FOR CURRENT YEAR.--Maximum recorded elevation, 217.87 ft, Jan. 27; minimum recorded elevation, 209.83 ft, Aug. 25.

COOPERATION.--Some records furnished by U.S. Army Corps of Engineers.

ELEVATION, in FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215.59	213.74	211.79	210.91	216.67	216.55	216.91	216.07	214.03	211.55	210.84	211.03
2	215.50	213.66	211.76	210.87	216.72	216.55	217.21	216.02	213.97	211.50	210.81	212.74
3	215.42	213.59	211.68	210.89	216.70	216.63	217.37	215.99	213.90	211.46	210.78	213.37
4	215.34	213.52	211.62	210.84	216.73	216.92	217.32	215.97	213.79	211.41	210.76	213.54
5	215.25	213.44	211.56	210.79	216.70	217.09	217.00	215.93	213.70	211.36	210.72	213.65
6	215.22	213.35	211.49	210.80	216.69	217.01	216.83	215.87	213.61	211.33	210.71	213.66
7	215.16	213.25	211.44	210.87	216.85	216.71	216.70	215.82	213.59	211.28	210.64	213.67
8	215.09	213.18	211.40	211.06	217.18	216.44	216.56	215.80	213.48	211.23	210.55	213.67
9	214.99	213.10	211.36	211.19	217.51	216.45	216.48	215.73	213.37	211.17	210.48	213.65
10	214.91	213.01	211.30	211.27	217.66	216.49	216.54	215.69	213.29	211.11	210.42	213.62
11	214.83	212.95	211.37	211.35	217.61	216.54	216.57	215.65	213.19	211.12	210.36	213.58
12	214.76	212.88	211.44	211.41	217.35	216.58	216.58	215.55	213.09	211.06	210.30	213.56
13	214.68	212.80	211.54	211.48	217.03	216.63	216.58	215.45	212.98	211.02	210.23	213.51
14	214.62	212.72	211.57	211.54	216.81	216.66	216.57	215.43	212.88	211.01	210.19	213.55
15	214.72	212.65	211.56	211.57	216.66	216.68	216.57	215.35	212.77	210.98	210.17	213.68
16	214.77	212.58	211.51	211.60	216.66	216.70	216.57	215.27	212.65	210.96	210.14	213.82
17	214.82	212.51	211.45	211.60	216.68	216.79	216.56	215.20	212.55	210.93	210.12	213.94
18	214.78	212.43	211.45	211.60	216.66	216.84	216.55	215.16	212.44	210.88	210.11	214.00
19	214.73	212.35	211.43	211.70	216.65	216.90	216.53	215.12	212.35	210.85	210.08	214.00
20	214.68	212.31	---	212.58	216.63	216.85	216.52	215.03	212.27	210.82	210.08	214.02
21	214.61	212.24	211.40	213.57	216.64	216.79	216.50	214.96	212.16	210.77	210.05	214.03
22	214.54	212.17	211.36	214.05	216.65	216.78	216.48	214.89	212.05	210.73	209.99	214.04
23	214.47	212.11	211.31	214.60	216.64	216.78	216.45	214.78	211.94	210.70	209.95	214.05
24	214.40	212.10	211.28	216.04	216.62	216.78	216.40	214.69	211.85	210.68	209.92	214.02
25	214.34	212.05	211.24	217.04	216.59	216.76	216.35	214.61	211.75	210.67	209.90	214.00
26	214.25	212.02	211.19	217.55	216.55	216.75	216.32	214.52	211.65	210.72	209.95	213.97
27	214.18	211.97	211.14	217.83	216.57	216.88	216.26	214.44	211.59	210.77	209.98	213.92
28	214.08	211.93	211.08	217.80	216.56	216.93	216.19	214.37	211.56	210.82	210.02	213.96
29	213.98	211.88	211.04	217.52	---	216.88	216.19	214.29	211.62	210.88	210.00	214.00
30	213.89	211.83	211.01	217.16	---	216.78	216.14	214.20	211.61	210.89	210.01	213.99
31	213.82	---	210.96	216.85	---	216.71	---	---	---	210.88	210.25	---
MEAN	214.72	212.68	---	213.09	216.82	216.74	216.59	---	212.72	211.02	210.27	213.67
MAX	215.59	213.74	---	217.83	217.66	217.09	217.37	---	214.03	211.55	210.84	214.05
MIN	213.82	211.83	---	210.79	216.55	216.44	216.14	---	211.56	210.67	209.90	211.03

02098197 B. EVERETT JORDAN LAKE AT DAM NEAR MONCURE, NC--Continued



CAPE FEAR RIVER BASIN

02098198 HAW RIVER BELOW B. EVERETT JORDAN LAKE DAM NEAR MONCURE, NC

LOCATION.--Lat 35°39'11", long 79°04'03", Chatham County, Hydrologic Unit 0303002, on right bank 300 ft downstream from B. Everett Jordan Lake Dam, 2.5 mi north of Moncure, and 4.2 mi upstream from mouth.

DRAINAGE AREA.--1,689 mi².

GAGE-HEIGHT RECORDS

PERIOD OF RECORD.--October 1965 to current year. Discharge records, October 1965 to September 1992. Gage height records only, October 1992 to current year. October 1965 to September 1978, published as "Haw River nr Haywood, NC" (02098200).

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

GAGE.--Water-stage recorder. Datum of gage is 155.00 ft above NGVD of 1929 (U.S. Corps of Engineers bench mark). Prior to Oct. 1, 1978, water-stage recorder at site 0.3 mi. downstream at same datum. U.S. Army Corps of Engineers satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum, 22.41 ft, Oct. 25, 1971 at site 0.3 mi downstream; minimum not determined.

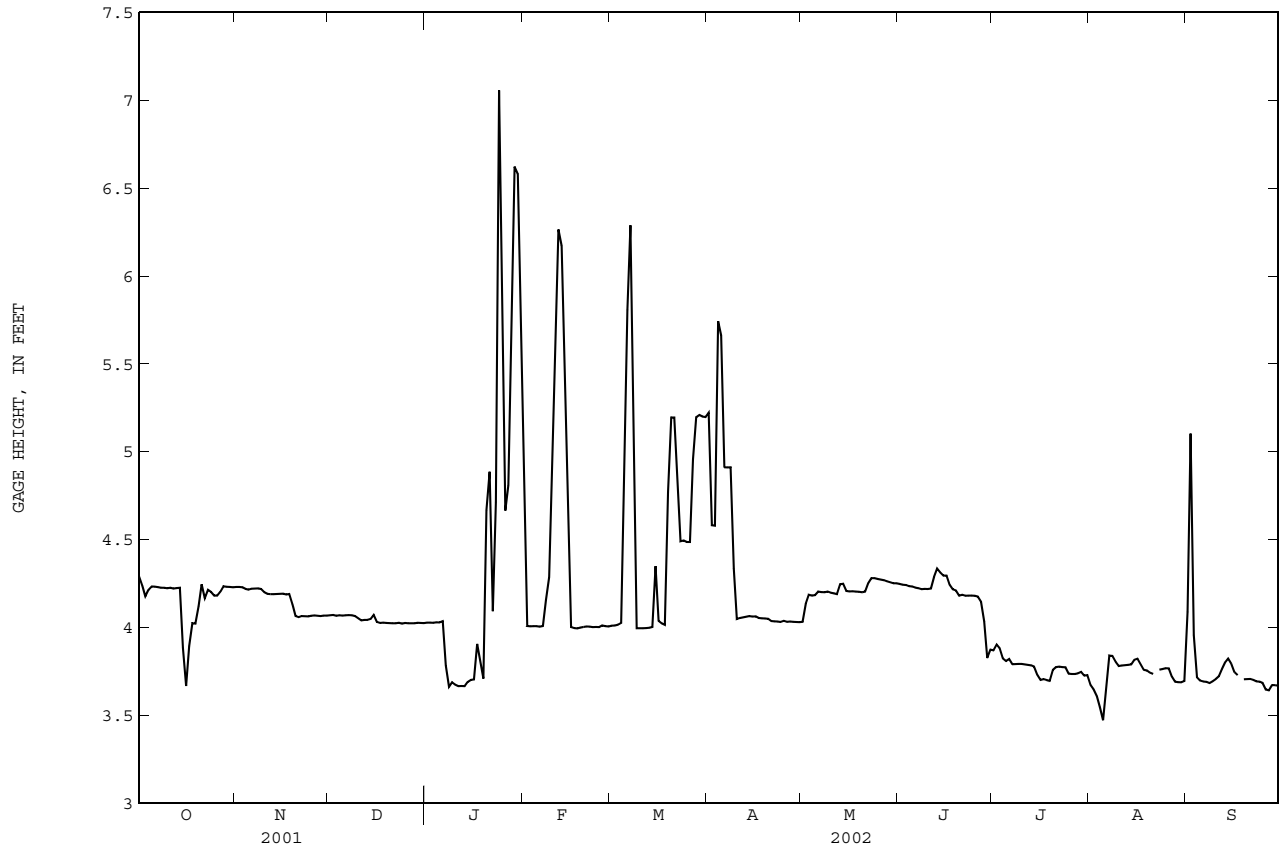
EXTREMES FOR CURRENT YEAR.--Maximum, 7.34 ft, Jan. 24; minimum, 3.40 ft, Aug. 6.

REMARKS.--Stage regulated by B. Everett Jordan Lake Dam (Station 02098197).

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.29	4.23	4.07	4.03	4.74	4.01	5.22	4.03	4.25	3.87	3.67	4.09
2	4.24	4.23	4.07	4.03	4.01	4.01	4.58	4.14	4.24	3.90	3.65	5.10
3	4.18	4.23	4.07	4.03	4.01	4.02	4.58	4.19	4.24	3.88	3.61	3.96
4	4.21	4.22	4.07	4.03	4.01	4.03	5.74	4.18	4.24	3.82	3.55	3.72
5	4.23	4.21	4.07	4.03	4.01	4.78	5.66	4.18	4.23	3.81	3.47	3.70
6	4.23	4.22	4.07	4.04	4.00	5.81	4.91	4.20	4.23	3.82	3.67	3.69
7	4.23	4.22	4.07	3.78	4.01	6.29	4.91	4.20	4.22	3.79	3.84	3.69
8	4.23	4.22	4.07	3.66	4.16	4.86	4.91	4.20	4.22	3.79	3.84	3.68
9	4.23	4.22	4.06	3.69	4.29	4.00	4.34	4.20	4.22	3.79	3.81	3.69
10	4.22	4.20	4.05	3.67	4.75	4.00	4.05	4.20	4.22	3.79	3.78	3.71
11	4.23	4.19	4.04	3.67	5.49	4.00	4.05	4.19	4.22	3.79	3.78	3.72
12	4.22	4.19	4.04	3.67	6.27	4.00	4.06	4.19	4.29	3.79	3.78	3.76
13	4.22	4.19	4.04	3.67	6.17	4.00	4.06	4.25	4.33	3.78	3.79	3.80
14	4.23	4.19	4.05	3.69	5.36	4.00	4.06	4.25	4.31	3.78	3.79	3.82
15	3.88	4.19	4.07	3.70	4.53	4.35	4.06	4.21	4.29	3.73	3.82	3.79
16	3.67	4.19	4.03	3.70	4.00	4.04	4.06	4.21	4.29	3.70	3.82	3.75
17	3.89	4.19	4.03	3.91	4.00	4.02	4.05	4.21	4.24	3.71	3.79	3.73
18	4.02	4.19	4.03	3.81	3.99	4.01	4.05	4.20	4.22	3.70	3.76	---
19	4.02	4.13	4.03	3.71	4.00	4.77	4.05	4.20	4.21	3.70	3.75	3.71
20	4.12	4.06	4.02	4.67	4.00	5.19	4.05	4.20	4.18	3.76	3.74	3.71
21	4.25	4.06	4.02	4.89	4.01	5.19	4.04	4.20	4.19	3.77	3.74	3.71
22	4.17	4.07	4.02	4.09	4.00	4.87	4.04	4.25	4.18	3.78	---	3.70
23	4.21	4.06	4.03	4.71	4.00	4.49	4.03	4.28	4.18	3.77	3.76	3.69
24	4.20	4.06	4.02	7.06	4.00	4.49	4.03	4.28	4.18	3.77	3.76	3.69
25	4.18	4.07	4.03	6.37	4.00	4.49	4.04	4.28	4.18	3.74	3.77	3.68
26	4.18	4.07	4.02	4.66	4.01	4.49	4.03	4.27	4.18	3.74	3.77	3.65
27	4.20	4.07	4.02	4.81	4.01	4.96	4.03	4.27	4.15	3.74	3.72	3.64
28	4.23	4.07	4.02	6.02	4.01	5.20	4.03	4.26	4.03	3.74	3.69	3.67
29	4.23	4.07	4.03	6.62	---	5.21	4.03	4.26	3.83	3.75	3.69	3.67
30	4.23	4.07	4.03	6.58	---	5.20	4.03	4.25	3.87	3.73	3.69	3.67
31	4.23	---	4.02	5.84	---	5.20	---	4.25	---	3.73	3.69	---
MEAN	4.16	4.15	4.04	4.48	4.35	4.58	4.33	4.22	4.20	3.77	---	---
MAX	4.29	4.23	4.07	7.06	6.27	6.29	5.74	4.28	4.33	3.90	---	---
MIN	3.67	4.06	4.02	3.66	3.99	4.00	4.03	4.03	3.83	3.70	---	---

02098198 HAW RIVER BELOW B. EVERETT JORDAN LAKE DAM NEAR MONCURE, NC--Continued



PRECIPITATION RECORDS

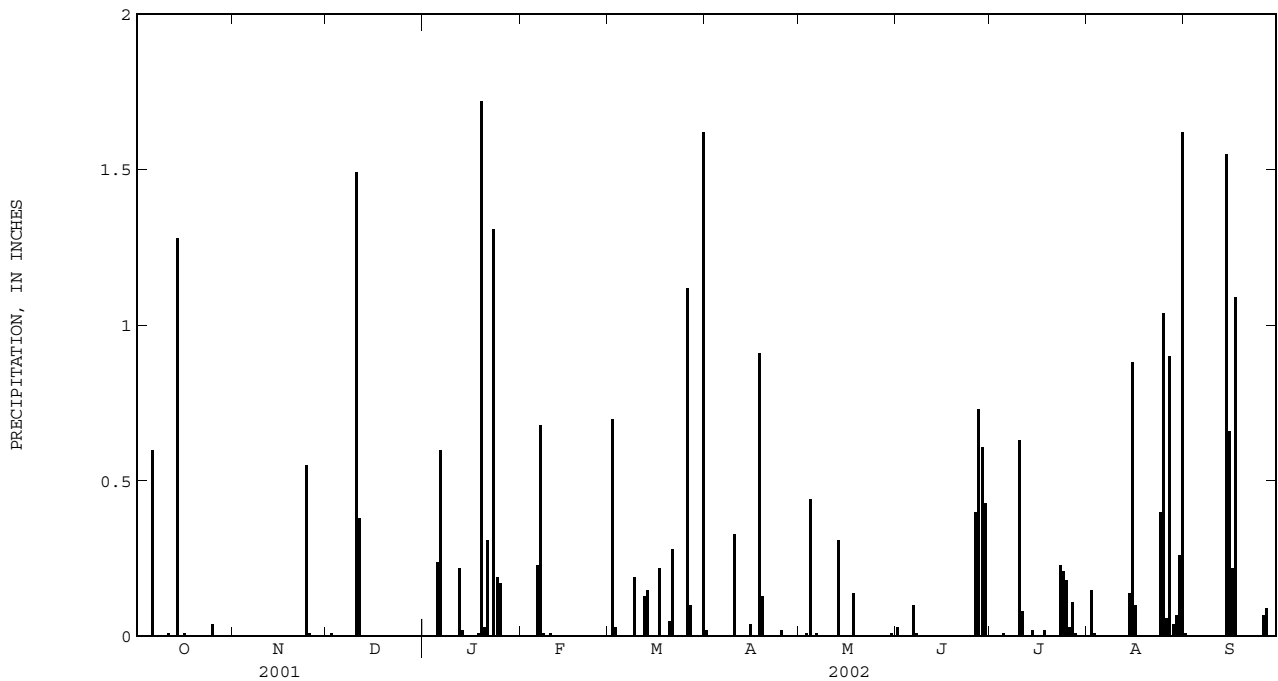
PERIOD OF RECORD.--October 1998 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

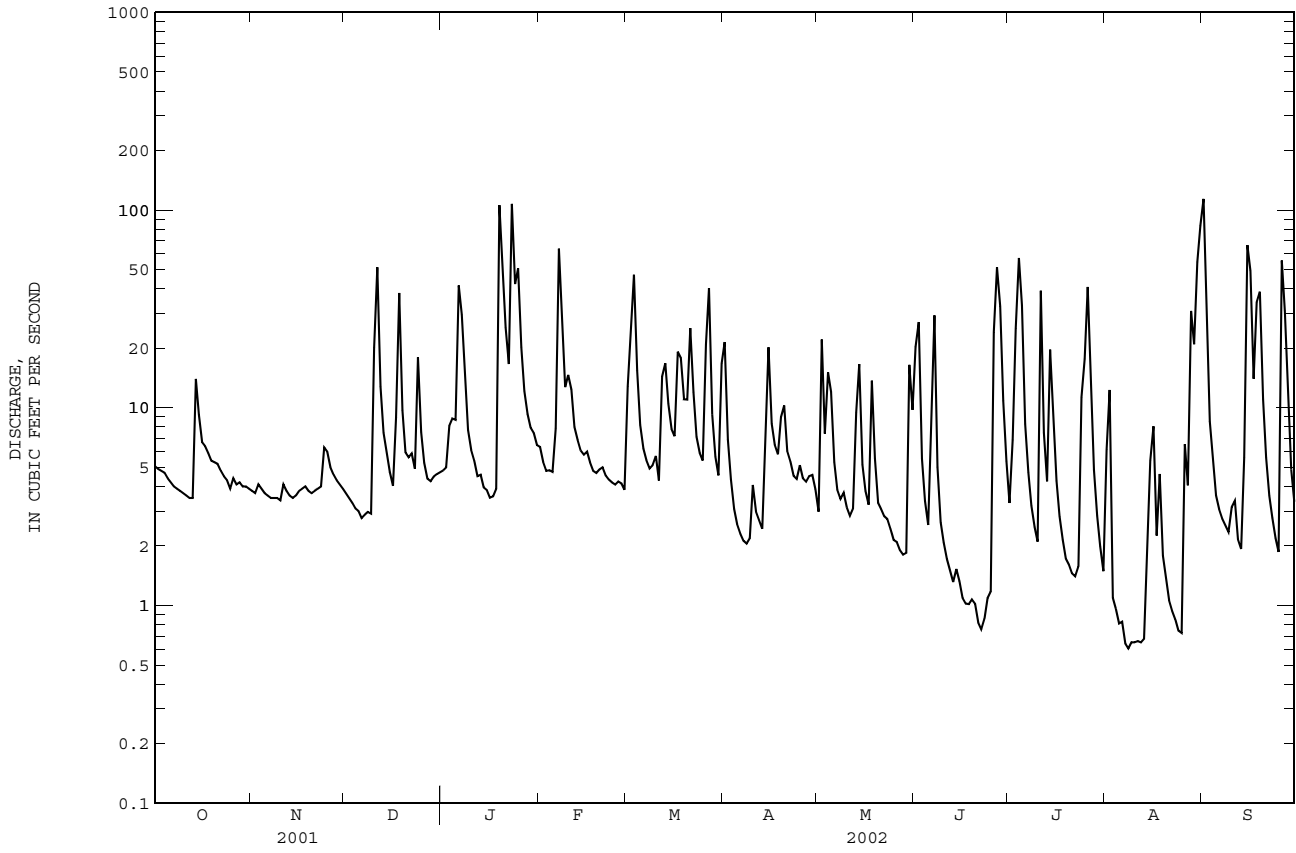
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.03	0.00	0.00	0.01
2	0.00	0.00	0.01	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.15	0.00
3	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00	0.00	0.01	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
6	0.60	0.00	0.00	0.60	0.23	0.00	0.00	0.01	0.10	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.49	0.00	0.01	0.00	0.33	0.00	0.00	0.63	0.00	0.00
11	0.01	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00
12	0.00	0.00	0.00	0.22	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.02	0.00	0.15	0.00	0.31	0.00	0.00	0.00	0.00
14	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.14	1.55
15	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.88	0.66
16	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.22
17	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	1.09
18	0.00	0.00	0.00	0.01	0.00	0.00	0.91	0.14	0.00	0.02	0.00	---
19	0.00	0.00	0.00	1.72	0.00	0.00	0.13	0.00	0.00	0.00	0.00	---
20	0.00	0.00	0.00	0.03	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.31	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	1.31	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00
24	0.00	0.55	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.21	0.40	0.00
25	0.04	0.01	0.00	0.17	0.00	0.00	0.02	0.00	0.00	0.18	1.04	0.00
26	0.00	0.00	0.00	0.00	0.00	1.12	0.00	0.00	0.40	0.03	0.06	0.07
27	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.73	0.11	0.90	0.09
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.01	0.04	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.43	0.00	0.07	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.01	0.00	0.00	0.26	0.00
31	0.00	---	0.00	0.00	---	1.62	---	0.00	---	0.00	1.62	---
TOTAL	1.94	0.56	1.88	4.82	0.93	4.59	1.45	0.92	2.31	1.53	5.67	---



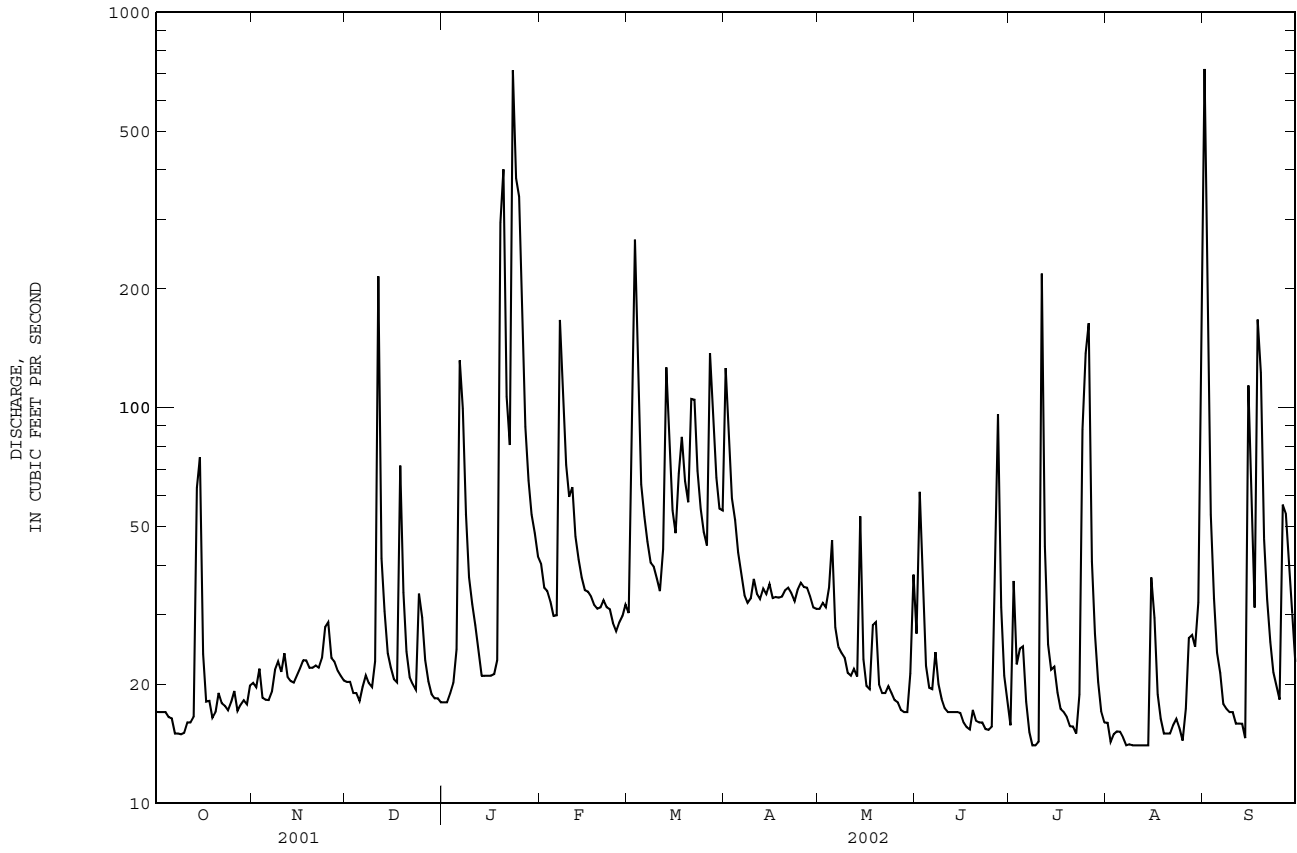


Gaging station at Mallard Creek below Stony Creek near Harrisburg, North Carolina.

02099000 EAST FORK DEEP RIVER NEAR HIGH POINT, NC--Continued



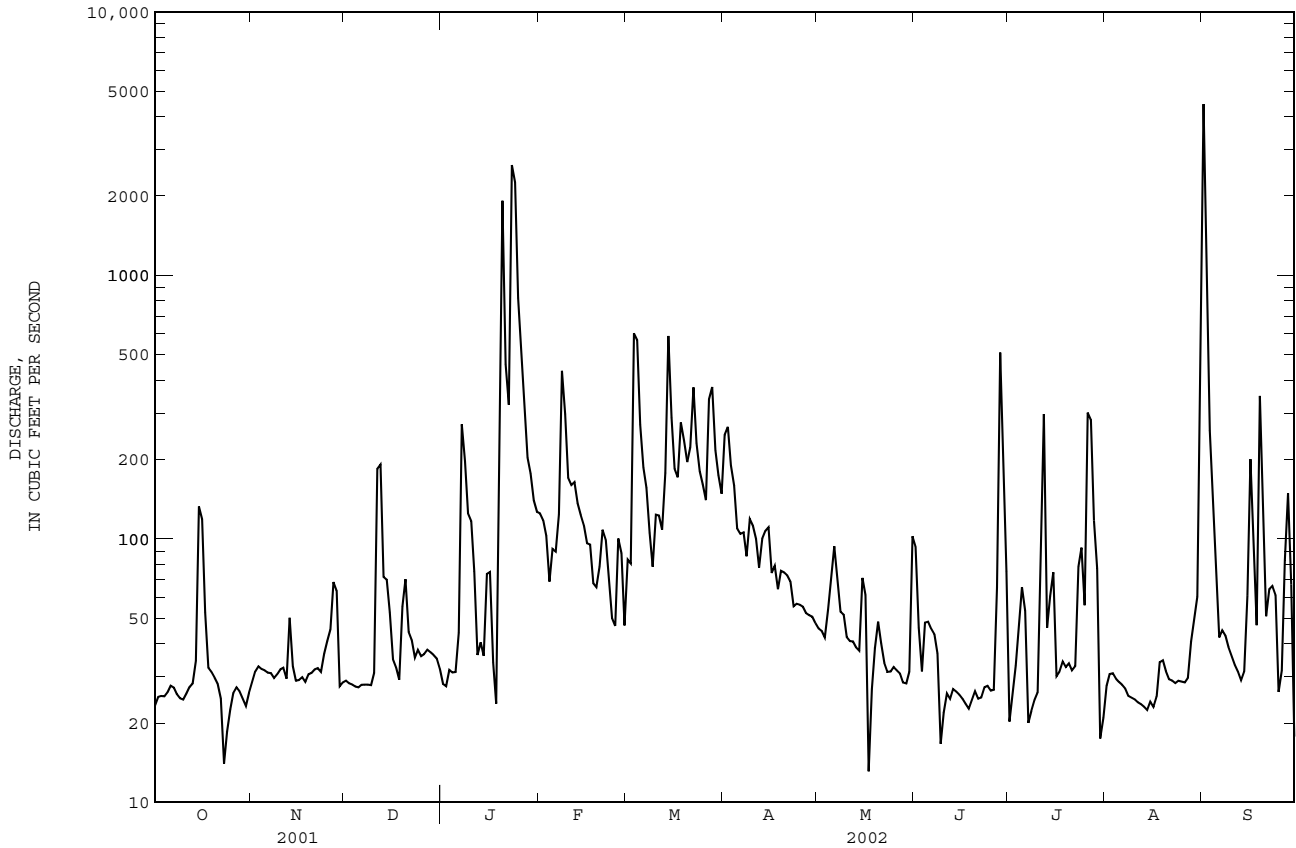
02099500 DEEP RIVER NEAR RANDLEMAN, NC--Continued



02100500 DEEP RIVER AT RAMSEUR, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1923 - 2002	
ANNUAL TOTAL	54085		42296		351.3	
ANNUAL MEAN	148.2		115.9		665	
HIGHEST ANNUAL MEAN					116	
LOWEST ANNUAL MEAN					27800	
HIGHEST DAILY MEAN	4020	Mar 30	4460	Sep 1	27800	Sep 18 1945
LOWEST DAILY MEAN	14	Oct 23	13	May 17	0.70	Nov 29 1941
ANNUAL SEVEN-DAY MINIMUM	23	Oct 22	23	Oct 22	3.6	Oct 19 1941
MAXIMUM PEAK FLOW			6760	Sep 1	43000*	Sep 18 1945
MAXIMUM PEAK STAGE			11.68	Sep 1	34.04*	Sep 18 1945
INSTANTANEOUS LOW FLOW			12	May 17	0.40*	May 27 1941
ANNUAL RUNOFF (CFSM)	0.42		0.33		1.01	
ANNUAL RUNOFF (INCHES)	5.76		4.51		13.68	
10 PERCENT EXCEEDS	249		202		678	
50 PERCENT EXCEEDS	72		44		148	
90 PERCENT EXCEEDS	29		25		36	

* 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 mi².

REVISIONS.--WDR NC-98-1(M).

PERIOD OF RECORD.--May 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 620 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. No flow occurred several days in Aug. 1988, July, Aug. 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.10	0.09	0.19	0.09	2.5	1.2	11	0.53	0.37	0.11	0.00	62
2	0.11	0.09	0.21	0.09	2.1	3.6	4.7	0.66	0.23	0.09	0.00	5.8
3	0.13	0.06	0.18	0.21	1.8	12	3.1	0.67	0.25	0.05	0.00	3.0
4	0.17	0.08	0.24	0.19	1.4	5.6	2.5	1.0	0.14	0.04	0.00	1.5
5	0.18	0.10	0.21	0.17	1.3	2.9	2.0	1.4	0.15	0.04	0.00	0.57
6	0.26	0.11	0.19	3.7	1.2	2.2	1.9	0.81	0.14	0.03	0.00	0.30
7	0.33	0.12	0.19	3.4	11	2.0	1.8	0.66	0.12	0.04	0.00	0.19
8	0.22	0.11	0.19	1.6	7.2	1.9	1.9	0.53	0.19	0.03	0.00	0.16
9	0.22	0.12	0.19	0.60	3.9	3.9	1.9	0.54	0.12	0.03	0.00	0.14
10	0.23	0.13	0.36	0.56	2.8	4.3	3.9	0.46	0.13	0.03	0.00	0.12
11	0.25	0.13	8.9	0.50	2.7	2.7	1.8	0.41	0.08	0.05	0.00	0.11
12	0.26	0.12	0.33	0.31	2.3	2.6	1.5	0.37	0.08	0.03	0.00	0.09
13	0.27	0.11	0.12	0.43	1.9	6.0	1.7	0.42	0.08	0.04	0.00	0.07
14	0.48	0.11	0.10	0.33	1.7	6.9	1.4	0.64	0.06	0.03	0.01	0.08
15	2.4	0.13	0.08	0.25	1.5	4.0	1.3	0.67	0.10	0.02	0.02	0.62
16	0.63	0.12	0.07	0.21	1.6	2.9	1.2	0.53	0.07	0.01	0.07	0.68
17	0.41	0.13	0.08	0.18	1.4	5.0	1.1	0.44	0.04	0.00	0.18	0.29
18	0.25	0.14	0.87	0.29	1.4	6.8	0.99	0.83	0.03	0.00	0.12	0.54
19	0.22	0.17	0.20	28	1.4	4.8	0.92	1.1	0.04	0.00	0.24	1.1
20	0.22	0.15	0.11	24	1.5	3.9	0.90	0.65	0.06	0.00	0.39	0.35
21	0.20	0.17	0.10	7.4	1.5	12	0.86	0.47	0.03	0.00	0.23	0.23
22	0.21	0.19	0.08	5.5	1.4	6.4	0.85	0.38	0.02	0.00	0.12	0.15
23	0.19	0.16	0.10	108	1.3	4.0	0.66	0.41	0.02	0.00	0.06	0.14
24	0.18	0.86	0.18	30	1.3	2.9	0.59	0.31	0.03	1.3	0.02	0.12
25	0.19	0.69	0.19	24	1.5	2.6	0.70	0.26	0.04	0.72	0.34	0.10
26	0.16	0.19	0.10	7.9	1.2	2.6	0.64	0.24	0.04	0.13	0.53	0.11
27	0.18	0.14	0.09	5.3	1.3	10	0.55	0.20	1.7	0.08	1.5	0.89
28	0.16	0.13	0.09	4.0	1.1	4.2	0.60	0.23	6.3	0.05	2.6	0.97
29	0.13	0.15	0.10	3.0	---	3.1	0.57	0.17	0.40	0.03	1.6	0.29
30	0.12	0.17	0.09	2.6	---	2.7	0.53	0.25	0.13	0.00	3.4	0.18
31	0.11	---	0.08	2.0	---	2.6	---	0.40	---	0.00	80	---
TOTAL	9.17	5.17	14.21	264.81	63.2	138.3	54.06	16.64	11.19	2.98	91.43	80.89
MEAN	0.296	0.172	0.458	8.542	2.257	4.461	1.802	0.537	0.373	0.096	2.949	2.696
MAX	2.4	0.86	8.9	108	11	12	11	1.4	6.3	1.3	80	62
MIN	0.10	0.06	0.07	0.09	1.1	1.2	0.53	0.17	0.02	0.00	0.00	0.07
CFSM	0.04	0.02	0.06	1.15	0.30	0.60	0.24	0.07	0.05	0.01	0.40	0.36
IN.	0.05	0.03	0.07	1.33	0.32	0.69	0.27	0.08	0.06	0.01	0.46	0.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2002, BY WATER YEAR (WY)

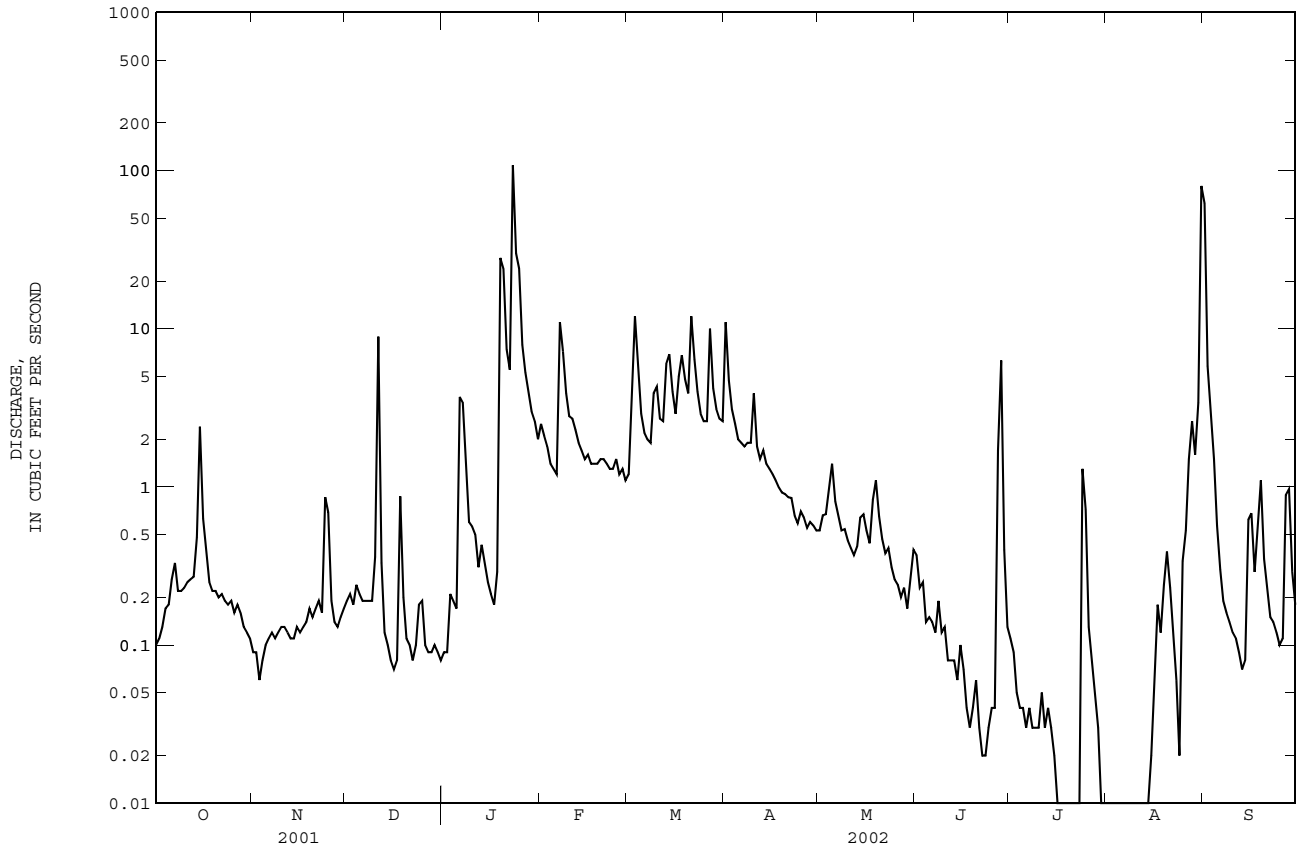
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	5.084	4.602	4.659	13.35	12.81	15.66	8.995	4.896	3.546	3.127	1.739	4.842			
MAX	17.1	18.2	10.6	37.3	32.9	42.4	22.0	19.2	20.5	14.8	8.61	23.7			
(WY)	1990	1996	1990	1998	1998	1998	1997	1990	1995	1989	1994	1996			
MIN	0.28	0.17	0.46	2.33	2.26	4.46	1.80	0.54	0.37	0.096	0.33	0.25			
(WY)	1999	2002	2002	2001	2002	2002	2002	2002	2002	2002	1998	2001			

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1988 - 2002

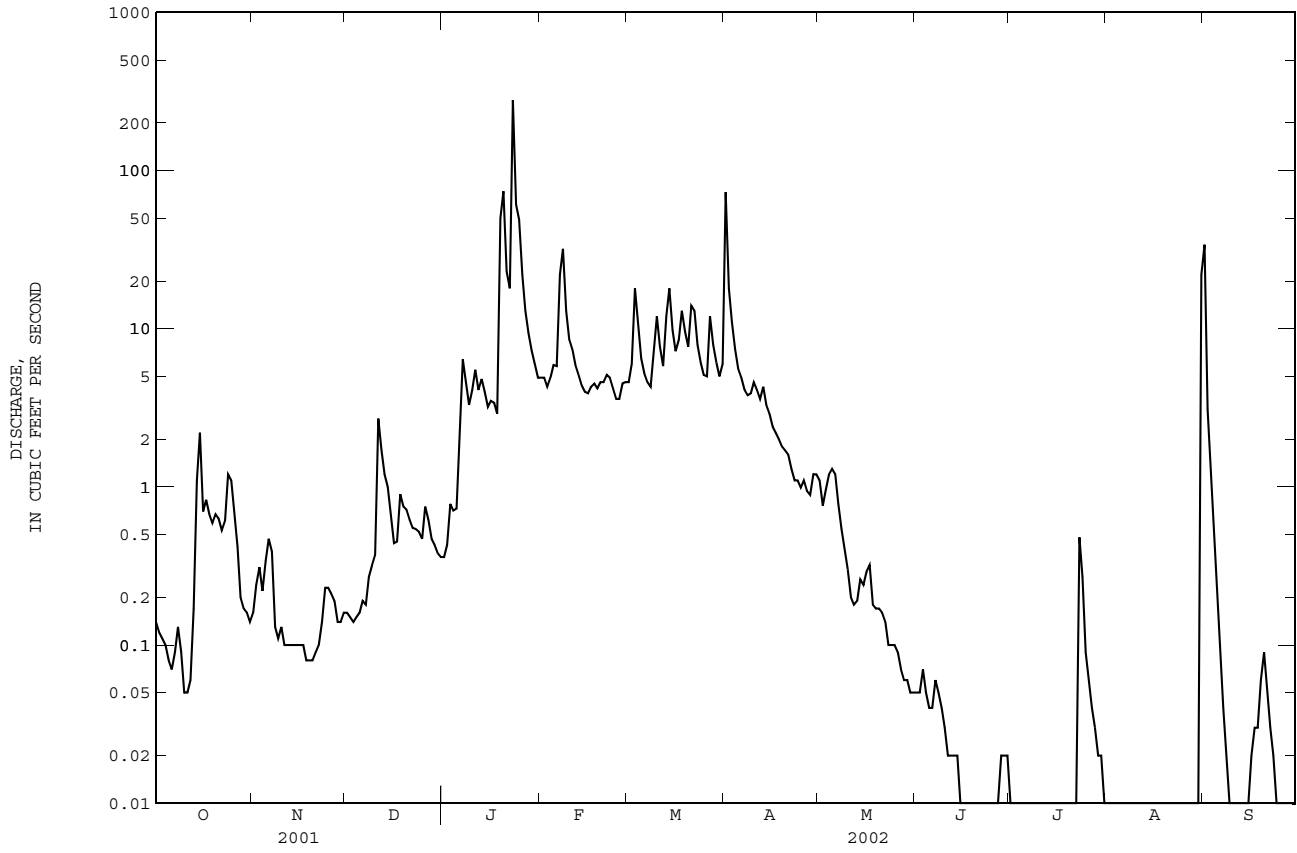
ANNUAL TOTAL	1071.70	752.05	
ANNUAL MEAN	2.936	2.060	6.975
HIGHEST ANNUAL MEAN			12.8 1998
LOWEST ANNUAL MEAN			2.06 2002
HIGHEST DAILY MEAN	90 Feb 17	108 Jan 23	531 Sep 6 1996
LOWEST DAILY MEAN	0.06 Nov 3	0.00 Jul 17	0.00 Aug 20 1988
ANNUAL SEVEN-DAY MINIMUM	0.09 Oct 31	0.00 Jul 17	0.00 Jul 17 2002
MAXIMUM PEAK FLOW		309 Aug 31	1670 Sep 6 1996
MAXIMUM PEAK STAGE		5.78 Aug 31	11.91 Sep 6 1996
INSTANTANEOUS LOW FLOW		0.00* Jul 17	0.00* Aug 19 1988
ANNUAL RUNOFF (CFSM)	0.40	0.28	0.94
ANNUAL RUNOFF (INCHES)	5.37	3.77	12.77
10 PERCENT EXCEEDS	5.1	3.9	13
50 PERCENT EXCEEDS	1.1	0.25	2.0
90 PERCENT EXCEEDS	0.12	0.03	0.30

* See REMARKS.

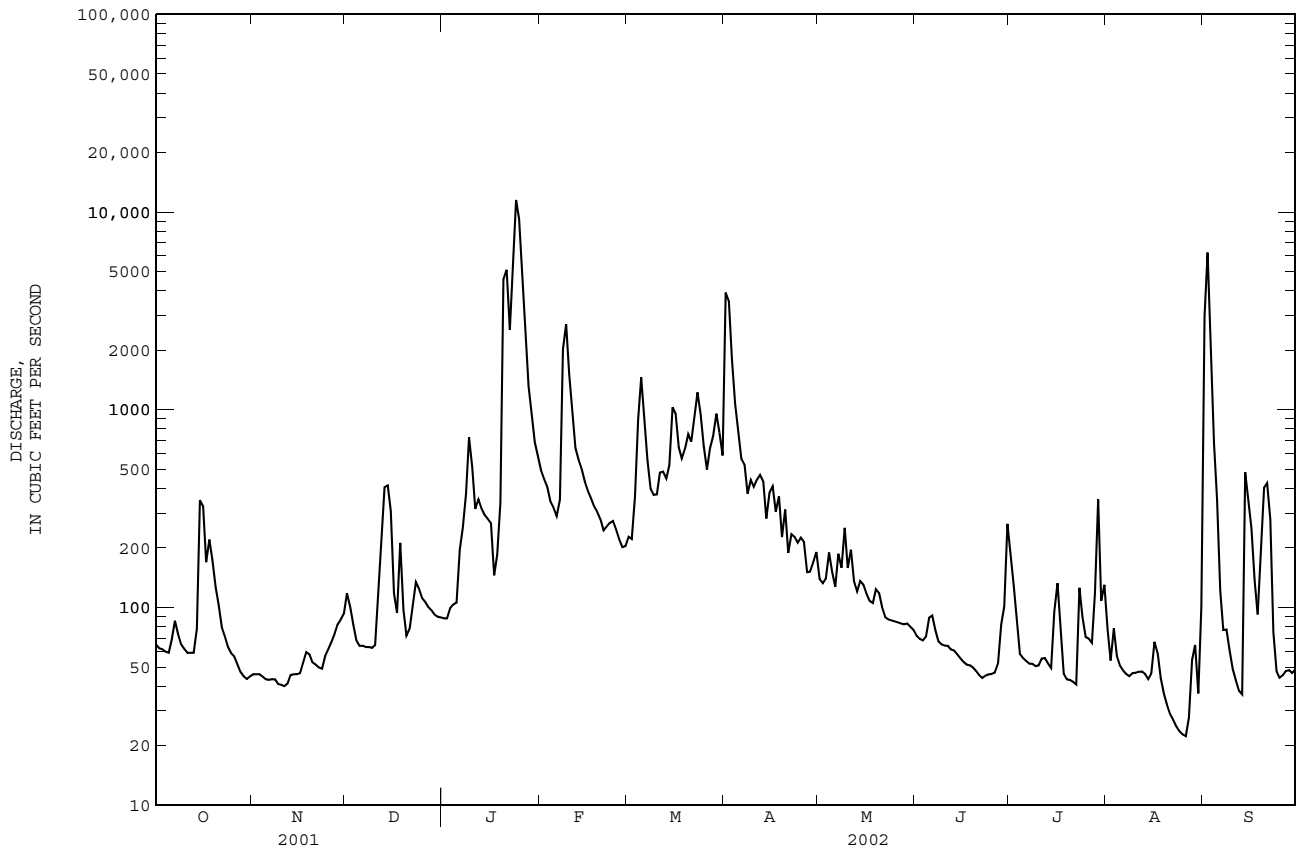
0210166029 ROCKY RIVER NEAR CRUTCHFIELD CROSSROADS, NC--Continued



02101800 TICK CREEK NEAR MOUNT VERNON SPRINGS, NC--Continued



02102000 DEEP RIVER AT MONCURE, NC--Continued



CAPE FEAR RIVER BASIN

02102000 DEEP RIVER AT MONCURE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1957 to 1965, 1968 to 1970, 1972, 1976 to 1978, 1981 to 1983, 2002.

REMARKS.--In 2002, water-quality data were collected at this station in cooperation with the Upper Cape Fear River Basin Association to assess constituent loads.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	ANC WATER UNFLTRD IT CACO3 (00419)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
AUG													
14...	1300	43	764	5.5	69	7.6	367	27.4	42	.018	.63	.177	.005
20...	1345	32	760	7.1	96	7.6	352	30.8	60	.020	.68	.473	.009
27...	0930	24	--	4.6	--	7.1	359	26.5	60	.072	.81	.335	.011
SEP													
04...	1530	570	--	7.9	--	6.8	104	23.5	18	.134	.96	1.14	.018
11...	0945	43	749	5.8	71	6.9	168	24.7	24	.049	.79	2.14	.028
17...	1230	134	--	7.0	--	6.8	114	24.1	20	.023	.68	.91	.009
25...	0845	44	--	6.0	--	7.1	149	23.1	31	.023	.62	.67	.006

Date	ORTHO-PHOS-PHATE, DIS-SOLVED AS P) (00671)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
AUG		
14...	.568	1.4
20...	.704	3.7
27...	.806	18
SEP		
04...	.149	18
11...	.470	6.4
17...	.202	17
25...	.213	28

CAPE FEAR RIVER BASIN

0210215985 CAPE FEAR RIVER AT STATE HIGHWAY 42 NEAR BRICKHAVEN, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
NOV 01...	<4	<.3	<20	4.9	7.8
DEC 03...	--	--	--	12	16.3
FEB 12...	--	--	--	20	194
APR 15...	<2	<.3	<20	8.9	--
JUN 18...	--	--	--	5.5	8.8
AUG 28...	--	--	--	3.6	2.4

Remark codes used in this report:

< -- Less than
E -- Estimated value
M -- Presence verified, not quantified



Gaging station and raingage at Abbotts Creek at Lexington, North Carolina.

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 mi².

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 NGVD of 1929. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Since Dec. 1, 1980, considerable regulation by Harris Lake (station 02102190). Maximum discharge prior to regulation: 6,920 ft³/s, Feb. 2, 1973; gage height: 20.02 ft. Minimum discharge prior to regulation: 0.01 ft³/s, Sept. 2, 1976. Minimum discharge for period of record and current water year also occurred June 22, 23, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	4.2	8.5	5.6	145	8.3	151	1.3	1.3	0.57	0.29	1.4
2	3.2	4.2	8.3	1.8	135	9.2	148	1.1	1.2	0.48	0.21	0.91
3	3.2	4.2	7.8	2.7	114	15	138	1.5	0.96	0.45	0.19	0.72
4	3.2	5.6	7.8	2.4	101	15	125	1.9	0.78	0.42	0.16	0.61
5	3.1	10	7.8	2.2	84	12	104	2.9	0.68	0.41	0.15	0.57
6	4.0	10	7.8	5.1	71	11	89	1.3	0.54	0.98	0.14	0.52
7	4.0	10	7.8	5.7	100	10	73	1.3	0.54	0.58	0.14	0.53
8	3.5	10	7.8	4.1	123	9.5	61	1.2	0.49	0.47	0.13	0.52
9	3.5	10	7.1	3.3	115	8.7	51	1.2	0.45	0.36	0.13	0.53
10	3.5	10	7.1	3.8	105	8.8	53	1.2	0.44	0.28	0.11	0.52
11	3.5	10	15	4.3	96	7.2	47	1.5	0.29	0.40	0.10	0.56
12	3.6	9.9	9.0	3.4	82	6.7	41	1.1	0.18	0.41	0.09	0.52
13	3.7	9.8	8.3	4.2	74	7.6	34	1.3	0.18	0.36	0.09	0.52
14	5.4	9.7	8.1	3.4	65	7.0	30	2.1	0.16	0.67	0.09	0.77
15	6.3	9.6	8.3	3.0	56	6.2	27	1.5	0.14	0.55	0.12	1.6
16	3.9	9.6	7.9	2.7	48	5.6	25	1.2	0.12	0.39	0.28	1.7
17	3.9	9.4	7.5	2.6	43	6.2	21	1.1	0.09	0.33	0.43	0.99
18	3.8	9.2	8.1	2.6	35	5.9	18	1.6	0.08	0.34	0.45	0.72
19	3.7	9.2	7.8	22	30	5.2	16	2.3	0.08	0.42	0.46	0.63
20	3.7	8.6	7.5	71	27	4.7	16	1.7	0.07	0.50	0.48	0.57
21	3.7	8.5	7.8	64	24	7.0	14	1.5	0.07	0.57	0.39	0.49
22	3.7	8.5	7.8	72	22	9.3	12	1.7	0.06	0.42	0.33	0.46
23	3.7	8.5	7.8	237	21	6.0	9.9	1.6	0.06	0.38	0.30	0.48
24	3.7	10	8.0	305	17	5.2	7.0	1.4	0.06	0.37	0.20	0.52
25	4.2	9.4	8.0	347	14	4.7	5.5	1.3	0.08	3.1	0.14	0.52
26	4.2	9.1	7.8	313	12	4.5	4.7	1.3	0.23	2.5	0.33	0.54
27	4.4	8.6	8.0	277	11	6.6	3.5	1.4	1.2	0.98	0.58	0.63
28	4.4	8.5	8.1	244	9.5	5.9	2.7	1.4	5.9	0.63	0.93	0.70
29	4.2	8.5	8.2	213	---	4.8	2.6	1.3	9.2	0.49	0.62	0.62
30	4.2	8.5	8.1	187	---	4.4	2.0	1.3	1.1	0.42	0.74	0.57
31	4.2	---	8.1	166	---	16	---	1.4	---	0.37	1.4	---
TOTAL	120.6	261.3	253.0	2580.9	1779.5	244.2	1331.9	45.9	26.73	19.60	10.20	20.94
MEAN	3.890	8.710	8.161	83.25	63.55	7.877	44.40	1.481	0.891	0.632	0.329	0.698
MAX	6.3	10	15	347	145	16	151	2.9	9.2	3.1	1.4	1.7
MIN	3.1	4.2	7.1	1.8	9.5	4.4	2.0	1.1	0.06	0.28	0.09	0.46
CFSM	0.05	0.11	0.11	1.09	0.83	0.10	0.58	0.02	0.01	0.01	0.00	0.01
IN.	0.06	0.13	0.12	1.26	0.87	0.12	0.65	0.02	0.01	0.01	0.00	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2002,[®] BY WATER YEAR (WY)

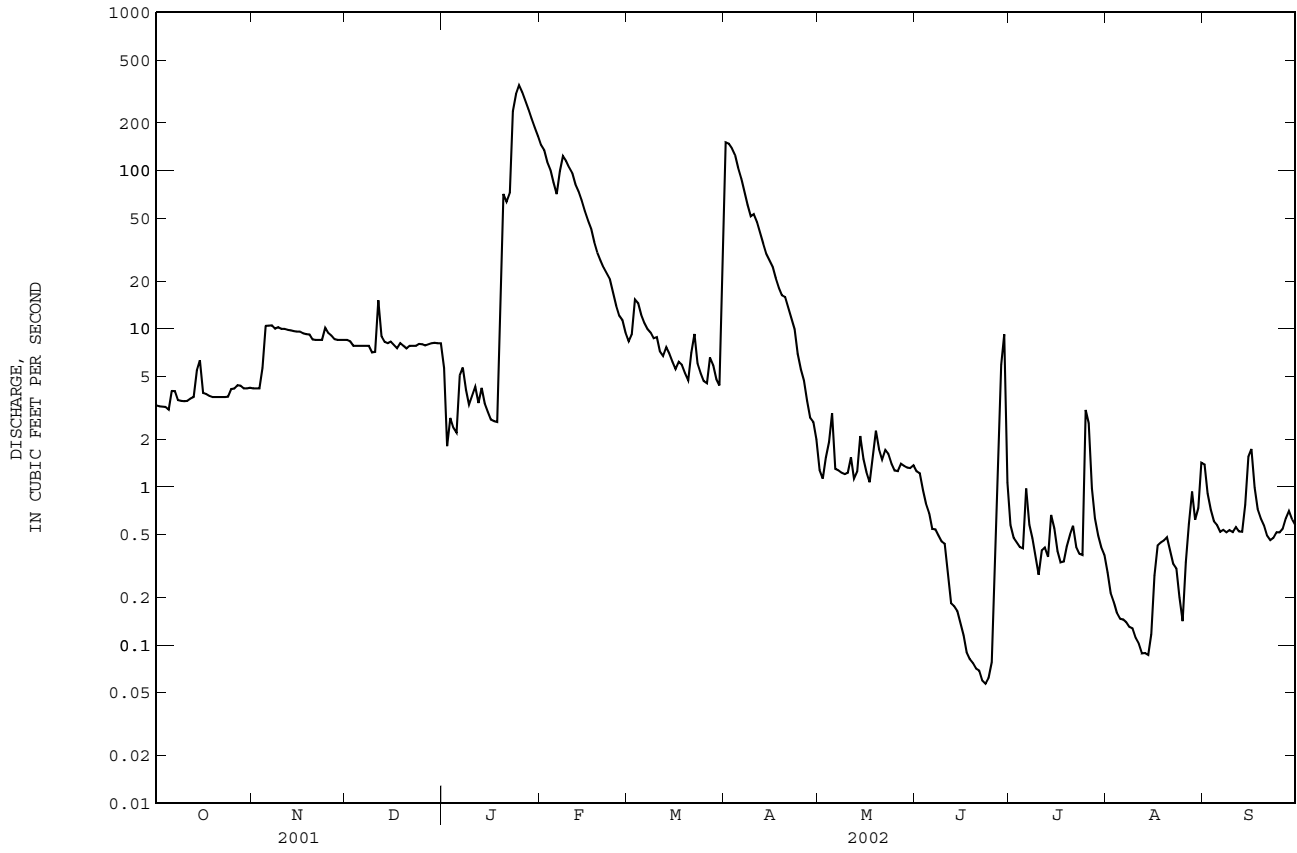
	2000	1996	1984	1984	1998	1998	1993	1989	1984	2001	1986	1996
MEAN	20.74	22.47	31.08	67.60	100.7	123.9	86.08	38.83	26.68	25.95	24.45	28.01
MAX	137	146	143	241	348	421	312	184	138	182	199	335
(WY)	2000	1996	1984	1984	1998	1998	1993	1989	1984	2001	1986	1996
MIN	0.70	0.81	1.40	2.07	1.37	1.66	1.13	1.48	0.67	0.34	0.33	0.70
(WY)	1982	1992	1992	2001	1992	1992	1992	2002	1981	1981	2002	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1981 - 2002 [®]
ANNUAL TOTAL	20404.8	6694.77	
ANNUAL MEAN	55.90	18.34	49.42
HIGHEST ANNUAL MEAN			126
LOWEST ANNUAL MEAN			2.47
HIGHEST DAILY MEAN	828	347	1940
LOWEST DAILY MEAN	1.3	0.06	0.06
ANNUAL SEVEN-DAY MINIMUM	1.7	0.07	0.07
MAXIMUM PEAK FLOW		513	4300
MAXIMUM PEAK STAGE		5.42	16.79
INSTANTANEOUS LOW FLOW		0.05*	0.05*
ANNUAL RUNOFF (CFSM)	0.73	0.24	0.65
ANNUAL RUNOFF (INCHES)	9.95	3.26	8.80
10 PERCENT EXCEEDS	181	52	151
50 PERCENT EXCEEDS	8.1	3.7	7.5
90 PERCENT EXCEEDS	1.9	0.32	0.69

[®] Regulated period only (1981-2002).

* See REMARKS.

02102192 BUCKHORN CREEK NEAR CORINTH, NC--Continued



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 mi².

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 NGVD of 1929. 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 ft³/s, Sept. 19, 1945, from rating curve extended above 76,000 ft³/s; gage height: 33.19 ft, from floodmark; minimum discharge: 11 ft³/s, Oct. 14, 15, 1954; gage height: -0.17 ft. Minimum discharge for period of record and current water year also occurred on Aug. 7, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	654	617	576	550	2410	727	6280	587	574	675	650	1230
2	686	618	593	532	1260	768	5980	535	589	430	287	6520
3	623	618	573	600	1090	1080	3150	642	581	439	227	3540
4	607	616	556	571	1050	1110	3510	687	591	376	221	1220
5	643	608	544	606	973	2190	3940	763	585	327	189	753
6	691	612	517	706	961	3090	2120	681	564	431	155	520
7	711	613	593	981	1110	4000	1780	654	605	340	226	324
8	674	618	553	728	2230	3100	1780	696	565	303	281	287
9	653	620	541	937	3980	951	1590	692	579	293	291	295
10	653	617	504	1000	2900	920	1040	734	534	291	275	270
11	642	604	777	823	3090	907	1030	664	548	300	264	257
12	632	599	740	660	3920	1020	1040	678	551	297	255	247
13	633	609	772	731	4440	981	1020	606	610	317	257	237
14	643	629	961	681	2790	1040	866	711	601	356	264	274
15	896	605	836	679	2040	1430	855	642	611	359	282	936
16	696	599	705	606	1060	1600	950	629	596	318	284	816
17	509	559	582	570	974	1250	801	619	583	330	294	625
18	602	612	678	622	921	1080	863	693	545	287	278	404
19	639	615	634	589	889	1330	745	614	534	274	254	355
20	588	543	569	4560	875	2330	763	619	517	239	250	490
21	688	521	532	6860	849	2450	703	575	506	300	239	674
22	680	519	535	4100	798	2520	659	589	505	283	232	645
23	589	538	566	4270	815	1940	674	643	509	277	243	442
24	653	610	604	12700	818	1870	650	637	506	358	242	273
25	605	586	607	11600	802	1570	638	616	505	504	245	253
26	603	567	552	6710	776	1410	631	624	484	531	260	257
27	583	559	561	4200	757	1740	620	629	585	408	288	244
28	611	573	555	4320	707	2440	576	630	644	327	351	256
29	617	569	560	5250	---	2460	585	601	1290	415	304	266
30	623	582	554	4940	---	2520	563	607	525	472	312	254
31	622	---	547	4270	---	2390	---	612	---	300	288	---
TOTAL	19949	17755	18977	86952	45285	54214	46402	19909	17522	11157	8488	23164
MEAN	643.5	591.8	612.2	2805	1617	1749	1547	642.2	584.1	359.9	273.8	772.1
MAX	896	629	961	12700	4440	4000	6280	763	1290	675	650	6520
MIN	509	519	504	532	707	727	563	535	484	239	155	237
CFSM	0.19	0.17	0.18	0.81	0.47	0.50	0.45	0.19	0.17	0.10	0.08	0.22
IN.	0.21	0.19	0.20	0.93	0.49	0.58	0.50	0.21	0.19	0.12	0.09	0.25

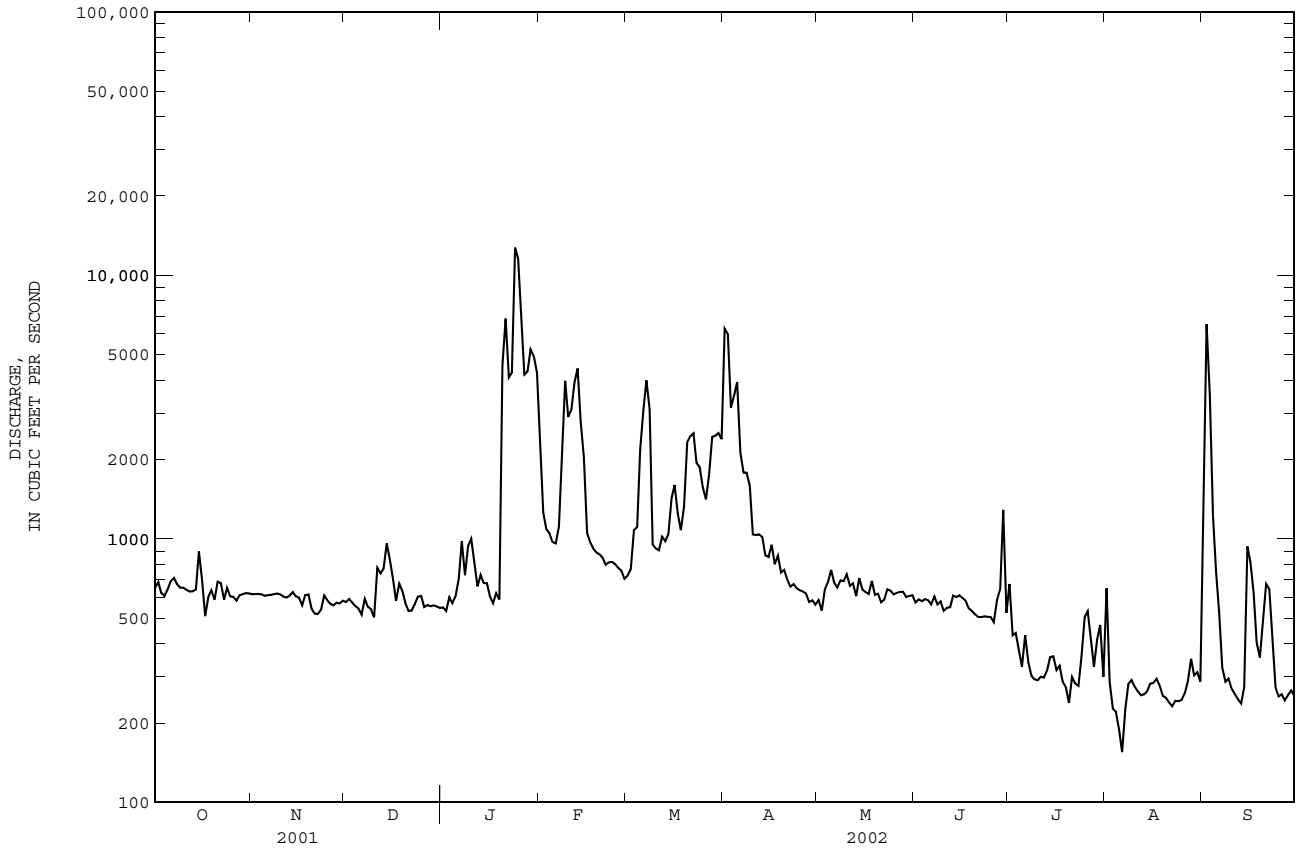
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2002,* BY WATER YEAR (WY)

	1920	1870	2523	5223	6194	7149	4783	2495	2159	1669	1527	1876
MEAN	1920	1870	2523	5223	6194	7149	4783	2495	2159	1669	1527	1876
MAX	6442	7919	8595	11750	16440	15710	11670	7784	12510	5694	5448	13920
(WY)	1990	1986	1984	1998	1998	1993	1993	1989	1982	1995	1985	1996
MIN	621	522	612	707	1617	1628	969	642	551	360	274	596
(WY)	1999	1999	2002	2001	2002	1988	1985	2002	1999	2002	2002	1990

02102500 CAPE FEAR RIVER AT LILLINGTON, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1982 - 2002*	
ANNUAL TOTAL	607852		369774		3267	
ANNUAL MEAN	1665		1013		6167	
HIGHEST ANNUAL MEAN					1013	
LOWEST ANNUAL MEAN					1984	
HIGHEST DAILY MEAN	16000	Apr 5	12700	Jan 24	41400	Sep 6 1996
LOWEST DAILY MEAN	484	Sep 17	155	Aug 6	155	Aug 6 2002
ANNUAL SEVEN-DAY MINIMUM	544	Dec 4	227	Aug 2	223	Oct 2 1981
MAXIMUM PEAK FLOW			13800		51800	
MAXIMUM PEAK STAGE			9.39		18.97	
INSTANTANEOUS LOW FLOW			141*		141*	
ANNUAL RUNOFF (CFSM)	0.48		0.29		0.94	
ANNUAL RUNOFF (INCHES)	6.53		3.97		12.81	
10 PERCENT EXCEEDS	3990		2270		9480	
50 PERCENT EXCEEDS	698		616		1170	
90 PERCENT EXCEEDS	570		283		593	

* See REMARKS.



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 mi².

WATER-DISCHARGE RECORDS

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 NGVD of 1929. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Some diurnal fluctuation at low flow during growing season. Minimum discharge some years affected by regulation from unknown source.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	4.5	4.7	4.8	6.7	5.3	18	3.3	3.8	3.1	8.3	8.9
2	4.0	4.5	4.6	4.7	6.3	7.2	7.7	3.2	3.1	2.7	3.6	5.7
3	3.8	4.5	4.6	5.8	6.2	15	6.2	3.2	2.6	2.3	2.5	4.2
4	3.7	4.5	4.6	6.0	6.3	7.4	5.6	5.3	2.5	2.3	2.0	3.4
5	3.6	4.5	4.6	6.0	6.1	6.2	5.3	6.8	2.4	2.2	1.9	2.8
6	10	4.5	4.6	11	6.1	5.8	5.2	4.4	2.3	3.6	1.7	2.4
7	18	4.5	4.6	16	17	5.6	5.2	3.7	2.6	2.5	1.7	2.3
8	6.4	4.6	4.6	9.1	17	5.6	5.2	3.5	2.8	2.1	1.8	2.2
9	5.3	4.5	4.5	7.5	9.5	5.7	5.0	3.3	2.5	1.9	1.3	2.3
10	5.0	4.5	4.5	8.8	7.9	6.8	6.1	3.0	2.2	1.7	1.3	2.1
11	4.8	4.6	11	8.5	7.5	5.3	5.7	3.6	2.1	2.1	1.3	2.0
12	4.6	4.5	6.7	6.6	6.9	5.7	5.0	2.9	2.0	2.6	1.1	1.8
13	4.6	4.5	5.7	8.9	6.6	6.6	5.1	2.9	2.0	2.0	0.94	1.8
14	4.5	4.8	5.6	6.7	6.3	6.4	4.8	5.7	1.8	2.3	1.1	2.5
15	6.5	4.8	5.3	6.0	6.2	5.7	5.0	3.6	2.2	3.4	1.9	7.5
16	4.7	4.7	4.9	5.6	6.2	5.3	4.7	3.1	2.0	2.5	1.8	12
17	4.3	4.6	4.9	5.5	5.9	5.2	4.5	2.8	1.9	1.8	2.6	6.1
18	4.3	4.7	6.5	5.3	5.8	5.3	4.3	5.3	2.0	1.7	2.8	4.5
19	4.3	4.9	5.3	8.3	5.8	5.3	4.2	6.4	2.2	1.6	2.5	5.7
20	4.5	4.8	5.0	26	5.8	5.3	4.0	3.9	2.1	1.4	2.5	4.4
21	4.3	4.6	4.8	11	5.8	10	3.9	3.6	1.9	2.1	1.9	3.5
22	4.4	4.6	4.7	9.7	5.6	8.0	3.7	3.5	1.9	1.6	1.7	3.1
23	4.3	4.7	4.8	23	5.6	5.9	3.6	3.2	2.2	2.3	1.6	2.9
24	4.2	11	5.1	24	5.5	5.6	3.6	3.0	2.1	11	1.2	2.9
25	4.4	7.9	4.9	16	5.3	5.3	3.7	2.7	2.0	6.2	1.3	2.9
26	4.2	5.7	4.9	11	5.4	5.3	3.6	2.5	2.0	5.5	2.7	3.3
27	4.1	5.3	4.8	8.6	5.3	9.0	3.6	2.4	3.0	4.1	4.5	4.3
28	4.3	5.0	4.9	8.0	5.3	5.9	3.9	2.3	23	3.1	7.4	4.9
29	4.5	4.9	4.9	7.6	---	5.4	3.6	2.3	6.7	2.8	5.3	4.4
30	4.6	4.9	4.6	7.1	---	5.4	3.2	2.8	3.9	2.8	4.7	3.3
31	4.5	---	4.7	6.9	---	8.0	---	5.7	---	2.6	8.1	---
TOTAL	158.9	150.6	159.9	300.0	195.9	200.5	153.2	113.9	95.8	89.9	85.04	120.1
MEAN	5.126	5.020	5.158	9.677	6.996	6.468	5.107	3.674	3.193	2.900	2.743	4.003
MAX	18	11	11	26	17	15	18	6.8	23	11	8.3	12
MIN	3.6	4.5	4.5	4.7	5.3	5.2	3.2	2.3	1.8	1.4	0.94	1.8
CFSM	0.67	0.66	0.68	1.27	0.92	0.85	0.67	0.48	0.42	0.38	0.36	0.52
IN.	0.77	0.73	0.78	1.46	0.96	0.98	0.75	0.56	0.47	0.44	0.41	0.59

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2002, BY WATER YEAR (WY)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002			
MEAN	10.44	11.04	11.70	14.09	15.08	15.00	13.18	10.76	10.40	10.49	9.452	9.993																										
MAX	19.9	20.5	19.5	20.2	32.0	28.5	39.7	18.9	25.3	24.5	16.4	22.3																										
(WY)	1972	1980	1973	1975	1973	1998	1973	1973	1995	1989	1974	1996																										
MIN	5.13	5.02	5.16	7.30	7.00	6.47	5.11	3.67	3.19	2.90	2.74	4.00																										
(WY)	2002	2002	2002	2001	2002	2002	2002	2002	2002	2002	2002	2002																										

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

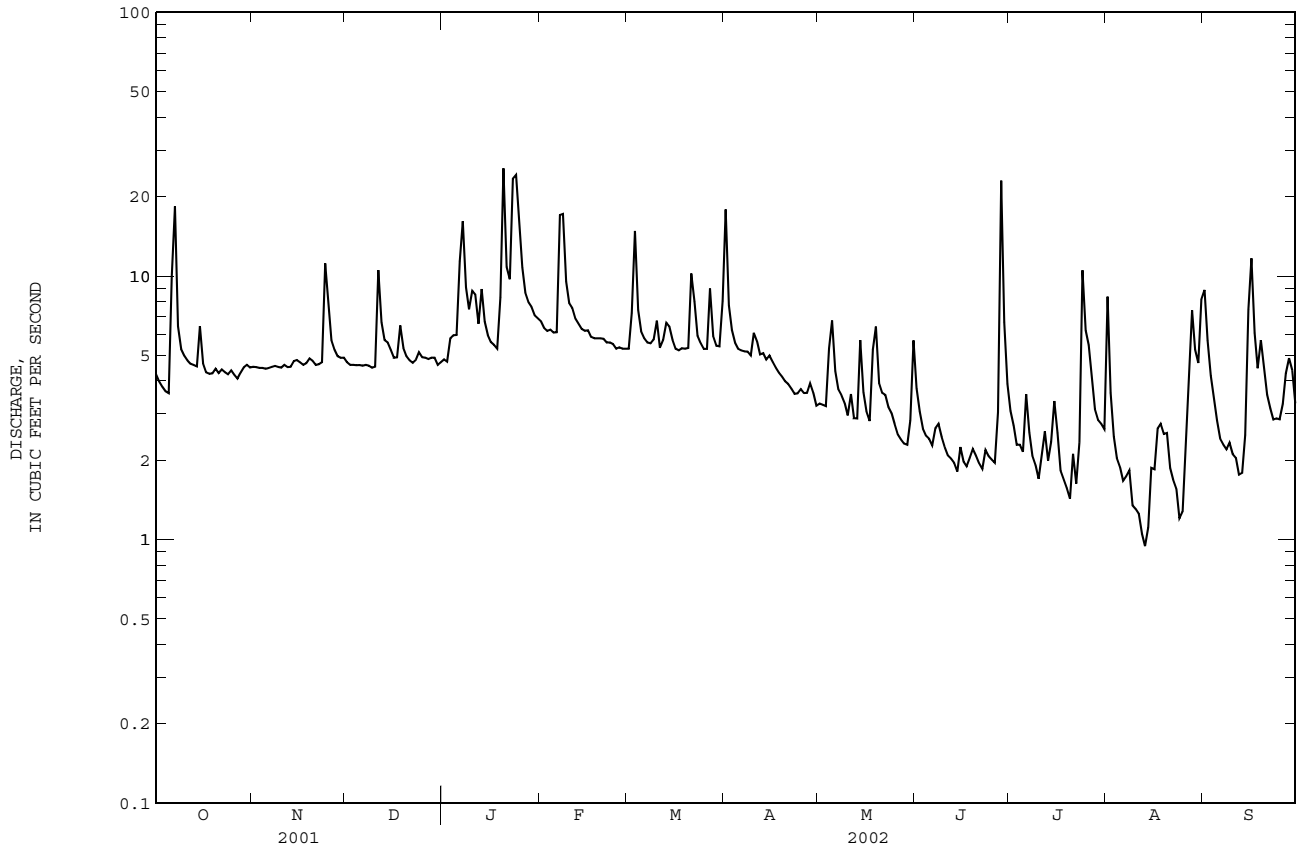
FOR 2002 WATER YEAR

WATER YEARS 1968 - 2002

ANNUAL TOTAL	2197.6	1823.74	
ANNUAL MEAN	6.021	4.997	11.81
HIGHEST ANNUAL MEAN			20.2
LOWEST ANNUAL MEAN			5.00
HIGHEST DAILY MEAN	30	Sep 25	200
LOWEST DAILY MEAN	2.4	Aug 10	0.94
ANNUAL SEVEN-DAY MINIMUM	2.5	Aug 7	1.3
MAXIMUM PEAK FLOW			39
MAXIMUM PEAK STAGE			1.60
INSTANTANEOUS LOW FLOW			0.38*
ANNUAL RUNOFF (CFSM)	0.79		0.65
ANNUAL RUNOFF (INCHES)	10.71		8.89
10 PERCENT EXCEEDS	9.0		7.9
50 PERCENT EXCEEDS	4.9		4.6
90 PERCENT EXCEEDS	3.4		2.0

* See REMARKS.

02102908 FLAT CREEK NEAR INVERNESS, NC--Continued



PRECIPITATION RECORDS

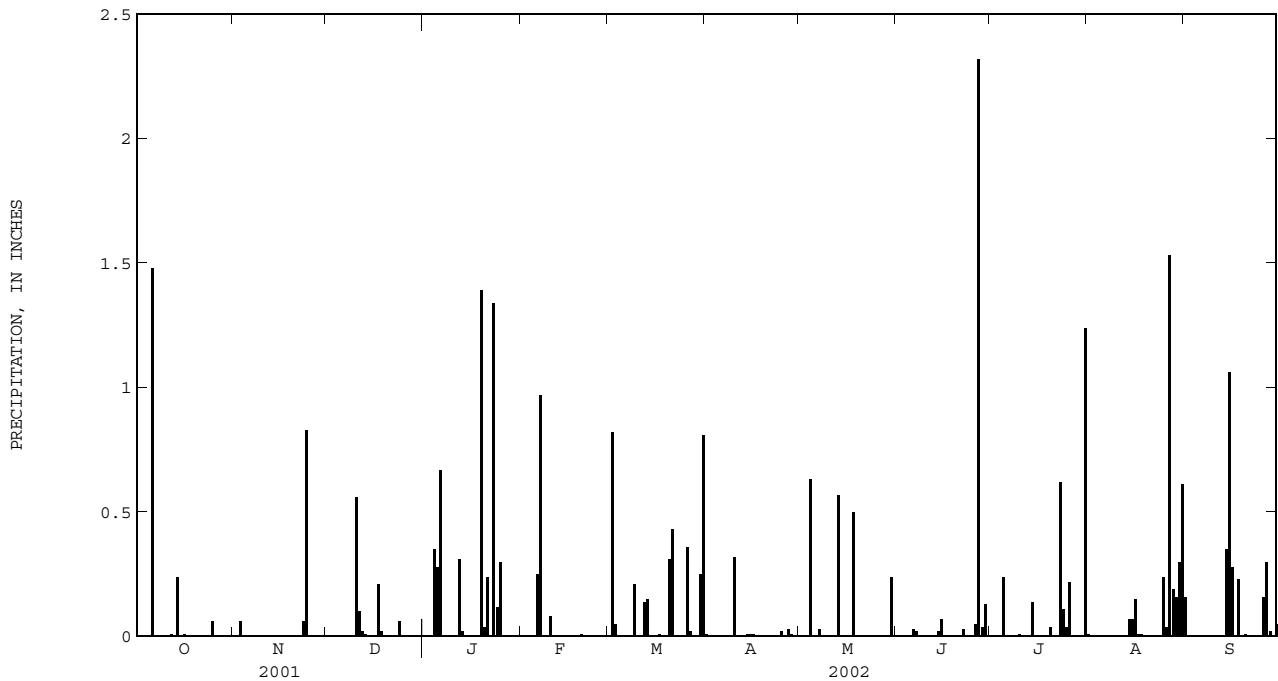
PERIOD OF RECORD.--April 2000 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and data collection platform. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.16
2	0.00	0.00	0.00	0.00	0.00	0.82	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.06	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00
6	1.48	0.00	0.00	0.67	0.25	0.00	0.00	0.00	0.03	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.97	0.00	0.00	0.03	0.02	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.56	0.00	0.08	0.00	0.32	0.00	0.00	0.01	0.00	0.00
11	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.01	0.00	0.02	0.31	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.01	0.02	0.00	0.15	0.00	0.57	0.00	0.00	0.00	0.00
14	0.24	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.14	0.07	0.35
15	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.07	0.00	0.07	1.06
16	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.15	0.28
17	0.00	0.00	0.21	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00
18	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.01	0.23
19	0.00	0.00	0.00	1.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.04	0.01	0.31	0.00	0.00	0.00	0.04	0.00	0.01
21	0.00	0.00	0.00	0.24	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
23	0.00	0.06	0.00	1.34	0.00	0.00	0.00	0.00	0.00	0.62	0.00	0.00
24	0.00	0.83	0.06	0.12	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00
25	0.06	0.00	0.00	0.30	0.00	0.00	0.02	0.00	0.00	0.04	0.24	0.00
26	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.05	0.22	0.04	0.16
27	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.00	2.32	0.00	1.53	0.30
28	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.04	0.00	0.19	0.02
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.13	0.00	0.16	0.00
30	0.00	0.00	0.00	0.00	---	0.25	0.00	0.24	0.00	0.00	0.30	0.05
31	0.00	---	0.00	0.00	---	0.81	---	0.00	---	1.24	0.61	---
TOTAL	1.80	0.95	0.98	5.06	1.31	3.56	0.42	1.97	2.71	2.66	3.39	2.62





Streamflow measurement using Acoustic Doppler Current Profiler at Four Mile Creek, North Carolina.

CAPE FEAR RIVER BASIN

02104000 CAPE FEAR RIVER AT FAYETTEVILLE, NC

LOCATION.--Lat 35°02'49", long 78°51'36", Cumberland County, Hydrologic Unit 03030004, at State Highway 24 bridge at Fayetteville, 700 ft upstream of Atlantic Coast Railroad bridge, 0.3 mi downstream of Cross Creek.

DRAINAGE AREA.--4,395 mi².

PERIOD OF RECORD.-- Discharge records January 1889 to September 1917, and October 1928 to September 1940. October 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is 20.52 ft above NGVD of 1929. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum, 48.3 ft, Sept. 24, 1945.

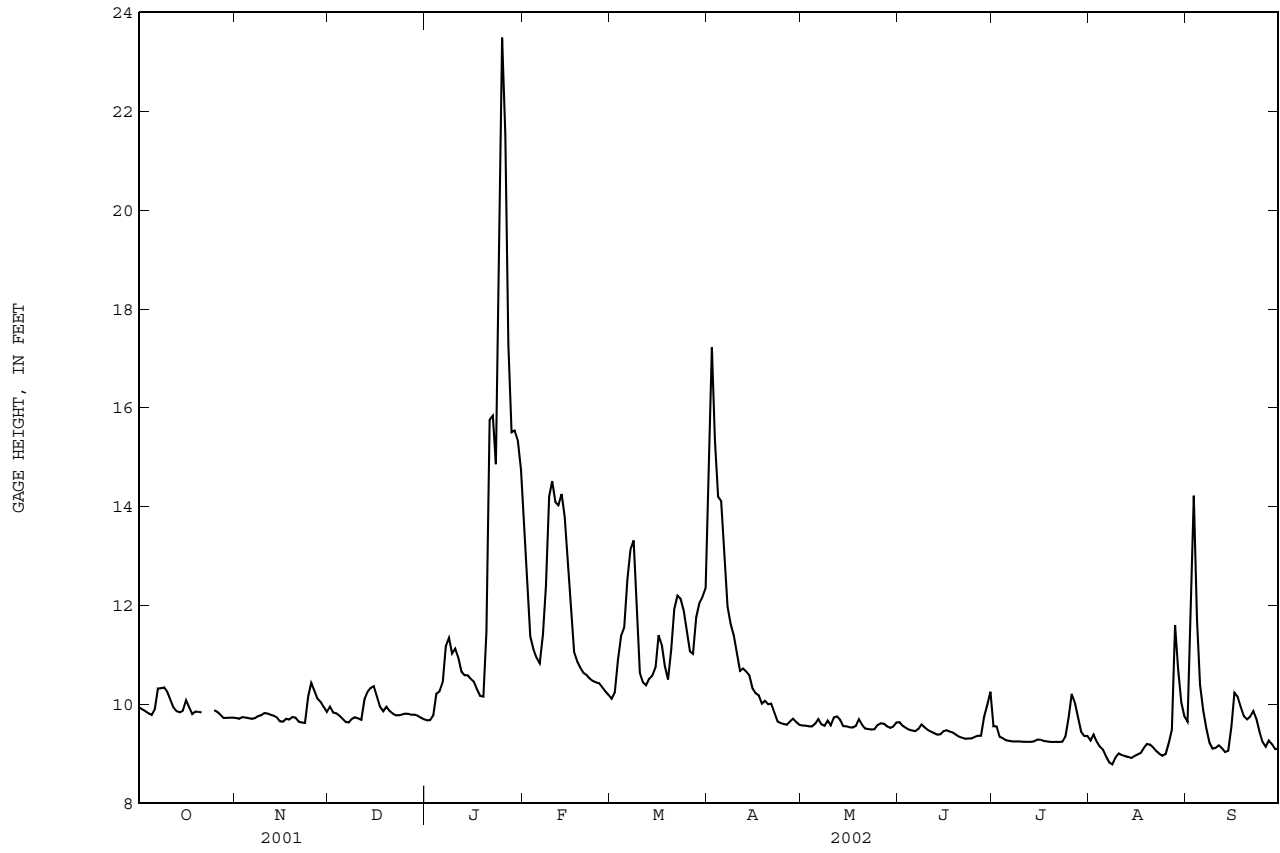
EXTREMES FOR PERIOD OF RECORD.--Maximum, 46.17 ft, Sept. 7, 1996; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum, 23.66 ft, Jan. 25; minimum, 8.76 ft, Aug. 8.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.94	9.72	9.95	9.68	13.63	10.11	14.68	9.57	9.64	9.56	9.27	9.65
2	9.90	9.71	9.83	9.68	12.34	10.23	17.23	9.57	9.57	9.55	9.39	12.12
3	9.86	9.74	9.82	9.78	11.37	10.90	15.35	9.55	9.52	9.34	9.24	14.22
4	9.82	9.73	9.77	10.22	11.11	11.39	14.20	9.55	9.49	9.31	9.14	11.72
5	9.78	9.72	9.71	10.26	10.94	11.55	14.11	9.60	9.47	9.27	9.08	10.39
6	9.90	9.71	9.64	10.45	10.83	12.53	13.20	9.70	9.46	9.26	8.95	9.87
7	10.32	9.72	9.63	11.17	11.41	13.13	11.97	9.60	9.50	9.25	8.82	9.52
8	10.32	9.76	9.70	11.34	12.40	13.31	11.63	9.57	9.59	9.25	8.78	9.22
9	10.34	9.78	9.74	11.03	14.21	11.84	11.39	9.67	9.53	9.25	8.92	9.11
10	10.26	9.82	9.71	11.13	14.52	10.64	11.05	9.57	9.48	9.24	9.01	9.12
11	10.09	9.81	9.68	10.95	14.09	10.45	10.67	9.73	9.45	9.24	8.97	9.17
12	9.94	9.79	10.10	10.66	14.03	10.38	10.72	9.76	9.42	9.24	8.95	9.11
13	9.86	9.77	10.25	10.59	14.25	10.52	10.66	9.69	9.39	9.24	8.94	9.03
14	9.84	9.74	10.33	10.59	13.80	10.58	10.59	9.56	9.39	9.25	8.91	9.06
15	9.87	9.66	10.37	10.51	12.78	10.75	10.32	9.55	9.45	9.29	8.95	9.54
16	10.08	9.65	10.15	10.45	11.86	11.40	10.22	9.53	9.48	9.28	8.98	10.24
17	9.94	9.71	9.95	10.30	11.06	11.20	10.18	9.53	9.45	9.26	9.02	10.16
18	9.80	9.69	9.86	10.17	10.87	10.77	10.01	9.56	9.43	9.25	9.11	9.95
19	9.85	9.74	9.95	10.16	10.74	10.50	10.07	9.70	9.39	9.24	9.20	9.76
20	9.85	9.73	9.87	11.47	10.63	11.11	10.00	9.58	9.34	9.24	9.19	9.70
21	9.84	9.65	9.81	15.76	10.59	11.93	10.01	9.51	9.32	9.24	9.13	9.75
22	---	9.63	9.78	15.84	10.52	12.20	9.84	9.50	9.30	9.24	9.06	9.86
23	---	9.62	9.78	14.86	10.47	12.14	9.65	9.49	9.31	9.25	9.00	9.71
24	---	10.16	9.79	20.16	10.44	11.90	9.62	9.50	9.31	9.35	8.96	9.44
25	9.88	10.44	9.81	23.49	10.42	11.50	9.60	9.58	9.34	9.74	8.99	9.24
26	9.85	10.28	9.81	21.53	10.34	11.07	9.59	9.62	9.37	10.21	9.22	9.14
27	9.79	10.11	9.79	17.28	10.26	11.02	9.66	9.61	9.36	10.03	9.49	9.27
28	9.72	10.05	9.79	15.51	10.19	11.76	9.71	9.55	9.76	9.74	11.60	9.19
29	9.73	9.95	9.77	15.54	---	12.05	9.64	9.52	9.99	9.44	10.72	9.09
30	9.73	9.85	9.73	15.34	---	12.17	9.58	9.55	10.26	9.36	10.04	9.11
31	9.73	---	9.70	14.75	---	12.35	---	9.63	---	9.36	9.76	---
MEAN	---	9.81	9.86	12.92	11.79	11.40	11.17	9.59	9.49	9.38	9.25	9.82
MAX	---	10.44	10.37	23.49	14.52	13.31	17.23	9.76	10.26	10.21	11.60	14.22
MIN	---	9.62	9.63	9.68	10.19	10.11	9.58	9.49	9.30	9.24	8.78	9.03

02104000 CAPE FEAR RIVER AT FAYETTEVILLE, NC--Continued



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 mi².

PERIOD OF RECORD.--July 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 178 ft above NGVD of 1929, 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 and current water year also occurred on July 23, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	57	66	62	83	69	165	48	46	25	88	88
2	50	57	65	62	81	73	160	48	40	23	98	80
3	48	56	64	70	78	120	118	48	37	25	56	57
4	47	57	63	75	78	115	87	53	36	31	41	48
5	46	54	63	76	76	90	76	79	34	32	35	e42
6	53	54	63	88	75	80	72	68	33	27	31	39
7	117	56	62	132	115	76	69	58	38	26	28	37
8	113	55	62	129	149	73	68	54	43	23	26	36
9	76	54	62	105	142	71	66	56	37	21	24	36
10	63	56	62	96	111	74	69	51	36	21	24	35
11	59	55	82	98	97	70	75	57	32	37	23	34
12	57	54	97	92	89	67	69	54	30	33	22	33
13	55	56	83	95	84	75	74	50	29	28	21	32
14	54	57	76	93	81	98	72	55	29	27	20	e33
15	64	58	73	83	79	81	79	57	28	52	22	43
16	69	59	69	78	78	72	70	50	28	42	23	69
17	58	61	68	75	77	68	65	48	27	30	26	72
18	54	57	75	74	75	67	62	48	27	26	38	62
19	54	57	77	74	74	65	61	73	27	23	32	68
20	57	58	70	127	73	64	58	62	26	21	34	57
21	55	57	66	141	74	78	57	54	26	21	32	47
22	55	57	64	140	74	103	55	51	25	20	28	42
23	56	57	64	146	73	83	52	48	25	20	26	38
24	55	86	65	200	72	68	51	48	25	26	23	37
25	56	112	67	203	71	61	52	45	24	28	23	35
26	58	89	64	183	71	60	53	43	23	50	46	36
27	56	77	64	138	71	111	51	41	23	45	71	42
28	56	72	63	103	70	83	52	40	33	34	67	52
29	55	69	63	93	---	68	52	39	39	29	62	50
30	56	68	63	88	---	64	50	39	30	25	56	41
31	57	---	62	85	---	83	---	45	---	23	65	---
TOTAL	1861	1872	2107	3304	2371	2430	2160	1610	936	894	1211	1421
MEAN	60.03	62.40	67.97	106.6	84.68	78.39	72.00	51.94	31.20	28.84	39.06	47.37
MAX	117	112	97	203	149	120	165	79	46	52	98	88
MIN	46	54	62	62	70	60	50	39	23	20	20	32
CFSM	0.64	0.67	0.73	1.14	0.91	0.84	0.77	0.56	0.34	0.31	0.42	0.51
IN.	0.74	0.75	0.84	1.32	0.95	0.97	0.86	0.64	0.37	0.36	0.48	0.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2002, BY WATER YEAR (WY)

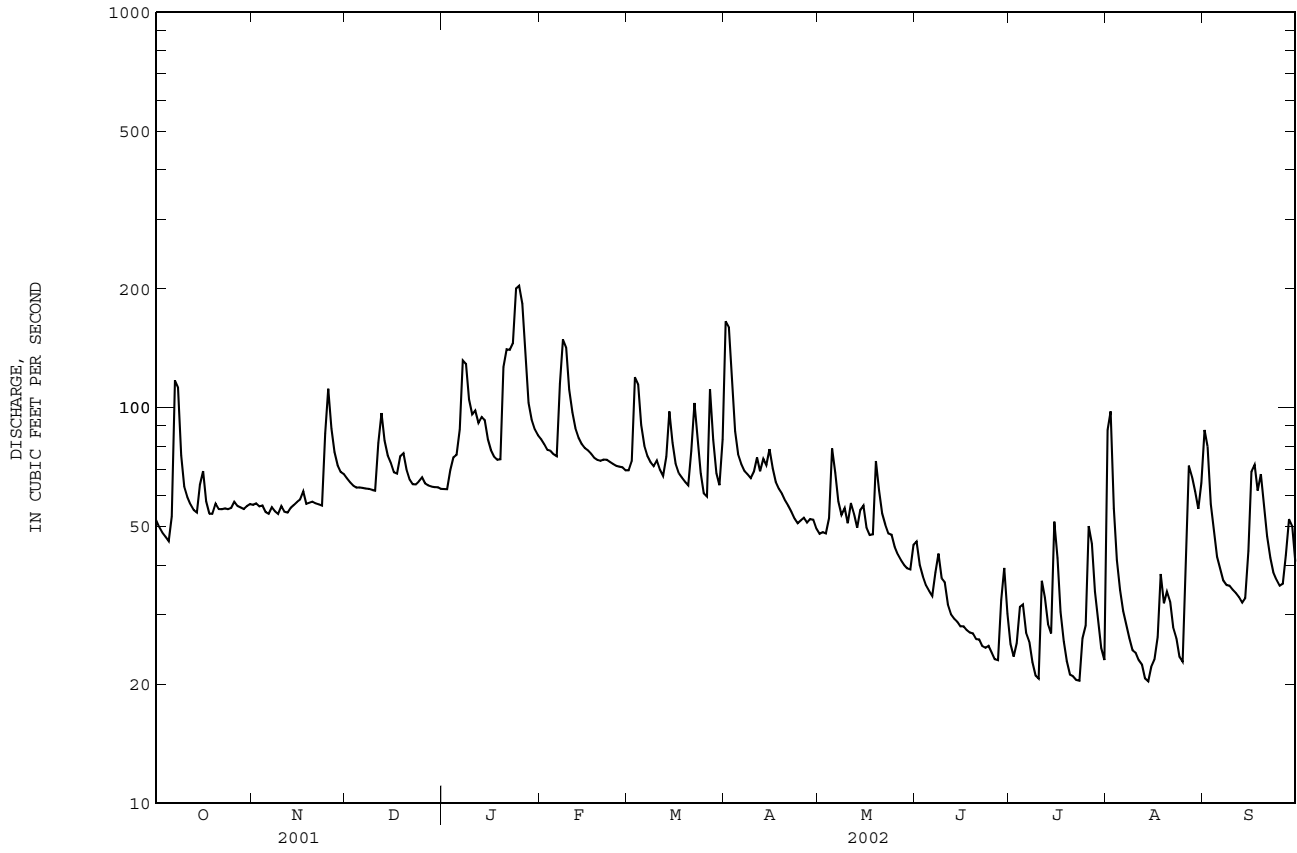
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	115.0	115.4	113.6	143.1	142.8	151.6	134.3	103.1	88.92	89.55	92.30	105.4			
MAX	207	169	186	209	291	289	305	182	175	224	176	247			
(WY)	2000	1990	1990	1998	1998	1998	1998	1989	1989	1989	1989	1996			
MIN	60.0	62.4	68.0	90.5	84.7	78.4	72.0	51.9	31.2	28.8	39.1	47.4			
(WY)	2002	2002	2002	2001	2002	2002	2002	2002	2002	2002	2002	2002			

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1988 - 2002

ANNUAL TOTAL	26891	22177	
ANNUAL MEAN	73.67	60.76	116.3
HIGHEST ANNUAL MEAN			167
LOWEST ANNUAL MEAN			60.8
HIGHEST DAILY MEAN	194	Jun 18	884
LOWEST DAILY MEAN	36	Aug 11	20
ANNUAL SEVEN-DAY MINIMUM	37	Aug 7	22
MAXIMUM PEAK FLOW			210
MAXIMUM PEAK STAGE			5.82
INSTANTANEOUS LOW FLOW			19*
ANNUAL RUNOFF (CFSM)	0.79		0.65
ANNUAL RUNOFF (INCHES)	10.74		8.86
10 PERCENT EXCEEDS	113		91
50 PERCENT EXCEEDS	65		57
90 PERCENT EXCEEDS	46		26

e Estimated.
* See REMARKS.

02104220 ROCKFISH CREEK AT RAEFORD, NC--Continued



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 river mile 123.

DRAINAGE AREA.--4,852 mi².

WATER-DISCHARGE RECORDS

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 NGVD of 1929. 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 fair 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 ft³/s, Sep. 20, 1950. Minimum discharge during regulation from unknown source. Minimum discharge for current water year, due to fish lockage.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1140	910	1110	864	4950	1320	6230	715	992	988	645	1050
2	1090	881	1010	864	3560	1340	9330	690	934	989	801	3140
3	1050	915	984	940	2500	1860	7560	653	857	759	668	6140
4	1010	920	939	1260	2240	2510	5690	655	741	e650	609	3120
5	979	904	884	1360	2080	2540	5450	811	731	e630	560	1640
6	1050	889	816	1470	1960	3460	4810	947	735	e600	449	1160
7	1440	890	801	2200	2470	4110	3190	957	846	e560	350	927
8	1460	918	866	2430	3400	4560	2670	921	937	e500	316	672
9	1490	947	912	2080	5380	3330	2390	986	891	e450	419	568
10	1420	984	883	2170	6070	1920	2210	919	832	e520	482	587
11	1270	995	813	2030	5430	1650	1830	999	781	608	451	618
12	1120	970	1190	1760	5270	1490	1780	1080	732	585	432	570
13	1040	956	1340	1650	5500	1630	1800	1100	705	516	407	492
14	1000	903	1380	1670	5230	1670	1760	991	725	619	398	506
15	1050	808	1470	1610	4050	1800	1570	910	826	717	419	892
16	1220	810	1270	1570	3160	2410	1370	837	838	717	449	1420
17	1120	892	1090	1420	2250	2440	1310	763	819	666	471	1390
18	989	872	1000	1310	2040	1990	1230	776	774	627	556	1200
19	1030	903	1050	1270	1910	1650	1210	874	724	e520	644	1130
20	1040	906	1030	2210	1790	1960	1260	943	776	e600	639	1090
21	1000	829	971	7350	1720	2940	1230	875	745	e560	584	1080
22	1060	811	937	7700	1690	3320	1150	801	706	e640	517	1120
23	1020	805	924	6210	1670	3380	849	741	729	e600	468	1080
24	977	1240	949	12100	1650	3070	753	735	727	e500	433	859
25	1040	1550	969	20400	1610	2670	709	808	779	e700	471	684
26	1000	1420	964	15100	1510	2150	713	898	820	e900	669	572
27	969	1240	939	7940	1460	2050	849	956	797	1310	855	663
28	918	1190	932	7050	1390	2640	936	980	1110	1100	3070	646
29	910	1100	926	6890	---	3120	903	954	1260	879	2070	549
30	915	991	904	6740	---	3300	710	983	1520	790	1330	556
31	922	---	874	6010	---	3540	---	1080	---	807	1110	---
TOTAL	33739	29349	31127	135628	83940	77820	73452	27338	25389	21667	21742	36121
MEAN	1088	978.3	1004	4375	2998	2510	2448	881.9	846.3	698.9	701.4	1204
MAX	1490	1550	1470	20400	6070	4560	9330	1100	1520	1310	3070	6140
MIN	910	805	801	864	1390	1320	709	653	705	450	316	492

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2002,* BY WATER YEAR (WY)

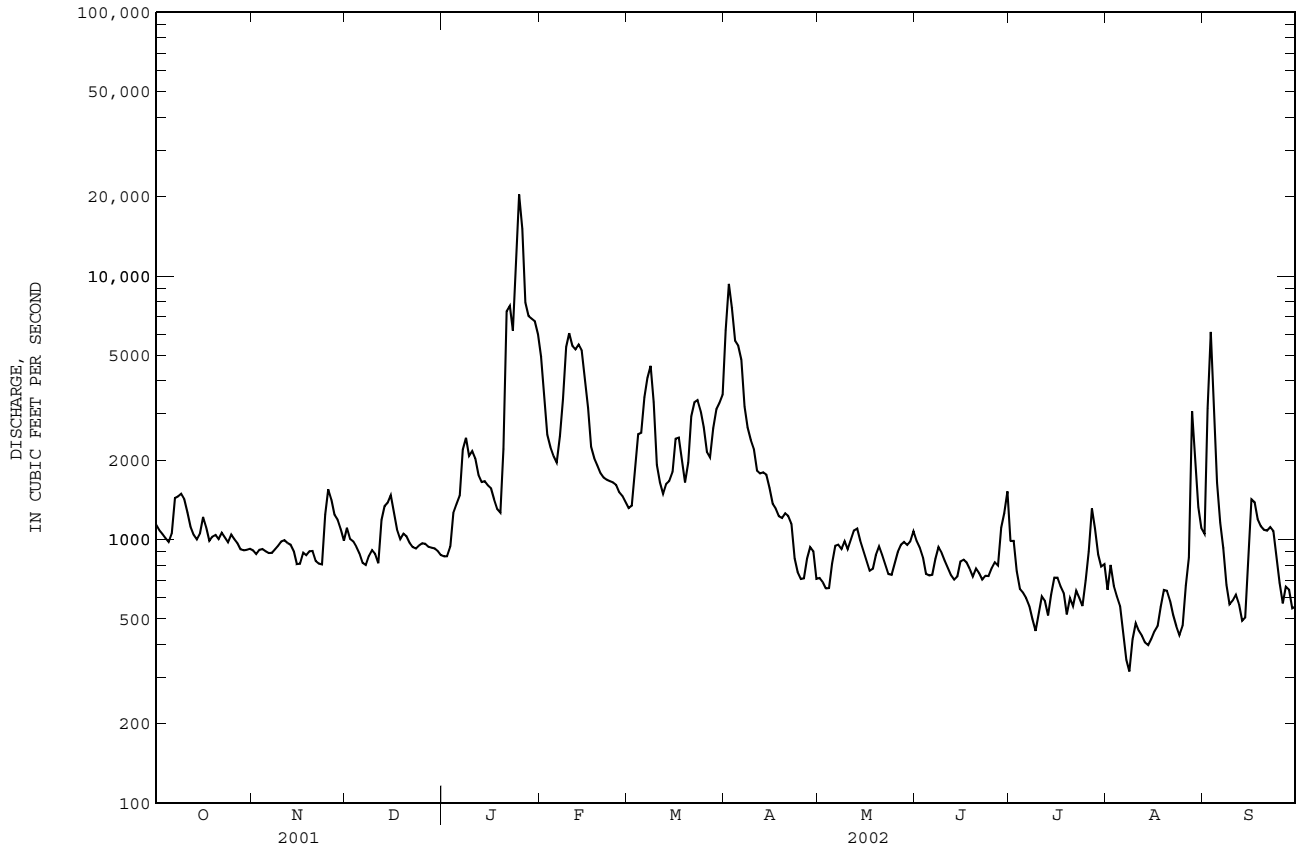
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	2988	2925	3861	7461	8554	9694	6553	3554	3161	2749	2466	2972										
MAX	10230	10190	11360	17240	24770	21520	15410	11770	14200	9262	7358	18950										
(WY)	2000	1996	1984	1998	1998	1998	1993	1989	1982	1995	1984	1996										
MIN	979	978	1004	1633	2799	2510	1508	882	846	699	701	935										
(WY)	1987	2002	2002	2001	1986	2002	1986	2002	2002	2002	2002	1990										

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1982 - 2002*
ANNUAL TOTAL	922567	597312	
ANNUAL MEAN	2528	1636	4725
HIGHEST ANNUAL MEAN			8328
LOWEST ANNUAL MEAN			1636
HIGHEST DAILY MEAN	21900	Mar 31	60000
LOWEST DAILY MEAN	749	Aug 10	154
ANNUAL SEVEN-DAY MINIMUM	853	Aug 4	408
MAXIMUM PEAK FLOW			21500
MAXIMUM PEAK STAGE			9.21
INSTANTANEOUS LOW FLOW			289*
10 PERCENT EXCEEDS	5350	3230	12500
50 PERCENT EXCEEDS	1450	988	2240
90 PERCENT EXCEEDS	903	595	969

e Estimated.

* Regulated period only (1982-2002). See REMARKS.

02105500 CAPE FEAR RIVER AT WILLIAM O. HUSKE LOCK NEAR TARHEEL, NC--Continued



02105500 CAPE FEAR RIVER AT WILLIAM O. HUSKE LOCK NEAR TARHEEL, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947, 1955, 2000 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 2000 to current year.

pH: June 2000 to current year.

WATER TEMPERATURE: June 2000 to current year.

DISSOLVED OXYGEN: June 2000 to current year.

DISSOLVED OXYGEN, PERCENT SATURATION: June 2000 to current year

TURBIDITY: October 2000 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry from June 2000 to current year.

REMARKS.--Station operated in cooperation with the Middle Cape Fear River Association. The constituents were monitored at approximately 10 ft above the streambed. On June 28, 2002 the data sonde was raised to approximately 16 ft above the streambed. Beginning October 1, 2000 dissolved oxygen, percent saturation is computed using a barometric pressure of 760mm Hg. Daily records of water temperature for water years 1947 and 1955 are available in the files of the District Office in Raleigh, NC.

EXTREMES FOR PERIOD OF DAILY RECORD.--

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	291, September 3, 2002	56, June 19, 2001
pH, standard units	9.6, August 25, 2002	5.8, August 29, 30, 2002
WATER TEMPERATURE, °C	32.3, July 31, 2002	2.6, January 5, 6, 2001
DISSOLVED OXYGEN, mg/L	13.4, January 30, 2001	1.3, June 14, 2002
DISSOLVED OXYGEN, PERCENT SATURATION,%	130, July 16, 2000	17, June 14, 2002
TURBIDITY, NTU	420, January 24, 2002	0.9, May 19, 2002

EXTREMES FOR CURRENT YEAR.--

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	291, September 3	70, January 25, 26
pH, standard units	9.6, August 25	5.8, August 29, 30
WATER TEMPERATURE, °C	32.3, July 31	3.7, January 8
DISSOLVED OXYGEN, mg/L	12.7, August 25	1.3, June 14
DISSOLVED OXYGEN, PERCENT SATURATION,%	172, August 25	17, June 14
TURBIDITY, NTU	420, January 24	0.9, May 19

02105500 CAPE FEAR RIVER AT WILLIAM O. HUSKE LOCK NEAR TARHEEL, NC--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	118	109	111	167	163	165	149	146	148	192	191	192
2	111	108	109	166	163	165	150	144	147	199	192	195
3	124	109	116	170	165	167	150	127	142	195	193	194
4	137	124	128	176	170	173	150	125	133	197	194	196
5	148	137	142	177	176	177	155	150	154	198	196	197
6	149	146	148	179	177	178	158	155	156	198	191	194
7	153	146	149	180	176	178	166	157	163	192	167	186
8	171	153	162	180	177	179	175	162	169	167	143	150
9	172	145	158	182	178	181	185	174	181	158	145	151
10	153	149	151	184	177	181	185	181	183	158	152	156
11	154	145	152	177	171	174	---	---	---	152	133	143
12	145	128	135	174	171	172	---	---	---	133	122	125
13	140	132	137	179	172	175	---	---	---	142	122	131
14	145	138	141	179	175	177	185	175	183	161	142	153
15	150	142	146	179	174	176	175	165	169	162	154	160
16	161	149	155	175	170	172	179	172	175	154	145	149
17	167	161	165	173	170	172	179	165	174	145	138	140
18	170	166	168	174	172	173	165	144	154	142	138	140
19	171	168	169	174	172	173	157	144	149	142	141	142
20	180	171	176	178	172	175	172	157	166	143	140	141
21	180	177	178	180	178	179	179	171	175	176	142	154
22	180	176	179	182	179	181	183	178	180	178	111	153
23	177	161	168	182	179	181	183	180	181	117	105	112
24	161	149	153	184	176	181	182	178	180	105	85	91
25	161	152	156	179	170	174	178	174	176	105	70	84
26	169	161	164	172	149	166	178	176	177	75	70	72
27	171	165	168	149	123	130	177	172	174	72	71	71
28	166	159	162	147	132	139	174	170	171	73	71	72
29	163	159	161	151	147	149	182	174	177	74	71	73
30	165	160	163	149	147	148	189	182	185	95	74	87
31	168	164	166	---	---	---	191	188	190	103	95	102
MONTH	180	108	153	184	123	170	---	---	---	199	70	139

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	112	103	107	112	109	110	128	112	122	133	130	132
2	118	112	116	113	111	112	119	108	114	137	133	135
3	117	112	115	127	113	118	120	83	104	141	136	139
4	115	113	114	114	101	109	84	78	80	144	141	143
5	113	104	110	106	100	103	85	83	84	150	144	147
6	104	100	102	105	98	101	94	85	88	151	150	151
7	103	100	101	128	96	108	118	94	107	153	149	151
8	101	97	99	138	128	134	126	118	124	149	146	148
9	99	85	92	171	138	154	127	125	126	153	148	150
10	94	83	87	178	171	176	128	125	127	154	153	153
11	95	89	93	175	171	173	125	118	121	155	153	154
12	89	83	85	171	160	166	124	119	122	156	141	151
13	109	86	94	160	139	150	124	118	121	156	153	154
14	120	109	117	139	134	136	119	114	118	154	144	152
15	124	117	120	134	131	132	114	103	108	160	153	155
16	124	122	123	136	131	135	106	103	104	161	157	159
17	123	121	122	136	133	135	111	106	109	162	158	160
18	121	118	121	139	131	134	112	110	111	165	160	163
19	119	111	116	146	139	144	111	109	109	167	160	164
20	111	108	110	146	134	141	110	109	109	171	164	169
21	109	107	108	134	127	130	113	110	112	174	171	172
22	107	105	106	131	126	128	115	113	114	174	168	172
23	108	104	106	143	127	132	118	114	117	170	164	168
24	111	108	109	145	139	142	122	116	120	171	164	169
25	111	107	108	140	136	138	121	118	119	176	171	173
26	108	106	107	139	136	138	121	118	119	180	169	178
27	107	105	106	141	138	140	123	121	122	183	180	181
28	110	104	107	139	124	133	125	122	124	183	180	182
29	---	---	---	124	119	122	126	123	125	182	178	180
30	---	---	---	137	122	130	130	125	128	181	179	180
31	---	---	---	138	128	134	---	---	---	187	169	182
MONTH	124	83	107	178	96	133	130	78	114	187	130	160

CAPE FEAR RIVER BASIN

02105500 CAPE FEAR RIVER AT WILLIAM O. HUSKE LOCK NEAR TARHEEL, NC--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	193	169	188	---	---	---	181	169	177	174	163	167
2	194	188	192	213	204	209	193	179	186	188	171	176
3	196	191	194	215	210	213	210	193	200	291	188	252
4	196	192	195	---	---	---	211	200	207	285	256	266
5	195	192	193	---	---	---	221	209	214	256	160	204
6	202	193	198	---	---	---	---	---	---	161	136	145
7	206	200	202	---	---	---	---	---	---	139	135	136
8	209	202	206	---	---	---	---	---	---	157	138	147
9	212	207	209	---	---	---	---	---	---	170	157	163
10	212	209	211	187	179	184	199	192	197	184	169	173
11	210	202	206	180	170	175	195	189	192	196	183	189
12	203	200	201	170	166	168	193	188	190	201	195	199
13	204	200	202	170	166	167	212	193	202	200	197	199
14	209	202	207	182	168	174	227	210	219	198	192	196
15	214	208	211	184	181	183	247	223	234	193	178	188
16	216	212	214	205	183	191	258	242	250	178	164	170
17	218	214	217	222	201	214	276	255	265	177	133	151
18	222	215	219	228	221	226	287	272	279	154	147	151
19	227	221	224	228	225	227	289	280	286	148	144	145
20	228	223	226	226	209	218	280	249	264	155	147	151
21	228	221	225	209	200	206	258	244	249	160	154	158
22	228	222	226	204	191	197	279	257	267	156	136	144
23	231	225	227	204	195	198	282	272	277	144	136	139
24	234	226	230	215	197	206	281	274	277	148	143	146
25	243	232	238	237	212	225	281	262	273	148	144	146
26	252	242	248	239	223	236	263	251	257	144	140	141
27	258	252	256	---	---	---	262	249	255	148	141	145
28	260	253	258	177	153	172	262	198	239	149	145	148
29	253	240	243	155	126	135	198	79	142	145	142	143
30	---	---	---	156	133	143	125	75	91	146	144	145
31	---	---	---	177	156	167	164	125	153	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	291	133	167

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.7	6.6	6.6	7.0	6.9	6.9	7.0	7.0	7.0	7.3	7.3	7.3
2	6.7	6.6	6.6	7.0	7.0	7.0	7.1	7.0	7.0	7.4	7.3	7.3
3	6.7	6.6	6.7	7.1	7.0	7.0	7.1	7.0	7.1	7.4	7.4	7.4
4	6.8	6.7	6.7	7.1	7.0	7.0	7.1	7.0	7.0	7.5	7.4	7.4
5	6.8	6.8	6.8	7.1	7.0	7.1	7.1	7.1	7.1	7.4	7.4	7.4
6	6.9	6.8	6.8	7.2	7.1	7.1	7.2	7.1	7.1	7.4	7.4	7.4
7	6.9	6.8	6.9	7.2	7.1	7.2	7.2	7.2	7.2	7.4	7.3	7.4
8	6.9	6.9	6.9	7.2	7.1	7.1	7.3	7.2	7.2	7.3	7.2	7.2
9	6.9	6.8	6.9	7.2	7.1	7.2	7.3	7.3	7.3	7.3	7.1	7.2
10	6.9	6.8	6.9	7.2	7.2	7.2	7.3	7.3	7.3	7.2	7.1	7.1
11	6.9	6.8	6.8	7.3	7.2	7.2	---	---	---	7.1	7.1	7.1
12	7.1	6.7	6.9	7.3	7.3	7.3	---	---	---	7.1	7.1	7.1
13	7.2	7.1	7.1	7.3	7.3	7.3	---	---	---	7.1	7.1	7.1
14	7.2	7.1	7.1	7.3	7.2	7.3	7.3	7.2	7.3	7.2	7.1	7.1
15	7.2	7.1	7.1	7.2	7.2	7.2	7.3	7.3	7.3	7.1	7.1	7.1
16	7.1	7.0	7.1	7.2	7.2	7.2	7.4	7.3	7.3	7.1	7.1	7.1
17	7.1	7.0	7.1	7.2	7.2	7.2	7.4	7.3	7.3	7.1	7.0	7.0
18	7.1	7.0	7.0	7.2	7.2	7.2	7.3	7.2	7.2	7.1	7.0	7.0
19	7.1	6.9	7.0	7.2	7.2	7.2	7.2	7.2	7.2	7.1	6.9	7.0
20	7.1	6.9	7.0	7.2	7.2	7.2	7.3	7.2	7.3	7.0	6.9	7.0
21	7.0	6.9	6.9	7.2	7.2	7.2	7.3	7.2	7.3	7.0	6.9	7.0
22	7.0	6.9	6.9	7.2	7.2	7.2	7.3	7.2	7.2	7.0	6.8	6.9
23	6.9	6.7	6.8	7.2	7.2	7.2	7.3	7.3	7.3	6.9	6.7	6.8
24	6.8	6.6	6.7	7.3	7.2	7.2	7.3	7.3	7.3	6.8	6.4	6.6
25	6.8	6.7	6.7	7.2	7.2	7.2	7.3	7.2	7.3	6.7	6.4	6.5
26	6.8	6.7	6.8	7.2	7.0	7.2	7.2	7.2	7.2	6.6	6.3	6.4
27	6.9	6.8	6.8	7.1	6.9	6.9	7.3	7.2	7.3	6.5	6.2	6.4
28	6.9	6.8	6.8	7.0	6.9	7.0	7.3	7.2	7.3	6.5	6.2	6.4
29	6.9	6.8	6.9	7.1	7.0	7.0	7.3	7.2	7.3	6.5	6.3	6.4
30	6.9	6.9	6.9	7.0	7.0	7.0	7.3	7.2	7.3	6.7	6.4	6.6
31	6.9	6.9	6.9	---	---	---	7.3	7.3	7.3	6.8	6.6	6.7
MONTH	7.2	6.6	6.9	7.3	6.9	7.1	---	---	---	7.5	6.2	7.0

CAPE FEAR RIVER BASIN

02105500 CAPE FEAR RIVER AT WILLIAM O. HUSKE LOCK NEAR TARHEEL, NC--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	6.8	6.6	6.7	7.2	7.0	7.1	6.9	6.6	6.7	6.8	6.7	6.7
2	6.8	6.7	6.8	7.2	7.1	7.1	6.7	6.5	6.7	6.7	6.5	6.6
3	6.9	6.7	6.8	7.1	7.0	7.1	6.8	6.5	6.6	7.0	6.6	6.8
4	6.8	6.7	6.7	7.1	6.8	7.0	6.6	6.4	6.5	6.8	6.7	6.8
5	6.8	6.7	6.7	7.1	6.9	7.0	6.6	6.5	6.5	6.8	6.7	6.8
6	6.8	6.7	6.7	7.1	6.8	6.9	6.6	6.5	6.6	6.8	6.8	6.8
7	6.8	6.7	6.7	7.2	6.8	7.0	6.8	6.6	6.7	6.8	6.8	6.8
8	6.8	6.7	6.7	7.1	6.9	7.0	7.0	6.8	6.9	6.8	6.7	6.8
9	6.8	6.6	6.7	7.2	7.0	7.1	7.0	6.9	6.9	6.8	6.8	6.8
10	6.9	6.6	6.7	7.3	7.1	7.2	7.0	6.9	6.9	6.9	6.8	6.8
11	6.9	6.7	6.8	7.5	7.2	7.3	7.0	6.7	6.8	6.9	6.8	6.8
12	6.8	6.6	6.7	7.5	7.2	7.3	6.8	6.7	6.8	6.9	6.8	6.8
13	6.9	6.7	6.8	7.7	7.2	7.5	6.9	6.8	6.8	7.0	6.8	6.8
14	7.1	6.8	6.9	7.6	7.2	7.4	6.9	6.8	6.8	7.1	6.9	7.0
15	7.0	6.9	7.0	7.4	7.1	7.2	6.9	6.7	6.8	7.2	6.9	7.0
16	7.0	6.9	7.0	7.2	7.0	7.1	6.9	6.8	6.8	7.2	6.9	7.0
17	7.0	6.9	7.0	7.1	6.9	7.0	7.0	6.8	6.9	7.3	6.9	7.1
18	7.0	6.9	7.0	6.9	6.8	6.8	6.9	6.8	6.8	7.3	7.0	7.1
19	7.0	6.9	7.0	6.9	6.8	6.8	6.8	6.7	6.8	7.1	6.9	7.0
20	7.0	6.9	6.9	6.9	6.7	6.9	6.8	6.7	6.8	7.1	6.9	7.0
21	7.1	6.8	6.9	6.8	6.6	6.7	6.8	6.7	6.8	7.0	6.8	6.9
22	6.8	6.7	6.8	6.8	6.6	6.7	6.8	6.6	6.7	7.0	6.9	6.9
23	6.8	6.7	6.8	6.9	6.6	6.8	6.8	6.6	6.7	7.0	6.9	6.9
24	6.8	6.8	6.8	7.0	6.8	6.9	6.9	6.7	6.7	7.2	6.9	7.0
25	6.9	6.8	6.8	6.9	6.8	6.8	6.9	6.7	6.8	7.2	7.1	7.1
26	6.9	6.8	6.9	7.0	6.8	6.9	6.9	6.7	6.8	7.1	7.0	7.1
27	6.9	6.8	6.9	7.2	6.8	6.9	6.9	6.7	6.8	7.0	6.9	7.0
28	7.0	6.9	6.9	7.2	6.8	7.0	6.7	6.6	6.7	7.2	6.9	7.0
29	---	---	---	7.1	6.9	7.0	6.7	6.6	6.7	7.0	6.9	7.0
30	---	---	---	7.1	6.9	7.0	6.7	6.6	6.7	7.0	6.9	7.0
31	---	---	---	7.1	6.8	7.0	---	---	---	7.1	6.9	7.0
MONTH	7.1	6.6	6.8	7.7	6.6	7.0	7.0	6.4	6.8	7.3	6.5	6.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.1	7.0	7.1	---	---	---	8.6	6.7	7.6	6.2	6.2	6.2
2	7.1	7.0	7.0	7.5	6.9	7.0	8.4	6.6	7.1	6.4	6.2	6.3
3	7.1	7.0	7.0	7.4	7.0	7.1	9.0	6.7	7.7	6.7	6.4	6.6
4	7.0	6.9	7.0	---	---	---	8.4	6.7	7.4	6.7	6.6	6.7
5	7.0	6.9	6.9	---	---	---	8.5	6.7	7.5	6.7	6.2	6.4
6	6.9	6.9	6.9	---	---	---	---	---	---	6.2	6.2	6.2
7	7.2	6.9	7.0	---	---	---	7.8	6.7	7.2	6.2	6.1	6.2
8	7.2	6.9	7.0	---	---	---	7.2	6.6	6.8	6.3	6.1	6.2
9	7.1	6.9	7.0	---	---	---	7.9	6.5	7.0	6.3	6.2	6.3
10	7.0	6.9	6.9	7.3	6.8	7.0	8.5	6.7	7.1	6.4	6.2	6.3
11	6.9	6.8	6.9	7.0	6.8	6.9	8.0	6.7	6.9	6.8	6.3	6.4
12	6.8	6.6	6.7	7.0	6.7	6.8	7.0	6.7	6.8	7.2	6.4	6.6
13	6.6	6.6	6.6	6.9	6.7	6.7	7.0	6.7	6.8	6.8	6.4	6.5
14	6.6	6.5	6.5	7.6	6.7	6.9	7.3	6.7	6.9	7.2	6.3	6.5
15	6.7	6.5	6.6	7.0	6.6	6.8	7.6	6.8	7.1	6.7	6.4	6.5
16	7.0	6.6	6.8	7.1	6.6	6.7	8.4	7.0	7.3	6.8	6.4	6.5
17	7.0	6.8	6.9	7.5	6.7	7.1	7.6	6.7	7.0	6.7	6.4	6.5
18	7.1	6.8	6.9	7.5	6.6	7.0	8.2	6.8	7.2	6.6	6.4	6.5
19	7.1	6.9	7.0	8.2	6.5	7.2	8.8	7.0	7.8	6.6	6.4	6.5
20	7.1	6.9	7.0	9.1	7.2	8.1	8.2	7.0	7.4	6.8	6.4	6.6
21	7.1	6.8	7.0	9.5	8.5	9.0	8.2	6.7	7.2	6.8	6.7	6.7
22	7.0	6.8	6.9	9.2	6.6	8.1	8.5	6.9	7.5	6.8	6.5	6.6
23	7.0	6.9	7.0	7.6	6.6	7.0	8.8	6.8	7.4	6.7	6.5	6.6
24	7.0	6.8	6.9	7.5	6.9	7.2	9.1	7.1	8.2	6.7	6.6	6.6
25	7.0	6.9	7.0	7.4	6.8	7.1	9.6	7.3	8.7	6.6	6.5	6.6
26	7.1	6.9	7.0	7.2	6.7	6.9	9.0	7.5	8.4	6.5	6.4	6.4
27	7.2	7.0	7.1	---	---	---	8.5	7.2	7.6	6.5	6.4	6.4
28	8.8	7.2	7.7	6.6	6.4	6.5	7.5	6.6	6.8	6.9	6.4	6.6
29	8.8	7.3	7.6	6.4	6.2	6.3	6.6	5.8	6.2	7.0	6.4	6.6
30	---	---	---	7.3	6.3	6.5	6.1	5.8	5.9	6.9	6.3	6.5
31	---	---	---	8.9	6.5	7.3	6.2	6.1	6.2	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	7.2	6.1	6.5

CAPE FEAR RIVER BASIN

02105500 CAPE FEAR RIVER AT WILLIAM O. HUSKE LOCK NEAR TARHEEL, NC--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	20.4	19.8	20.0	15.8	15.2	15.4	16.7	16.0	16.2	7.4	7.1	7.2
2	19.9	19.2	19.4	15.4	15.2	15.3	16.9	16.5	16.7	7.1	6.1	6.7
3	19.7	19.1	19.3	15.8	15.2	15.4	16.9	16.5	16.6	6.1	5.4	5.8
4	19.6	19.2	19.4	15.9	15.4	15.6	16.5	16.1	16.3	5.4	4.9	5.2
5	19.9	19.5	19.7	15.5	15.1	15.3	16.1	15.7	15.9	4.9	4.4	4.6
6	20.5	19.9	20.1	15.2	14.9	15.0	15.7	15.3	15.5	4.5	4.0	4.2
7	20.2	19.7	19.9	15.0	14.6	14.8	15.4	14.9	15.1	4.2	3.9	4.1
8	19.9	19.4	19.6	14.9	14.6	14.7	15.2	14.8	14.9	4.0	3.7	3.9
9	19.6	18.9	19.2	15.1	14.6	14.8	15.2	14.7	15.0	4.1	3.8	3.9
10	19.1	18.4	18.6	14.6	14.2	14.4	14.7	14.1	14.4	4.8	4.1	4.4
11	18.8	18.4	18.5	14.7	14.2	14.4	---	---	---	5.5	4.8	5.2
12	18.7	18.1	18.3	14.4	13.9	14.2	---	---	---	5.6	5.3	5.5
13	18.6	18.2	18.3	14.0	13.5	13.7	---	---	---	6.4	5.6	6.0
14	19.1	18.4	18.7	13.7	13.3	13.4	14.1	13.5	13.7	6.6	6.1	6.4
15	19.4	18.8	19.0	13.4	13.1	13.3	14.3	14.0	14.1	7.1	6.5	6.8
16	19.5	18.7	18.9	13.8	13.0	13.3	14.1	13.7	13.9	7.1	6.9	7.0
17	19.3	18.9	19.0	13.8	13.2	13.4	14.0	13.6	13.7	7.3	6.8	7.0
18	19.2	18.5	18.8	13.8	13.3	13.5	14.2	13.8	13.9	7.5	7.3	7.4
19	18.5	18.2	18.3	13.8	13.4	13.5	13.8	13.4	13.6	7.5	7.3	7.4
20	18.5	18.2	18.3	14.1	13.7	13.9	13.5	13.2	13.4	7.4	7.2	7.3
21	18.5	18.1	18.2	13.9	13.3	13.6	13.2	12.5	12.9	7.4	7.0	7.1
22	18.6	18.2	18.4	13.3	13.0	13.1	12.5	11.8	12.2	7.1	5.8	6.1
23	18.7	18.3	18.5	13.2	12.9	13.0	11.8	11.1	11.4	6.2	5.8	5.9
24	18.9	18.4	18.5	13.6	13.1	13.2	11.3	10.9	11.1	7.6	6.2	7.1
25	19.7	18.7	19.1	13.5	13.2	13.3	10.9	10.3	10.5	8.2	7.3	7.8
26	19.3	18.9	19.1	13.9	13.4	13.6	10.3	9.7	9.9	8.3	7.9	8.1
27	18.9	18.3	18.7	14.6	13.9	14.2	9.7	9.0	9.3	8.7	8.0	8.3
28	18.3	17.6	18.0	15.3	14.5	14.7	9.0	8.5	8.7	9.2	8.7	8.9
29	17.6	16.9	17.3	15.7	15.0	15.1	8.5	8.1	8.3	10.0	9.1	9.5
30	16.9	16.3	16.6	16.1	15.4	15.6	8.1	7.4	7.8	10.6	10.0	10.2
31	16.3	15.7	15.9	---	---	---	7.5	7.2	7.4	11.2	10.3	10.7
MONTH	20.5	15.7	18.7	16.1	12.9	14.2	---	---	---	11.2	3.7	6.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	12.4	11.1	11.7	10.8	10.2	10.4	17.8	17.0	17.3	22.6	22.2	22.4
2	12.4	12.0	12.2	10.2	10.0	10.1	17.2	16.7	16.9	22.9	22.2	22.3
3	12.1	12.0	12.1	10.5	10.0	10.2	17.2	16.5	16.8	23.7	22.5	23.0
4	12.0	11.4	11.8	10.5	10.0	10.2	17.4	17.2	17.3	23.0	22.3	22.6
5	11.4	10.4	10.8	10.0	9.7	9.8	17.4	17.0	17.1	22.3	21.8	22.0
6	10.4	9.3	10.0	10.0	9.4	9.7	17.0	16.3	16.7	21.8	21.4	21.5
7	9.3	8.4	8.8	9.9	9.5	9.7	16.3	15.7	16.0	21.8	21.5	21.6
8	8.4	7.9	8.0	10.5	9.6	10.1	16.0	15.4	15.7	22.0	21.6	21.7
9	8.4	7.7	8.0	11.5	10.5	11.0	16.4	15.8	16.0	22.4	21.8	22.1
10	9.0	8.3	8.7	12.2	11.5	11.8	17.2	16.1	16.6	23.4	22.3	22.8
11	9.2	8.9	9.0	12.8	11.9	12.2	17.8	16.8	17.2	24.1	23.1	23.6
12	9.3	9.0	9.2	12.9	12.5	12.7	18.6	17.8	18.2	24.2	23.8	24.1
13	9.1	8.8	8.9	13.3	12.8	13.0	19.5	18.4	19.0	25.3	24.0	24.5
14	8.9	8.6	8.7	14.1	13.2	13.5	20.1	19.1	19.5	25.4	24.8	25.1
15	8.9	8.7	8.8	14.6	13.6	14.0	21.1	19.6	20.0	25.1	24.6	24.8
16	9.1	8.7	8.9	15.2	14.3	14.7	21.3	20.5	20.8	25.0	24.4	24.6
17	9.3	9.0	9.2	15.8	15.1	15.4	22.4	21.2	21.7	24.7	24.2	24.4
18	9.5	9.0	9.3	16.3	15.6	15.9	23.0	22.2	22.6	24.8	24.0	24.4
19	9.6	9.2	9.4	16.5	16.1	16.3	23.7	22.9	23.3	24.0	22.8	23.4
20	9.9	9.1	9.5	16.4	16.0	16.1	24.4	23.6	24.0	22.8	22.2	22.4
21	11.1	9.9	10.3	16.0	15.5	15.9	24.9	24.2	24.5	22.2	21.7	21.9
22	10.9	10.2	10.6	15.5	15.1	15.2	25.3	24.7	24.9	21.7	21.0	21.3
23	10.8	10.5	10.6	15.1	13.8	14.4	25.3	24.6	24.8	21.0	20.4	20.6
24	10.8	10.2	10.6	13.8	13.4	13.5	24.8	24.1	24.3	20.5	20.3	20.4
25	11.1	10.4	10.7	14.0	13.3	13.6	24.3	23.9	24.1	20.6	20.3	20.4
26	11.7	10.9	11.1	15.1	13.7	14.3	24.0	23.3	23.6	20.9	20.4	20.6
27	11.5	11.2	11.3	16.5	15.0	15.6	23.4	22.7	23.0	21.2	20.7	20.9
28	11.2	10.7	10.9	17.3	16.2	16.7	22.9	22.5	22.6	22.0	21.0	21.4
29	---	---	---	17.4	16.7	17.1	22.9	22.5	22.7	22.2	21.4	21.8
30	---	---	---	17.4	16.9	17.2	22.7	22.1	22.4	22.8	21.8	22.2
31	---	---	---	17.2	16.7	16.9	---	---	---	23.4	22.1	22.6
MONTH	12.4	7.7	10.0	17.4	9.4	13.5	25.3	15.4	20.3	25.4	20.3	22.5

02105500 CAPE FEAR RIVER AT WILLIAM O. HUSKE LOCK NEAR TARHEEL, NC--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	24.2	22.8	23.5	---	---	---	31.0	29.9	30.5	25.1	24.7	24.9
2	24.6	23.4	24.0	29.1	28.3	28.6	30.7	29.6	30.0	24.8	24.4	24.6
3	25.0	24.1	24.6	29.1	28.5	28.8	31.4	29.6	30.4	25.3	24.0	24.5
4	25.3	24.5	24.9	---	---	---	30.9	29.7	30.2	25.0	24.1	24.5
5	25.8	24.8	25.2	---	---	---	31.3	29.6	30.4	25.4	24.3	24.7
6	26.4	25.3	25.9	---	---	---	30.9	29.7	30.3	25.4	24.2	24.6
7	27.4	25.9	26.6	---	---	---	30.2	29.3	29.8	25.8	24.4	24.9
8	27.5	26.2	26.8	---	---	---	29.6	28.7	29.1	25.6	24.7	25.2
9	27.0	26.0	26.5	---	---	---	29.5	28.2	28.8	25.9	25.1	25.4
10	26.6	26.0	26.3	29.6	28.5	28.8	29.5	27.8	28.4	26.0	25.1	25.5
11	26.3	25.8	26.2	28.9	28.5	28.8	28.6	27.6	27.9	27.2	25.4	25.8
12	26.3	25.7	26.0	28.6	28.1	28.3	28.1	27.4	27.6	26.5	25.4	25.8
13	26.1	25.8	26.0	28.4	28.0	28.2	28.0	27.4	27.5	25.9	25.3	25.5
14	26.5	25.8	26.1	29.2	28.2	28.5	28.0	27.4	27.6	25.8	25.4	25.5
15	26.9	26.2	26.5	29.3	28.2	28.5	28.1	27.7	27.8	25.8	25.3	25.5
16	27.2	26.4	26.8	30.2	28.2	28.5	28.7	27.8	28.0	26.1	25.2	25.6
17	27.4	26.9	27.1	29.3	28.3	28.8	28.5	27.8	28.0	26.4	25.1	25.6
18	27.4	26.7	27.2	29.2	28.2	28.7	28.7	27.8	28.1	26.1	25.6	25.7
19	27.4	27.0	27.2	29.8	28.0	28.8	29.4	28.1	28.6	26.5	25.5	25.7
20	27.3	26.9	27.1	31.4	28.9	29.5	29.0	28.4	28.6	26.4	25.5	25.7
21	27.1	26.7	26.9	31.2	29.1	29.9	29.4	28.5	28.9	26.6	25.4	25.8
22	26.9	26.5	26.6	30.3	28.5	29.4	29.6	28.6	28.9	26.6	25.4	25.8
23	26.5	26.3	26.4	29.2	28.6	28.9	30.0	28.6	29.0	26.6	25.6	25.9
24	26.5	26.3	26.4	29.4	28.9	29.1	30.0	28.9	29.3	26.0	25.6	25.8
25	26.5	26.2	26.4	29.7	28.9	29.2	31.3	28.9	29.6	26.0	25.5	25.7
26	26.7	26.2	26.5	29.7	29.0	29.3	29.8	29.1	29.3	25.7	25.4	25.5
27	27.0	26.5	26.8	29.4	28.5	28.9	29.3	28.7	28.9	25.9	25.4	25.6
28	28.7	26.9	27.6	30.2	28.8	29.0	28.8	26.9	27.6	27.1	25.8	26.2
29	28.8	27.6	28.0	29.7	28.6	29.1	26.9	24.7	25.7	26.8	25.6	26.0
30	---	---	---	31.1	29.1	29.7	24.8	24.5	24.6	26.0	25.4	25.6
31	---	---	---	32.3	29.8	30.7	25.1	24.8	25.0	---	---	---
MONTH	---	---	---	---	---	---	31.4	24.5	28.5	27.2	24.0	25.4

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	5.9	5.3	5.5	7.3	6.7	7.0	7.2	6.4	6.7	11.2	10.7	10.9
2	6.2	4.9	5.6	7.6	6.9	7.3	7.0	6.2	6.6	11.2	10.6	10.8
3	6.6	5.0	5.8	8.2	7.2	7.7	6.8	6.2	6.6	10.9	10.7	10.8
4	6.7	5.2	6.0	8.5	7.7	8.0	6.9	6.2	6.5	11.2	10.8	11.0
5	6.8	5.4	6.2	8.4	7.8	8.1	6.6	6.1	6.3	11.5	11.1	11.3
6	7.8	5.6	6.4	8.7	7.9	8.2	6.6	6.2	6.4	11.9	11.4	11.6
7	7.7	6.1	6.9	8.3	7.8	8.0	6.7	6.2	6.5	12.1	11.7	11.9
8	7.4	6.2	6.8	8.3	7.6	7.9	7.0	6.4	6.6	12.1	11.8	12.0
9	7.3	5.8	6.6	8.2	7.6	8.0	7.2	6.6	6.8	12.1	11.6	11.9
10	7.9	5.8	6.6	8.6	7.8	8.2	7.2	6.7	6.9	11.7	11.3	11.6
11	7.7	6.1	6.6	9.0	8.3	8.7	---	---	---	11.7	11.3	11.5
12	7.5	6.2	6.9	9.1	8.3	8.7	---	---	---	11.7	11.4	11.6
13	7.4	6.8	7.1	9.4	8.6	8.9	---	---	---	11.6	11.1	11.4
14	7.4	6.9	7.1	9.3	8.6	9.0	8.2	7.8	8.0	11.3	10.8	11.1
15	7.5	6.8	7.1	9.1	8.6	8.9	8.4	7.9	8.2	11.0	10.6	10.8
16	7.4	6.7	7.0	9.2	8.6	8.8	8.5	8.0	8.2	10.8	10.5	10.7
17	7.3	6.6	6.9	8.9	8.4	8.7	8.5	8.0	8.3	10.9	10.4	10.6
18	7.1	6.4	6.7	8.8	8.3	8.5	8.5	8.0	8.2	10.6	10.3	10.5
19	6.9	6.2	6.5	8.6	8.2	8.4	8.4	7.9	8.1	10.7	10.3	10.5
20	6.8	6.2	6.5	8.6	8.2	8.4	8.4	7.9	8.2	11.0	10.3	10.6
21	6.7	6.3	6.5	8.6	8.1	8.3	8.4	8.0	8.2	11.0	10.4	10.7
22	6.8	6.3	6.5	8.5	8.1	8.3	8.7	8.0	8.3	11.3	10.3	10.9
23	6.8	6.3	6.5	8.5	8.1	8.3	9.1	8.2	8.6	11.4	11.0	11.2
24	6.7	6.1	6.4	8.6	8.1	8.4	9.2	8.7	8.9	11.4	10.5	11.0
25	6.9	6.2	6.5	8.7	8.3	8.5	9.4	9.0	9.2	10.9	10.4	10.6
26	6.9	6.3	6.6	8.7	7.7	8.2	9.9	9.1	9.5	10.7	10.3	10.6
27	6.8	6.3	6.6	7.8	7.2	7.4	10.1	9.5	9.7	10.7	10.2	10.5
28	6.8	6.2	6.5	7.6	7.1	7.2	10.5	9.8	10.2	10.5	10.0	10.3
29	7.0	6.2	6.6	7.7	7.0	7.3	10.7	10.1	10.4	10.4	9.7	10.2
30	6.9	6.4	6.6	7.6	6.6	7.0	11.0	10.4	10.7	10.2	9.7	10.0
31	7.1	6.5	6.8	---	---	---	11.1	10.6	10.9	10.2	9.5	9.9
MONTH	7.9	4.9	6.5	9.4	6.6	8.1	---	---	---	12.1	9.5	10.9

CAPE FEAR RIVER BASIN

02105500 CAPE FEAR RIVER AT WILLIAM O. HUSKE LOCK NEAR TARHEEL, NC--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	9.9	9.2	9.6	11.6	9.5	10.4	8.6	8.0	8.2	7.1	6.3	6.6
2	9.6	8.7	9.3	11.4	10.0	10.8	8.4	8.0	8.2	6.7	5.9	6.2
3	9.3	8.5	8.9	11.4	9.8	10.8	8.4	7.8	8.1	7.9	5.6	6.6
4	9.0	8.0	8.6	11.2	10.1	10.8	8.2	7.5	7.9	6.8	6.1	6.3
5	9.2	8.3	8.7	11.2	10.3	10.9	8.2	7.7	8.0	6.2	5.7	6.0
6	9.4	8.2	8.9	10.6	10.1	10.4	8.6	7.6	8.1	5.9	5.4	5.6
7	10.1	8.8	9.6	11.3	10.4	10.8	8.9	7.2	8.4	5.8	5.3	5.5
8	10.7	9.5	10.3	11.1	10.4	10.7	9.7	8.4	9.0	5.8	4.8	5.2
9	10.8	10.3	10.5	10.7	10.3	10.5	9.8	8.5	9.1	5.8	4.9	5.2
10	10.7	9.9	10.4	10.9	10.1	10.5	9.9	8.4	9.0	6.0	4.8	5.4
11	10.5	9.8	10.3	11.2	10.3	10.7	9.2	7.7	8.4	5.8	4.8	5.3
12	10.4	9.7	10.1	11.4	10.5	11.0	8.5	7.5	8.1	6.0	5.0	5.5
13	10.5	9.9	10.2	11.6	10.7	11.2	8.8	7.6	8.1	6.3	4.7	5.3
14	10.6	9.9	10.3	11.3	10.5	10.9	8.1	7.0	7.5	6.9	5.5	6.0
15	10.4	9.6	10.1	10.7	9.9	10.3	7.7	6.9	7.2	6.8	5.6	6.1
16	10.4	9.5	10.0	10.5	9.7	10.1	7.6	6.7	7.0	6.8	5.4	5.9
17	10.2	9.0	9.8	10.2	9.1	9.7	7.6	6.8	7.1	7.0	4.5	6.0
18	10.0	9.0	9.6	9.2	8.3	8.6	7.5	6.5	7.0	7.1	5.0	5.9
19	10.0	8.3	9.3	8.5	7.9	8.2	7.1	6.0	6.5	6.5	5.2	5.7
20	9.8	8.6	9.2	9.0	8.1	8.5	6.7	5.3	6.0	6.4	4.9	5.6
21	10.6	9.0	9.7	8.7	8.2	8.4	6.0	5.1	5.5	6.0	4.8	5.5
22	10.7	9.4	10.2	8.5	8.1	8.3	6.4	5.0	5.4	6.5	5.2	5.7
23	10.6	9.2	10.1	9.1	8.1	8.6	6.2	5.1	5.5	6.5	5.5	5.9
24	10.5	9.1	9.9	9.5	8.9	9.2	6.7	5.3	5.8	---	---	---
25	10.4	8.8	9.7	9.8	9.2	9.5	6.6	5.2	5.9	---	---	---
26	10.5	8.9	9.7	9.9	9.3	9.6	6.7	5.6	6.1	---	---	---
27	10.4	9.1	9.8	10.1	9.1	9.6	7.1	6.2	6.6	---	---	---
28	10.8	8.9	10.0	9.8	8.6	9.3	6.9	6.0	6.5	---	---	---
29	---	---	---	8.9	8.2	8.5	6.8	6.0	6.4	---	---	---
30	---	---	---	8.8	8.1	8.4	6.8	6.1	6.3	---	---	---
31	---	---	---	8.8	8.3	8.5	---	---	---	---	---	---
MONTH	10.8	8.0	9.7	11.6	7.9	9.8	9.9	5.0	7.2	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	---	---	---	8.8	5.0	6.6	3.9	3.5	3.7
2	---	---	---	6.7	3.7	4.6	7.5	4.0	5.3	5.1	3.6	4.1
3	---	---	---	6.4	3.7	4.9	8.8	4.2	6.1	5.8	4.9	5.4
4	---	---	---	---	---	---	---	---	---	5.6	4.9	5.2
5	---	---	---	---	---	---	---	---	---	5.3	4.5	4.9
6	---	---	---	---	---	---	---	---	---	4.7	4.2	4.4
7	---	---	---	---	---	---	---	---	---	5.0	4.1	4.5
8	5.7	3.5	4.6	---	---	---	---	---	---	5.2	4.1	4.7
9	5.3	3.4	4.5	---	---	---	---	---	---	5.5	4.4	4.9
10	5.0	3.9	4.3	6.1	3.5	4.7	9.4	4.2	6.1	5.5	4.4	4.9
11	4.7	3.4	4.1	5.2	3.9	4.6	8.1	4.4	5.5	7.6	4.5	5.4
12	3.9	2.4	3.1	4.9	2.6	3.5	6.0	4.4	5.0	8.2	4.7	6.0
13	2.7	1.9	2.3	4.5	2.6	3.2	5.7	3.7	4.8	6.9	4.8	5.6
14	2.6	1.3	1.8	6.0	2.3	3.7	6.4	3.9	4.9	7.6	4.0	5.4
15	3.4	1.5	2.4	5.4	2.6	3.9	7.4	4.9	5.8	6.5	4.6	5.3
16	4.6	2.1	3.2	6.9	3.1	4.1	9.4	5.8	6.4	6.8	4.7	5.5
17	4.8	2.9	3.8	6.5	3.5	5.1	7.3	4.2	5.6	6.4	4.8	5.4
18	4.8	2.7	3.8	6.7	2.3	4.7	8.0	4.7	6.0	5.7	4.6	5.0
19	4.9	3.6	4.3	6.7	1.9	4.2	9.6	5.4	7.0	5.7	4.5	4.9
20	5.4	3.8	4.3	8.1	4.0	5.6	7.9	5.6	6.4	5.7	4.6	5.1
21	5.7	3.5	4.5	8.1	4.9	6.2	7.9	4.8	6.4	6.2	4.6	5.2
22	4.9	3.4	4.1	---	---	---	9.0	5.5	7.1	6.5	4.8	5.5
23	4.9	3.3	4.0	---	---	---	10.6	4.8	7.0	6.1	5.0	5.5
24	4.5	3.2	3.9	---	---	---	10.3	5.4	7.9	5.6	4.6	5.1
25	4.3	3.1	3.7	---	---	---	12.7	5.8	8.7	5.2	4.4	4.8
26	4.1	3.0	3.5	---	---	---	9.7	5.9	7.3	5.0	4.2	4.4
27	4.8	3.2	3.9	---	---	---	7.1	5.2	5.8	4.9	4.2	4.5
28	9.9	4.0	6.6	6.0	4.0	5.0	5.6	3.7	4.3	6.7	4.6	5.4
29	9.7	6.4	7.4	5.5	3.7	4.3	4.2	3.6	3.9	7.3	4.8	5.6
30	---	---	---	7.3	4.1	5.1	4.0	3.6	3.8	7.7	4.0	5.6
31	---	---	---	9.8	4.5	6.9	3.8	3.4	3.6	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	8.2	3.5	5.1

02105500 CAPE FEAR RIVER AT WILLIAM O. HUSKE LOCK NEAR TARHEEL, NC--Continued

OXYGEN DISSOLVED (% OF SATURATION), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	65	59	61	74	68	70	73	66	69	93	88	91
2	68	54	61	76	69	73	72	64	68	92	86	88
3	71	54	63	83	72	78	70	64	67	87	86	87
4	73	56	65	86	78	81	71	64	67	88	86	87
5	75	60	68	84	78	81	67	62	64	89	87	88
6	86	61	71	86	78	82	66	62	64	91	88	89
7	85	67	76	82	77	79	67	62	64	93	89	91
8	82	68	75	82	75	78	70	63	66	92	90	91
9	80	63	71	82	75	79	71	65	67	92	89	91
10	85	63	71	85	77	80	70	66	68	91	88	89
11	83	65	70	89	81	85	---	---	---	92	88	91
12	80	67	73	89	81	85	---	---	---	93	91	92
13	79	73	76	90	83	86	---	---	---	93	90	92
14	80	74	76	89	83	86	79	75	77	92	89	90
15	82	73	77	88	82	85	82	77	80	90	87	88
16	81	72	76	89	81	84	82	78	80	90	87	88
17	79	72	74	86	80	83	82	78	80	89	86	88
18	77	69	72	85	80	82	82	78	80	88	86	87
19	74	66	70	83	79	81	81	76	78	89	86	88
20	72	67	69	84	79	81	80	76	78	91	86	88
21	71	67	69	83	78	80	80	76	78	92	86	89
22	73	67	69	81	77	79	80	75	77	91	85	88
23	73	67	69	81	77	79	83	76	79	92	88	90
24	72	65	68	83	77	80	84	79	81	94	88	91
25	76	67	71	83	80	81	84	80	82	91	88	90
26	75	68	72	83	75	80	87	81	84	91	87	90
27	73	68	70	76	71	72	88	83	85	91	88	89
28	72	66	69	76	70	71	90	85	87	91	87	89
29	73	65	69	77	70	73	91	86	89	91	86	89
30	71	66	68	76	67	70	92	88	90	91	87	89
31	72	66	69	---	---	---	93	89	90	91	87	89
MONTH	86	54	70	90	67	79	---	---	---	94	85	89

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	91	86	89	104	85	94	89	83	86	82	72	77
2	89	82	87	102	89	96	87	82	85	77	55	72
3	87	79	83	102	87	96	86	80	84	94	65	77
4	83	74	80	101	90	96	85	79	82	80	71	74
5	83	75	79	99	91	96	85	80	83	72	65	69
6	82	73	79	94	88	91	89	78	84	68	61	64
7	86	77	83	100	91	96	90	73	85	66	60	63
8	91	81	87	98	93	95	98	84	90	67	54	59
9	92	87	89	98	94	95	100	86	92	67	56	60
10	91	86	89	101	93	97	103	85	93	71	56	63
11	91	85	89	106	96	100	96	81	88	69	57	63
12	90	84	88	108	99	103	90	80	86	72	60	66
13	91	86	88	110	102	106	96	82	88	76	57	64
14	91	85	88	108	100	105	89	76	82	85	67	73
15	90	83	87	104	97	100	87	75	79	83	68	73
16	90	82	87	104	95	100	86	75	79	82	65	71
17	89	79	85	102	92	97	87	77	81	84	54	72
18	88	78	84	93	84	88	88	76	81	86	60	71
19	88	73	81	87	81	84	84	71	77	77	61	67
20	87	74	81	92	82	87	80	64	71	75	57	64
21	95	80	87	88	82	85	72	62	66	69	55	63
22	97	85	91	85	81	83	78	61	65	74	59	65
23	95	83	91	88	80	84	76	62	66	73	61	66
24	95	82	89	91	86	88	81	64	69	---	---	---
25	94	80	88	95	88	91	79	61	70	---	---	---
26	95	81	89	98	90	94	79	66	72	---	---	---
27	96	83	90	103	91	96	83	73	78	---	---	---
28	99	81	91	101	90	96	80	70	76	---	---	---
29	---	---	---	92	86	89	79	69	74	---	---	---
30	---	---	---	91	84	87	79	70	73	---	---	---
31	---	---	---	91	86	88	---	---	---	---	---	---
MONTH	99	73	86	110	80	94	103	61	80	---	---	---

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 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 river mile 67.

DRAINAGE AREA.--5,255 mi².

WATER-DISCHARGE RECORDS

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 NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. 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 24.0 ft³/s for municipal water supply, most of which was returned downstream of station as treated effluent. Prior to regulation, maximum discharge: 57,000 ft³/s, March 3, 1979; gage height: 24.92 ft, from floodmarks. Minimum discharge prior to regulation, 406 ft³/s, July 1, 1981. Minimum discharge for period of record and current water year, due to fish lockage.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1330	901	1130	976	6600	1420	5730	925	921	1260	768	1400
2	1160	810	1160	975	5270	1530	8320	932	933	951	727	1500
3	1110	931	1080	1070	3720	2690	9710	962	944	892	870	5170
4	1000	961	1040	1180	2640	3180	8150	949	902	849	825	5590
5	867	948	1000	1470	2030	3150	6880	1130	797	818	699	2870
6	1000	933	950	1680	1770	3630	6280	1190	740	753	528	1490
7	1230	921	903	2320	2150	4490	5100	1120	801	723	430	969
8	1470	943	902	2910	3010	5020	3670	948	926	679	361	882
9	1530	1010	954	2850	4380	5020	3060	988	864	507	284	730
10	1550	1010	982	2600	6320	3220	2770	893	888	487	179	706
11	1470	1030	1070	2610	6500	2110	2330	992	823	708	230	646
12	1270	1030	1100	2350	6270	1760	2120	1030	696	734	442	559
13	1130	1000	1320	2190	6210	1910	2290	939	687	704	526	510
14	1050	1010	1460	2080	6340	2170	2150	915	762	706	522	648
15	1050	1050	1580	2050	5530	2180	1940	929	921	764	408	759
16	1100	1030	1540	1960	4480	2530	1620	825	913	669	535	970
17	1180	959	1350	1830	3290	3160	1550	821	916	619	612	1140
18	1100	950	1210	1660	2530	2800	1410	932	810	622	638	1200
19	1030	955	1120	1530	2200	2270	1310	970	788	582	668	1130
20	1060	970	1170	1630	1940	2050	1400	990	818	682	575	990
21	1040	935	1110	4510	1980	2850	1340	930	791	662	529	915
22	1050	896	1050	8400	1940	3720	1260	e900	926	e680	552	937
23	1070	884	1030	8040	1900	3950	1060	e800	969	e700	830	970
24	1010	1070	1050	8570	1830	3900	893	e800	884	e640	560	930
25	1030	1580	1050	13000	1540	3550	861	e820	770	e760	552	830
26	1030	1720	1050	15300	1460	2980	850	e900	744	1090	614	747
27	1010	1580	1040	14900	1350	2630	967	e1000	787	1450	719	620
28	970	1410	1010	11700	1270	2640	985	e1100	918	1280	1860	804
29	942	1260	1020	8880	---	3370	925	e1080	1130	1010	3160	793
30	946	1160	1010	8240	---	3690	801	e1100	1450	946	2250	683
31	964	---	990	7580	---	3940	---	e1200	---	925	1590	---
TOTAL	34749	31847	34431	147041	96450	93510	87732	30010	26219	24852	24043	38088
MEAN	1121	1062	1111	4743	3445	3016	2924	968.1	874.0	801.7	775.6	1270
MAX	1550	1720	1580	15300	6600	5020	9710	1200	1450	1450	3160	5590
MIN	867	810	902	975	1270	1420	801	800	687	487	179	510

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2002,* BY WATER YEAR (WY)

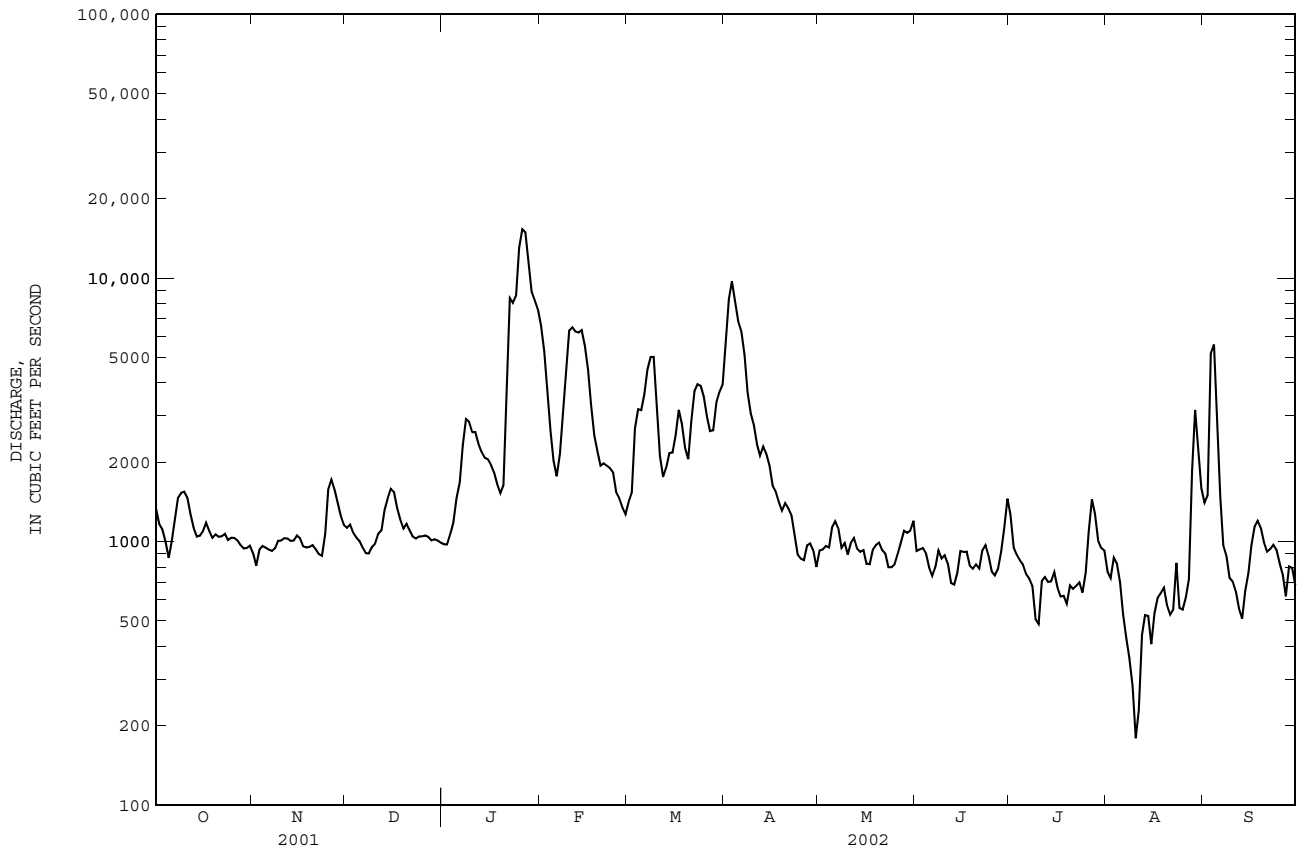
MEAN	3507	3222	4431	8268	9571	10740	7714	3959	3608	2962	2830	3715
MAX	15080	11390	11050	17180	27780	23830	17730	12110	15070	10860	7883	22580
(WY)	2000	1996	1984	1998	1998	1998	1993	1989	1982	1995	1984	1996
MIN	1023	1062	1111	1717	2992	3016	1667	968	874	802	776	985
(WY)	1999	2002	2002	2001	2001	2002	1986	2002	2002	2002	2002	1990

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1982 - 2002*	
ANNUAL TOTAL	1020154		668972			
ANNUAL MEAN	2795		1833		5354	
HIGHEST ANNUAL MEAN					8529	
LOWEST ANNUAL MEAN					1833	
HIGHEST DAILY MEAN	18500	Apr 7	15300	Jan 26	47600	Sep 11 1996
LOWEST DAILY MEAN	677	Aug 8	179	Aug 10	179	Aug 10 2002
ANNUAL SEVEN-DAY MINIMUM	830	Aug 5	350	Aug 7	350	Aug 7 2002
MAXIMUM PEAK FLOW			15600	Jan 26	48300	Sep 11 1996
MAXIMUM PEAK STAGE			19.43	Jan 26	24.29	Sep 11 1996
INSTANTANEOUS LOW FLOW			157*	Aug 10	157*	Aug 10 2002
10 PERCENT EXCEEDS	6070		3790		14500	
50 PERCENT EXCEEDS	1550		1040		2640	
90 PERCENT EXCEEDS	949		683		1030	

e Estimated.

* Regulated period only (1982-2002). See REMARKS.

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC--Continued



CAPE FEAR RIVER BASIN

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC--Continued

PRECIPITATION RECORDS

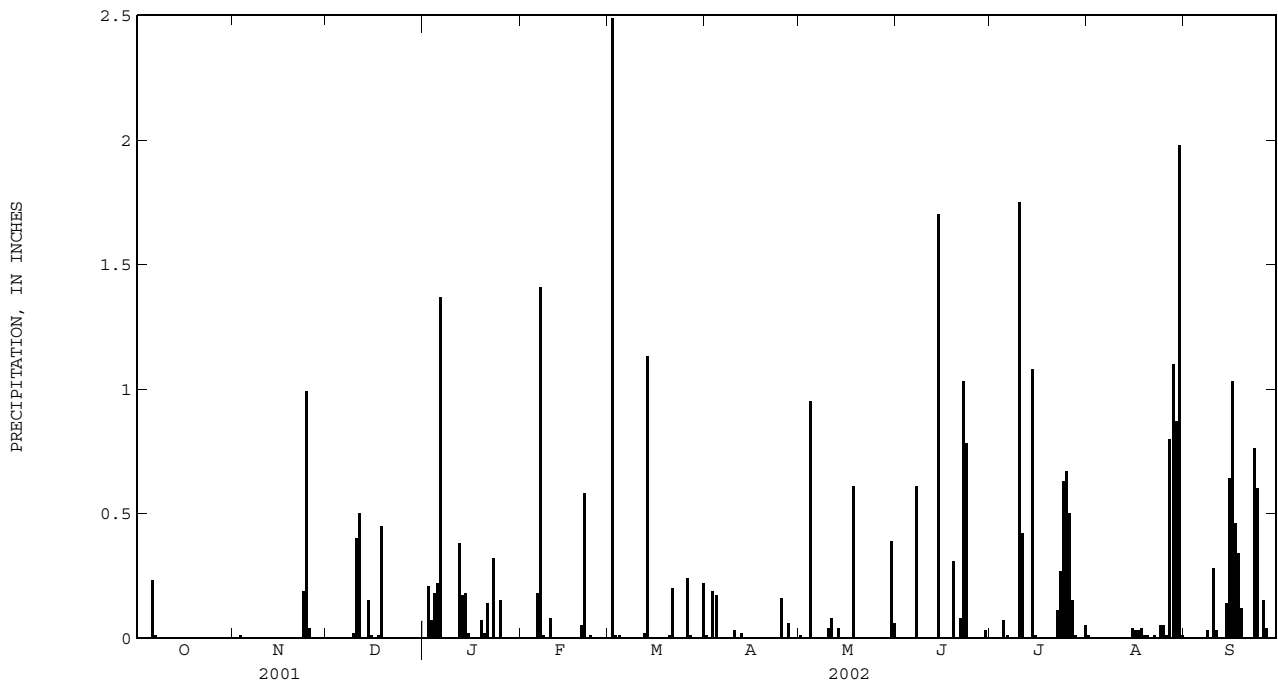
PERIOD OF RECORD.--November 1998 to current year. Records from November 1998 to September 1999 are unpublished and available in the USGS District Office, Raleigh, NC.

INSTRUMENTATION.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00
2	0.00	0.00	0.00	0.21	0.00	2.49	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.01	0.00	0.07	0.00	0.01	0.19	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.18	0.00	0.01	0.17	0.95	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00
6	0.23	0.00	0.00	1.37	0.18	0.00	0.00	0.00	0.00	0.01	0.00	0.00
7	0.01	0.00	0.00	0.00	1.41	0.00	0.00	0.00	0.61	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03
9	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.40	0.00	0.08	0.00	0.03	0.04	0.00	1.75	0.00	0.28
11	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.08	0.00	0.42	0.00	0.03
12	0.00	0.00	0.00	0.38	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.17	0.00	1.13	0.00	0.04	0.00	0.00	0.00	0.00
14	0.00	0.00	0.15	0.18	0.00	0.00	0.00	0.00	1.70	1.08	0.00	0.14
15	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.64
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	1.03
17	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.46
18	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.04	0.34
19	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.31	0.00	0.01	0.12
20	0.00	0.00	0.00	0.02	0.05	0.01	0.00	0.00	0.00	0.00	0.01	0.00
21	0.00	0.00	0.00	0.14	0.58	0.20	0.00	0.00	0.08	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	1.03	0.11	0.01	0.00
23	0.00	0.19	0.00	0.32	0.01	0.00	0.00	---	0.78	0.27	0.00	0.76
24	0.00	0.99	0.00	0.00	0.00	0.00	0.00	---	0.00	0.63	0.05	0.60
25	0.00	0.04	0.00	0.15	0.00	0.00	0.16	---	0.00	0.67	0.05	0.00
26	0.00	0.00	0.00	0.00	0.00	0.24	0.00	---	0.00	0.50	0.01	0.15
27	0.00	0.00	0.00	0.00	0.00	0.01	0.06	---	0.00	0.15	0.80	0.04
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.01	1.10	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	---	0.03	0.00	0.87	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.39	0.00	0.00	1.98	0.00
31	0.00	---	0.00	0.00	---	0.22	---	0.06	---	0.05	0.01	---
TOTAL	0.24	1.23	1.54	3.50	2.32	4.34	0.64	---	4.54	5.73	5.05	4.62





Weather station near Lizzie, North Carolina.

CAPE FEAR RIVER BASIN

02105900 HOOD CREEK NEAR LELAND, NC

LOCATION.--Lat 34°16'43", long 78°07'34", Brunswick County, Hydrologic Unit 03030005, on right bank at downstream side of bridge on U.S. Highway 74-76, 0.4 mi downstream from Pasture Pond Branch, 1 mi southeast of Maco, and 4.8 mi northwest of Leland.

DRAINAGE AREA.--21.6 mi².

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 NGVD of 1929. 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 gage height for period of record from floodmark. Low flows possibly affected by tide. No flow also occurred Sept. 11, 1997. No flow part of each day June 13, 14, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	0.12	1.4	0.86	2.4	1.4	9.5	2.0	1.6	3.1	9.4	220
2	2.2	0.13	1.1	0.90	2.0	2.2	8.8	2.1	1.4	2.9	8.0	111
3	2.3	0.14	0.80	e1.7	1.7	17	8.4	2.1	1.1	2.7	7.8	70
4	2.1	0.12	0.85	2.0	1.3	21	7.9	2.2	0.88	2.6	8.2	47
5	2.1	0.05	0.89	2.2	1.1	9.0	7.2	2.4	0.69	2.4	17	33
6	2.4	0.04	0.83	3.5	1.1	5.7	6.8	2.4	0.54	2.3	19	24
7	2.3	0.06	0.98	4.8	9.4	4.8	6.4	2.4	0.49	2.2	11	19
8	2.3	0.05	1.1	4.9	20	4.3	6.6	2.4	0.46	1.9	7.9	18
9	2.1	0.08	0.91	4.1	12	4.2	5.8	2.3	0.39	1.7	6.7	28
10	1.9	0.12	0.85	3.6	6.4	4.1	6.6	2.7	0.29	1.7	6.0	26
11	1.5	0.15	2.5	3.2	4.8	3.9	6.6	3.4	0.18	3.0	5.5	23
12	1.3	0.13	2.6	2.9	3.8	3.8	6.2	3.1	0.10	3.1	5.5	21
13	1.2	0.12	2.7	3.5	3.2	11	5.6	3.1	0.03	3.1	5.4	16
14	1.1	0.15	2.7	3.6	2.7	18	5.0	3.2	0.18	4.1	5.6	21
15	0.95	0.18	2.4	4.5	2.3	13	4.7	2.9	2.3	5.4	6.2	72
16	0.69	0.21	1.8	4.3	2.3	e5.4	4.1	2.6	2.0	78	7.0	83
17	0.67	0.21	1.6	4.1	2.2	7.9	3.7	2.5	1.7	55	7.6	90
18	0.68	0.17	2.6	3.8	2.0	7.4	3.2	2.5	1.7	16	7.6	71
19	0.70	0.15	2.3	3.5	1.9	7.1	3.0	2.7	1.9	8.4	7.7	79
20	0.69	0.18	2.0	3.3	1.8	7.6	2.3	2.8	2.2	5.7	12	74
21	0.63	0.15	1.6	3.1	2.2	7.4	2.0	2.6	2.3	5.1	17	49
22	0.51	0.14	1.4	3.2	2.1	7.0	1.8	2.8	2.5	7.4	14	34
23	0.41	0.19	1.3	3.1	2.0	6.9	1.4	2.6	3.9	11	12	26
24	0.35	1.4	1.4	3.2	1.9	6.8	1.6	2.3	3.3	25	7.6	38
25	0.29	2.5	1.4	3.5	1.7	6.6	1.7	2.1	3.0	52	11	52
26	0.10	2.6	1.4	3.3	1.7	7.3	1.9	1.9	3.2	60	11	43
27	0.09	2.0	1.3	3.2	1.6	12	2.0	1.7	3.4	63	13	36
28	0.09	1.6	1.4	3.1	1.4	13	2.1	1.4	3.3	32	40	30
29	0.12	1.4	1.3	3.0	---	11	2.2	1.3	3.1	16	107	23
30	0.12	1.4	1.1	2.7	---	10	2.0	1.6	3.2	11	294	18
31	0.11	---	0.90	2.6	---	9.7	---	1.7	---	8.7	340	---
TOTAL	34.50	15.94	47.41	99.26	99.0	256.5	137.1	73.8	51.33	496.5	1037.7	1495
MEAN	1.113	0.531	1.529	3.202	3.536	8.274	4.570	2.381	1.711	16.02	33.47	49.83
MAX	2.5	2.6	2.7	4.9	20	21	9.5	3.4	3.9	78	340	220
MIN	0.09	0.04	0.80	0.86	1.1	1.4	1.4	1.3	0.03	1.7	5.4	16
CFSM	0.05	0.02	0.07	0.15	0.16	0.38	0.21	0.11	0.08	0.74	1.55	2.31
IN.	0.06	0.03	0.08	0.17	0.17	0.44	0.24	0.13	0.09	0.86	1.79	2.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2002,® BY WATER YEAR (WY)

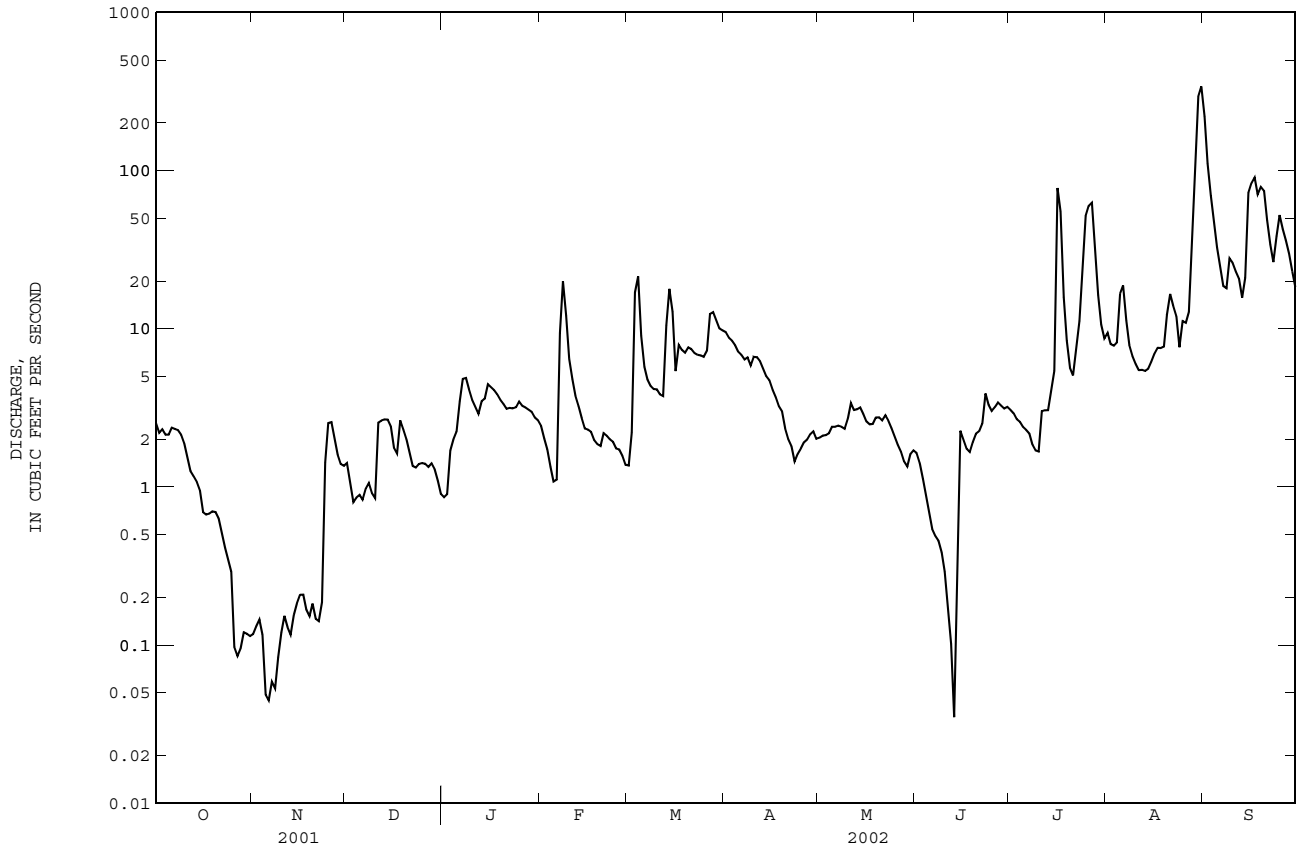
	MEAN	30.18	20.21	27.10	45.61	53.15	54.62	30.44	18.24	22.82	38.43	49.44	60.32
MAX	115	52.6	74.5	93.8	177	111	115	137	143	133	153	534	
(WY)	2000	1960	1973	1964	1998	1959	1961	1999	1961	1996	1969	1999	
MIN	1.11	0.53	1.53	3.20	3.54	8.27	3.69	1.67	0.32	0.73	0.15	0.51	
(WY)	2002	2002	2002	2002	2002	2002	1967	1995	1960	1957	1957	1963	

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1957 - 2002®

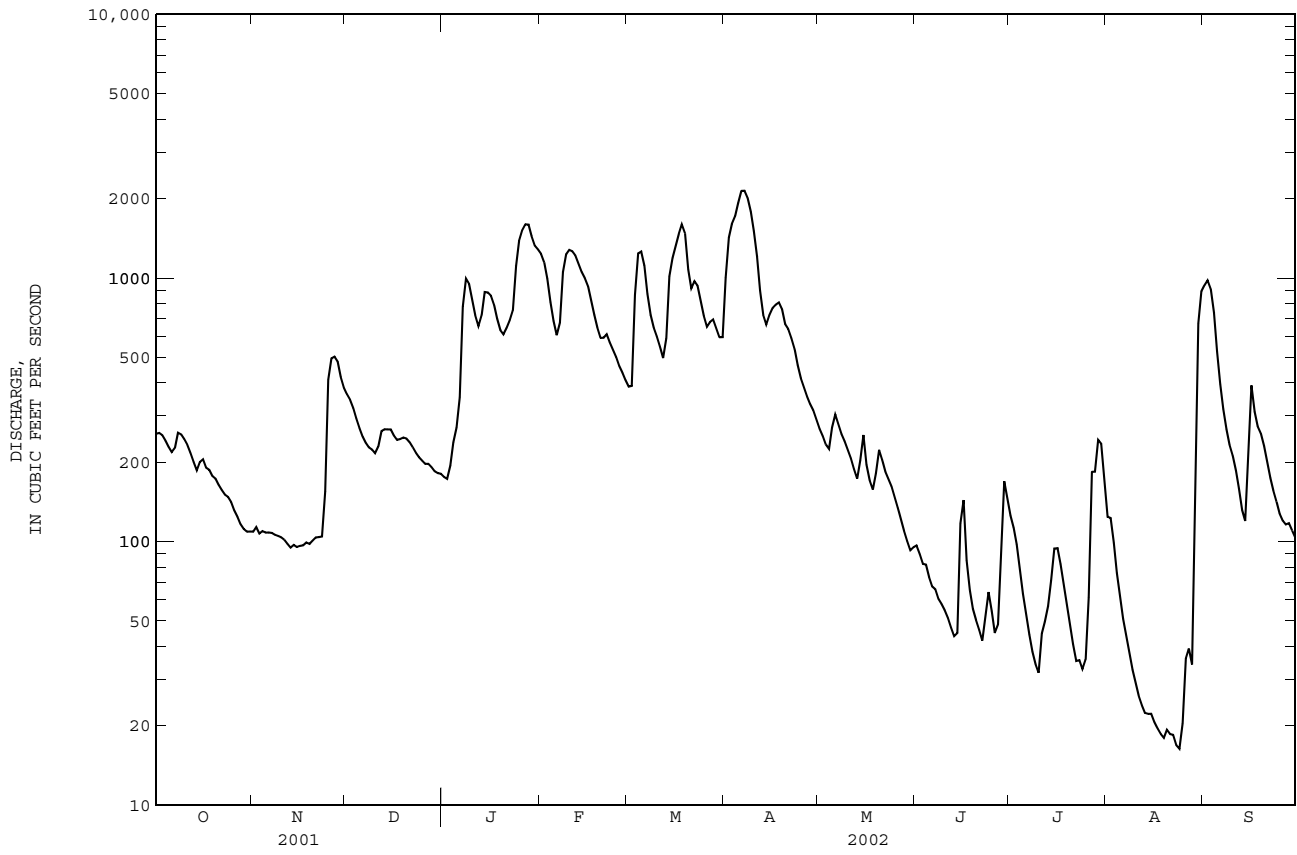
ANNUAL TOTAL		7641.86		3844.04								
ANNUAL MEAN		20.94		10.53						37.47		
HIGHEST ANNUAL MEAN										80.6		1999
LOWEST ANNUAL MEAN										10.5		2002
HIGHEST DAILY MEAN			863	Mar 21		340	Aug 31		3000	Sep 16		1999
LOWEST DAILY MEAN		0.04	Nov 6			0.03	Jun 13		0.00	Sep 10		1997
ANNUAL SEVEN-DAY MINIMUM		0.07	Nov 4			0.07	Nov 4		0.02	Sep 4		1997
MAXIMUM PEAK FLOW						419	Aug 30		4800	Sep 16		1999
MAXIMUM PEAK STAGE						7.04	Aug 30		13.89*	Sep 16		1999
INSTANTANEOUS LOW FLOW						0.00*	Jun 13		0.00*	Sep 10		1997
ANNUAL RUNOFF (CFSM)		0.97				0.49			1.73			
ANNUAL RUNOFF (INCHES)		13.16				6.62			23.57			
10 PERCENT EXCEEDS		38				21			84			
50 PERCENT EXCEEDS		13				2.7			15			
90 PERCENT EXCEEDS		0.68				0.37			1.5			

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

02105900 HOOD CREEK NEAR LELAND, NC--Continued



02106500 BLACK RIVER NEAR TOMAHAWK, NC--Continued



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 mi².

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 NGVD of 1929 (levels by U.S. Army Corps of Engineers). Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minimum discharge for period of record also occurred Oct. 11, 1954. Minimum discharge for current water year also occurred Aug. 24, 25.

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	36	124	72	788	298	783	222	47	104	190	114
2	169	35	118	76	644	295	923	191	47	80	216	160
3	154	35	111	88	544	1500	1050	164	48	60	217	240
4	133	35	108	117	479	2470	1210	146	47	46	191	366
5	116	30	105	152	426	2750	1310	167	43	36	160	439
6	104	30	101	214	381	2520	1280	209	39	33	139	450
7	100	32	100	433	431	2120	1200	224	73	44	119	423
8	133	29	96	560	711	1580	1100	220	58	45	98	381
9	146	29	90	663	899	1160	905	199	43	34	78	337
10	156	29	86	666	967	897	700	167	36	30	64	287
11	160	31	e86	615	981	721	579	139	32	37	52	246
12	153	29	e100	547	949	607	507	119	29	46	44	225
13	138	29	e110	552	899	653	456	104	26	40	36	195
14	122	30	111	596	842	1010	422	101	26	48	31	169
15	109	31	114	621	767	1240	406	111	57	62	29	150
16	97	31	117	628	685	1390	389	104	49	55	27	138
17	86	32	111	599	616	1440	366	95	41	49	24	128
18	79	32	111	554	554	1430	331	87	38	49	23	114
19	73	32	118	506	499	1400	320	89	37	47	22	102
20	67	33	116	483	450	1320	508	110	34	38	21	91
21	64	34	108	467	441	1320	760	110	28	30	21	80
22	61	34	99	476	467	1320	944	105	31	26	20	71
23	56	34	92	519	475	1220	1050	98	148	23	20	68
24	53	42	89	844	457	1060	990	88	141	21	19	100
25	49	65	87	1060	425	915	777	82	102	22	20	89
26	46	88	86	1160	387	804	548	73	90	37	21	83
27	43	108	84	1180	350	791	414	64	76	50	22	91
28	41	122	81	1150	321	806	342	57	81	87	28	85
29	41	130	78	1120	---	813	294	51	94	113	37	75
30	39	130	76	1080	---	771	254	48	117	130	45	64
31	37	---	75	955	---	703	---	46	---	153	71	---
TOTAL	3005	1417	3088	18753	16835	37324	21118	3790	1758	1675	2105	5561
MEAN	96.94	47.23	99.61	604.9	601.2	1204	703.9	122.3	58.60	54.03	67.90	185.4
MAX	180	130	124	1180	981	2750	1310	224	148	153	217	450
MIN	37	29	75	72	321	295	254	46	26	21	19	64
CFSM	0.16	0.08	0.17	1.01	1.00	2.01	1.18	0.20	0.10	0.09	0.11	0.31
IN.	0.19	0.09	0.19	1.16	1.05	2.32	1.31	0.24	0.11	0.10	0.13	0.35

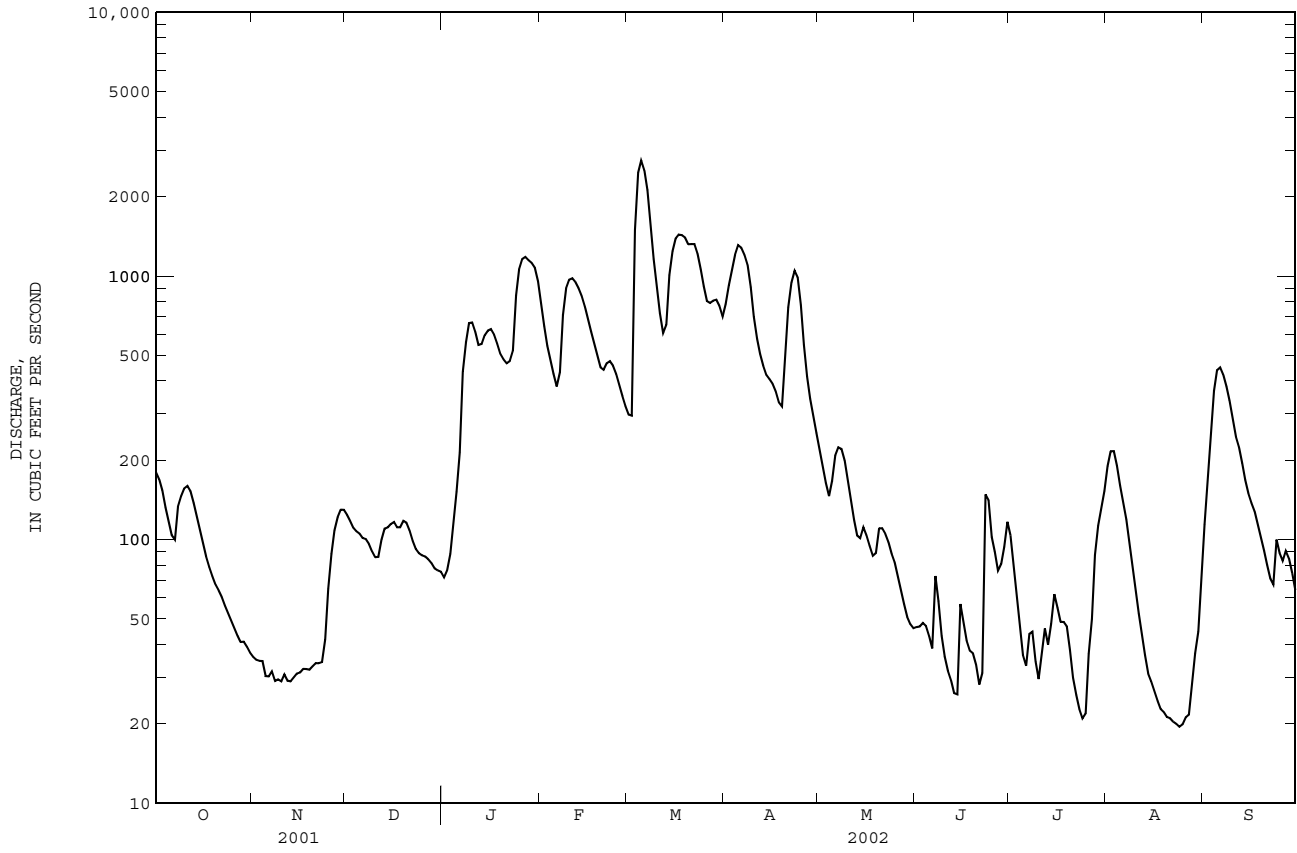
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2002, BY WATER YEAR (WY)

MEAN	461.4	418.8	652.9	1062	1206	1235	836.5	457.2	391.1	533.5	662.0	683.8
MAX	3237	1852	2225	2548	4399	3506	2958	1901	1953	3922	2681	7329
(WY)	2000	1948	1949	1993	1998	1983	1973	1969	1961	1962	1955	1999
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

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1940 - 2002	
ANNUAL TOTAL	169152		116429			
ANNUAL MEAN	463.4		319.0		715.8	
HIGHEST ANNUAL MEAN					1243	
LOWEST ANNUAL MEAN					279	
HIGHEST DAILY MEAN	5590	Mar 23	2750	Mar 5	29900	Sep 18 1999
LOWEST DAILY MEAN	24	Jul 23	19	Aug 24	5.3	Oct 10 1954
ANNUAL SEVEN-DAY MINIMUM	27	Jul 19	20	Aug 20	5.5	Oct 8 1954
MAXIMUM PEAK FLOW			2780	Mar 5	30700	Sep 18 1999
MAXIMUM PEAK STAGE			11.22	Mar 5	23.51	Sep 18 1999
INSTANTANEOUS LOW FLOW			19*	Aug 23	5.3*	Oct 10 1954
ANNUAL RUNOFF (CFSM)	0.77		0.53		1.19	
ANNUAL RUNOFF (INCHES)	10.50		7.23		16.24	
10 PERCENT EXCEEDS	981		946		1690	
50 PERCENT EXCEEDS	286		111		400	
90 PERCENT EXCEEDS	41		31		58	

e Estimated.
* See REMARKS.

02108000 NORTHEAST CAPE FEAR RIVER NEAR CHINQUAPIN, NC--Continued



CAPE FEAR RIVER BASIN

02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC

LOCATION.--Lat 34°35'55", long 77°52'32", Pender County, Hydrologic Unit 03030007, on left bank at State Highway 53 bridge, 3.9 mi above Holly Shelter Creek and 4.5 mi east of Burgaw.

DRAINAGE AREA.--920 mi².

PERIOD OF RECORD.--September 1999 to current year. Records for September 1999 are unpublished and available in the USGS District Office, Raleigh, NC.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. Satellite telemetry at station.

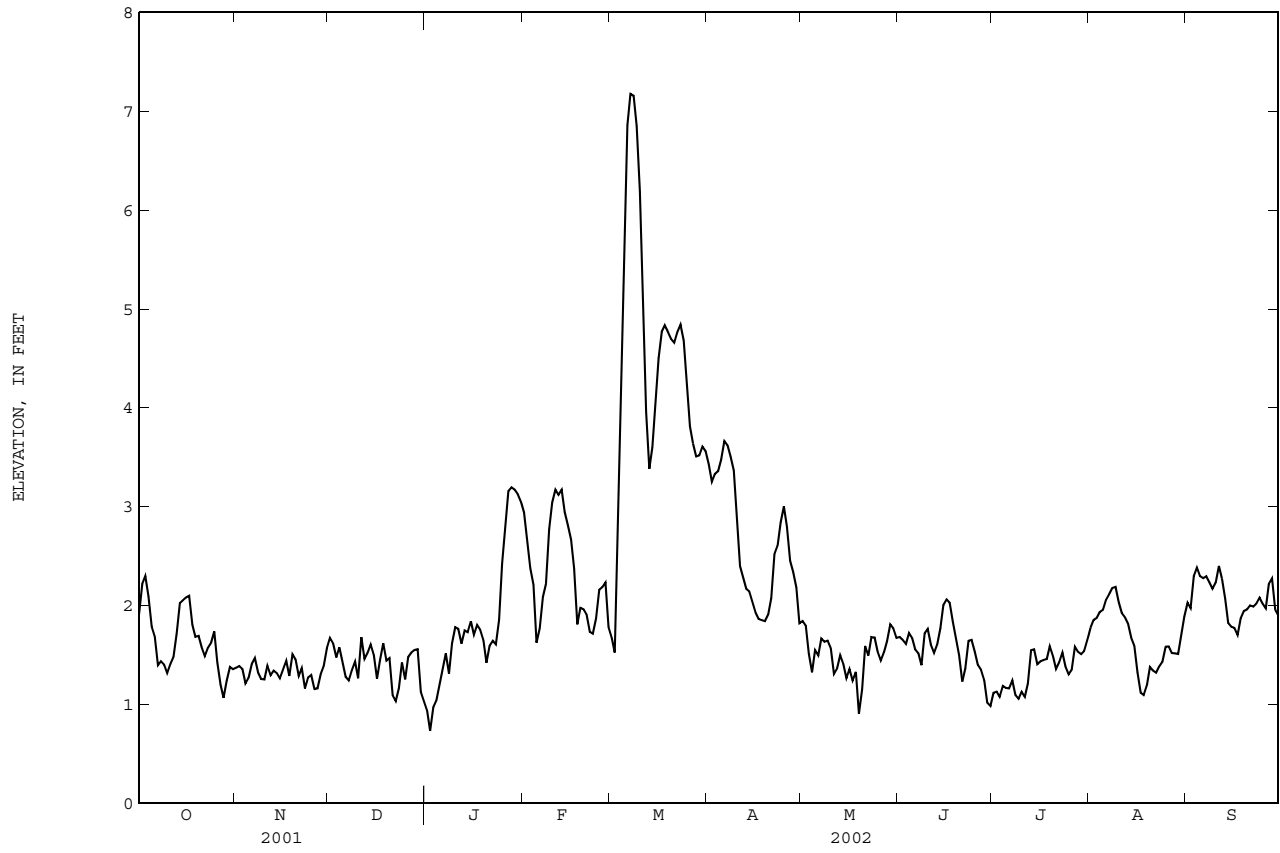
EXTREMES FOR PERIOD OF RECORD.--Maximum, 22.77 ft, Sept. 20, 1999; minimum, -0.18 ft, Jan. 2, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum, 7.25 ft, Mar. 7; minimum -0.18 ft, Jan 2.

ELEVATION, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.91	1.37	1.67	0.94	2.94	1.67	3.43	1.84	1.68	1.12	1.78	2.03
2	2.22	1.39	1.61	0.73	2.67	1.52	3.25	1.80	1.65	1.13	1.85	1.97
3	2.30	1.36	1.47	0.97	2.38	3.28	3.33	1.51	1.61	1.08	1.88	2.30
4	2.09	1.21	1.58	1.04	2.21	5.08	3.36	1.32	1.72	1.19	1.93	2.38
5	1.79	1.27	1.43	1.20	1.62	6.13	3.48	1.55	1.67	1.17	1.96	2.30
6	1.69	1.41	1.28	1.36	1.77	6.86	3.66	1.50	1.55	1.16	2.06	2.28
7	1.39	1.47	1.24	1.51	2.09	7.18	3.62	1.67	1.52	1.24	2.12	2.30
8	1.44	1.32	1.34	1.31	2.22	7.16	3.51	1.63	1.40	1.09	2.18	2.23
9	1.40	1.26	1.43	1.62	2.77	6.85	3.37	1.64	1.72	1.06	2.19	2.17
10	1.31	1.25	1.26	1.78	3.04	6.19	2.94	1.57	1.76	1.13	2.03	2.23
11	1.41	1.39	1.68	1.76	3.17	5.12	2.40	1.31	1.60	1.08	1.92	2.40
12	1.48	1.30	1.46	1.61	3.12	3.96	2.28	1.36	1.52	1.21	1.88	2.27
13	1.72	1.34	1.52	1.75	3.17	3.38	2.17	1.50	1.60	1.55	1.82	2.07
14	2.02	1.32	1.60	1.73	2.95	3.60	2.14	1.41	1.77	1.56	1.67	1.82
15	2.05	1.26	1.50	1.84	2.81	4.04	2.03	1.26	2.01	1.41	1.59	1.78
16	2.08	1.35	1.26	1.70	2.67	4.50	1.92	1.36	2.06	1.43	1.32	1.77
17	2.10	1.44	1.45	1.80	2.38	4.77	1.86	1.24	2.03	1.45	1.12	1.70
18	1.81	1.29	1.62	1.76	1.81	4.84	1.85	1.33	1.83	1.46	1.09	1.87
19	1.68	1.51	1.44	1.65	1.98	4.77	1.84	0.90	1.67	1.59	1.19	1.94
20	1.69	1.45	1.47	1.42	1.96	4.70	1.91	1.15	1.50	1.49	1.38	1.96
21	1.58	1.29	1.09	1.59	1.91	4.66	2.07	1.59	1.23	1.36	1.34	2.00
22	1.49	1.37	1.03	1.64	1.73	4.77	2.52	1.49	1.36	1.43	1.32	1.99
23	1.57	1.16	1.16	1.61	1.72	4.84	2.61	1.68	1.64	1.52	1.39	2.02
24	1.62	1.27	1.42	1.85	1.87	4.68	2.84	1.68	1.65	1.38	1.43	2.08
25	1.74	1.30	1.25	2.43	2.16	4.28	3.00	1.53	1.53	1.31	1.58	2.02
26	1.42	1.15	1.48	2.83	2.18	3.81	2.80	1.44	1.40	1.35	1.59	1.97
27	1.20	1.16	1.52	3.16	2.23	3.64	2.45	1.53	1.35	1.58	1.52	2.22
28	1.06	1.30	1.55	3.20	1.78	3.51	2.34	1.64	1.25	1.53	1.52	2.28
29	1.24	1.39	1.56	3.17	---	3.52	2.18	1.81	1.02	1.51	1.51	1.96
30	1.38	1.57	1.13	3.13	---	3.61	1.82	1.77	0.98	1.54	1.70	1.90
31	1.36	---	1.03	3.05	---	3.56	---	1.67	---	1.65	1.89	---
MEAN	1.65	1.33	1.40	1.84	2.33	4.53	2.63	1.51	1.58	1.35	1.67	2.07
MAX	2.30	1.57	1.68	3.20	3.17	7.18	3.66	1.84	2.06	1.65	2.19	2.40
MIN	1.06	1.15	1.03	0.73	1.62	1.52	1.82	0.90	0.98	1.06	1.09	1.70

02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC--Continued



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 mi².

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 NGVD of 1929. 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.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	e1.0	e2.0	e6.2	68	157	245	18	e6.6	e4.5	9.2	184
2	26	e1.0	e2.0	e8.0	65	145	233	18	e6.2	e3.4	14	221
3	24	e1.0	e1.8	e10	63	203	221	17	e5.8	e3.0	12	241
4	21	e0.90	e1.8	e12	61	295	210	16	e5.4	e2.6	12	230
5	21	e0.90	e1.8	e13	56	345	196	16	e5.2	e2.2	11	202
6	18	e0.90	e1.8	e20	53	374	183	16	e5.0	e2.6	12	171
7	16	e0.90	e1.6	e22	74	417	170	15	e4.8	e3.0	11	139
8	e15	e0.80	e1.6	e23	171	489	157	14	e4.6	e2.4	9.3	116
9	e13	e0.80	e1.4	e24	232	569	140	14	e4.6	e1.8	7.8	101
10	e12	e0.80	e1.4	e26	251	633	123	14	e4.4	e1.5	6.3	89
11	e10	e0.80	e3.0	e30	261	635	115	19	e4.4	e1.1	5.1	78
12	e9.0	e0.70	e16	e32	265	624	112	31	e4.3	e0.80	4.2	68
13	e9.0	e0.60	e14	35	263	621	108	38	e4.2	e0.90	3.5	56
14	e8.0	e0.50	e12	39	256	662	105	34	e6.0	e1.2	3.2	78
15	e8.0	e0.60	e11	44	248	673	100	28	e8.0	e2.0	2.9	240
16	e7.0	e0.66	e10	49	241	673	96	24	e10	e1.2	3.3	326
17	e6.0	e0.60	e9.0	50	234	646	90	19	9.5	e1.0	3.4	358
18	e6.0	e0.58	e8.8	48	226	600	83	18	8.1	1.1	5.3	351
19	e5.0	e0.54	e8.0	48	215	544	78	16	8.9	1.1	5.3	344
20	e4.8	e0.50	e7.0	50	204	490	71	14	7.7	0.92	5.7	322
21	e4.0	e0.46	e6.8	51	196	438	65	14	6.6	0.98	5.3	290
22	e3.6	e0.48	e7.0	51	199	402	58	13	7.2	1.1	5.1	264
23	e3.0	e0.50	e7.0	52	200	368	50	11	8.6	1.1	5.1	244
24	e2.8	e0.90	e7.0	55	199	339	42	10	14	1.7	4.7	251
25	e2.6	e3.0	e7.0	56	196	316	37	9.7	13	2.4	4.0	281
26	e2.2	e2.6	e7.0	58	193	298	33	8.7	11	3.4	3.7	307
27	e2.0	e2.4	e7.0	61	186	288	32	8.1	9.2	4.0	4.6	329
28	e1.8	e2.2	e7.0	64	173	285	30	7.6	7.8	4.3	e8.4	334
29	e1.6	e2.0	e6.8	71	---	282	27	7.0	6.4	4.5	e36	329
30	e1.4	e2.0	e6.2	74	---	270	23	e6.8	5.1	4.3	77	317
31	e1.0	---	e6.0	69	---	257	---	e6.6	---	4.3	146	---
TOTAL	292.8	31.62	190.8	1251.2	5049	13338	3233	501.5	212.6	70.40	446.4	6861
MEAN	9.445	1.054	6.155	40.36	180.3	430.3	107.8	16.18	7.087	2.271	14.40	228.7
MAX	28	3.0	16	74	265	673	245	38	14	4.5	146	358
MIN	1.0	0.46	1.4	6.2	53	145	23	6.6	4.2	0.80	2.9	56
CFSM	0.01	0.00	0.01	0.06	0.27	0.63	0.16	0.02	0.01	0.00	0.02	0.34
IN.	0.02	0.00	0.01	0.07	0.28	0.73	0.18	0.03	0.01	0.00	0.02	0.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2002, BY WATER YEAR (WY)

	MEAN	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	523.5	344.7	479.5	1033	1370	1421	953.2	370.9	306.5	501.7	630.3	834.1
MAX	5778	2332	3080	3722	5574	5319	2895	3586	1474	3040	2740	8449
(WY)	2000	1978	1949	1993	1998	1983	1973	1999	1969	1961	1981	1999
MIN	1.14	0.54	3.53	20.6	44.6	219	108	16.2	5.51	2.27	7.59	0.31
(WY)	1941	1955	1955	1955	1941	1955	2002	2002	1952	2002	1954	1954

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

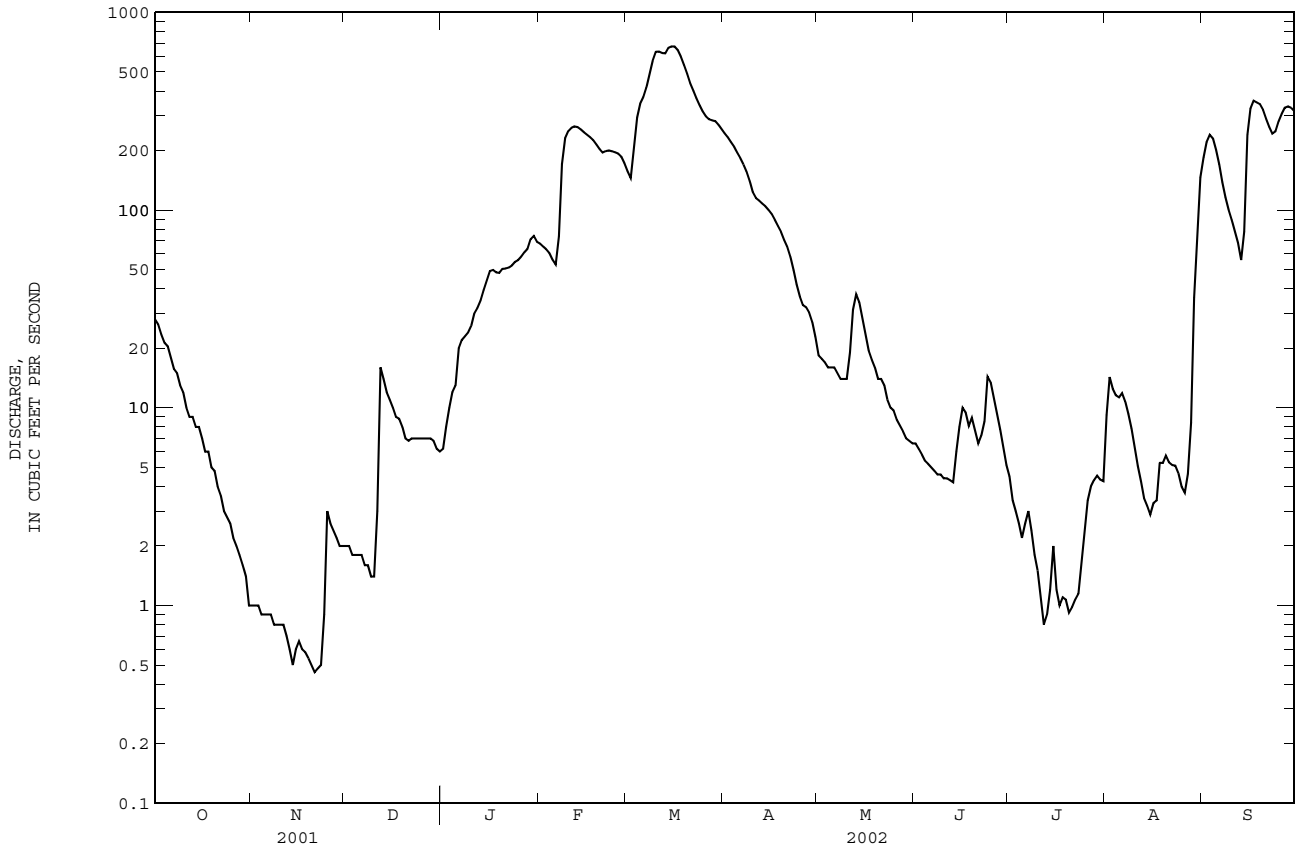
WATER YEARS 1939 - 2002

ANNUAL TOTAL	116615.22	31478.32		
ANNUAL MEAN	319.5	86.24	728.0	
HIGHEST ANNUAL MEAN			1572	1999
LOWEST ANNUAL MEAN			86.2	2002
HIGHEST DAILY MEAN	2890	Mar 26	30600	Sep 21 1999
LOWEST DAILY MEAN	0.46	Nov 21	0.10	Aug 30 1954
ANNUAL SEVEN-DAY MINIMUM	0.52	Nov 17	0.10	Oct 4 1954
MAXIMUM PEAK FLOW			681	Mar 16 31200
MAXIMUM PEAK STAGE			10.10	Mar 15 19.30
INSTANTANEOUS LOW FLOW			NOT DETERMINED	0.10* Aug 30 1954
ANNUAL RUNOFF (CFSM)	0.47		0.13	1.07
ANNUAL RUNOFF (INCHES)	6.38		1.72	14.55
10 PERCENT EXCEEDS	749		283	1900
50 PERCENT EXCEEDS	150		13	350
90 PERCENT EXCEEDS	1.9		1.2	26

e Estimated.

* See REMARKS.

02109500 WACCAMAW RIVER AT FREELAND, NC--Continued



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 mi².

WATER-DISCHARGE RECORDS

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 NGVD of 1929. 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. 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 1,400 ft³/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. 11, 12.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	16	20	28	19	45	23	14	12	7.7	7.8
2	12	12	14	19	25	28	39	23	13	12	7.2	7.1
3	11	11	13	19	25	37	37	24	12	29	7.0	6.3
4	11	11	13	19	24	26	33	25	13	15	6.7	6.5
5	11	11	12	e18	23	24	32	24	34	12	6.3	5.7
6	11	11	12	e18	24	23	30	22	18	10	6.0	5.1
7	11	11	12	e18	47	23	28	22	16	9.0	5.6	4.8
8	11	11	12	e19	47	22	28	26	14	8.5	5.5	4.7
9	11	11	12	19	36	22	37	21	13	8.1	5.5	4.3
10	11	11	24	19	36	22	56	19	12	8.1	5.3	4.1
11	11	11	62	19	33	21	40	19	11	8.0	5.2	3.9
12	13	11	32	18	31	26	39	19	11	8.0	5.2	3.6
13	14	11	37	18	29	56	53	21	11	8.3	4.9	3.6
14	48	10	36	18	28	49	49	24	21	10	4.8	4.9
15	24	11	30	18	27	39	44	19	13	51	4.8	22
16	15	11	26	17	26	35	40	18	11	15	12	25
17	13	11	34	17	25	131	40	17	11	11	11	9.8
18	12	11	54	18	24	121	38	34	10	9.8	15	7.7
19	12	11	37	38	23	78	36	19	11	9.3	7.3	37
20	12	11	32	44	24	63	34	18	10	8.6	6.1	12
21	12	11	28	33	24	53	33	17	9.3	8.3	5.5	11
22	11	10	26	28	23	43	31	17	8.8	8.4	5.1	12
23	11	11	27	81	22	38	28	16	8.9	13	5.2	17
24	11	23	32	73	21	35	28	16	9.1	14	6.8	11
25	11	27	26	73	21	33	31	15	8.5	18	5.7	10
26	11	18	25	53	21	39	27	15	9.4	36	5.5	61
27	11	14	23	44	20	43	26	23	14	14	7.9	153
28	11	13	23	37	19	35	26	16	17	11	6.9	69
29	11	12	22	34	---	33	25	15	16	9.5	6.5	34
30	11	17	21	31	---	35	23	15	11	8.7	6.5	24
31	12	---	20	29	---	44	---	14	---	7.8	6.7	---
TOTAL	409	377	793	929	756	1296	1056	616	391.0	411.4	207.4	587.9
MEAN	13.19	12.57	25.58	29.97	27.00	41.81	35.20	19.87	13.03	13.27	6.690	19.60
MAX	48	27	62	81	47	131	56	34	34	51	15	153
MIN	11	10	12	17	19	19	23	14	8.5	7.8	4.8	3.6
CFSM	0.46	0.44	0.89	1.04	0.94	1.45	1.22	0.69	0.45	0.46	0.23	0.68
IN.	0.53	0.49	1.02	1.20	0.98	1.67	1.36	0.80	0.51	0.53	0.27	0.76

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2002, BY WATER YEAR (WY)

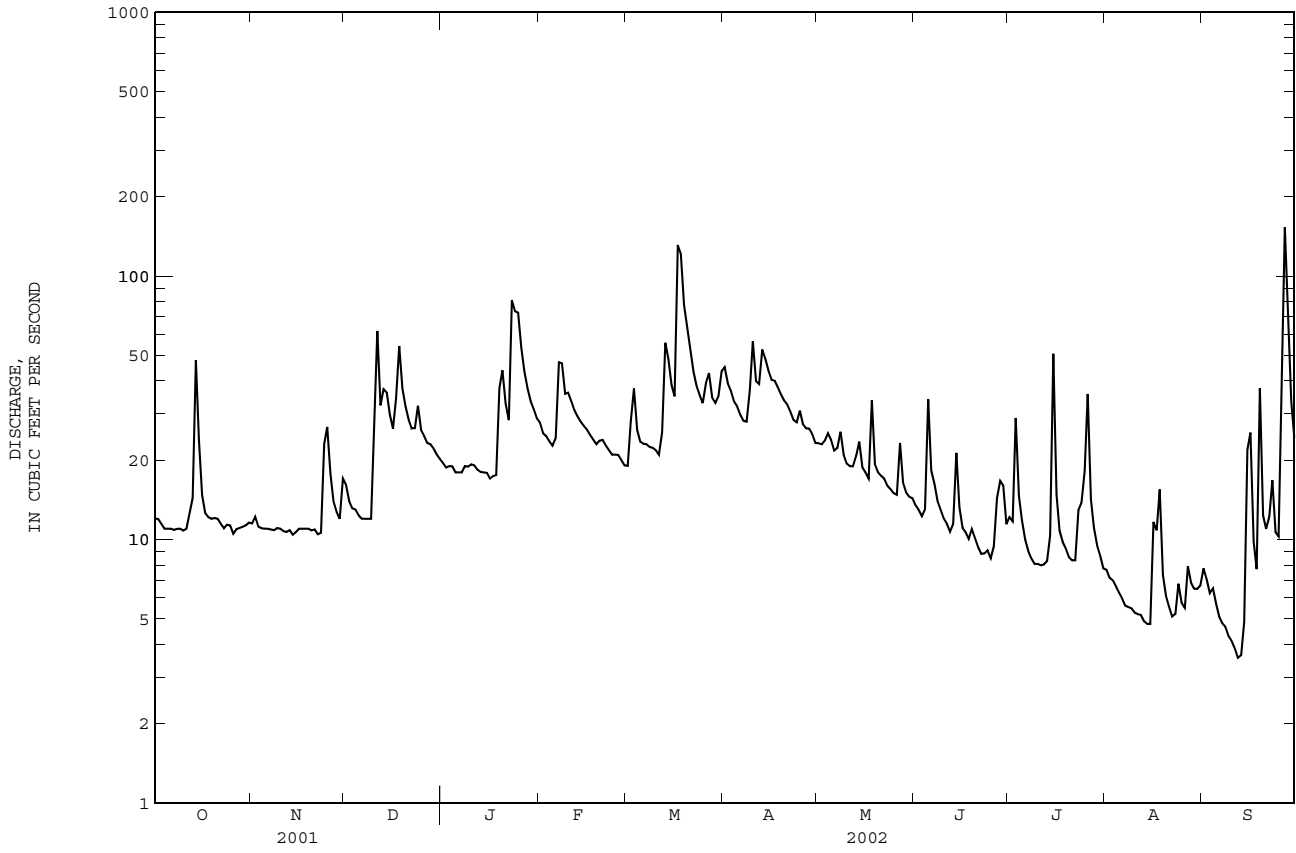
	35.65	40.24	44.49	50.83	60.63	72.43	68.46	53.47	47.10	38.71	43.21	34.96
MEAN	35.65	40.24	44.49	50.83	60.63	72.43	68.46	53.47	47.10	38.71	43.21	34.96
MAX	149	140	98.8	132	143	160	164	125	122	98.9	194	136
(WY)	1991	1978	1974	1946	1960	1993	1980	1973	1992	1941	1940	1979
MIN	8.45	9.07	11.8	11.4	17.4	23.7	26.5	16.5	13.0	9.04	6.69	6.95
(WY)	1955	1982	1956	1956	2001	1988	1981	2001	2002	1988	2002	1954

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1940 - 2002

ANNUAL TOTAL	8114.0	7829.7	
ANNUAL MEAN	22.23	21.45	49.11
HIGHEST ANNUAL MEAN			78.3
LOWEST ANNUAL MEAN			21.0
HIGHEST DAILY MEAN	165	Mar 21	2130
LOWEST DAILY MEAN	9.2	Jan 11	3.6
ANNUAL SEVEN-DAY MINIMUM	9.2	Jan 11	4.1
MAXIMUM PEAK FLOW			292
MAXIMUM PEAK STAGE			2.49
INSTANTANEOUS LOW FLOW			3.3*
ANNUAL RUNOFF (CFSM)	0.77		0.74
ANNUAL RUNOFF (INCHES)	10.48		10.11
10 PERCENT EXCEEDS	37		39
50 PERCENT EXCEEDS	16		17
90 PERCENT EXCEEDS	11		7.1

e Estimated.
* See REMARKS.

02111000 YADKIN RIVER AT PATTERSON, NC--Continued



PEE DEE RIVER BASIN

02111000 YADKIN RIVER AT PATTERSON, NC--Continued

PRECIPITATION RECORDS

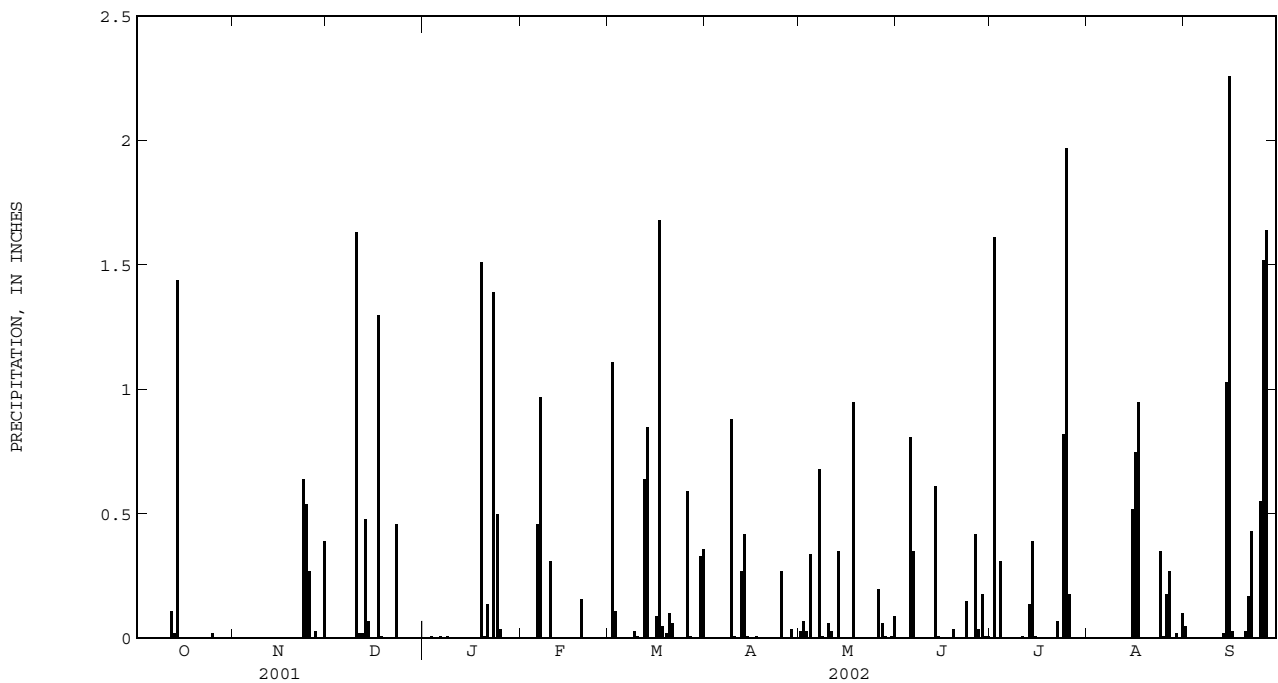
PERIOD OF RECORD.--October 1999 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Gage is operated in cooperation with U.S. Army Corps of Engineers, Wilmington District. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.05
2	0.00	0.00	0.00	0.00	0.00	1.11	0.00	0.07	0.00	1.61	0.00	0.00
3	0.00	0.00	0.00	0.01	0.00	0.11	0.00	0.03	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.31	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.00	0.00
6	0.00	0.00	0.00	0.01	0.46	0.00	0.00	0.00	0.35	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.97	0.00	0.00	0.68	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.03	0.88	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.63	0.00	0.31	0.01	0.01	0.06	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00	0.00
12	0.11	0.00	0.02	0.00	0.00	0.64	0.27	0.00	0.00	0.00	0.00	0.00
13	0.02	0.00	0.48	0.00	0.00	0.85	0.42	0.35	0.61	0.14	0.00	0.02
14	1.44	0.00	0.07	0.00	0.00	0.00	0.01	0.00	0.01	0.39	0.00	1.03
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.52	2.26
16	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.75	0.03
17	0.00	0.00	1.30	0.00	0.00	1.68	0.01	0.00	0.00	0.00	0.95	0.00
18	0.00	0.00	0.01	0.00	0.00	0.05	0.00	0.95	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.51	0.00	0.02	0.00	0.00	0.04	0.00	0.00	0.00
20	0.00	0.00	0.00	0.01	0.16	0.10	0.00	0.00	0.00	0.00	0.00	0.03
21	0.00	0.00	0.00	0.14	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.17
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.43
23	0.00	0.64	0.46	1.39	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00
24	0.00	0.54	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.82	0.35	0.00
25	0.02	0.27	0.00	0.04	0.00	0.00	0.27	0.00	0.00	1.97	0.01	0.55
26	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.20	0.42	0.18	0.18	1.52
27	0.00	0.03	0.00	0.00	0.00	0.01	0.00	0.06	0.04	0.00	0.27	1.64
28	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.01	0.18	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.01	0.00	0.02	0.00
30	0.00	0.39	0.00	0.00	---	0.33	0.00	0.01	0.01	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.36	---	0.09	---	0.00	0.10	---
TOTAL	1.59	1.87	3.99	3.62	1.90	6.04	1.91	2.92	2.63	5.51	3.15	7.73



361210081333001 TRIPLETT RAINGAGE

LOCATION.--Lat 36°12'10", long 81°33'30", Watauga County, Hydrologic Unit 03040101, 60 ft west of Secondary Road 1570, 0.3 mi north of Triplett, and 1.7 mi south of Blue Ridge Parkway.

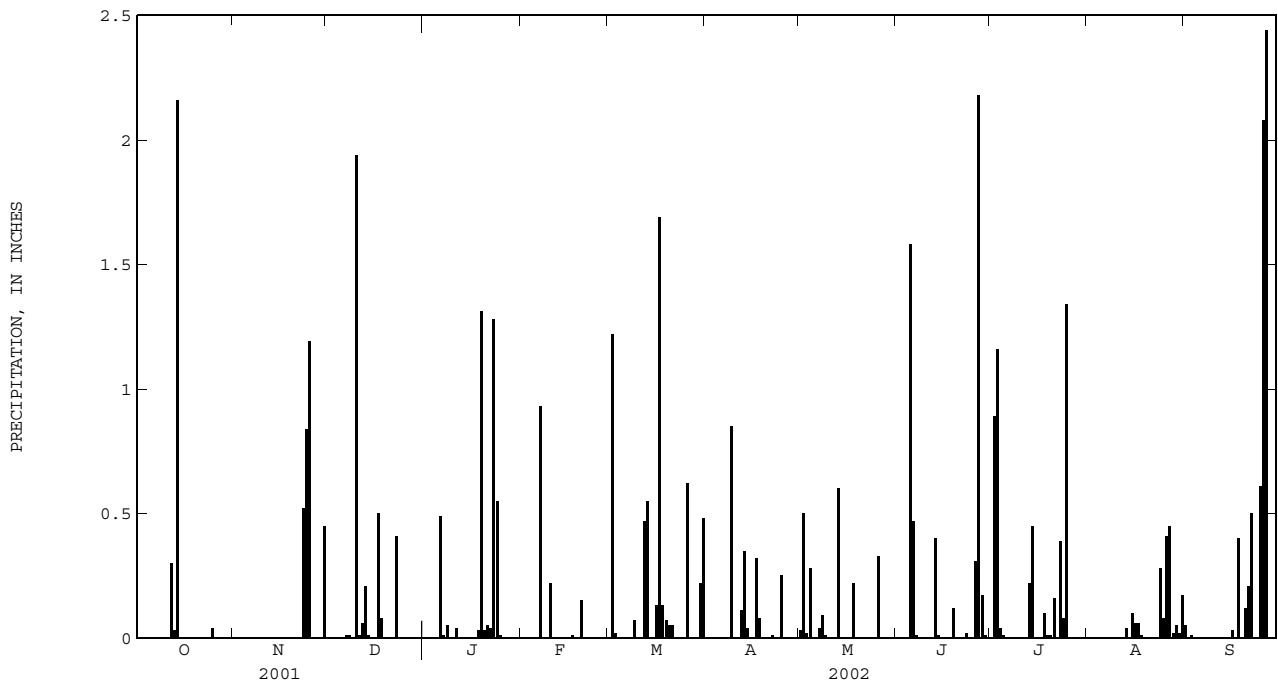
PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Gage is operated in cooperation with U.S. Army Corps of Engineers, Wilmington District. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.05
2	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.50	0.00	0.89	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02	0.00	1.16	0.00	0.01
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.04	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.58	0.01	0.00	0.00
6	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00
7	0.00	0.00	0.01	0.01	0.93	0.00	0.00	0.04	0.01	0.00	0.00	0.00
8	0.00	0.00	0.01	0.05	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.07	0.85	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.94	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.01	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.30	0.00	0.06	0.00	0.00	0.47	0.11	0.00	0.00	0.00	0.00	0.00
13	0.03	0.00	0.21	0.00	0.00	0.55	0.35	0.60	0.40	0.22	0.04	---
14	2.16	0.00	0.01	0.00	0.00	0.00	0.04	0.00	0.01	0.45	0.00	---
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	---
16	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.06	0.03
17	0.00	0.00	0.50	0.00	0.01	1.69	0.32	0.00	0.00	0.00	0.06	0.00
18	0.00	0.00	0.08	0.03	0.00	0.13	0.08	0.22	0.00	0.10	0.01	0.40
19	0.00	0.00	0.00	1.31	0.00	0.07	0.00	0.00	0.12	0.01	0.00	0.00
20	0.00	0.00	0.00	0.03	0.15	0.05	0.00	0.00	0.00	0.01	0.00	0.12
21	0.00	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.16	0.00	0.21
22	0.00	0.00	0.00	0.04	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.50
23	0.00	0.52	0.41	1.28	0.00	0.00	0.00	0.00	0.02	0.39	0.00	0.00
24	0.00	0.84	0.00	0.55	0.00	0.00	0.00	0.00	0.00	0.08	0.28	0.00
25	0.04	1.19	0.00	0.01	0.00	0.00	0.25	0.00	0.00	1.34	0.08	0.61
26	0.00	0.00	0.00	0.00	0.00	0.62	0.00	0.33	0.31	0.00	0.41	2.08
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.18	0.00	0.45	2.44
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.02	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.01	0.00	0.05	0.00
30	0.00	0.45	0.00	0.00	---	0.22	0.00	0.00	0.00	0.00	0.02	0.00
31	0.00	---	0.00	0.00	---	0.48	---	0.00	---	0.00	0.17	---
TOTAL	2.53	3.00	3.24	3.89	1.31	5.77	2.01	2.12	5.28	4.86	1.75	---



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 Elksville, and 3,400 ft upstream from mouth.

DRAINAGE AREA.--48.1 mi².

WATER-DISCHARGE RECORDS

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 NGVD of 1929. 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 ft³/s on basis of contracted-opening computation. Minimum discharge for period of record and current water year also occurred Sept. 14.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 13, 1940, reached a stage of about 22 ft; discharge, about 70,000 ft³/s, on basis of several contracted-opening and slope-area measurements. A discharge of 6.0 ft³/s was measured Sept. 19, 1956.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	21	32	26	52	36	83	40	19	18	14	16
2	18	21	26	e25	49	46	77	37	19	17	14	15
3	17	21	25	e25	47	83	72	42	19	55	14	13
4	17	21	24	e24	45	56	64	41	18	54	13	14
5	16	20	24	e24	43	50	61	41	46	27	12	12
6	16	20	23	e24	43	49	58	36	34	20	12	11
7	16	19	23	e23	68	48	54	35	31	18	11	10
8	16	19	23	e24	75	47	53	38	24	17	11	9.3
9	16	19	22	25	60	46	63	32	22	15	10	8.7
10	16	19	30	26	61	45	109	32	20	15	9.9	8.2
11	17	19	127	28	60	42	86	31	19	14	10	7.7
12	18	18	64	27	56	45	78	29	18	14	10	7.3
13	21	18	e70	26	54	97	88	35	19	14	9.2	7.0
14	68	18	65	25	52	98	82	46	33	18	8.1	7.9
15	58	17	51	24	50	79	78	32	23	53	8.0	28
16	30	17	43	24	49	70	74	28	19	20	17	44
17	25	17	44	24	47	216	75	27	19	16	63	19
18	24	17	78	24	45	258	73	44	17	15	44	15
19	23	17	57	39	44	175	67	29	16	14	17	23
20	23	18	48	66	44	140	63	26	17	14	14	19
21	22	17	43	54	46	115	59	26	15	13	12	17
22	22	17	38	48	44	94	55	25	15	14	11	19
23	21	17	36	106	41	81	50	24	15	25	10	25
24	20	31	47	151	40	74	48	24	15	19	9.7	19
25	21	55	38	142	39	67	53	23	15	18	10	17
26	20	41	34	114	38	69	50	22	16	92	16	129
27	20	28	32	90	37	81	47	27	22	27	19	586
28	20	25	31	75	36	67	45	24	44	20	19	190
29	21	24	29	66	---	63	44	23	22	17	16	81
30	21	28	28	59	---	65	40	21	19	15	15	54
31	21	---	27	55	---	76	---	21	---	14	14	---
TOTAL	703	659	1282	1513	1365	2578	1949	961	650	722	472.9	1432.1
MEAN	22.68	21.97	41.35	48.81	48.75	83.16	64.97	31.00	21.67	23.29	15.25	47.74
MAX	68	55	127	151	75	258	109	46	46	92	63	586
MIN	16	17	22	23	36	36	40	21	15	13	8.0	7.0
CFSM	0.47	0.46	0.86	1.01	1.01	1.73	1.35	0.64	0.45	0.48	0.32	0.99
IN.	0.54	0.51	0.99	1.17	1.06	1.99	1.51	0.74	0.50	0.56	0.37	1.11

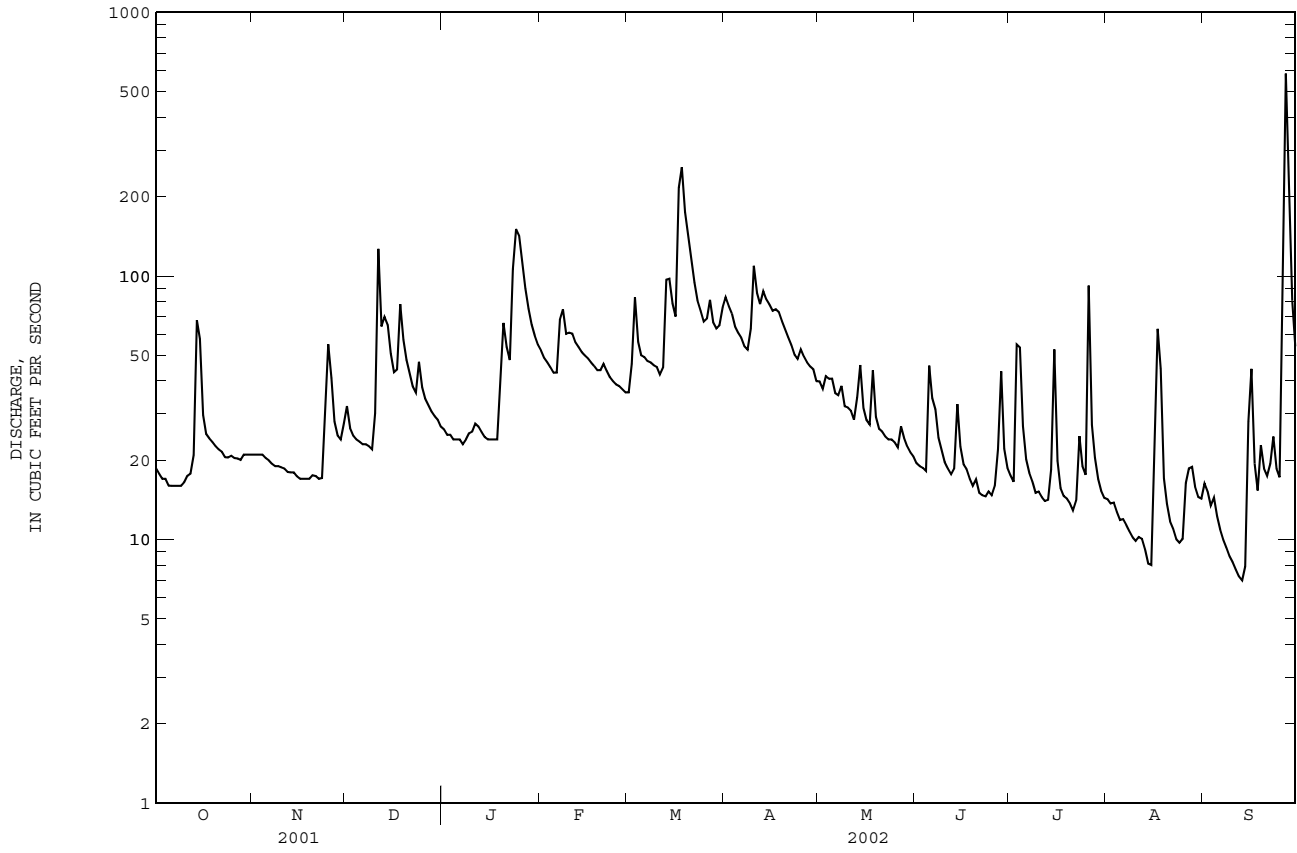
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2002, BY WATER YEAR (WY)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002				
MEAN	73.37	86.45	84.92	103.2	118.4	147.1	139.2	108.3	96.50	67.55	77.19	62.13																													
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	13.7	19.8	19.1	22.5	25.0	47.9	49.9	31.0	21.7	17.6	15.3	21.0																													
(WY)	2001	1982	2001	1981	2001	1988	2001	2002	1988	1988	2002	2000																													

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1966 - 2002
ANNUAL TOTAL	14023	14287.0	
ANNUAL MEAN	38.42	39.14	96.87
HIGHEST ANNUAL MEAN			154
LOWEST ANNUAL MEAN			35.7
HIGHEST DAILY MEAN	401	Mar 30	5890
LOWEST DAILY MEAN	13	Jan 6	7.0
ANNUAL SEVEN-DAY MINIMUM	13	Jan 6	8.0
MAXIMUM PEAK FLOW		1850	18700*
MAXIMUM PEAK STAGE		3.92	12.02
INSTANTANEOUS LOW FLOW		6.8*	6.8*
ANNUAL RUNOFF (CFSM)	0.80	0.81	2.01
ANNUAL RUNOFF (INCHES)	10.85	11.05	27.36
10 PERCENT EXCEEDS	63	74	168
50 PERCENT EXCEEDS	28	25	67
90 PERCENT EXCEEDS	18	14	27

e Estimated.
* See REMARKS.

02111180 ELK CREEK AT ELKVILLE, NC--Continued



PRECIPITATION RECORDS

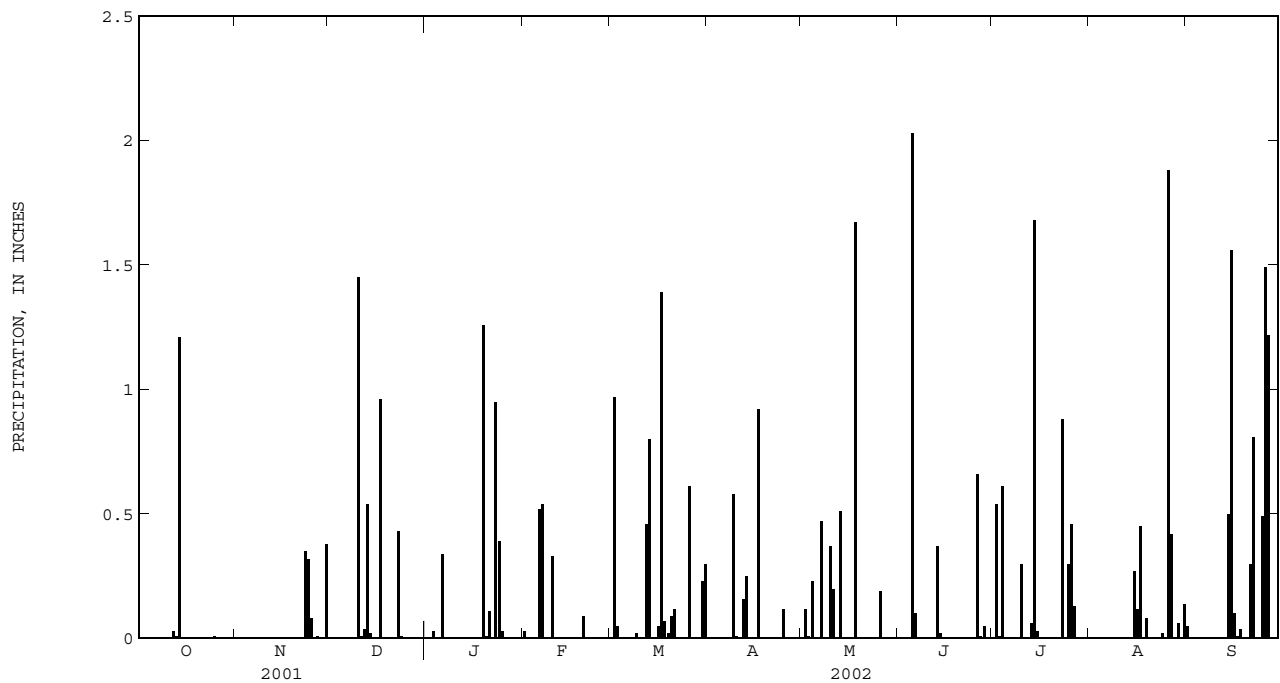
PERIOD OF RECORD.--October 2001 to September 2002.

GAGE.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Gage is operated in cooperation with U.S. Army Corps of Engineers, Wilmington District. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.05
2	0.00	0.00	0.00	0.00	0.00	0.97	0.00	0.12	0.00	0.54	0.00	0.00
3	0.00	0.00	0.00	0.03	0.00	0.05	0.00	0.01	0.00	0.01	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.61	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.03	0.00	0.00	0.00
6	0.00	0.00	0.00	0.34	0.52	0.00	0.00	0.00	0.10	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.54	0.00	0.00	0.47	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.02	0.58	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.45	0.00	0.33	0.00	0.01	0.37	0.00	0.30	0.00	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00
12	0.03	0.00	0.04	0.00	0.00	0.46	0.16	0.00	0.00	0.00	0.00	0.00
13	0.01	0.00	0.54	0.00	0.00	0.80	0.25	0.51	0.37	0.06	0.00	0.00
14	1.21	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02	1.68	0.00	0.50
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.27	1.56
16	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.12	0.10
17	0.00	0.00	0.96	0.00	0.00	1.39	0.92	0.00	0.00	0.00	0.45	0.01
18	0.00	0.00	0.00	0.00	0.00	0.07	0.00	1.67	0.00	0.00	0.00	0.04
19	0.00	0.00	0.00	1.26	0.00	0.02	0.00	0.00	0.00	0.00	0.08	0.00
20	0.00	0.00	0.00	0.01	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.11	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.30
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
23	0.00	0.35	0.43	0.95	0.00	0.00	0.00	0.00	0.00	0.88	0.00	0.00
24	0.00	0.32	0.01	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
25	0.01	0.08	0.00	0.03	0.00	0.00	0.12	0.00	0.00	0.30	0.00	0.49
26	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.19	0.66	0.46	1.88	1.49
27	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.13	0.42	1.22
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.06	0.00
30	0.00	0.38	0.00	0.00	---	0.23	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.30	---	0.00	---	0.00	0.14	---
TOTAL	1.26	1.14	3.46	3.12	1.51	5.18	2.04	3.77	3.24	5.00	3.44	6.57





Gaging station at Briar Creek near Charlotte, North Carolina.

PEE DEE RIVER BASIN

02111391 W. KERR SCOTT RESERVOIR AT DAM NEAR WILKESBORO, NC

LOCATION.--Lat 36°08'04", long 80°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.--367 mi².

PERIOD OF RECORD.--August 1962 to current year.

GAGE.--Water-stage recorder and staff gage at dam. Datum of gage is 1,000 ft above NGVD of 1929. U.S. Army Corps of Engineers telephone and satellite telemetry at station.

REMARKS.--No estimated daily gage-heights. Records good. 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 1,075.0 ft is 6,664,680,000 ft³ of which 4,878,720,000 ft³ is controlled flood storage.

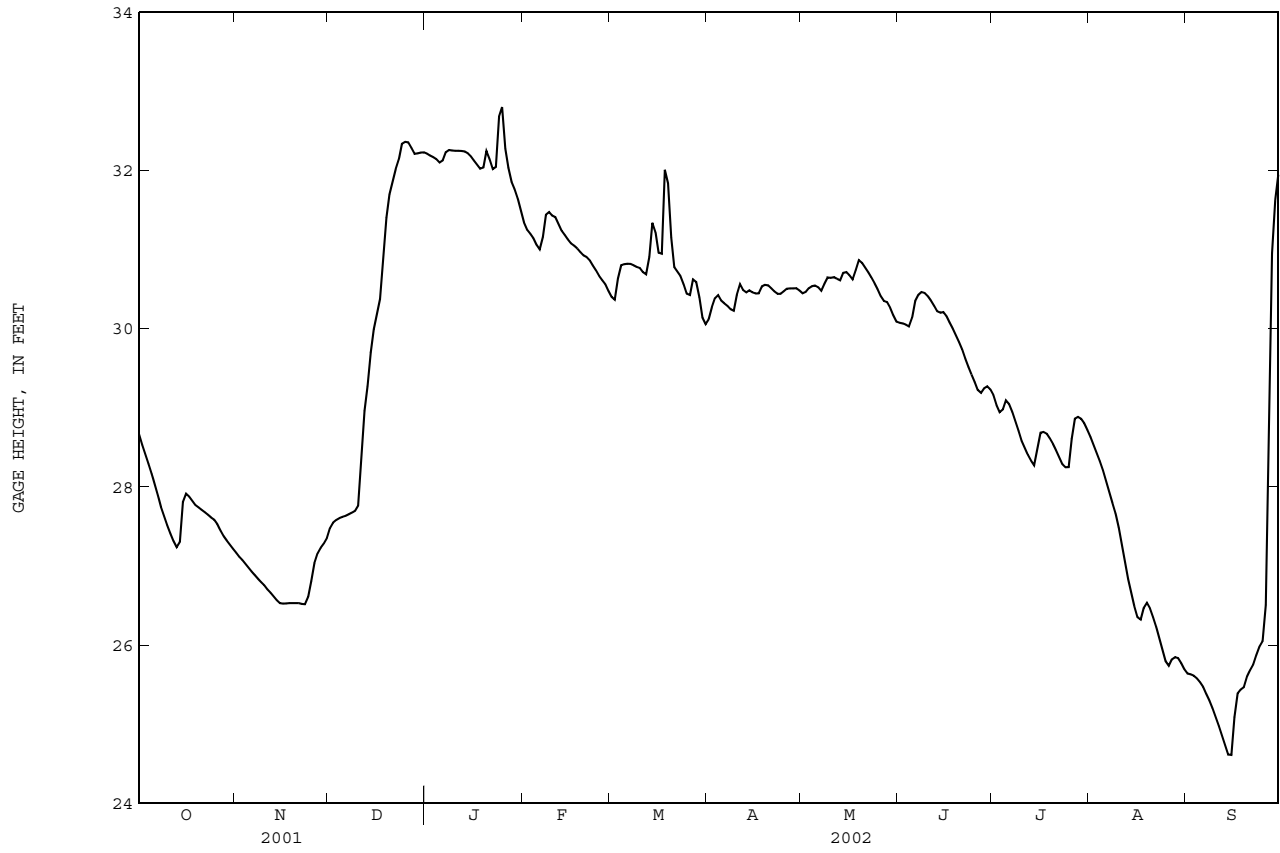
EXTREMES FOR PERIOD OF RECORD.--Maximum, 61.20 ft, Nov. 7, 1977; minimum, 19.85 ft, Nov. 26, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum, 32.90 ft, Jan. 25; minimum, 24.57 ft, Sept. 14.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.67	27.17	27.48	32.22	31.35	30.40	30.12	30.45	30.07	29.16	28.63	25.64
2	28.53	27.12	27.55	32.19	31.25	30.37	30.27	30.46	30.07	29.03	28.53	25.63
3	28.41	27.07	27.58	32.17	31.20	30.64	30.39	30.51	30.05	28.95	28.43	25.61
4	28.29	27.03	27.61	32.15	31.14	30.80	30.43	30.54	30.03	28.98	28.32	25.58
5	28.17	26.98	27.62	32.10	31.06	30.82	30.36	30.55	30.14	29.09	28.21	25.53
6	28.03	26.93	27.63	32.13	31.00	30.82	30.32	30.52	30.35	29.05	28.08	25.47
7	27.89	26.88	27.65	32.23	31.16	30.82	30.29	30.48	30.43	28.95	27.94	25.38
8	27.75	26.84	27.67	32.26	31.44	30.80	30.25	30.57	30.46	28.83	27.80	25.30
9	27.63	26.79	27.70	32.26	31.48	30.78	30.23	30.65	30.45	28.71	27.66	25.20
10	27.52	26.75	27.76	32.25	31.43	30.77	30.43	30.64	30.41	28.58	27.48	25.09
11	27.41	26.70	28.41	32.25	31.41	30.72	30.56	30.65	30.36	28.49	27.26	24.98
12	27.32	26.66	28.96	32.25	31.33	30.69	30.49	30.63	30.29	28.41	27.04	24.85
13	27.24	26.61	29.27	32.24	31.24	30.91	30.46	30.61	30.22	28.33	26.84	24.73
14	27.30	26.57	29.70	32.22	31.19	31.34	30.49	30.71	30.20	28.27	26.66	24.61
15	27.81	26.53	29.99	32.18	31.13	31.22	30.46	30.72	30.21	28.48	26.49	24.61
16	27.91	26.52	30.19	32.13	31.08	30.96	30.45	30.68	30.16	28.69	26.35	25.08
17	27.88	26.53	30.38	32.08	31.05	30.95	30.45	30.62	30.08	28.70	26.32	25.39
18	27.82	26.53	30.94	32.02	31.01	32.01	30.53	30.74	30.00	28.67	26.47	25.43
19	27.77	26.53	31.41	32.04	30.97	31.84	30.56	30.87	29.92	28.62	26.53	25.47
20	27.74	26.53	31.70	32.25	30.93	31.15	30.55	30.83	29.83	28.54	26.46	25.60
21	27.71	26.53	31.86	32.15	30.91	30.78	30.51	30.77	29.74	28.46	26.35	25.68
22	27.68	26.52	32.02	32.02	30.86	30.72	30.47	30.71	29.62	28.37	26.23	25.75
23	27.65	26.52	32.15	32.05	30.80	30.67	30.44	30.65	29.52	28.29	26.08	25.87
24	27.61	26.61	32.34	32.68	30.74	30.56	30.44	30.58	29.42	28.25	25.95	25.98
25	27.58	26.81	32.36	32.80	30.67	30.44	30.47	30.50	29.33	28.25	25.79	26.05
26	27.53	27.04	32.36	32.28	30.61	30.43	30.51	30.41	29.23	28.61	25.74	26.51
27	27.45	27.16	32.29	32.04	30.56	30.62	30.51	30.35	29.19	28.86	25.82	28.59
28	27.38	27.23	32.21	31.86	30.48	30.59	30.51	30.34	29.25	28.89	25.85	30.96
29	27.32	27.28	32.22	31.77	---	30.40	30.51	30.26	29.27	28.86	25.83	31.63
30	27.27	27.35	32.23	31.65	---	30.14	30.48	30.17	29.23	28.81	25.77	31.95
31	27.22	---	32.23	31.49	---	30.06	---	30.09	---	28.72	25.70	---
MEAN	27.73	26.81	30.05	32.14	31.05	30.78	30.43	30.56	29.92	28.67	26.86	26.14
MAX	28.67	27.35	32.36	32.80	31.48	32.01	30.56	30.87	30.46	29.16	28.63	31.95
MIN	27.22	26.52	27.48	31.49	30.48	30.06	30.12	30.09	29.19	28.25	25.70	24.61

02111391 W. KERR SCOTT RESERVOIR AT DAM NEAR WILKESBORO, NC--Continued



PEE DEE RIVER BASIN

361554081191701 WILBAR RAINGAGE

LOCATION.--Lat 36°15'54", long 81°19'17", Wilkes County, Hydrologic Unit 03040101, 300 ft northeast of NC Hwy 16, 2.0 mi northwest of Wilbar, and 4.0 mi southwest of Horse Gap.

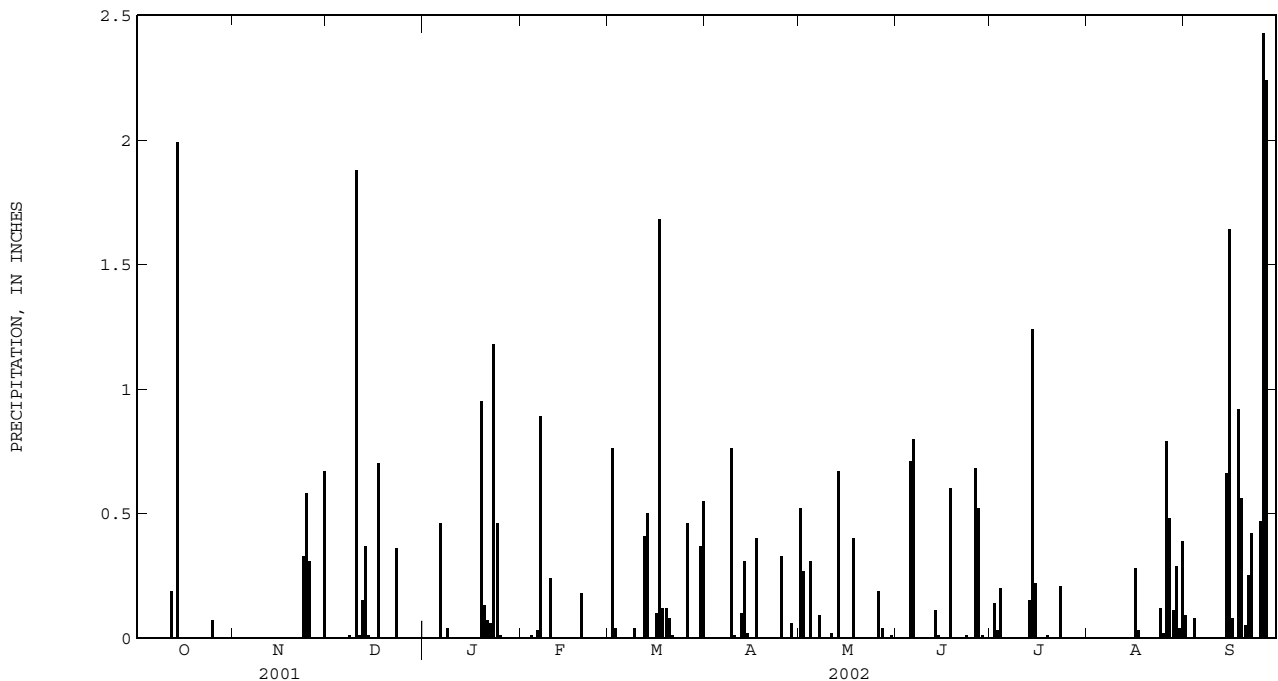
PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Gage is operated in cooperation with U.S. Army Corps of Engineers, Wilmington District. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

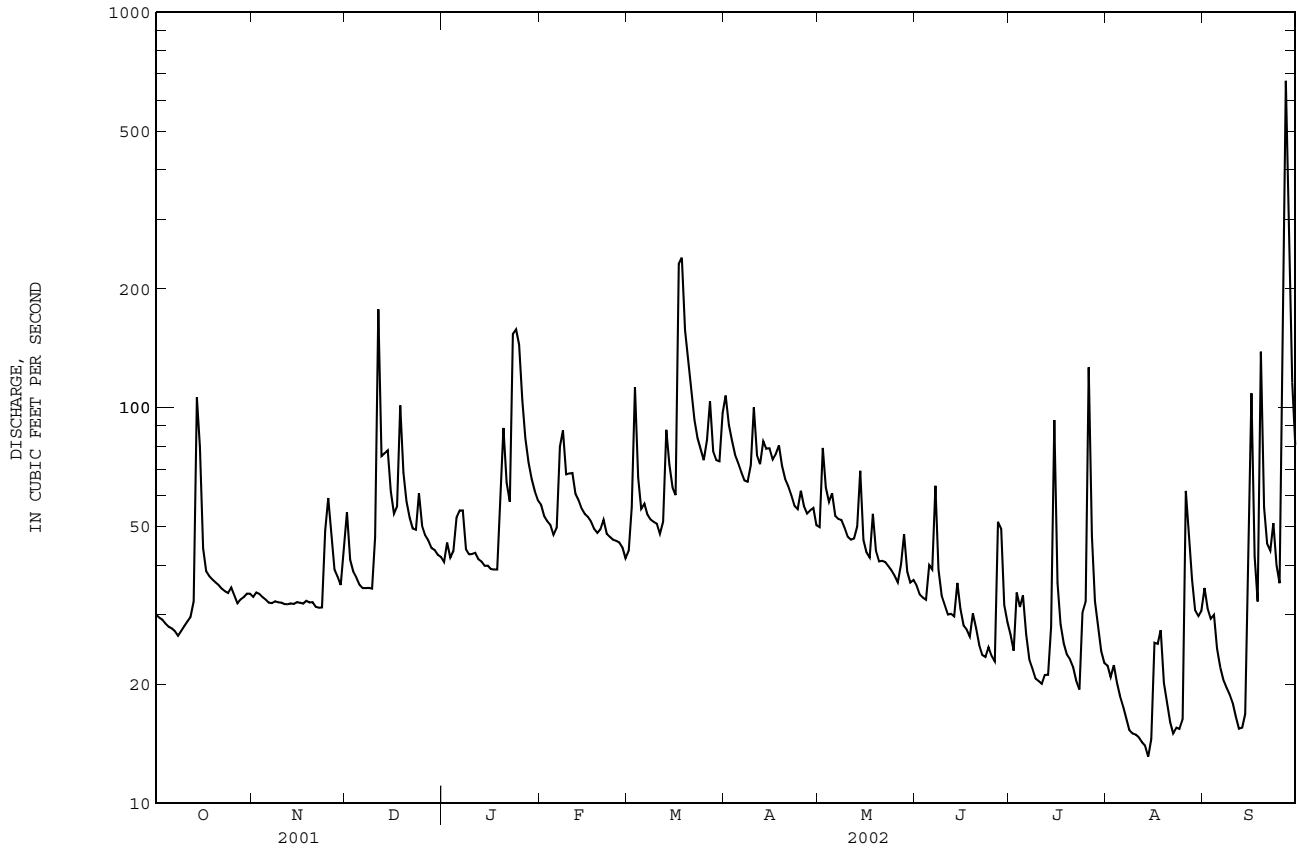
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	---	0.09
2	0.00	0.00	0.00	0.00	0.00	0.76	0.00	0.27	0.00	0.14	---	0.00
3	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.03	---	0.00
4	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.31	0.00	0.20	---	0.08
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.00	---	0.00
6	0.00	0.00	0.00	0.46	0.03	0.00	0.00	0.00	0.80	0.00	---	0.00
7	0.00	0.00	0.00	0.00	0.89	0.00	0.00	0.09	0.00	0.00	---	0.00
8	0.00	0.00	0.01	0.04	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00
9	0.00	0.00	0.00	0.00	0.00	0.04	0.76	0.00	0.00	0.00	---	0.00
10	0.00	0.00	1.88	0.00	0.24	0.00	0.01	0.00	0.00	0.00	---	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	---	0.00
12	0.19	0.00	0.15	0.00	0.00	0.41	0.10	0.00	0.00	0.00	---	0.00
13	0.00	0.00	0.37	0.00	0.00	0.50	0.31	0.67	0.11	0.15	---	0.00
14	1.99	0.00	0.01	0.00	0.00	0.00	0.02	0.00	0.01	1.24	0.00	0.66
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	1.64
16	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.28	0.08
17	0.00	0.00	0.70	0.00	0.00	1.68	0.40	0.00	0.00	0.00	0.03	0.00
18	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.40	0.60	0.00	0.00	0.92
19	0.00	0.00	0.00	0.95	0.00	0.12	0.00	0.00	0.00	0.01	0.00	0.56
20	0.00	0.00	0.00	0.13	0.18	0.08	0.00	0.00	0.00	0.00	0.00	0.05
21	0.00	0.00	0.00	0.07	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.25
22	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
23	0.00	0.33	0.36	1.18	0.00	0.00	0.00	0.00	0.01	0.21	0.00	0.00
24	0.00	0.58	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00
25	0.07	0.31	0.00	0.01	0.00	0.00	0.33	0.00	0.00	0.00	0.02	0.47
26	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.19	0.68	---	0.79	2.43
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.52	---	0.48	2.24
28	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.01	---	0.11	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	---	0.29	0.00
30	0.00	0.67	0.00	0.00	---	0.37	0.00	0.01	0.00	---	0.04	0.00
31	0.00	---	0.00	0.00	---	0.55	---	0.00	---	---	0.39	---
TOTAL	2.25	1.89	3.49	3.36	1.35	5.24	1.99	2.52	3.45	---	---	9.89





Gaging station at Rocky River near Stanfield, North Carolina.

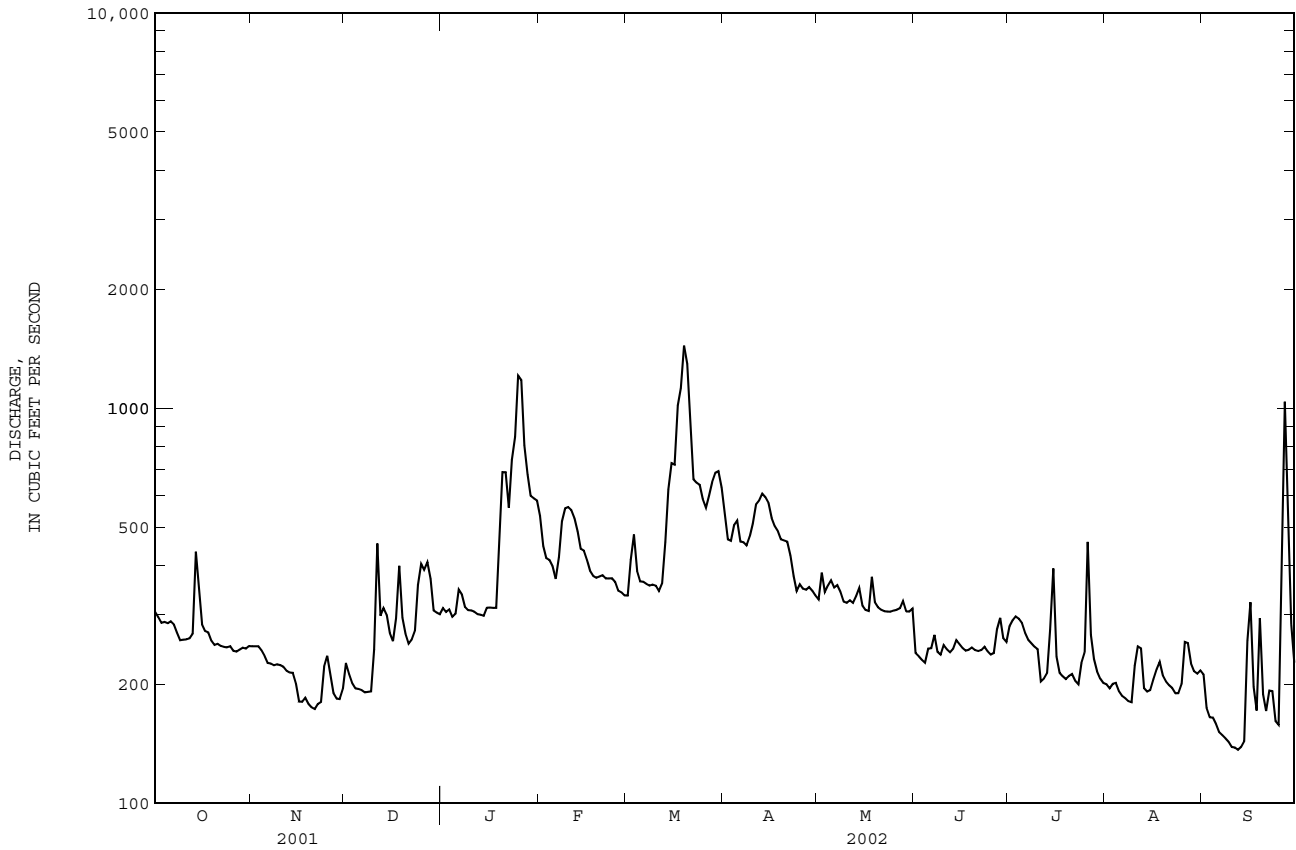
02111500 REDDIES RIVER AT NORTH WILKESBORO, NC--Continued



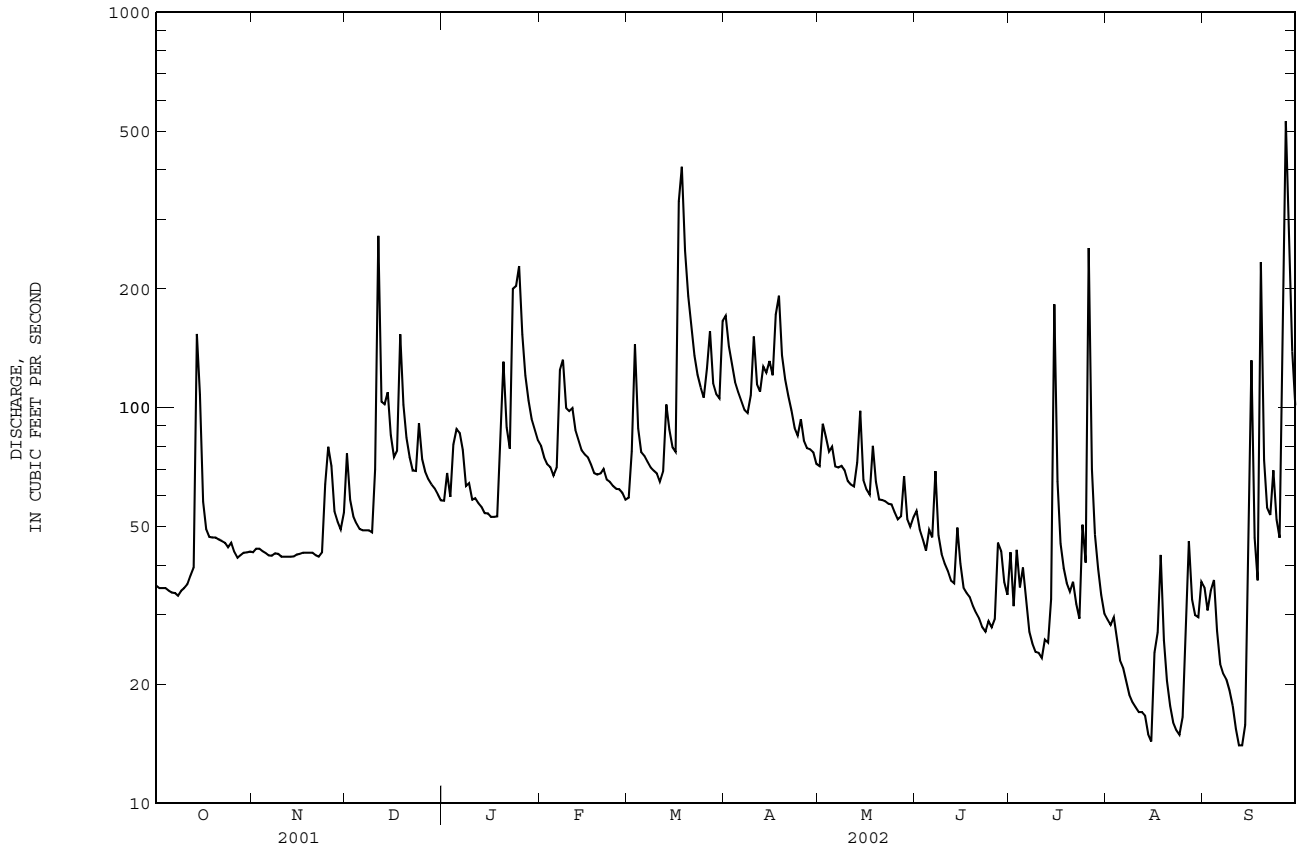
02112000 YADKIN RIVER AT WILKESBORO, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1963 - 2002*	
ANNUAL TOTAL	129039		122516		824 (UNADJUSTED)	
ANNUAL MEAN	353		336		1220 1973	
HIGHEST ANNUAL MEAN			†343		336 2002	
LOWEST ANNUAL MEAN					7990 Aug 10 1970	
HIGHEST DAILY MEAN	2060	Mar 30	1440	Mar 19	114	Dec 8 1970
LOWEST DAILY MEAN	173	Nov 21	137	Sep 12	141	Sep 8 2002
ANNUAL SEVEN-DAY MINIMUM	179	Nov 16	141	Sep 8	12800	Apr 10 1983
MAXIMUM PEAK FLOW			2140	Sep 27	16.22	Apr 10 1983
MAXIMUM PEAK STAGE			4.48	Sep 27	54	Oct 21 1997
INSTANTANEOUS LOW FLOW			136*	Sep 11		
10 PERCENT EXCEEDS	445		560		1390	
50 PERCENT EXCEEDS	307		288		627	
90 PERCENT EXCEEDS	219		192		327	

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 (1963-2002). See REMARKS.



02112120 ROARING RIVER NEAR ROARING RIVER, NC--Continued



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 mi².

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 NGVD of 1929. 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 good 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. Minimum discharge for period of record and current water year also occurred Aug. 10, 15, Sept. 12, 13, 2002.

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 ft³/s was measured on Sept. 19, 1956.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	413	359	407	453	762	513	965	525	418	345	254	320
2	410	364	394	442	676	587	814	642	366	344	247	289
3	391	366	368	473	612	972	766	587	349	337	253	260
4	392	363	356	438	607	697	756	562	332	e350	249	277
5	393	352	351	442	589	616	793	596	341	e320	230	264
6	394	341	348	531	591	600	736	555	359	e310	219	236
7	393	339	346	594	772	586	715	543	384	e300	208	226
8	388	341	344	497	874	574	705	608	372	e290	201	229
9	375	342	347	472	842	567	709	548	337	e282	197	222
10	376	342	386	474	819	564	828	505	332	e280	217	212
11	377	347	1100	472	823	547	768	522	325	e240	254	206
12	384	341	633	462	766	567	820	499	315	e245	249	197
13	394	336	537	460	731	717	852	496	306	e260	224	193
14	524	337	625	448	676	778	863	620	324	e340	198	220
15	837	335	509	458	654	915	830	505	336	e500	219	318
16	458	314	463	459	647	909	787	480	313	e380	240	611
17	405	313	472	454	602	1730	749	469	308	e300	281	403
18	396	315	898	452	588	2050	848	577	300	e280	291	324
19	396	317	618	570	578	2000	748	522	294	263	273	631
20	373	307	514	1010	581	1830	716	471	293	255	234	495
21	369	303	466	930	588	1370	697	460	278	259	223	357
22	366	305	443	784	569	1010	671	457	273	248	e216	345
23	361	314	453	1060	563	929	610	450	275	237	210	401
24	358	389	567	1400	563	904	569	448	278	270	208	351
25	360	444	603	1620	558	872	582	445	271	335	216	315
26	351	449	550	1730	543	875	576	438	291	954	238	534
27	347	365	566	1120	530	1110	556	439	354	515	349	1570
28	358	343	558	1010	518	947	561	503	409	360	300	1190
29	361	339	486	823	---	945	565	450	353	312	284	612
30	359	344	465	811	---	978	532	436	316	279	287	470
31	359	---	457	788	---	969	---	444	---	261	297	---
TOTAL	12418	10366	15630	22137	18222	29228	21687	15802	9802	10251	7566	12278
MEAN	400.6	345.5	504.2	714.1	650.8	942.8	722.9	509.7	326.7	330.7	244.1	409.3
MAX	837	449	1100	1730	874	2050	965	642	418	954	349	1570
MIN	347	303	344	438	518	513	532	436	271	237	197	193

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2002, BY WATER YEAR (WY)

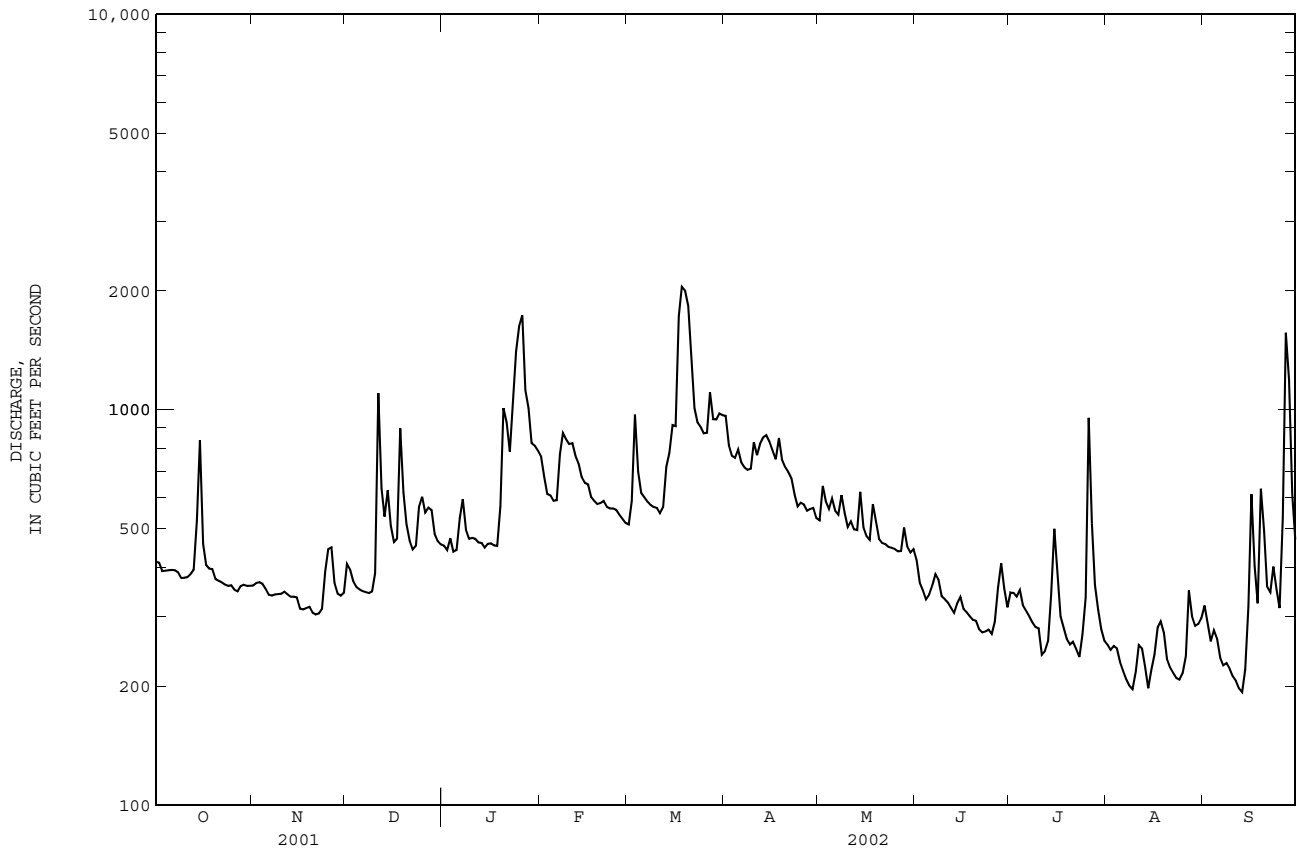
MEAN	1090	1108	1198	1449	1582	1867	1815	1495	1334	1050	1108	965.5
MAX	2911	3871	2591	3129	2978	3885	4510	2887	2942	1922	3323	2910
(WY)	1991	1978	1974	1978	1990	1975	1980	1973	1975	1989	1994	1979
MIN	368	346	479	583	567	745	723	510	327	331	244	409
(WY)	2001	2002	2001	2001	2001	1988	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1964 - 2002

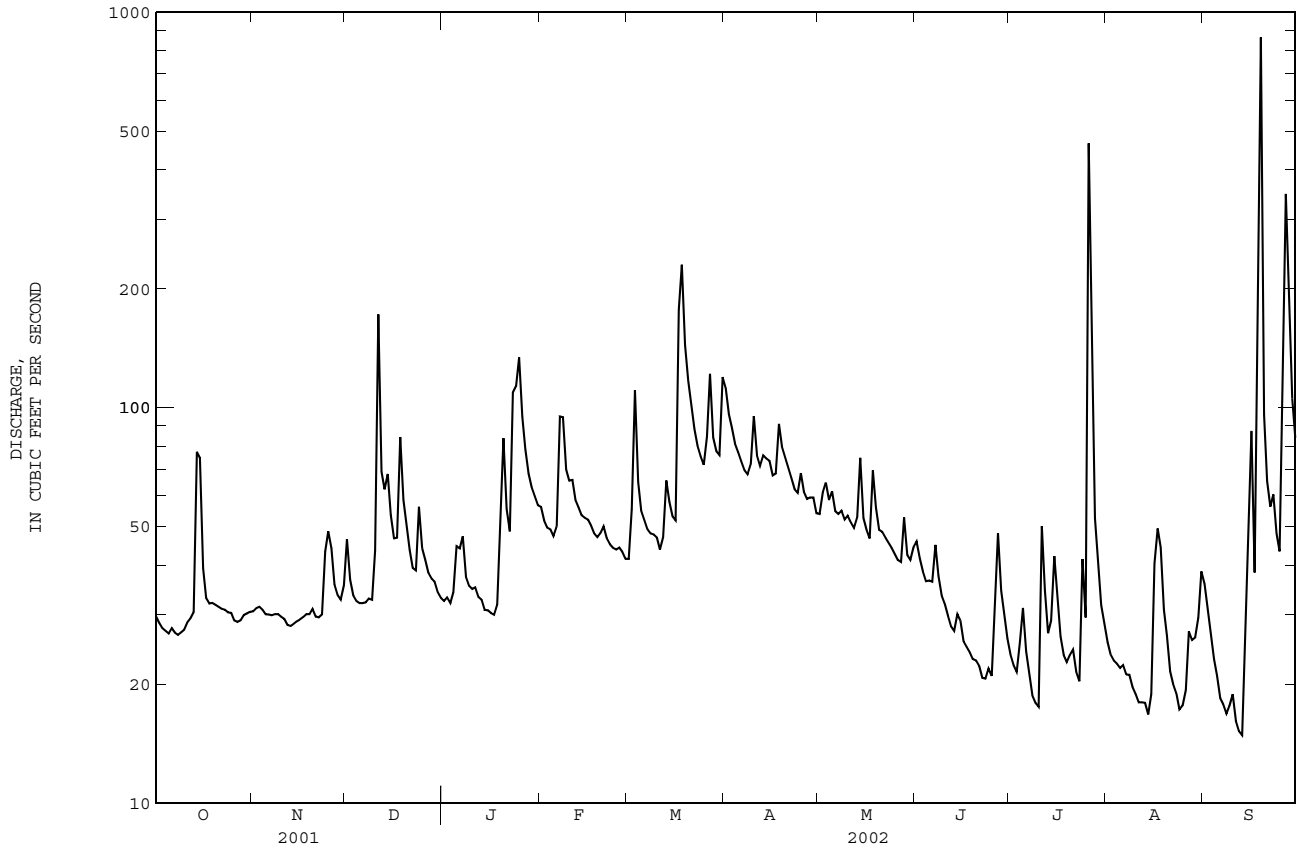
ANNUAL TOTAL	217122	185387	
ANNUAL MEAN	594.9	507.9	1341
HIGHEST ANNUAL MEAN			1951
LOWEST ANNUAL MEAN			508
HIGHEST DAILY MEAN	4610	Mar 30	21500
LOWEST DAILY MEAN	303	Nov 21	193
ANNUAL SEVEN-DAY MINIMUM	311	Nov 16	211
MAXIMUM PEAK FLOW			3060
MAXIMUM PEAK STAGE			5.09
INSTANTANEOUS LOW FLOW			187*
10 PERCENT EXCEEDS	866		844
50 PERCENT EXCEEDS	518		442
90 PERCENT EXCEEDS	360		255

e Estimated.
* See REMARKS.

02112250 YADKIN RIVER AT ELKIN, NC--Continued



02112360 MITCHELL RIVER NEAR STATE ROAD, NC--Continued



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 mi².

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 NGVD of 1929, by barometer. Prior to Sept. 5, 1936, twice daily readings at same site and datum. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Some irrigation diversions at times in the growing season. Maximum discharge for period of record, from rating curve extended above 6,200 ft³/s on basis of slope-area measurement of peak flow; gage height: 18.4 ft. Minimum discharge for period of record and current water year also occurred Sept. 13, 14, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	42	61	59	100	63	192	64	45	28	38	36
2	35	43	54	72	88	82	154	69	43	21	35	31
3	34	44	48	65	83	242	136	85	40	19	35	28
4	34	46	44	66	80	132	120	75	37	24	33	25
5	33	44	44	80	71	110	112	78	36	27	29	25
6	33	42	43	90	72	94	107	69	35	19	26	22
7	33	42	43	91	151	87	102	64	42	19	23	19
8	33	40	45	71	172	83	104	69	39	17	20	17
9	32	40	47	65	122	81	102	64	35	13	19	17
10	34	40	54	62	112	80	131	65	33	13	18	15
11	35	42	324	61	112	74	106	61	29	95	18	14
12	36	41	144	60	97	76	97	60	26	53	17	11
13	37	41	116	59	91	106	99	59	26	34	15	11
14	53	40	125	56	87	102	105	96	30	36	14	12
15	168	47	94	55	83	87	110	64	34	40	14	40
16	62	57	80	54	88	85	106	57	27	42	17	107
17	48	56	78	54	81	386	99	54	25	31	27	53
18	45	56	150	55	75	570	109	80	23	26	32	47
19	44	55	105	86	81	276	101	70	21	24	34	613
20	44	54	85	173	80	194	94	56	23	22	21	91
21	46	53	75	106	76	162	90	54	20	23	21	58
22	45	49	71	88	72	147	84	53	17	21	17	52
23	42	46	71	196	70	138	77	52	17	17	18	57
24	42	54	104	227	69	118	74	50	18	18	17	49
25	43	67	84	278	67	108	82	48	16	71	16	41
26	40	74	73	170	69	114	78	47	17	900	20	156
27	41	51	67	136	67	208	71	45	29	183	22	525
28	43	46	65	116	64	129	73	67	42	92	25	257
29	43	45	64	115	---	115	72	49	36	64	26	134
30	43	47	63	110	---	110	65	45	30	50	33	97
31	43	---	60	103	---	201	---	45	---	42	47	---
TOTAL	1382	1444	2581	3079	2480	4560	3052	1914	891	2084	747	2660
MEAN	44.58	48.13	83.26	99.32	88.57	147.1	101.7	61.74	29.70	67.23	24.10	88.67
MAX	168	74	324	278	172	570	192	96	45	900	47	613
MIN	32	40	43	54	64	63	65	45	16	13	14	11
CFSM	0.35	0.38	0.65	0.78	0.69	1.15	0.79	0.48	0.23	0.53	0.19	0.69
IN.	0.40	0.42	0.75	0.89	0.72	1.33	0.89	0.56	0.26	0.61	0.22	0.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2002, BY WATER YEAR (WY)

	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955
MEAN	144.6	147.1	165.9	200.0	213.5	246.9	240.7	194.2	172.4	145.2	148.7	138.9												
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	48.1	58.1	54.4	68.8	103	102	61.7	29.7	31.3	24.1	27.9												
(WY)	1942	2002	1956	1956	1934	1981	2002	2002	2002	1986	2002	1954												

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

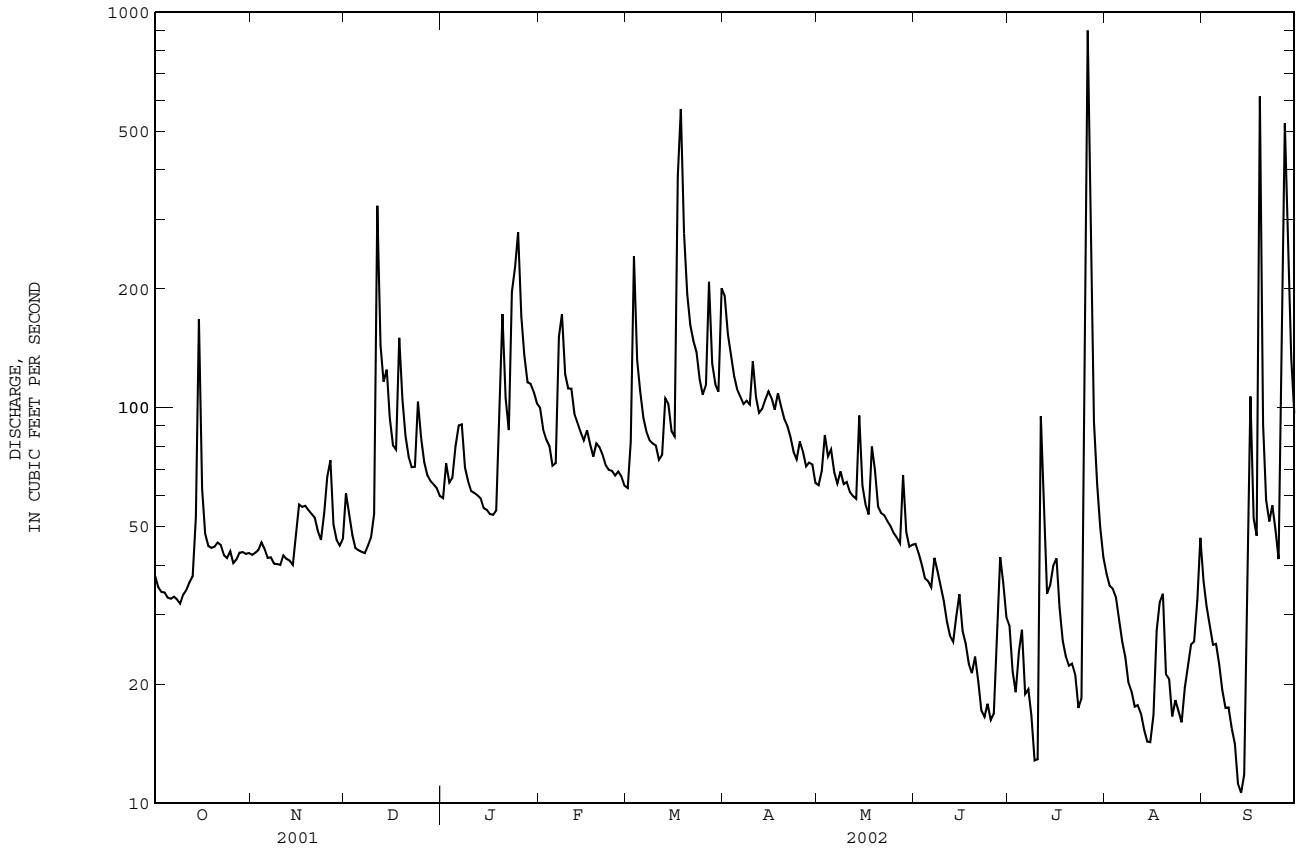
FOR 2002 WATER YEAR

WATER YEARS 1932 - 2002

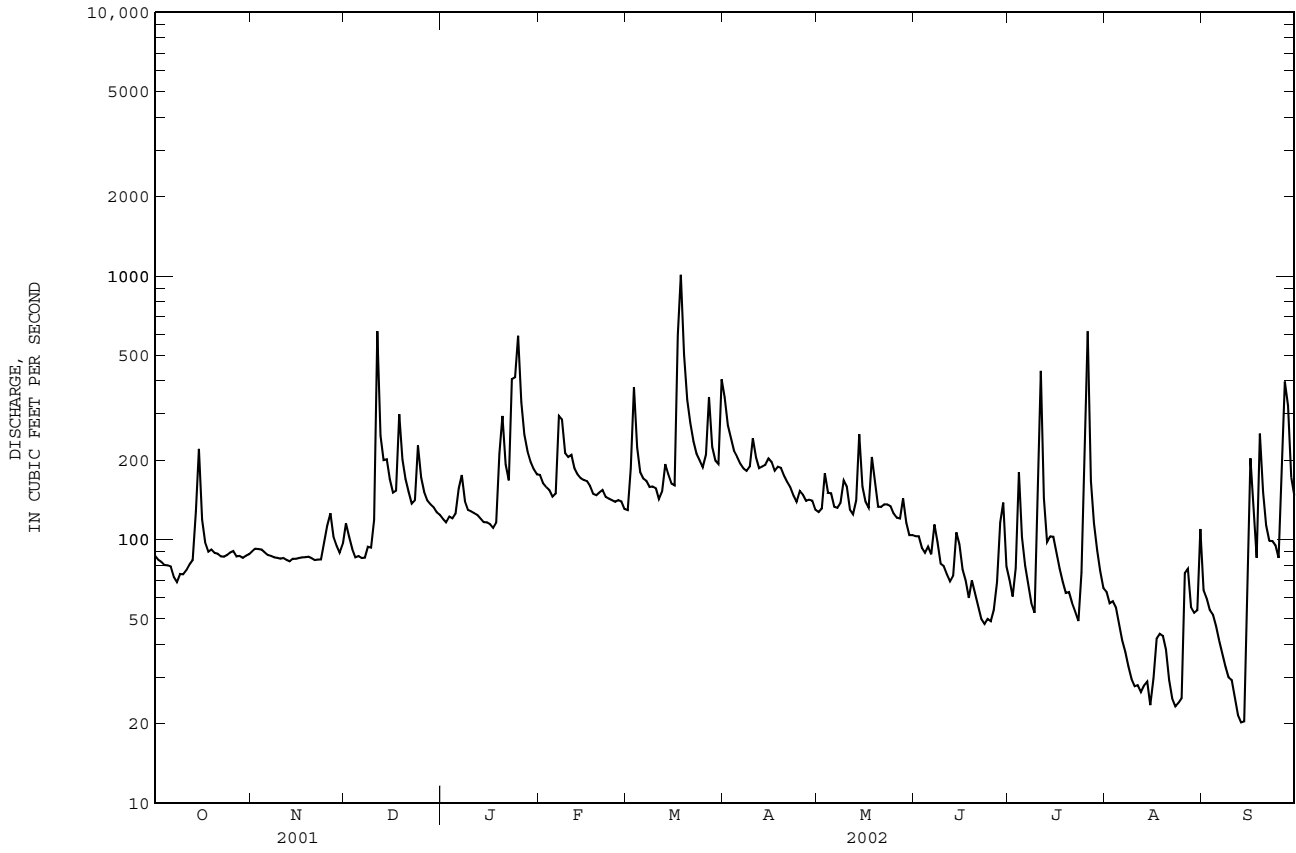
ANNUAL TOTAL	29495	26874		
ANNUAL MEAN	80.81	73.63	179.6	
HIGHEST ANNUAL MEAN			281	1979
LOWEST ANNUAL MEAN			73.6	2002
HIGHEST DAILY MEAN	966	Mar 30	900	Jul 26
LOWEST DAILY MEAN	32	Sep 18	11	Sep 12
ANNUAL SEVEN-DAY MINIMUM	33	Oct 3	14	Sep 8
MAXIMUM PEAK FLOW			3480	Jul 26
MAXIMUM PEAK STAGE			7.50	Jul 26
INSTANTANEOUS LOW FLOW			10*	Sep 12
ANNUAL RUNOFF (CFSM)	0.63		0.58	1.40
ANNUAL RUNOFF (INCHES)	8.57		7.81	19.07
10 PERCENT EXCEEDS	131		123	286
50 PERCENT EXCEEDS	65		55	134
90 PERCENT EXCEEDS	40		21	65

* See REMARKS.

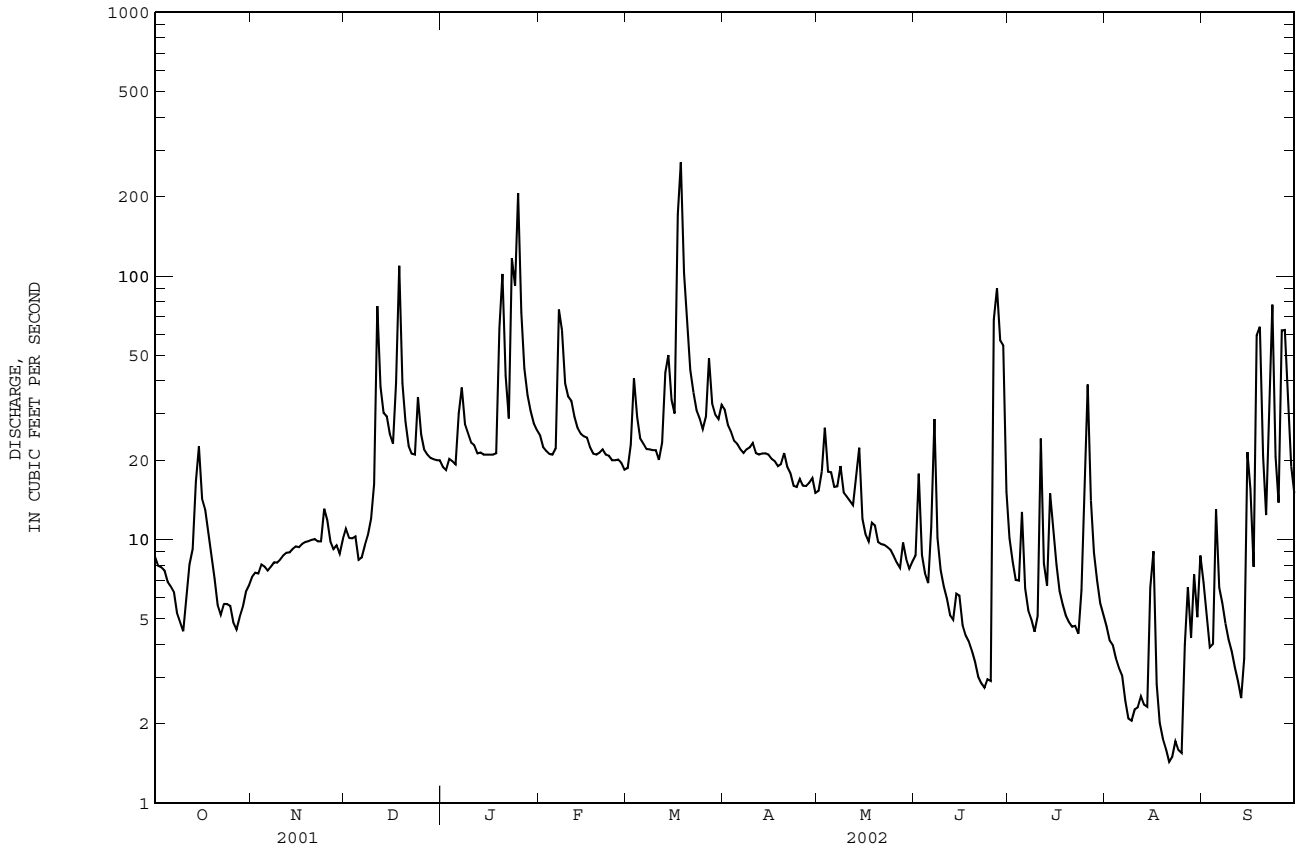
02113000 FISHER RIVER NEAR COPELAND, NC--Continued



02113850 ARARAT RIVER AT ARARAT, NC--Continued



02114450 LITTLE YADKIN RIVER AT DALTON, NC--Continued



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 mi².

WATER-DISCHARGE RECORDS

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 NGVD of 1929. Prior to Nov. 6, 1968, nonrecording gage on downstream side of bridge at same site and datum. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some regulation by W. Kerr Scott Reservoir (station 02111391).

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	612	606	656	824	1380	954	2040	960	740	507	465	613
2	615	611	748	804	1300	987	1800	995	704	515	441	565
3	604	620	695	835	1190	e1800	1580	1200	628	485	419	503
4	581	621	651	841	1140	e1750	1480	1110	587	515	410	448
5	575	619	633	778	1100	e1320	1440	1060	555	668	400	e600
6	571	602	629	870	1090	1210	1430	1060	568	543	365	477
7	562	591	625	1140	1450	1160	1350	987	633	467	334	391
8	558	591	625	1050	2020	1130	1320	1070	652	420	314	352
9	547	595	632	914	1730	1100	1320	1030	597	388	293	337
10	541	596	666	878	1550	1090	1420	1020	541	396	283	324
11	552	592	1890	868	1560	1050	1500	925	526	958	282	312
12	562	599	1920	855	1470	1050	1410	925	505	755	326	284
13	577	592	1170	836	1370	1240	1430	933	490	518	324	266
14	604	589	1170	822	1300	1520	1500	1090	498	521	306	264
15	1250	594	1110	804	1230	1450	1460	1120	539	555	305	379
16	1080	602	950	811	1210	1490	1460	904	536	948	452	690
17	739	592	900	805	1180	2090	1360	859	481	630	410	1040
18	655	589	1610	802	1110	5780	1380	857	460	492	449	945
19	644	593	1560	904	1080	3920	1440	1120	440	435	453	3050
20	646	593	e1130	1930	1090	3140	1340	901	430	405	427	1610
21	626	576	977	1760	1100	2710	1280	828	420	390	352	899
22	624	569	892	1500	1080	2170	1230	811	392	384	326	687
23	619	569	857	1600	1040	1770	1170	801	381	367	319	881
24	610	620	1030	3160	1030	1680	1090	782	379	366	307	762
25	608	744	1160	3350	1020	1600	1050	768	382	634	290	632
26	596	808	1070	3070	1020	1540	1090	751	406	3540	669	807
27	578	797	993	2370	1010	2100	1040	733	561	2160	574	2180
28	573	668	982	1840	976	1910	1030	755	699	996	571	3390
29	590	632	959	1630	---	1690	1040	854	860	707	555	1720
30	596	633	866	1480	---	1680	1010	735	613	589	497	1130
31	602	---	839	1420	---	1830	---	718	---	512	644	---
TOTAL	19697	18603	30595	41551	34826	55911	40490	28662	16203	21766	12562	26538
MEAN	635.4	620.1	986.9	1340	1244	1804	1350	924.6	540.1	702.1	405.2	884.6
MAX	1250	808	1920	3350	2020	5780	2040	1200	860	3540	669	3390
MIN	541	569	625	778	976	954	1010	718	379	366	282	264

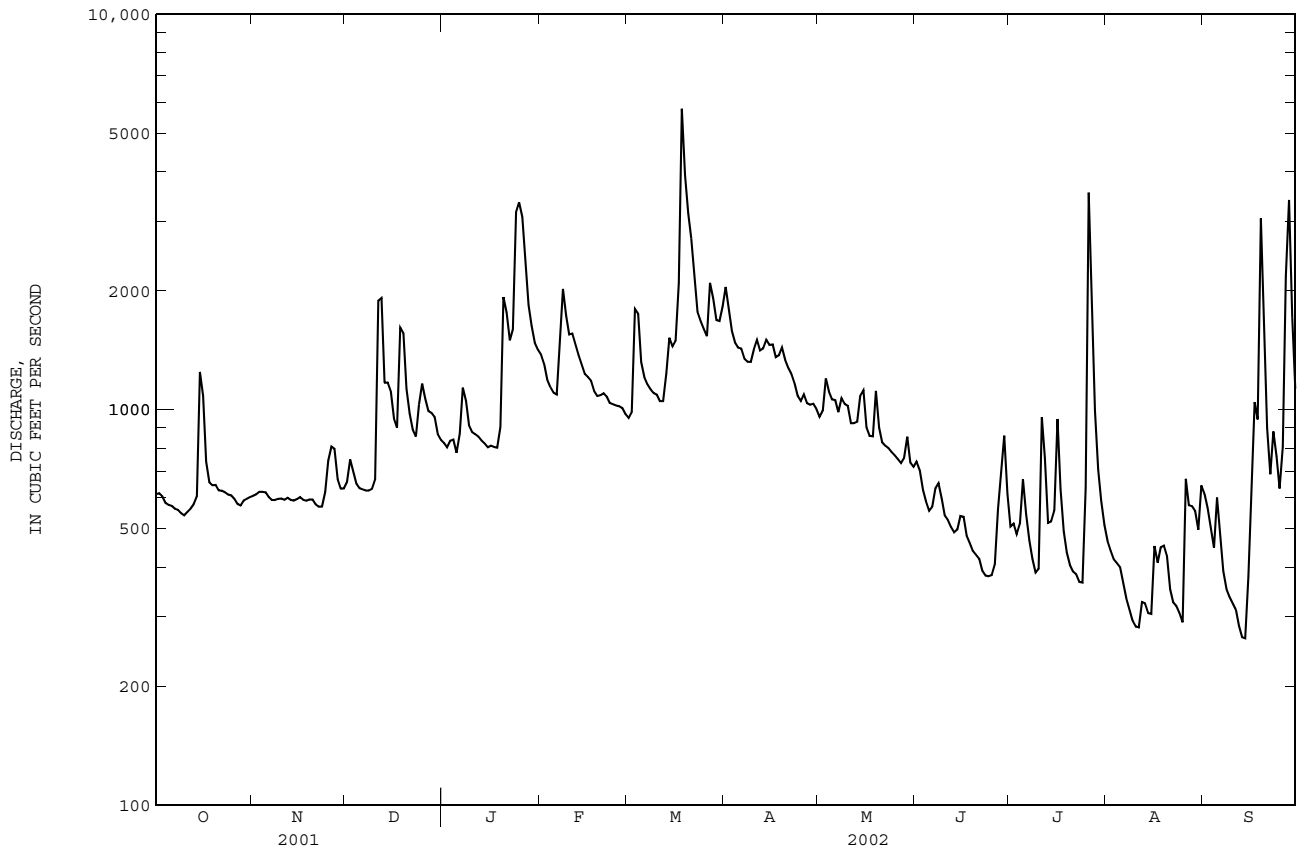
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2002, BY WATER YEAR (WY)

	1964	1978	2237	2746	2891	3469	3267	2735	2388	1872	1926	1718
MEAN	1964	1978	2237	2746	2891	3469	3267	2735	2388	1872	1926	1718
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	635	620	841	1051	1023	1443	1350	925	540	654	405	815
(WY)	2002	2002	2001	1981	2001	1981	2002	2002	2002	1986	2002	1988

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1964 - 2002	
ANNUAL TOTAL	389642		347404			
ANNUAL MEAN	1068		951.8		2427	
HIGHEST ANNUAL MEAN					3605	
LOWEST ANNUAL MEAN					952	
HIGHEST DAILY MEAN	9690		5780		48400	
LOWEST DAILY MEAN	541		264		264	
ANNUAL SEVEN-DAY MINIMUM	556		303		303	
MAXIMUM PEAK FLOW			7030		73300	
MAXIMUM PEAK STAGE			9.26		29.52	
INSTANTANEOUS LOW FLOW			247		247	
10 PERCENT EXCEEDS	1600		1610		4100	
50 PERCENT EXCEEDS	912		802		1860	
90 PERCENT EXCEEDS	604		406		970	

e Estimated.

02115360 YADKIN RIVER AT ENON, NC--Continued



PEE DEE RIVER BASIN

02115360 YADKIN RIVER AT ENON, NC--Continued

PRECIPITATION RECORDS

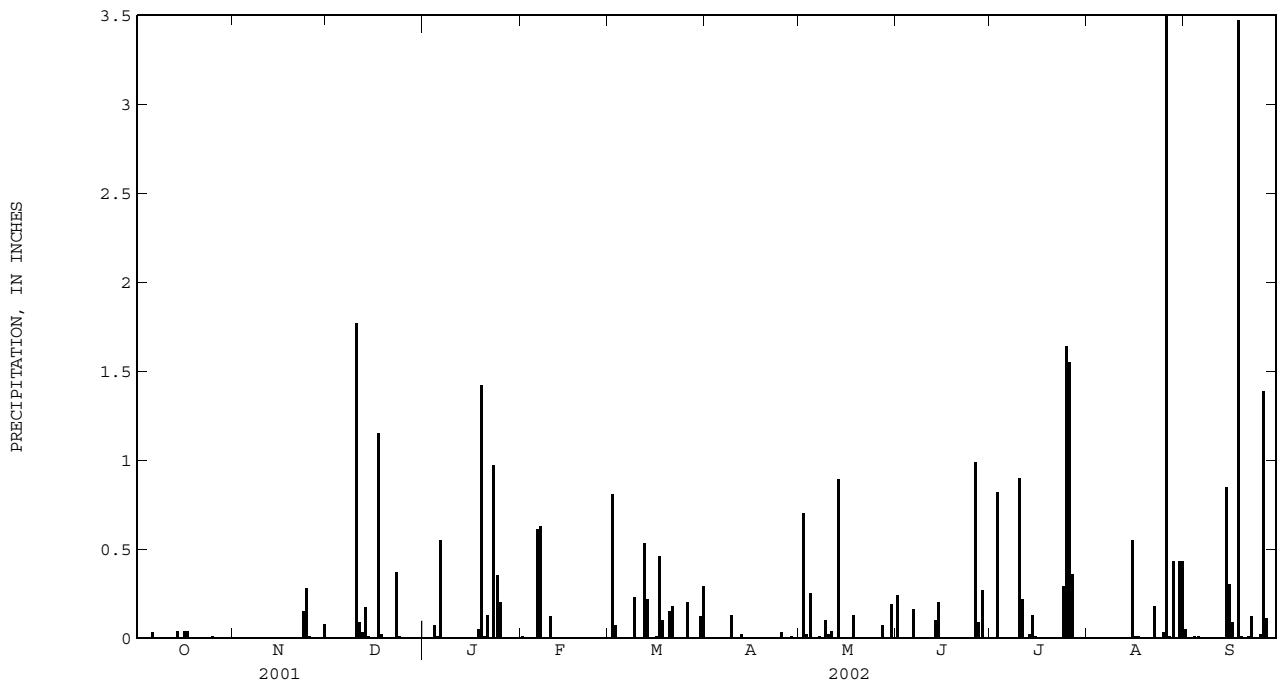
PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Gage is operated in cooperation with the Winston-Salem/Forsyth County Utilities Commission, Yadkin Inc., and the U.S. Army Corps of Engineers, Wilmington District. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

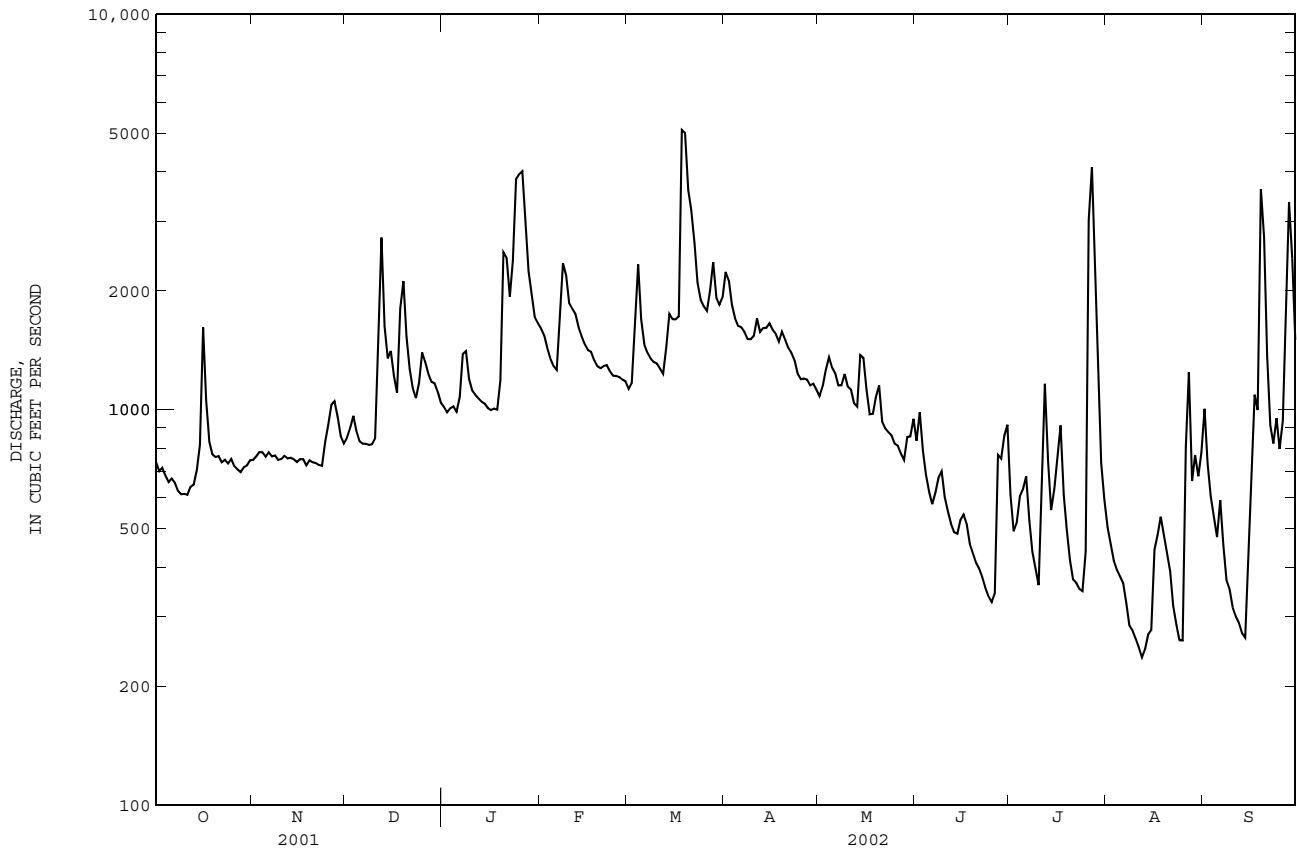
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.24	0.00	0.00	0.05
2	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.70	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.02	0.00	0.82	0.00	0.00
4	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.01
5	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
6	0.03	0.00	0.00	0.55	0.61	0.00	0.00	0.00	0.16	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.01	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.23	0.13	0.10	0.00	0.00	0.00	0.00
10	0.00	0.00	1.77	0.00	0.12	0.00	0.00	0.02	0.00	0.90	0.00	0.00
11	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.04	0.00	0.22	0.00	0.00
12	0.00	0.00	0.03	0.00	0.00	0.53	0.02	0.00	0.00	---	0.00	0.00
13	0.00	0.00	0.17	0.00	0.00	0.22	0.00	0.89	0.10	0.02	0.00	0.00
14	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.20	0.13	0.00	0.85
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.55	0.30
16	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.09
17	0.04	0.00	1.15	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.01	0.00
18	0.00	0.00	0.02	0.05	0.00	0.10	0.00	0.13	0.00	0.00	0.00	3.47
19	0.00	0.00	0.00	1.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
20	0.00	0.00	0.00	0.01	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.13	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.01
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.12
23	0.00	0.15	0.37	0.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.28	0.01	0.35	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00
25	0.01	0.01	0.00	0.20	0.00	0.00	0.03	0.00	0.00	1.64	0.03	0.02
26	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.99	1.55	3.50	1.39
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.09	0.36	0.01	0.11
28	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.27	0.00	0.43	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.08	0.00	0.00	---	0.12	0.00	0.19	0.00	0.00	0.43	0.00
31	0.00	---	0.00	0.00	---	0.29	---	0.00	---	0.00	0.43	---
TOTAL	0.16	0.52	3.62	3.76	1.37	3.37	0.19	2.42	2.05	---	5.58	6.44





Gaging station and weir Tar River near Tar River, North Carolina.

02116500 YADKIN RIVER AT YADKIN COLLEGE, NC--Continued



PEE DEE RIVER BASIN

02116500 YADKIN RIVER AT YADKIN COLLEGE, NC--Continued

PRECIPITATION RECORDS

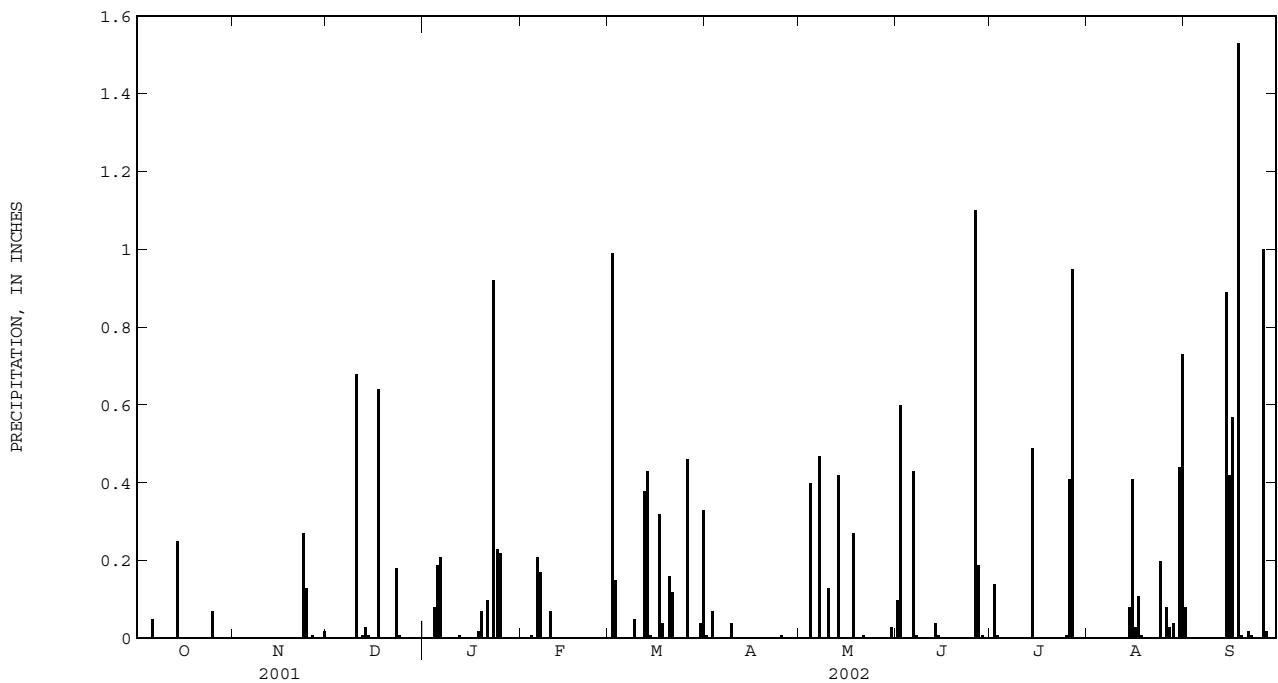
PERIOD OF RECORD.--October 2001 to September 2002.

GAGE.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

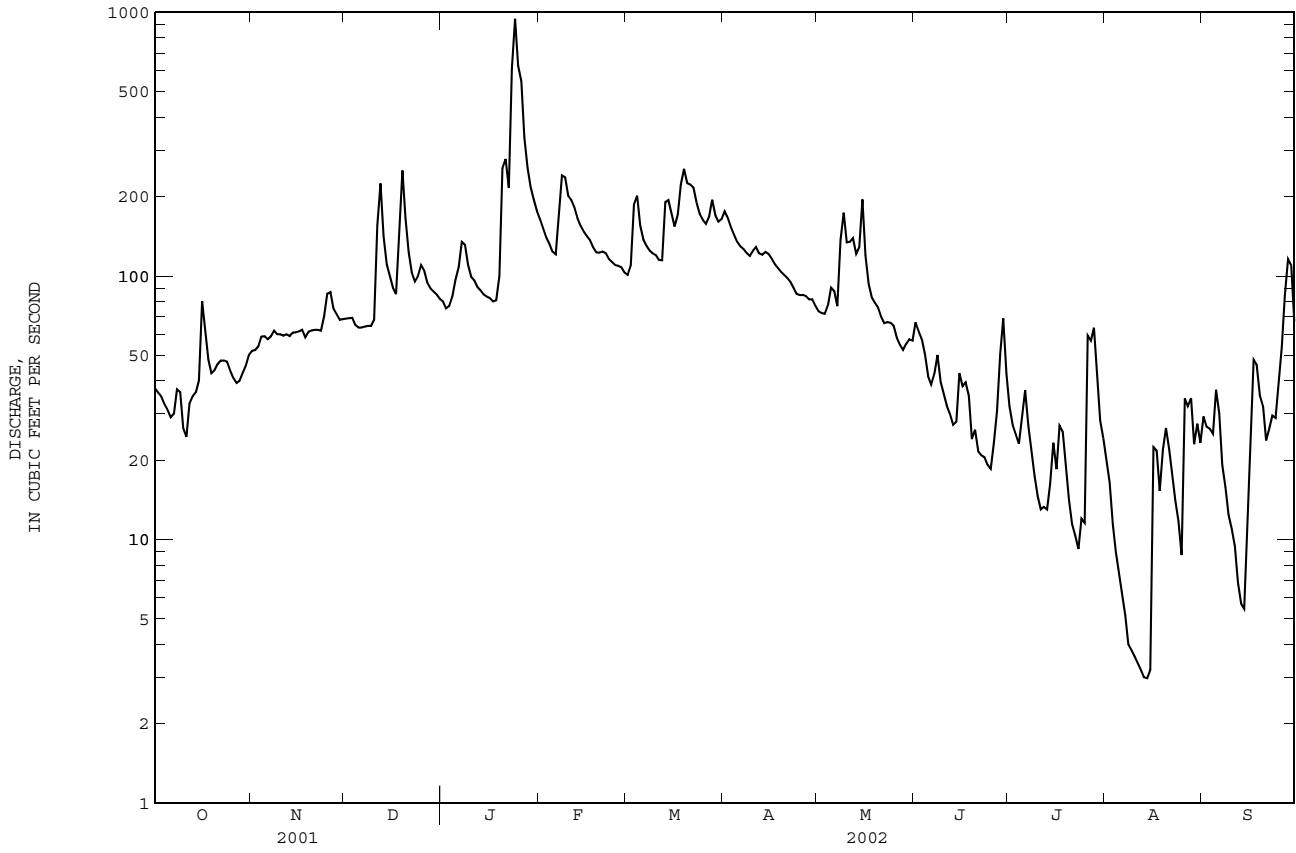
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.10	0.00	0.00	0.08
2	---	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.60	0.14	0.00	0.00
3	---	0.00	0.00	0.00	0.00	0.15	0.07	0.00	0.00	0.01	0.00	0.00
4	0.00	0.00	0.00	0.08	0.01	0.00	0.00	0.40	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.05	0.00	0.00	0.21	0.21	0.00	0.00	0.00	0.43	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.47	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.05	0.04	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.68	0.00	0.07	0.00	0.00	0.13	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.01	0.01	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.03	0.00	0.00	0.43	0.00	0.42	0.04	0.00	0.00	0.00
14	0.25	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.49	0.08	0.89
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.42
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.57
17	0.00	0.00	0.64	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.11	0.00
18	0.00	0.00	0.00	0.02	0.00	0.04	0.00	0.27	0.00	0.00	0.01	1.53
19	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
20	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.10	0.00	0.12	0.00	0.01	0.00	0.00	0.00	0.02
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
23	0.00	0.27	0.18	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.13	0.01	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00
25	0.07	0.00	0.00	0.22	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00
26	0.00	0.01	0.00	0.00	0.00	0.46	0.00	0.00	1.10	0.41	0.08	1.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.95	0.03	0.02
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.04	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.02	0.00	0.00	---	0.04	0.00	0.03	0.00	0.00	0.44	0.00
31	0.00	---	0.00	0.00	---	0.33	---	0.00	---	0.00	0.73	---
TOTAL	---	0.43	1.56	2.05	0.46	3.48	0.13	1.73	2.49	2.01	2.16	4.55





Gaging station and water quality monitor at Pamlico River at Washington, North Carolina.

02118000 SOUTH YADKIN RIVER NEAR MOCKSVILLE, NC--Continued



PEE DEE RIVER BASIN

02118000 SOUTH YADKIN RIVER NEAR MOCKSVILLE, NC--Continued

PRECIPITATION RECORDS

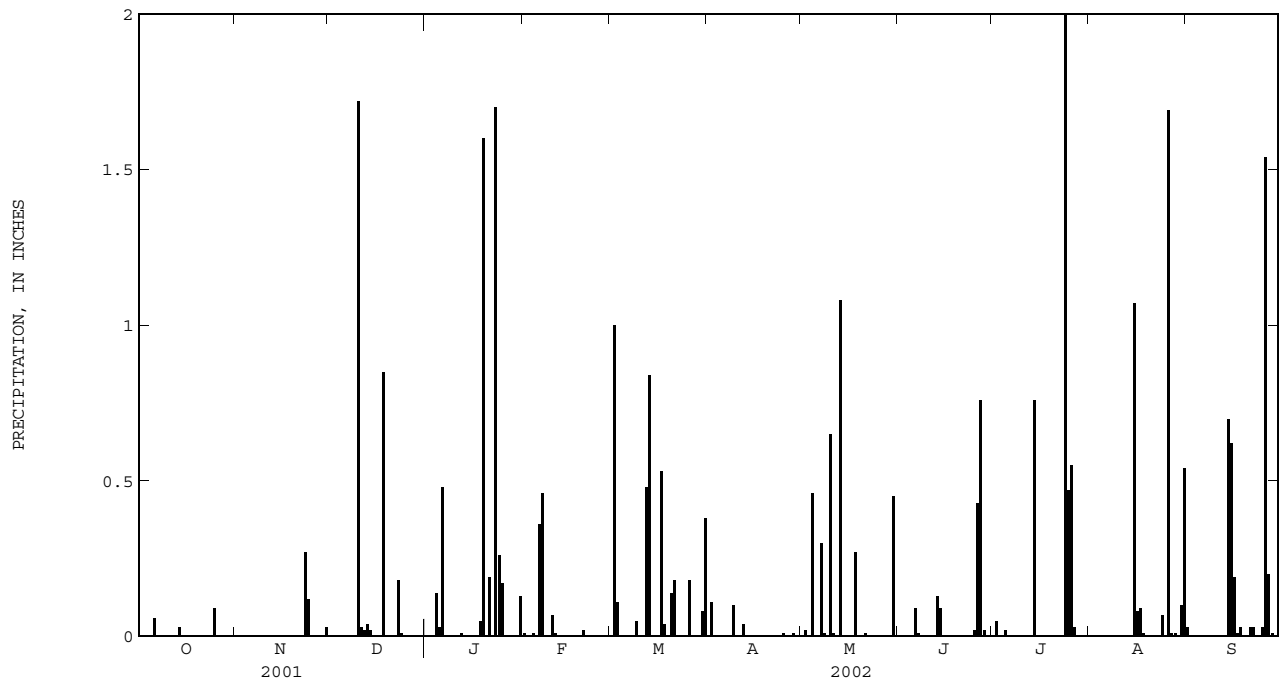
PERIOD OF RECORD.--October 2001 to September 2002.

GAGE.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

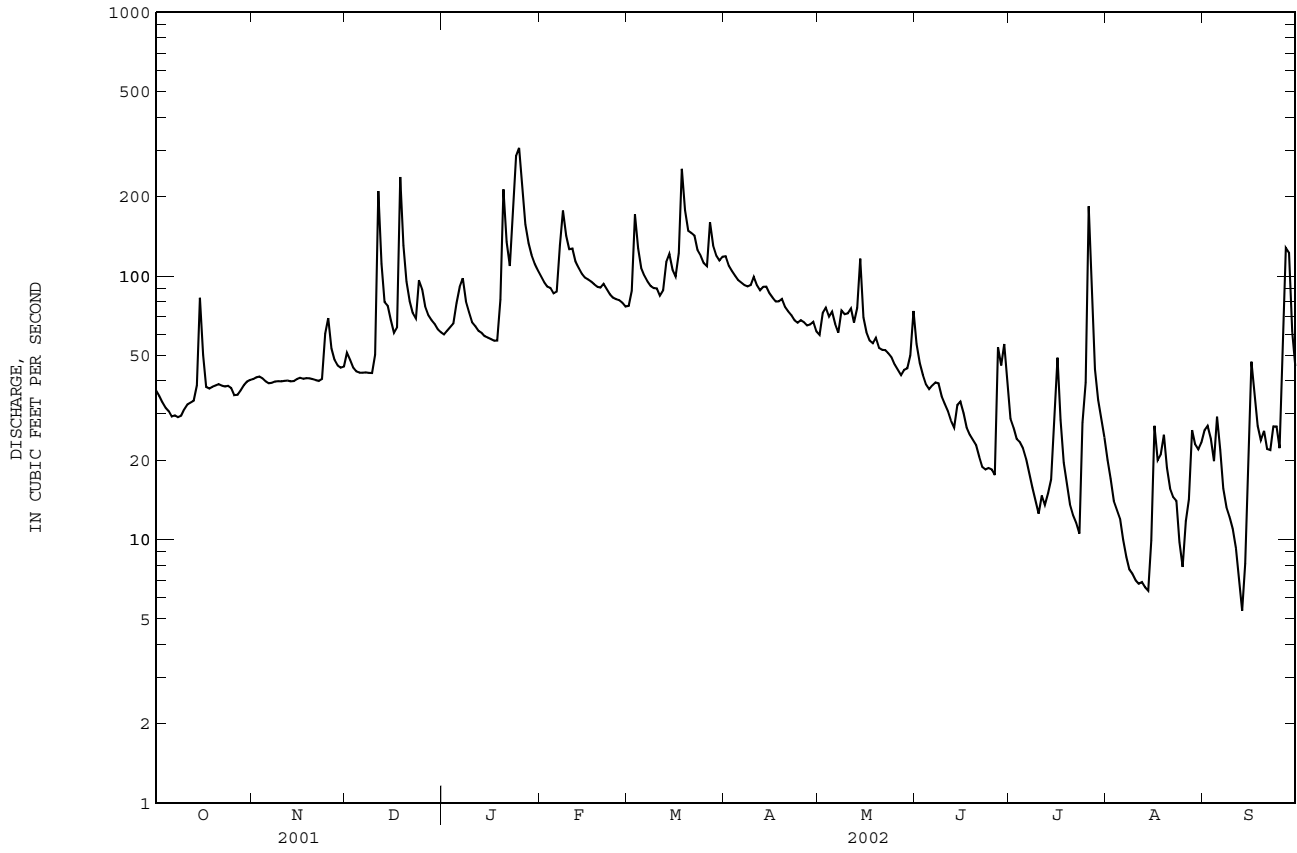
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03
2	0.00	0.00	0.00	0.00	0.00	1.00	0.11	0.02	0.00	0.05	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.14	0.01	0.00	0.00	0.46	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
6	0.06	0.00	0.00	0.48	0.36	0.00	0.00	0.00	0.09	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.30	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.05	0.10	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.72	0.00	0.07	0.00	0.00	0.65	0.00	0.00	0.00	0.00
11	0.00	0.00	0.03	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.01	0.00	0.48	0.04	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.04	0.00	0.00	0.84	0.00	1.08	0.13	0.00	0.00	0.00
14	0.03	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.09	0.76	0.00	0.70
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07	0.62
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.19
17	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.09	0.01
18	0.00	0.00	0.85	0.05	0.00	0.04	0.00	0.27	0.00	0.00	0.01	0.03
19	0.00	0.00	0.00	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.02	0.14	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.19	0.00	0.18	0.00	0.01	0.00	0.00	0.00	0.03
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
23	0.00	0.27	0.18	1.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.12	0.01	0.26	0.00	0.00	0.00	0.00	0.00	2.00	0.07	0.00
25	0.09	0.00	0.00	0.17	0.00	0.00	0.01	0.00	0.02	0.47	0.00	0.03
26	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.43	0.55	1.69	1.54
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.03	0.01	0.20
28	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.01	0.01
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.03	0.00	0.00	---	0.08	0.00	0.45	0.00	0.00	0.10	0.00
31	0.00	---	0.00	0.13	---	0.38	---	0.00	---	0.00	0.54	---
TOTAL	0.18	0.42	2.87	4.76	0.94	4.01	0.27	3.26	1.55	3.88	3.67	3.42





Gaging station at Neuse River near Goldsboro, North Carolina.

02118500 HUNTING CREEK NEAR HARMONY, NC--Continued



PEE DEE RIVER BASIN

02120780 SECOND CREEK NEAR BARBER, NC

LOCATION.--Lat 35°43'04", long 80°35'45", North American Datum of 1983, 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 mi².

WATER-DISCHARGE RECORDS

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 NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some diurnal fluctuation caused by industry 0.7 mi upstream. Minimum discharge for period of record and current water year also occurred Aug. 11, Sept. 12, 13, 14, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	11	9.5	19	44	23	67	14	11	5.3	2.6	6.3
2	5.5	12	9.3	20	34	45	50	15	8.8	5.2	2.8	2.6
3	5.0	12	8.9	18	32	137	45	16	7.3	4.8	2.7	2.5
4	5.1	11	9.1	18	30	65	41	20	6.9	4.6	2.4	2.3
5	5.4	10	9.2	19	27	48	38	25	6.4	4.5	2.4	2.0
6	5.1	11	9.6	31	29	41	37	16	7.0	3.9	2.2	1.8
7	6.3	11	10	39	53	38	35	14	17	3.5	2.0	1.5
8	6.1	12	9.9	21	82	35	37	80	5.4	3.3	1.9	1.3
9	6.9	12	9.4	18	51	34	34	24	4.9	3.0	1.5	1.3
10	8.4	10	12	17	47	34	33	16	4.6	3.2	1.2	1.2
11	9.1	11	54	15	45	30	30	16	4.4	e3.5	1.2	1.2
12	8.5	11	23	14	39	39	30	15	4.1	3.6	1.3	1.1
13	8.7	12	17	15	37	63	32	15	4.3	3.6	1.4	1.1
14	8.8	11	16	13	34	60	30	20	4.5	68	1.4	1.1
15	9.7	12	16	13	33	47	28	12	4.3	20	1.5	3.5
16	11	12	19	12	32	42	25	13	4.0	5.6	1.7	3.8
17	7.7	11	21	15	29	54	24	18	3.7	3.8	3.6	2.7
18	9.6	12	48	21	27	71	23	19	3.4	4.1	3.7	2.6
19	9.6	12	27	51	27	55	20	19	3.8	3.8	2.2	1.9
20	11	10	22	185	27	51	21	14	4.4	3.5	2.0	2.0
21	10	9.1	20	59	28	66	20	10	3.7	6.5	1.6	1.7
22	10	8.7	20	47	26	59	17	9.6	4.1	3.6	1.6	1.9
23	10	13	20	533	26	50	15	9.7	4.2	3.1	1.5	2.1
24	10	12	25	278	25	46	15	9.2	4.2	2.8	1.5	2.1
25	10	13	20	202	25	43	17	8.3	4.0	3.7	1.4	2.0
26	8.9	10	19	107	25	42	15	8.1	3.7	26	1.7	4.6
27	8.5	9.3	20	68	24	56	15	7.6	14	8.4	1.4	10
28	8.9	9.2	20	57	23	43	17	7.7	64	3.4	1.7	3.7
29	10	9.0	20	50	---	42	14	7.8	11	3.5	2.1	2.6
30	11	9.6	19	44	---	40	13	8.0	5.6	3.1	2.1	2.5
31	11	---	19	43	---	43	---	12	---	2.6	3.7	---
TOTAL	260.6	328.9	581.9	2062	961	1542	838	499.0	238.7	227.5	62.0	77.0
MEAN	8.406	10.96	18.77	66.52	34.32	49.74	27.93	16.10	7.957	7.339	2.000	2.567
MAX	11	13	54	533	82	137	67	80	64	68	3.7	10
MIN	4.8	8.7	8.9	12	23	23	13	7.6	3.4	2.6	1.2	1.1
CFSM	0.07	0.09	0.16	0.56	0.29	0.42	0.24	0.14	0.07	0.06	0.02	0.02
IN.	0.08	0.10	0.18	0.65	0.30	0.49	0.26	0.16	0.08	0.07	0.02	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2002, BY WATER YEAR (WY)

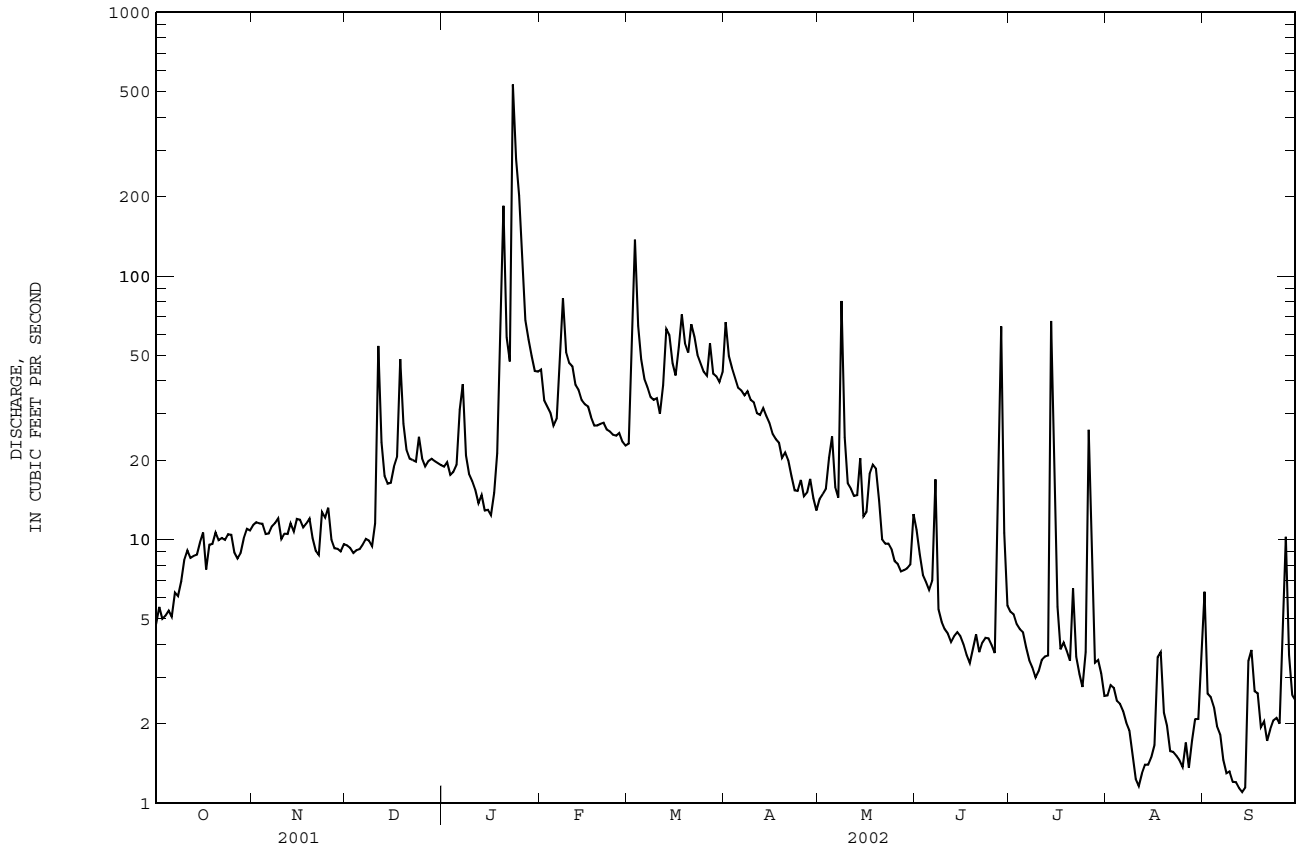
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	84.21	85.03	91.98	140.2	162.8	184.5	137.6	83.28	83.13	50.98	55.59	52.49												
MAX	419	262	222	317	301	476	390	178	243	98.3	304	196												
(WY)	1991	1996	1984	1998	1990	1993	1987	1990	1992	1989	1995	1979												
MIN	8.37	11.0	18.7	29.6	34.3	49.7	27.9	16.1	7.96	7.34	2.00	2.57												
(WY)	2001	2002	2001	2001	2002	2002	2002	2002	2002	2002	2002	2002												

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1979 - 2002

ANNUAL TOTAL	11034.7	7678.6	
ANNUAL MEAN	30.23	21.04	99.52
HIGHEST ANNUAL MEAN			171
LOWEST ANNUAL MEAN			21.0
HIGHEST DAILY MEAN	967	Mar 30	533
LOWEST DAILY MEAN	3.5	Aug 23	1.1
ANNUAL SEVEN-DAY MINIMUM	4.2	Aug 22	1.2
MAXIMUM PEAK FLOW			1350
MAXIMUM PEAK STAGE			9.87
INSTANTANEOUS LOW FLOW			1.1*
ANNUAL RUNOFF (CFSM)	0.26		0.18
ANNUAL RUNOFF (INCHES)	3.48		2.42
10 PERCENT EXCEEDS	58		46
50 PERCENT EXCEEDS	16		11
90 PERCENT EXCEEDS	5.7		2.1

e Estimated.
* See REMARKS.

02120780 SECOND CREEK NEAR BARBER, NC--Continued



PEE DEE RIVER BASIN

02120780 SECOND CREEK NEAR BARBER, NC--Continued

PRECIPITATION RECORDS

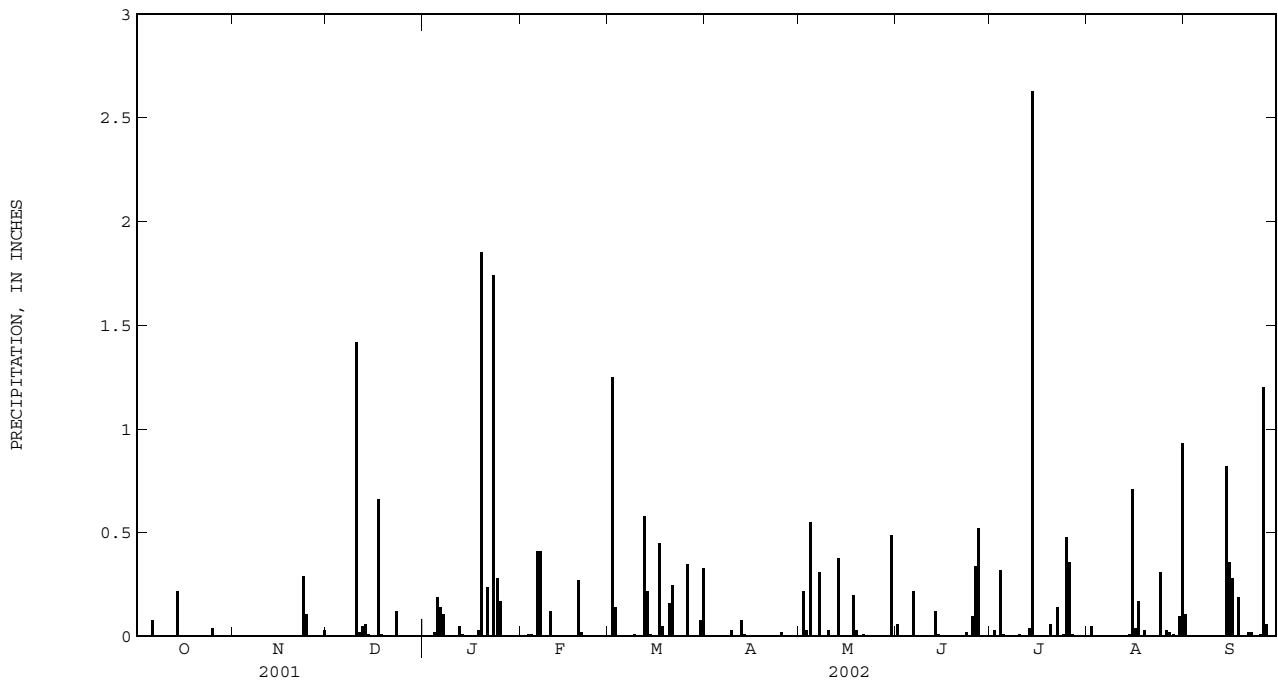
PERIOD OF RECORD.--October 2001 to September 2002.

GAGE.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.11
2	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.22	0.00	0.03	0.05	0.00
3	0.00	0.00	0.00	0.00	0.01	0.14	0.00	0.03	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.55	0.00	0.32	0.00	0.00
5	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
6	0.08	0.00	0.00	0.14	0.41	0.00	0.00	0.00	0.22	0.00	0.00	0.00
7	0.00	0.00	0.00	0.11	0.41	0.00	0.00	0.31	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.42	0.00	0.12	0.00	0.00	0.03	0.00	0.01	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.05	0.05	0.00	0.58	0.08	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.06	0.01	0.00	0.22	0.01	0.38	0.12	0.04	0.00	0.00
14	0.22	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	2.63	0.01	0.82
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.36
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.28
17	0.00	0.00	0.66	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.17	0.00
18	0.00	0.00	0.01	0.03	0.00	0.05	0.00	0.20	0.00	0.00	0.00	0.19
19	0.00	0.00	0.00	1.85	0.27	0.00	0.00	0.03	0.00	0.00	0.03	0.00
20	0.00	0.00	0.00	0.00	0.02	0.16	0.00	0.00	0.00	0.06	0.00	0.00
21	0.00	0.00	0.00	0.24	0.00	0.25	0.00	0.01	0.00	0.00	0.00	0.02
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.02
23	0.00	0.29	0.12	1.74	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
24	0.00	0.11	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.01	0.31	0.00
25	0.04	0.00	0.00	0.17	0.00	0.00	0.02	0.00	0.10	0.48	0.00	0.01
26	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.34	0.36	0.03	1.20
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.01	0.02	0.06
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.03	0.00	0.00	---	0.08	0.00	0.49	0.00	0.00	0.10	0.00
31	0.00	---	0.00	0.00	---	0.33	---	0.00	---	0.00	0.93	---
TOTAL	0.34	0.43	2.35	4.83	1.25	3.88	0.14	2.25	1.39	4.10	2.41	3.07





Gaging station at Potecasi Creek near Union, North Carolina.

PEE DEE RIVER BASIN

02121500 ABBOTTS CREEK AT LEXINGTON, NC

LOCATION.--Lat 35°48'25", long 80°14'05", North American Datum of 1983, 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 mi².

PERIOD OF RECORD.--March 1940 to December 1957 (annual maximums only), October 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 630 ft above NGVD of 1929, 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 good except those for estimated daily discharges, which are poor. The City of Lexington diverted an average of 5.1 ft³/s for water supply. The City of High Point diverted water from the Cape Fear River basin and discharged an average of 5.45 ft³/s of treated sewage effluent into Rich Fork Creek, upstream from station. Maximum discharge at former site, 14,800 ft³/s, from floodmark; minimum discharge at former site 0.4 ft³/s. Minimum discharge for period of record also occurred Sept. 5, 1990. Minimum discharge for current water year also occurred Aug. 13.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	9.1	12	12	58	28	143	14	26	13	11	406
2	7.4	9.4	11	12	55	46	114	15	52	11	9.4	255
3	7.5	10	10	14	46	267	87	16	33	49	8.1	46
4	7.1	10	10	16	44	189	74	21	22	24	7.0	27
5	6.9	9.7	11	18	40	102	61	35	14	17	5.9	19
6	7.2	8.5	11	46	35	77	53	22	13	13	5.9	16
7	6.0	9.0	11	117	100	66	46	18	25	9.1	6.0	12
8	5.3	9.4	11	50	162	58	43	17	22	8.5	5.7	10
9	5.4	9.4	10	34	107	59	44	15	12	8.1	5.1	8.6
10	6.9	9.4	20	26	84	57	48	14	9.2	8.1	5.5	8.8
11	7.6	9.6	117	23	93	48	48	13	9.4	16	4.7	8.5
12	7.6	8.5	66	21	72	55	40	12	9.0	62	4.0	7.9
13	7.1	8.0	27	e20	63	158	41	23	8.3	19	4.4	7.2
14	7.4	11	20	e20	56	303	40	67	8.5	18	5.0	13
15	17	11	17	e19	50	144	50	33	8.2	20	13	121
16	21	10	14	e19	48	105	49	22	7.3	14	47	164
17	9.9	11	14	e17	46	101	37	17	6.5	10	25	52
18	7.9	9.4	48	16	42	143	35	20	6.5	8.2	11	38
19	8.1	9.0	48	90	39	111	34	29	6.6	6.9	7.2	264
20	7.4	9.0	23	509	38	94	34	19	6.9	7.0	6.2	151
21	7.5	9.6	17	145	39	139	32	16	6.7	10	5.9	42
22	7.0	9.5	15	93	39	173	29	16	6.7	7.8	5.6	27
23	6.1	10	14	627	36	108	28	15	6.9	24	5.0	21
24	7.7	12	17	915	33	88	25	14	8.1	56	5.1	18
25	7.9	16	30	399	32	78	19	13	6.8	159	7.7	16
26	7.6	15	19	283	32	75	18	12	15	305	52	30
27	7.1	13	15	145	32	209	16	11	154	133	88	103
28	8.8	12	14	104	30	156	15	12	106	39	38	48
29	8.2	11	14	83	---	103	15	12	51	19	45	30
30	7.7	11	15	72	---	85	15	12	23	15	54	20
31	8.0	---	13	63	---	88	---	25	---	12	131	---
TOTAL	250.5	309.5	694	4028	1551	3513	1333	600	689.6	1121.7	634.4	1990.0
MEAN	8.081	10.32	22.39	129.9	55.39	113.3	44.43	19.35	22.99	36.18	20.46	66.33
MAX	21	16	117	915	162	303	143	67	154	305	131	406
MIN	5.3	8.0	10	12	30	28	15	11	6.5	6.9	4.0	7.2
CFSM	0.05	0.06	0.13	0.75	0.32	0.65	0.26	0.11	0.13	0.21	0.12	0.38
IN.	0.05	0.07	0.15	0.86	0.33	0.75	0.28	0.13	0.15	0.24	0.14	0.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2002,® BY WATER YEAR (WY)

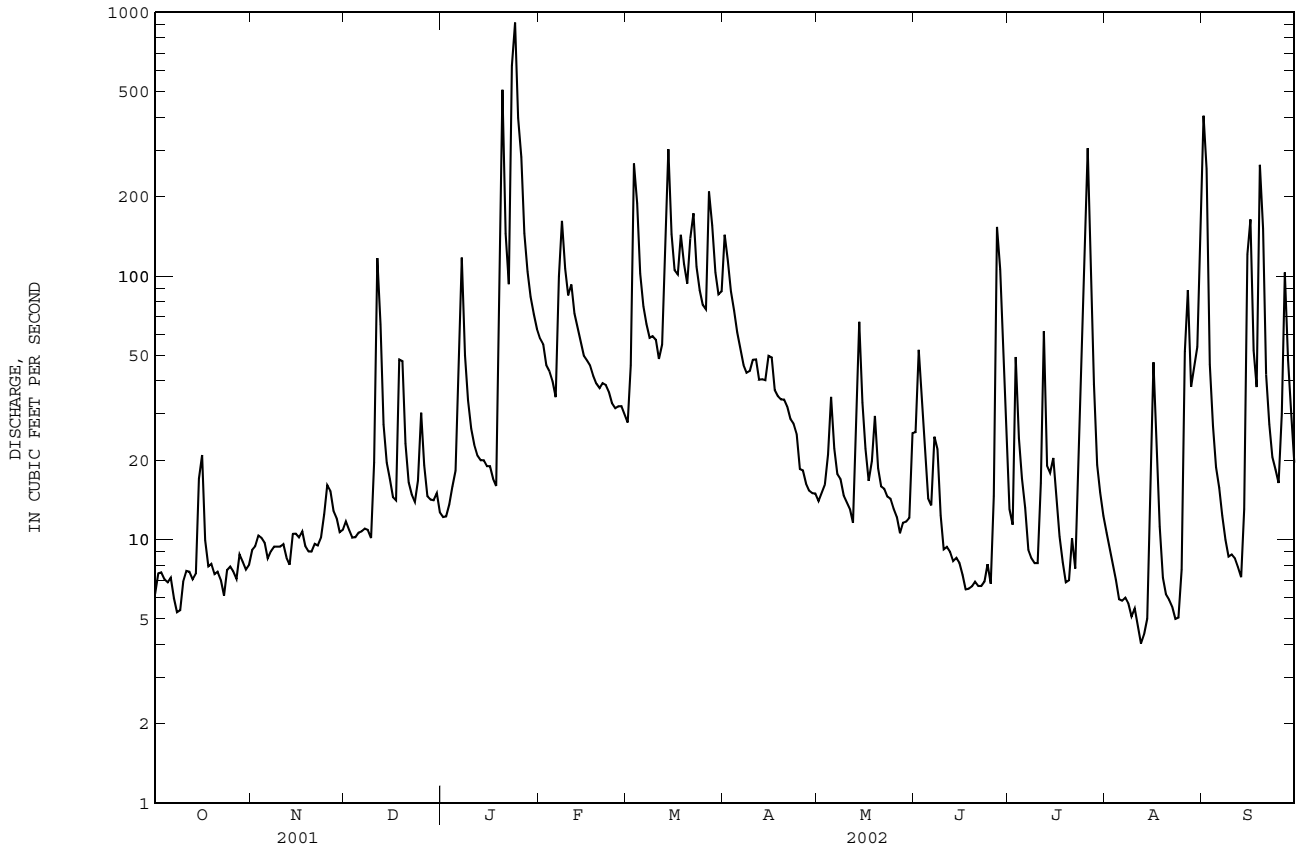
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	153.0	102.1	119.3	266.8	276.3	338.3	244.8	161.5	76.46	53.39	50.37	74.63			
MAX	731	282	319	554	753	781	506	515	182	115	102	397			
(WY)	1990	1996	1990	1998	1990	1993	1993	1989	1989	1995	1989	1996			
MIN	8.08	10.3	22.4	55.9	55.4	83.7	44.4	19.4	21.2	21.6	14.9	13.5			
(WY)	2002	2002	2002	2001	2002	1999	2002	2002	1999	1996	1990	2001			

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1988 - 2002®

ANNUAL TOTAL	22079.1	16714.7	
ANNUAL MEAN	60.49	45.79	159.2
HIGHEST ANNUAL MEAN			281
LOWEST ANNUAL MEAN			45.8
HIGHEST DAILY MEAN	1500	Mar 30	915
LOWEST DAILY MEAN	5.3	Oct 8	4.0
ANNUAL SEVEN-DAY MINIMUM	6.4	Oct 4	4.9
MAXIMUM PEAK FLOW			1620
MAXIMUM PEAK STAGE			10.46
INSTANTANEOUS LOW FLOW			3.3*
ANNUAL RUNOFF (CFSM)	0.35		0.26
ANNUAL RUNOFF (INCHES)	4.72		3.57
10 PERCENT EXCEEDS	115		106
50 PERCENT EXCEEDS	24		18
90 PERCENT EXCEEDS	8.5		7.1

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

02121500 ABBOTTS CREEK AT LEXINGTON, NC--Continued



02122400 HIGH ROCK LAKE PRECIPITATION

LOCATION.--Lat 35°36'02", long 80°14'00", North American Datum of 1983, Davidson County, Hydrologic Unit 03040103, High Rock Lake Dam.

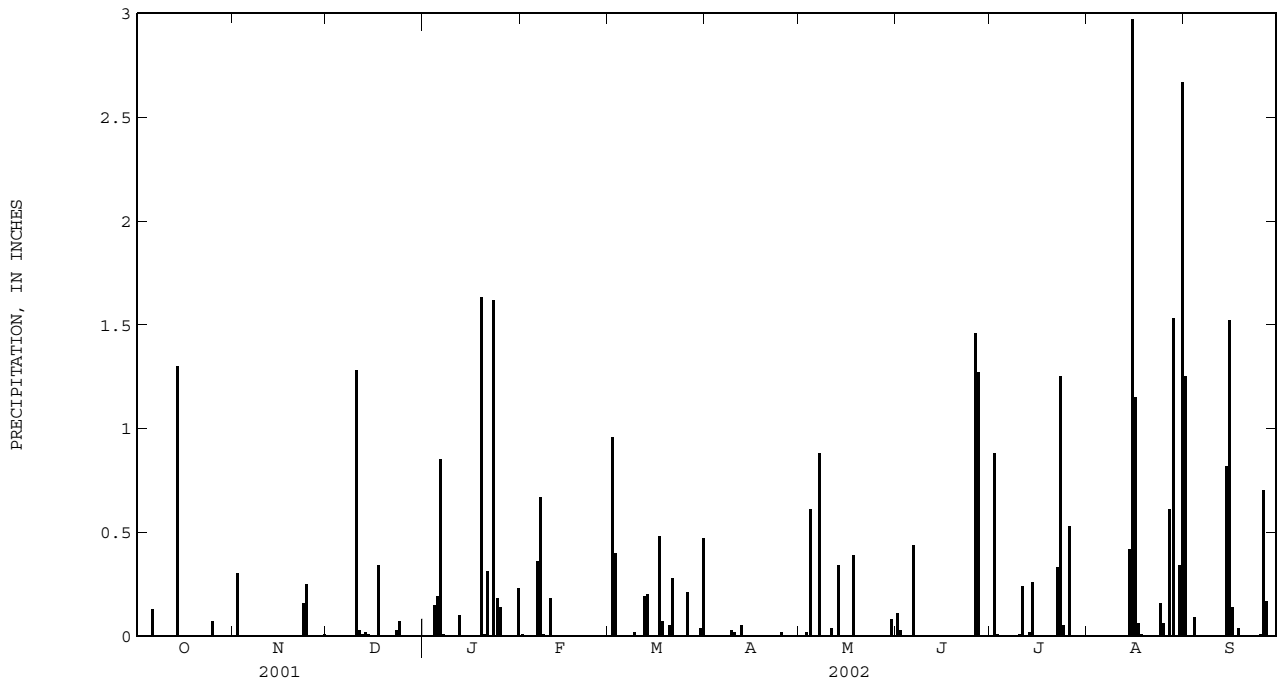
PERIOD OF RECORD.--September 1996 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.11	0.00	0.00	1.25
2	0.00	0.30	0.00	0.00	0.00	0.96	0.00	0.00	0.03	0.88	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.02	0.00	0.01	0.00	0.00
4	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.09
5	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.13	0.00	0.00	0.85	0.36	0.00	0.00	0.00	0.44	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.67	0.00	0.00	0.88	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.28	0.00	0.18	0.00	0.02	0.00	0.00	0.01	0.00	0.00
11	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.04	0.00	0.24	0.00	0.00
12	0.00	0.00	0.01	0.10	0.00	0.19	0.05	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.02	0.00	0.00	0.20	0.00	0.34	0.00	0.02	0.00	0.00
14	1.30	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.42	0.82
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.97	1.52
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.15	0.14
17	0.00	0.00	0.34	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.06	0.00
18	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.39	0.00	0.00	0.01	0.04
19	0.00	0.00	0.00	1.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.01	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.31	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00
23	0.00	0.16	0.03	1.62	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.00
24	0.00	0.25	0.07	0.18	0.00	0.00	0.00	0.00	0.00	0.05	0.16	0.00
25	0.07	0.00	0.00	0.14	0.00	0.00	0.02	0.00	0.00	0.00	0.06	0.01
26	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	1.46	0.53	0.00	0.70
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.61	0.17
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.53	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.01	0.00	0.00	---	0.04	0.00	0.08	0.00	0.00	0.34	0.00
31	0.00	---	0.00	0.23	---	0.47	---	0.00	---	0.00	2.67	---
TOTAL	1.50	0.72	1.79	5.42	1.23	3.37	0.12	2.36	3.31	3.58	9.98	4.74



02122699 TUCKERTOWN RESERVOIR PRECIPITATION

LOCATION.--Lat 35°29'03", long 80°10'30", Montgomery County, Hydrologic Unit 03040102, Tuckertown Reservoir Dam.

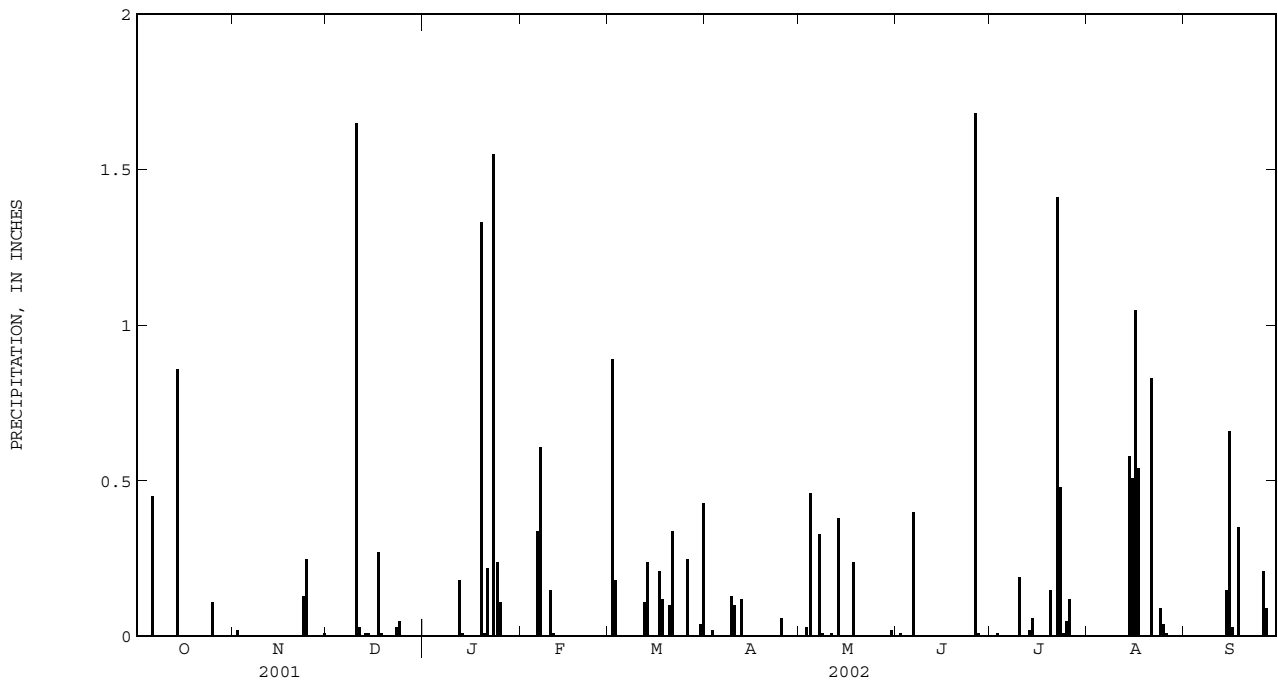
PERIOD OF RECORD.-- October 1998 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	---
2	0.00	0.02	0.00	---	---	0.89	0.00	0.00	0.01	0.00	0.00	---
3	0.00	0.00	0.00	---	---	0.18	0.02	0.03	0.00	0.01	0.00	---
4	0.00	0.00	0.00	---	---	0.00	0.00	0.46	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.45	0.00	0.00	---	0.34	0.00	0.00	0.00	0.40	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.33	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.65	0.00	0.15	0.00	0.10	0.00	0.00	0.19	0.00	0.00
11	0.00	0.00	0.03	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.18	0.00	0.11	0.12	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.01	0.01	0.00	0.24	0.00	0.38	0.00	0.02	0.00	0.00
14	0.86	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.58	0.15
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.66
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.03
17	0.00	0.00	0.27	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.54	0.00
18	0.00	0.00	0.01	0.00	0.00	0.12	0.00	0.24	0.00	0.00	0.00	0.35
19	0.00	0.00	0.00	1.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.01	0.00	0.10	0.00	0.00	0.00	0.15	0.00	0.00
21	0.00	0.00	0.00	0.22	0.00	0.34	0.00	0.00	0.00	0.00	0.83	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.41	---	0.00
23	0.00	0.13	0.03	1.55	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00
24	0.00	0.25	0.05	0.24	0.00	0.00	0.00	0.00	0.00	0.01	0.09	0.00
25	0.11	0.00	0.00	0.11	0.00	0.00	0.06	0.00	0.00	0.05	0.04	0.00
26	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	1.68	0.12	0.01	0.21
27	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.01	0.00	---	0.09
28	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00
29	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	---	0.00
30	0.00	0.01	0.00	---	---	0.04	0.00	0.02	0.00	0.00	---	0.00
31	0.00	---	0.00	---	---	0.43	---	0.00	---	0.00	---	---
TOTAL	1.42	0.41	2.06	---	---	2.91	0.43	1.48	2.10	2.50	---	---



PEE DEE RIVER BASIN

02123567 DUTCHMANS CREEK NEAR UWHARRIE, NC

LOCATION.--Lat 35°22'45", long 80°01'49", North American Datum of 1983, Montgomery County, Hydrologic Unit 03040104, 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 mi².

PERIOD OF RECORD.--October 1981 to September 1983, October 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 340 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records fair. Maximum gage height for period of record, from floodmark. No flow also occurred June 23-25, July 8, 9, 19, Aug. 9-15, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.05	0.14	0.28	0.17	0.99	0.92	7.8	0.53	0.24	0.03	0.02	2.6
2	0.02	0.14	0.26	0.18	0.84	3.9	3.3	0.56	0.31	0.02	0.02	0.45
3	0.02	0.14	0.23	0.29	0.73	7.0	2.5	0.56	0.14	0.02	0.07	0.20
4	0.02	0.13	0.23	0.33	0.73	3.5	2.1	0.86	0.12	0.02	0.06	0.12
5	0.01	0.12	0.22	0.35	0.68	2.3	1.8	1.0	0.10	0.02	0.02	0.10
6	0.15	0.12	0.23	1.6	0.79	1.9	1.6	0.68	0.07	0.01	0.02	0.05
7	0.18	0.12	0.23	1.7	4.4	1.7	1.4	0.67	0.12	0.01	0.01	0.03
8	0.07	0.12	0.25	0.91	9.0	1.5	1.4	6.0	0.13	0.00	0.01	0.02
9	0.04	0.12	0.23	0.65	3.2	1.4	1.4	1.2	0.10	0.00	0.00	0.02
10	0.03	0.12	0.48	0.76	2.4	1.3	1.6	0.81	0.06	0.01	0.00	0.02
11	0.04	0.13	2.7	0.72	2.0	1.2	1.4	0.66	0.04	0.03	0.00	0.02
12	0.04	0.12	0.59	0.52	1.6	1.2	1.4	0.60	0.03	0.02	0.00	0.02
13	0.04	0.12	0.37	0.77	1.5	4.0	1.5	0.59	0.03	0.02	0.00	0.01
14	0.32	0.13	0.33	0.61	1.3	3.4	1.3	0.71	0.02	0.02	0.00	1.6
15	0.55	0.13	0.26	0.45	1.2	2.3	1.3	0.55	0.02	0.02	0.00	2.0
16	0.19	0.14	0.20	0.38	1.2	1.9	1.2	0.45	0.01	0.02	0.63	1.3
17	0.11	0.14	0.20	0.33	1.1	2.2	1.1	0.43	0.01	0.01	0.61	0.59
18	0.10	0.14	0.46	0.33	0.99	2.3	1.00	0.50	0.01	0.01	0.16	0.30
19	0.10	0.16	0.37	5.7	0.97	1.9	0.96	0.55	0.01	0.00	0.06	0.21
20	0.10	0.17	0.27	6.5	0.99	1.8	0.93	0.44	0.01	0.09	0.06	0.14
21	0.10	0.16	0.21	2.4	1.0	3.7	0.88	0.38	0.01	0.09	0.04	0.10
22	0.10	0.16	0.17	1.9	0.97	2.9	0.81	0.38	0.00	0.06	0.02	0.07
23	0.11	0.17	0.18	28	0.92	2.2	0.71	0.37	0.00	0.06	0.02	0.05
24	0.11	0.72	0.24	6.1	0.89	1.9	0.68	0.33	0.00	0.04	0.02	0.04
25	0.19	0.68	0.23	7.6	0.85	1.7	0.82	0.32	0.00	0.33	0.02	0.03
26	0.17	0.44	0.20	3.3	0.90	1.6	0.77	0.30	0.13	0.61	0.01	0.09
27	0.13	0.33	0.18	2.2	0.88	1.6	0.72	0.26	0.44	0.44	0.02	0.23
28	0.24	0.28	0.18	1.6	0.79	1.3	0.71	0.23	0.13	0.12	0.14	0.19
29	0.22	0.26	0.18	1.3	---	1.4	0.65	0.23	0.06	0.05	0.07	0.11
30	0.17	0.28	0.17	1.2	---	1.4	0.54	0.21	0.04	0.03	0.04	0.06
31	0.14	---	0.17	1.0	---	2.1	---	0.25	---	0.02	0.97	---
TOTAL	3.86	6.13	10.50	79.85	43.81	69.42	44.28	21.61	2.39	2.23	3.12	10.77
MEAN	0.125	0.204	0.339	2.576	1.565	2.239	1.476	0.697	0.080	0.072	0.101	0.359
MAX	0.55	0.72	2.7	28	9.0	7.0	7.8	6.0	0.44	0.61	0.97	2.6
MIN	0.01	0.12	0.17	0.17	0.68	0.92	0.54	0.21	0.00	0.00	0.00	0.01
CFSM	0.04	0.06	0.10	0.75	0.45	0.65	0.43	0.20	0.02	0.02	0.03	0.10
IN.	0.04	0.07	0.11	0.86	0.47	0.75	0.48	0.23	0.03	0.02	0.03	0.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2002, BY WATER YEAR (WY)

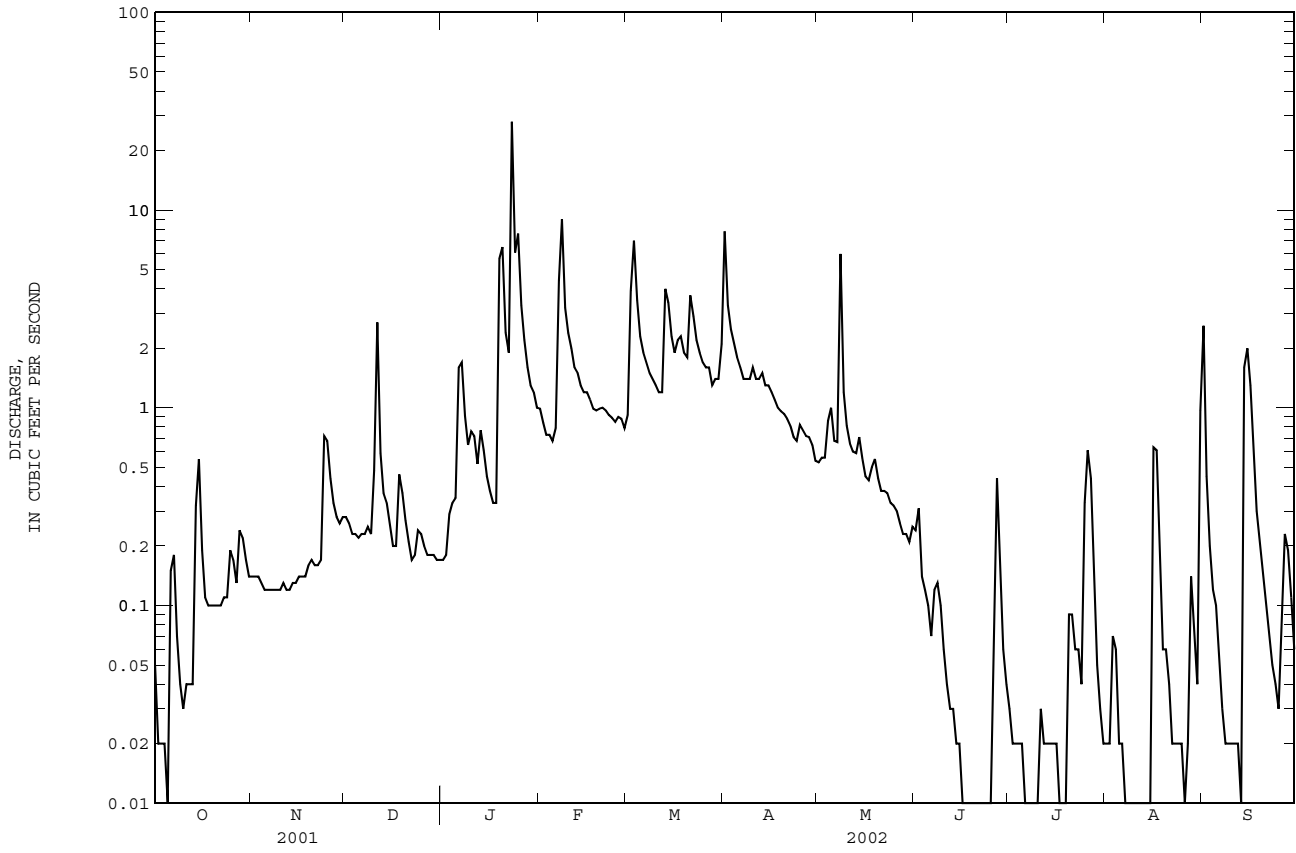
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	2.864	2.564	2.553	5.380	5.837	7.141	4.955	2.699	1.697	1.435	1.658	1.482										
MAX	11.9	8.69	4.81	17.5	15.9	22.5	10.2	6.49	5.28	8.80	11.2	7.81										
(WY)	1991	1986	1991	1998	1998	1998	1992	1990	1994	1997	1996	1996										
MIN	0.12	0.20	0.34	1.23	1.56	2.24	1.41	0.70	0.080	0.072	0.10	0.14										
(WY)	2002	2002	2002	2001	2002	2002	1986	2002	2002	2002	2002	2001										

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1982 - 2002	
ANNUAL TOTAL	381.97		297.97			
ANNUAL MEAN	1.046		0.816		3.344	
HIGHEST ANNUAL MEAN					7.16	
LOWEST ANNUAL MEAN					0.40	
HIGHEST DAILY MEAN	20	Mar 29	28	Jan 23	206	Apr 21 1992
LOWEST DAILY MEAN	0.01	Oct 5	0.00	Jun 22	0.00	Jun 22 2002
ANNUAL SEVEN-DAY MINIMUM	0.05	Sep 13	0.00	Aug 9	0.00	Aug 9 2002
MAXIMUM PEAK FLOW			101	Jan 23	1560	Apr 21 1992
MAXIMUM PEAK STAGE			3.85	Jan 23	11.96	Apr 21 1992
INSTANTANEOUS LOW FLOW			0.00*	Jun 22	0.00*	Jun 19 2002
ANNUAL RUNOFF (CFSM)	0.30		0.24		0.97	
ANNUAL RUNOFF (INCHES)	4.13		3.22		13.21	
10 PERCENT EXCEEDS	2.1		1.9		5.6	
50 PERCENT EXCEEDS	0.67		0.24		1.6	
90 PERCENT EXCEEDS	0.10		0.02		0.30	

* See REMARKS.

02123567 DUTCHMANS CREEK NEAR UWHARRIE, NC--Continued



PEE DEE RIVER BASIN

0212414900 MALLARD CREEK BELOW STONY CREEK NEAR HARRISBURG, NC

LOCATION.--Lat 35°19'58", long 80°42'57", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03040105, on left bank on upstream side of bridge at Pavillion Blvd, 0.1 mi downstream of Stony Creek, and 3.8 mi northwest of Harrisburg.

DRAINAGE AREA.--34.6 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 568.40 ft, North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--Records fair except discharges below 1 ft³/s and those for estimated daily discharges, which are poor. Maximum discharge for period of record from contracted opening measurement of peak flow; maximum gage height for period of record from floodmarks. No flow occurred for part of each day Aug. 8, 9, 10, 12, 13, 14, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	4.0	2.4	e2.8	9.6	4.3	108	3.9	8.3	4.3	1.00	31
2	1.7	14	2.0	e3.0	7.2	161	30	4.4	13	3.5	0.58	6.8
3	1.8	2.9	e2.0	5.0	6.6	142	19	5.1	4.5	140	1.4	3.6
4	1.6	1.8	e2.1	6.9	6.9	37	14	32	3.8	30	1.2	2.8
5	1.9	2.1	1.9	4.8	6.4	19	12	9.6	2.8	6.0	0.57	2.3
6	8.5	2.3	1.7	123	10	13	10	4.7	47	3.4	0.77	2.0
7	2.0	2.6	2.2	28	113	11	9.6	3.9	35	2.6	0.54	1.7
8	1.4	2.5	2.0	9.8	70	9.3	9.0	3.5	5.4	2.1	0.15	1.6
9	1.5	3.0	1.8	6.1	22	8.4	9.2	3.4	3.7	2.0	0.06	1.1
10	1.4	2.5	86	5.3	32	7.5	13	4.5	3.1	2.1	0.03	1.2
11	1.4	2.8	80	4.5	20	6.4	9.1	23	3.0	1.9	0.10	1.3
12	2.1	2.6	9.7	3.9	13	35	9.9	5.5	2.4	2.3	0.06	1.4
13	2.2	2.9	6.7	7.9	11	73	11	78	2.4	1.3	0.01	1.4
14	9.7	2.5	4.7	4.4	8.9	28	8.4	30	2.0	206	0.11	3.2
15	3.5	2.3	4.0	3.9	8.1	15	7.9	7.0	1.9	14	7.6	49
16	2.2	2.3	3.4	3.1	7.8	11	6.6	4.6	1.7	8.0	101	46
17	3.8	3.0	15	3.2	7.1	99	7.8	4.2	1.6	3.6	176	22
18	4.2	3.2	44	3.3	6.1	38	14	16	2.2	2.0	7.5	4.5
19	3.7	2.8	6.8	225	6.7	21	6.3	6.2	2.5	1.7	3.3	3.1
20	4.6	3.1	5.0	102	6.3	18	5.4	4.1	2.0	1.2	2.1	2.7
21	5.1	2.9	3.9	53	6.3	78	5.0	3.6	1.2	1.1	1.7	2.9
22	5.5	2.8	3.3	23	5.7	26	4.4	3.2	1.3	0.63	1.8	2.9
23	4.7	2.4	3.2	576	5.5	16	4.4	3.2	1.7	0.76	1.4	2.9
24	4.4	25	5.1	72	4.9	12	3.8	3.4	1.6	42	1.4	2.1
25	26	4.2	3.4	96	5.0	10	5.7	3.1	6.5	21	4.8	2.7
26	2.5	2.4	3.0	29	4.9	13	4.3	2.9	6.0	8.7	3.9	44
27	2.1	2.3	3.0	19	4.9	18	3.7	2.9	2.6	3.6	5.4	22
28	2.8	2.5	3.0	14	4.8	9.5	3.9	2.5	2.4	2.2	4.7	13
29	3.2	1.9	2.8	12	---	8.4	3.8	2.3	1.7	1.2	2.8	3.6
30	5.0	2.3	2.7	10	---	19	3.7	118	1.3	1.2	2.3	2.8
31	4.2	---	e2.6	9.0	---	139	---	31	---	1.1	171	---
TOTAL	126.4	113.9	319.4	1468.9	420.7	1105.8	362.9	429.7	174.6	521.49	505.28	287.6
MEAN	4.077	3.797	10.30	47.38	15.03	35.67	12.10	13.86	5.820	16.82	16.30	9.587
MAX	26	25	86	576	113	161	108	118	47	206	176	49
MIN	1.4	1.8	1.7	2.8	4.8	4.3	3.7	2.3	1.2	0.63	0.01	1.1
CFSM	0.12	0.11	0.30	1.37	0.43	1.03	0.35	0.40	0.17	0.49	0.47	0.28
IN.	0.14	0.12	0.34	1.58	0.45	1.19	0.39	0.46	0.19	0.56	0.54	0.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2002, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	25.02	29.19	24.83	60.21	53.47	52.66	40.44	17.49
MAX	53.7	90.4	64.3	147	95.0	79.3	77.0	27.5
(WY)	1996	1996	1998	1998	1997	2001	1997	1995
MIN	2.75	3.80	9.44	13.5	15.0	15.5	11.2	9.55
(WY)	2001	2002	2001	2001	2002	1999	1995	2001

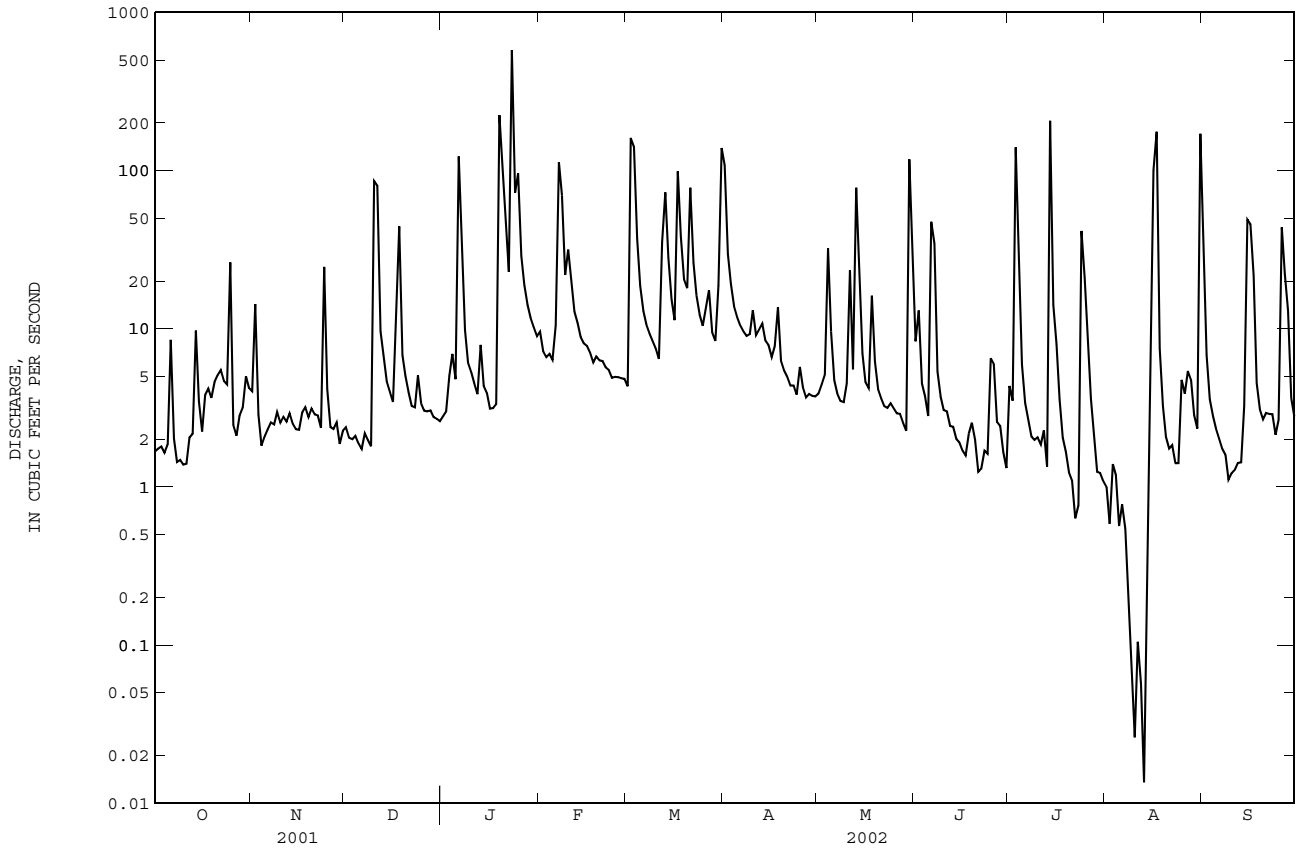
SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1995 - 2002

ANNUAL TOTAL	6368.30	5836.67	
ANNUAL MEAN	17.45	15.99	
HIGHEST ANNUAL MEAN			32.36
LOWEST ANNUAL MEAN			51.1
HIGHEST DAILY MEAN	617	Mar 29	16.0
LOWEST DAILY MEAN	0.52	Aug 23	16.0
ANNUAL SEVEN-DAY MINIMUM	0.69	Aug 27	0.07
MAXIMUM PEAK FLOW			2350
MAXIMUM PEAK STAGE			Aug 27 1995
INSTANTANEOUS LOW FLOW			12.00
ANNUAL RUNOFF (CFSM)	0.50		Jan 23
ANNUAL RUNOFF (INCHES)	6.85		Aug 13
10 PERCENT EXCEEDS	32		0.00
50 PERCENT EXCEEDS	5.4		Aug 8
90 PERCENT EXCEEDS	1.8		0.07
			Aug 8 2002
			1550
			Jan 23
			6260*
			Aug 27 1995
			12.00
			Jan 23
			17.34*
			Aug 27 1995
			0.00*
			Aug 8 2002
			0.94
			12.71
			59
			12
			2.8

e Estimated.

* See REMARKS.

0212414900 MALLARD CREEK BELOW STONY CREEK NEAR HARRISBURG, NC--Continued



PEE DEE RIVER BASIN

0212414900 MALLARD CREEK BELOW STONY CREEK NEAR HARRISBURG, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2000 to October 2002 (discontinued).

INSTRUMENTATION.--Optical backscatterance sensor.

REMARKS.--Station operated in cooperation with Mecklenburg County and City of Charlotte to characterize suspended sediment concentrations in Mallard Creek basin.

WATER-QUALITY DATA, OCTOBER 2001 TO OCTOBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, DIS- CHARGE, SUS- PENDE D (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE D (T/DAY) (80155)
DEC 2001				
03...	1411	2.0	4.9	.03
03...	1548	2.0	4.4	.02
11...	1030	49	78	10.4
JAN 2002				
22...	1430	19	34	1.8
FEB				
25...	1440	4.8	3.1	.04
MAR				
04...	1630	29	15	1.2
05...	1105	18	12	.59
06...	1140	13	7.1	.25
13...	1630	113	105	32.0
MAY				
14...	1040	23	138	8.6
14...	1410	18	120	5.8
17...	1013	4.3	24	.28
29...	1515	2.0	19	.10
31...	0800	32	112	9.7
31...	1045	24	88	5.7
31...	1545	17	321	14.7
31...	1625	16	91	3.9
JUN				
07...	0820	29	133	10.4
07...	1430	16	67	2.9
13...	1000	2.4	66	.42
JUL				
15...	1145	12	52	1.7
AUG				
26...	1145	3.4	15	.14
SEP				
16...	1030	28	43	3.3
16...	1100	25	41	2.8
18...	1330	3.8	19	.20
27...	0800	32	50	4.4
OCT				
11...	0919	1240	876	2920
11...	1008	1200	772	2500
11...	1056	1060	537	1540



Water quality monitoring site at Roanoke River at NC 45 near Westover, North Carolina.

0212427947 REEDY CREEK AT SECONDARY ROAD 2803 NEAR CHARLOTTE, NC

LOCATION.--Lat 35°15'23", long 80°42'02", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03040105, on right downstream wingwall on Secondary Road 2803, 3.8 mi southeast of the University of North Carolina at Charlotte.

DRAINAGE AREA.--2.48 mi².

PERIOD OF RECORD.--October 2001 to September 2002.

GAGE.--Water-stage recorder. Datum of gage is 637.45 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges and those for Oct. to Dec., which are poor. Minimum discharge for period of record and current water year occurred many days.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.08	0.52	0.56	0.29	0.83	0.58	2.0	0.17	0.14	0.07	0.00	0.14
2	0.08	0.81	0.60	0.30	0.72	4.0	1.0	0.16	0.13	0.04	0.02	0.04
3	e0.08	0.65	0.63	0.42	0.70	6.3	0.88	0.18	0.12	0.13	0.03	0.03
4	0.08	0.79	0.67	0.39	0.69	2.6	0.69	0.39	0.11	0.07	0.02	0.02
5	0.08	0.69	0.66	0.36	0.64	1.5	0.64	0.31	0.10	0.05	0.01	0.02
6	e0.18	0.58	0.69	2.1	0.70	1.2	0.59	0.20	0.15	0.02	0.02	0.02
7	0.11	0.51	0.74	1.1	2.9	0.98	0.56	0.19	0.19	0.03	0.00	0.02
8	0.09	0.77	0.80	0.63	2.8	0.87	0.51	0.18	0.11	0.03	0.01	0.02
9	0.10	0.68	0.84	0.48	1.6	0.84	0.52	0.17	0.09	0.02	0.01	0.02
10	0.12	0.80	1.3	0.44	1.5	0.74	0.58	0.20	0.13	0.10	0.00	0.02
11	e0.12	1.2	1.3	0.40	1.4	0.63	0.48	0.25	0.10	0.04	0.00	0.02
12	0.13	1.0	0.91	0.38	1.1	1.1	0.48	0.21	0.08	0.06	0.02	0.02
13	e0.14	0.93	0.47	0.46	0.98	1.7	0.50	0.27	0.09	0.04	0.01	0.02
14	e0.68	0.93	0.31	0.41	0.90	1.2	0.47	0.25	0.08	0.22	0.01	0.01
15	0.65	0.95	0.27	0.39	0.84	0.94	0.44	0.15	0.06	0.06	0.01	0.16
16	e0.42	0.92	0.27	0.38	0.82	0.84	0.41	0.13	0.05	0.06	0.02	0.17
17	e0.38	0.83	0.37	0.37	0.77	2.8	0.38	0.15	0.09	0.03	0.16	0.03
18	e0.26	0.78	0.78	0.37	0.71	2.1	0.35	0.23	0.04	0.02	0.02	0.04
19	e0.26	0.93	0.41	5.7	0.69	1.4	0.32	0.16	0.07	0.03	0.02	0.03
20	e0.20	0.86	0.33	3.8	0.73	1.3	0.30	0.15	0.07	0.02	0.02	0.03
21	0.15	0.81	0.31	1.9	0.72	3.2	0.28	0.13	0.06	0.02	0.01	0.03
22	0.21	0.70	0.30	1.3	0.68	1.9	0.23	0.17	0.05	0.02	0.01	0.03
23	0.25	0.68	0.32	18	0.67	1.3	0.20	0.12	0.08	0.02	0.01	0.03
24	0.17	0.83	0.32	3.9	0.65	1.1	0.19	0.13	0.08	0.03	0.04	0.02
25	0.27	0.85	0.30	4.5	0.62	0.92	0.23	0.13	0.06	e0.03	0.02	0.02
26	0.15	0.76	0.31	2.1	0.66	0.91	0.18	0.13	0.07	e0.03	0.02	0.12
27	0.15	0.62	0.31	1.5	0.62	0.88	0.34	0.12	0.05	0.01	0.02	0.09
28	0.31	0.59	0.30	1.2	0.59	0.73	0.20	0.10	0.04	0.01	0.03	0.05
29	0.40	0.51	0.30	0.99	---	0.74	0.18	0.10	0.04	0.01	0.02	0.03
30	0.41	0.53	0.27	0.92	---	0.83	0.14	0.35	0.01	0.00	0.02	0.03
31	0.42	---	0.29	0.84	---	1.1	---	0.24	---	0.00	1.5	---
TOTAL	7.13	23.01	16.24	56.32	27.23	47.23	14.27	5.82	2.54	1.32	2.11	1.33
MEAN	0.230	0.767	0.524	1.817	0.973	1.524	0.476	0.188	0.085	0.043	0.068	0.044
MAX	0.68	1.2	1.3	18	2.9	6.3	2.0	0.39	0.19	0.22	1.5	0.17
MIN	0.08	0.51	0.27	0.29	0.59	0.58	0.14	0.10	0.01	0.00	0.00	0.01
IN.	0.11	0.34	0.24	0.84	0.41	0.70	0.21	0.09	0.04	0.02	0.03	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

	2001	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002
MEAN	0.230	0.767	0.524	1.817	0.973	1.524	0.476	0.188	0.085	0.043	0.068	0.044
MAX	0.23	0.77	0.52	1.82	0.97	1.52	0.48	0.19	0.085	0.043	0.068	0.044
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002
MIN	0.23	0.77	0.52	1.82	0.97	1.52	0.48	0.19	0.085	0.043	0.068	0.044
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS

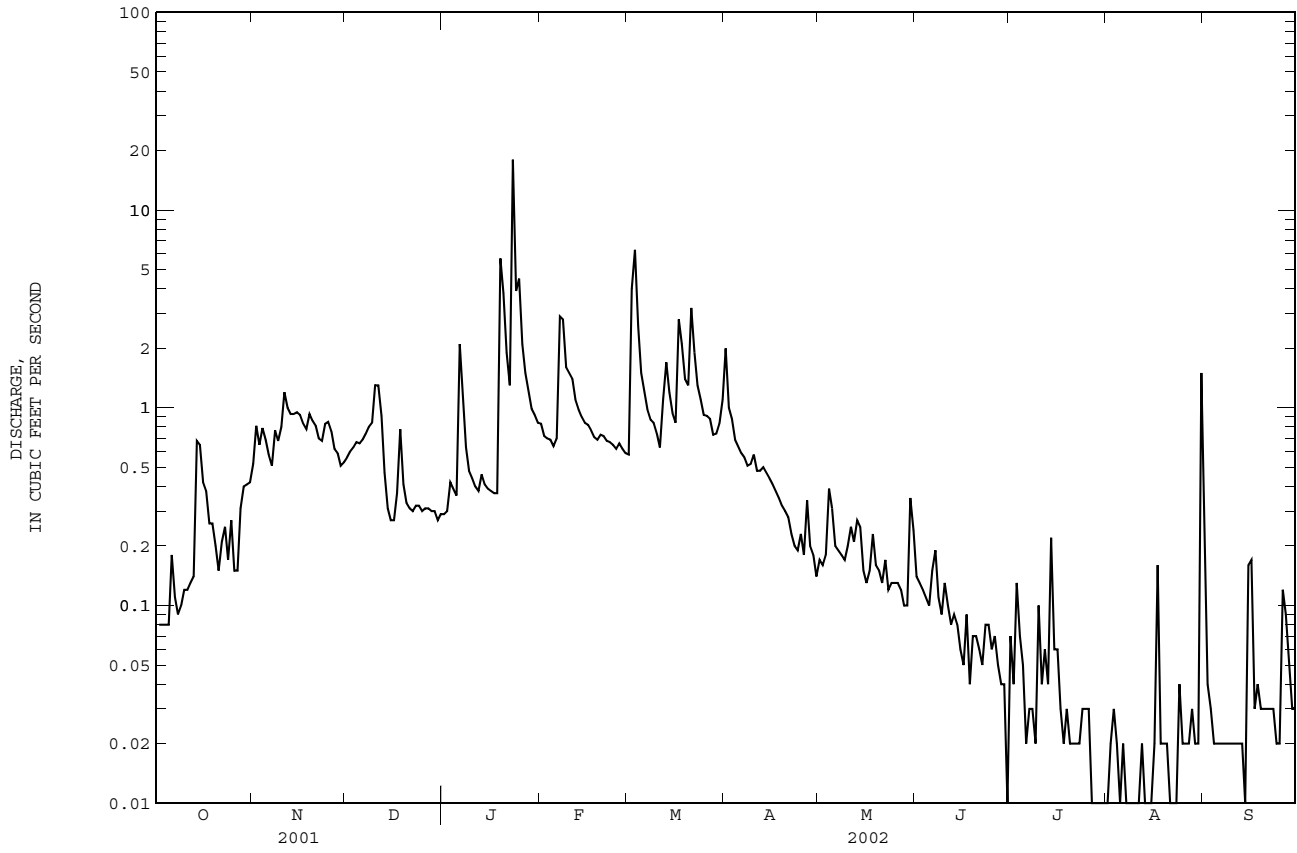
FOR 2002 WATER YEAR

WATER YEARS 2001 - 2002

ANNUAL TOTAL	204.55	
ANNUAL MEAN	0.560	0.560
HIGHEST ANNUAL MEAN		0.56 2002
LOWEST ANNUAL MEAN		0.56 2002
HIGHEST DAILY MEAN	18 Jan 23	18 Jan 23 2002
LOWEST DAILY MEAN	0.00 Jul 30	0.00 Jul 30 2002
ANNUAL SEVEN-DAY MINIMUM	0.01 Jul 27	0.01 Jul 27 2002
MAXIMUM PEAK FLOW	63 Jan 23	63 Jan 23 2002
MAXIMUM PEAK STAGE	2.32 Jan 23	2.32 Jan 23 2002
INSTANTANEOUS LOW FLOW	0.00* Jul 30	0.00* Jun 30 2002
ANNUAL RUNOFF (INCHES)	3.04	3.05
10 PERCENT EXCEEDS	1.1	1.1
50 PERCENT EXCEEDS	0.27	0.27
90 PERCENT EXCEEDS	0.02	0.02

e Estimated.
* See REMARKS.

0212427947 REEDY CREEK AT SECONDARY ROAD 2803 NEAR CHARLOTTE, NC--Continued



0212433550 ROCKY RIVER ABOVE IRISH BUFFALO CREEK NEAR ROCKY RIVER, NC

LOCATION.--Lat 35°19'18", long 80°32'27", North American Datum of 1983, Cabarrus County, Hydrologic Unit 03040105, on left bank at end of maintenance road located within Rocky River Wastewater Treatment Facility, 0.40 mi above confluence with Irish Buffalo Creek, and 1.9 mi northeast of Rocky River.

DRAINAGE AREA.--278 mi².

PERIOD OF RECORD.--April 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 500 ft above NGVD of 1929 (from topographic map). Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. A daily average of 8.8 ft³/s for the current water year, of treated sewage effluent from the Mallard Creek Wastewater Treatment Plant was discharged into the river approximately 7 mi upstream of the gaging station. A daily average of 3.9 ft³/s for the current water year, of treated sewage effluent from the Mooresville Wastewater Treatment Plant was discharged into the river approximately 15 mi upstream of the gaging station. Minimum discharge for period of record and current water year affected by regulation. Minimum discharge for period of record and current water year also occurred Aug. 14, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	31	35	36	e103	59	638	42	80	21	22	340
2	31	30	33	36	87	174	252	43	49	24	20	92
3	31	57	33	42	e80	1010	166	43	40	24	19	50
4	29	37	34	48	e78	448	140	61	33	173	19	38
5	29	31	33	54	76	223	116	101	30	44	19	31
6	30	30	33	169	74	159	105	59	30	26	18	27
7	45	30	33	269	261	133	96	47	204	21	18	25
8	31	29	34	111	588	118	92	43	101	20	18	23
9	30	30	35	76	252	108	88	41	45	19	16	20
10	29	30	47	65	163	103	94	40	35	19	16	21
11	27	30	383	57	172	96	90	52	32	25	e15	18
12	27	31	127	52	129	104	82	58	30	20	e14	17
13	27	31	70	54	110	507	89	50	28	19	13	16
14	28	31	58	54	98	512	83	223	26	192	13	18
15	41	31	52	49	90	231	79	92	24	266	14	108
16	35	32	46	48	86	168	76	56	24	65	49	211
17	28	31	44	46	83	310	70	48	23	43	311	100
18	29	30	134	45	77	439	75	52	23	32	90	72
19	28	30	101	220	74	241	66	64	23	28	43	58
20	33	30	63	978	75	185	59	44	23	25	30	37
21	29	30	52	261	74	323	57	39	21	24	26	32
22	29	30	46	234	73	287	55	39	20	41	25	30
23	30	29	43	1970	68	181	51	38	21	25	22	27
24	32	43	43	1010	64	150	49	38	21	21	20	24
25	51	61	44	552	62	133	51	38	20	111	21	24
26	63	45	40	313	62	126	51	37	27	87	24	43
27	36	38	39	191	60	154	46	35	28	77	25	129
28	31	39	39	155	60	135	45	34	29	39	28	90
29	31	37	38	140	---	114	46	32	43	30	30	53
30	32	35	37	121	---	114	43	32	24	25	25	36
31	33	---	36	115	---	157	---	212	---	21	282	---
TOTAL	1017	1029	1885	7571	3279	7202	3050	1833	1157	1607	1305	1810
MEAN	32.81	34.30	60.81	244.2	117.1	232.3	101.7	59.13	38.57	51.84	42.10	60.33
MAX	63	61	383	1970	588	1010	638	223	204	266	311	340
MIN	27	29	33	36	60	59	43	32	20	19	13	16
CFSM	0.12	0.12	0.22	0.88	0.42	0.84	0.37	0.21	0.14	0.19	0.15	0.22
IN.	0.14	0.14	0.25	1.01	0.44	0.96	0.41	0.25	0.15	0.22	0.17	0.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
MEAN	34.55	49.53	59.06	161.2	115.1	287.2	148.5	67.31	61.83	63.78	59.34	119.7
MAX	36.3	64.8	60.7	244	117	342	229	82.5	101	80.9	86.9	211
(WY)	2001	2001	2002	2002	2002	2001	2000	2000	2001	2001	2000	2000
MIN	32.8	34.3	57.4	78.3	113	232	102	59.1	38.6	51.8	42.2	60.4
(WY)	2002	2002	2001	2001	2001	2002	2002	2002	2002	2002	2002	2002

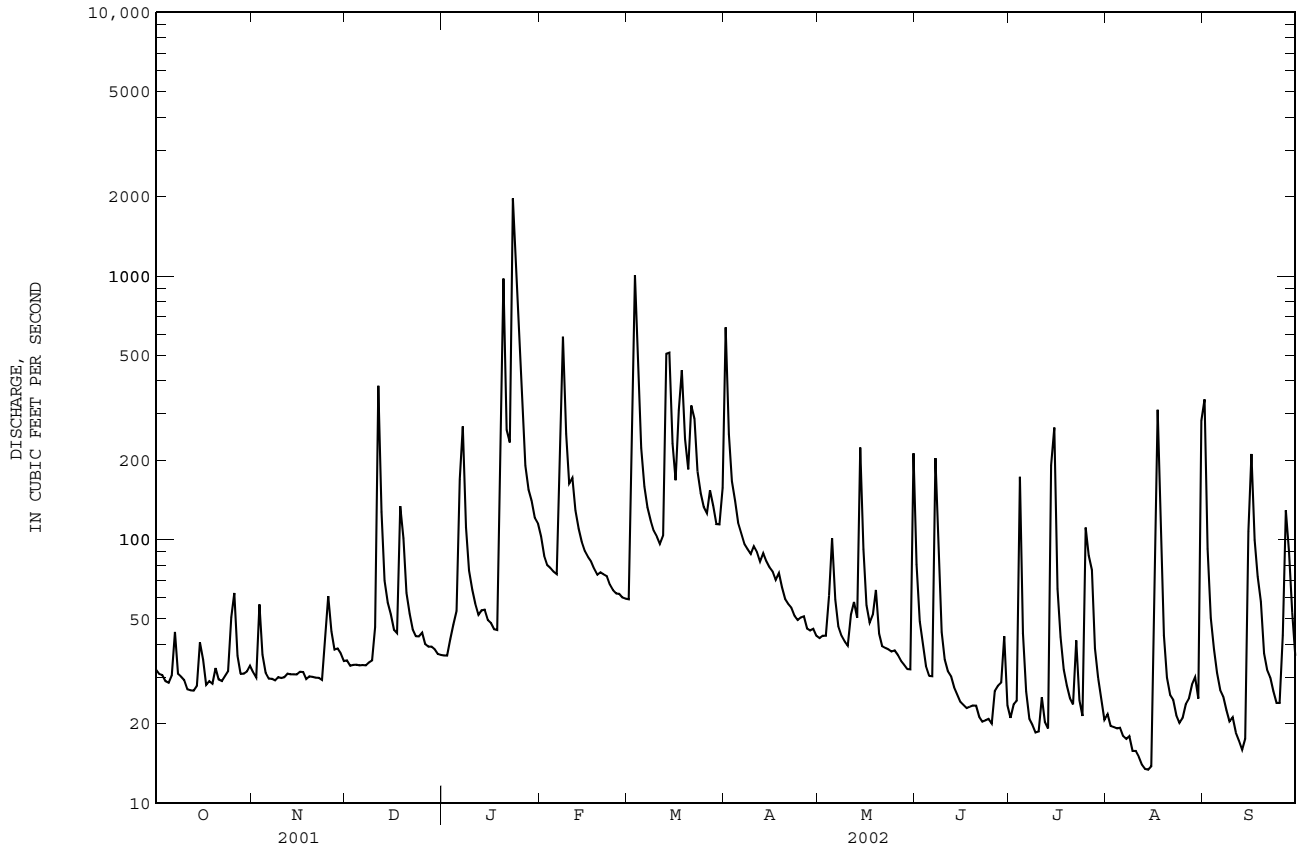
SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2002 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2002 WATER YEAR
ANNUAL TOTAL	35153	32745	35153	32745	32745	35153	32745	32745
ANNUAL MEAN	96.31	89.71	96.31	89.71	89.71	96.31	89.71	89.71
HIGHEST ANNUAL MEAN								
LOWEST ANNUAL MEAN								
HIGHEST DAILY MEAN	2560	Mar 30	2560	Mar 30	2560	2560	2560	2560
LOWEST DAILY MEAN	22	Aug 28	22	Aug 28	22	22	22	22
ANNUAL SEVEN-DAY MINIMUM	23	Aug 27	23	Aug 27	23	23	23	23
MAXIMUM PEAK FLOW								
MAXIMUM PEAK STAGE								
INSTANTANEOUS LOW FLOW								
ANNUAL RUNOFF (CFSM)	0.35	0.32	0.35	0.32	0.32	0.35	0.32	0.32
ANNUAL RUNOFF (INCHES)	4.70	4.38	4.70	4.38	4.38	4.70	4.38	4.38
10 PERCENT EXCEEDS	168	187	168	187	187	168	187	187
50 PERCENT EXCEEDS	52	43	52	43	43	52	43	43
90 PERCENT EXCEEDS	29	22	29	22	22	29	22	22

e Estimated.

* See REMARKS.

0212433550 ROCKY RIVER ABOVE IRISH BUFFALO CREEK NEAR ROCKY RIVER, NC--Continued



02124692 GOOSE CREEK NEAR FAIRVIEW, NC

LOCATION.--Lat 35°09'13", long 80°32'07", North American Datum of 1983, Union County, Hydrologic Unit 03040105, on right bank at downstream side of culvert on U.S. Highway 601, 1.0 mi north of Fairview, and 2.0 mi above Duck Creek.

DRAINAGE AREA.--24.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1999 to current year.

REVISED RECORDS.--WSP 822: Drainage area. WSP 852: 1935-37(m).

GAGE.--Water-stage recorder. Elevation of gage is 475 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharge. Records good. Maximum discharge for period of record from rating curve extended above 600 ft³/s. No flow also occurred Aug. 12, 13, 14, 15, 16, 2002.

REVISIONS.--Maximum discharge for water years 2000, 2001 to 1,360 ft³/s, June 5, 2000, gage height 8.64 ft, 875 ft³/s, Mar. 29, 2001, gage height 6.95 ft.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.30	0.81	0.45	0.98	5.8	2.0	148	1.3	0.62	0.13	0.29	45
2	0.24	0.58	0.36	1.0	5.9	54	30	0.99	0.77	0.13	0.24	8.6
3	0.28	0.51	0.56	1.4	4.1	149	15	1.1	0.79	0.17	0.22	4.3
4	0.22	0.56	0.67	1.6	3.5	39	11	11	0.75	0.17	0.57	1.0
5	0.22	0.52	0.81	1.8	2.6	15	7.4	10	0.58	0.44	0.35	0.58
6	1.2	0.51	0.99	37	2.6	9.4	6.0	3.3	0.65	0.34	0.28	0.48
7	2.9	0.52	0.83	33	76	7.3	4.9	2.1	10	0.18	0.21	0.34
8	0.69	0.64	1.2	9.0	108	5.8	4.5	1.8	1.3	0.10	0.14	0.29
9	0.59	0.71	1.2	4.6	25	4.9	4.2	1.8	0.66	0.07	0.09	0.37
10	0.46	0.50	6.2	3.4	17	4.7	4.7	1.5	0.49	0.06	0.06	0.43
11	0.41	0.48	57	2.6	15	4.0	4.3	1.1	0.45	0.08	0.02	0.34
12	0.37	0.80	5.5	2.2	9.0	5.1	3.8	1.6	0.46	0.10	0.00	0.29
13	0.39	1.1	2.2	3.0	6.7	31	4.2	1.5	0.30	0.13	0.00	0.30
14	42	1.8	1.8	2.8	5.3	20	4.0	18	0.35	0.19	0.00	0.24
15	14	1.3	1.6	2.3	4.6	10	3.4	2.7	0.35	0.83	0.00	33
16	1.3	0.64	1.1	1.9	4.3	7.2	3.2	1.5	0.31	0.50	0.02	36
17	0.84	0.50	1.1	1.8	3.9	30	2.9	0.97	0.28	0.29	7.1	3.7
18	0.65	0.62	5.6	1.6	3.1	33	2.7	2.4	0.27	0.19	1.3	1.2
19	0.62	0.78	2.6	97	3.1	15	2.6	4.4	0.32	0.15	0.41	0.89
20	0.76	1.0	1.5	122	3.0	10	2.3	1.5	0.41	0.15	0.25	0.66
21	0.72	1.2	1.2	32	3.1	89	2.1	1.2	0.41	0.14	0.24	0.77
22	0.79	1.5	1.1	22	2.9	37	1.7	1.2	0.28	0.08	0.21	0.51
23	0.88	1.5	1.0	203	2.6	16	1.6	1.1	0.26	6.2	0.14	0.49
24	0.92	2.1	1.1	50	2.5	11	1.6	1.1	0.20	2.9	0.12	0.42
25	1.9	2.3	1.1	116	2.5	10	1.6	1.0	0.22	30	0.16	0.39
26	1.8	0.99	1.00	31	2.4	8.5	1.6	0.93	0.18	1.9	0.21	1.0
27	0.80	0.77	0.97	14	2.3	10	1.6	0.98	0.18	0.79	0.26	2.7
28	0.73	0.67	0.97	9.4	2.1	6.8	1.7	0.75	0.20	0.68	0.43	1.7
29	0.58	0.70	0.98	7.0	---	5.7	1.7	0.55	0.23	0.54	0.67	1.2
30	0.62	0.64	0.95	5.6	---	5.9	1.6	0.42	0.15	0.39	0.64	0.77
31	0.68	---	0.97	4.6	---	35	---	0.43	---	0.33	195	---
TOTAL	78.86	27.25	104.61	825.58	328.9	691.3	285.9	80.22	22.42	48.35	209.63	147.96
MEAN	2.544	0.908	3.375	26.63	11.75	22.30	9.530	2.588	0.747	1.560	6.762	4.932
MAX	42	2.3	57	203	108	149	148	18	10	30	195	45
MIN	0.22	0.48	0.36	0.98	2.1	2.0	1.6	0.42	0.15	0.06	0.00	0.24
CFSM	0.11	0.04	0.14	1.11	0.49	0.93	0.40	0.11	0.03	0.06	0.28	0.21
IN.	0.12	0.04	0.16	1.28	0.51	1.07	0.44	0.12	0.03	0.07	0.32	0.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

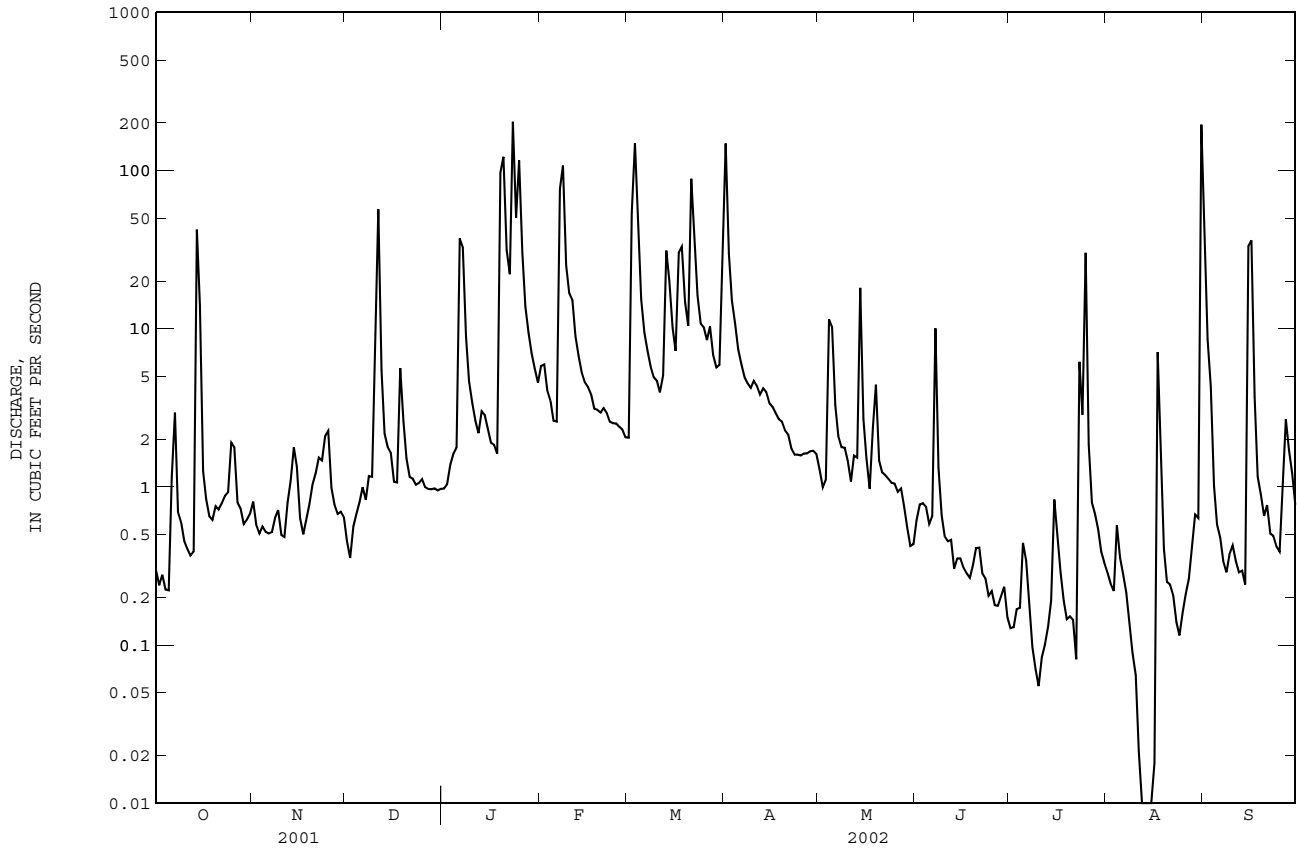
	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
MEAN	1.620	3.009	5.469	21.42	22.82	23.85	8.706	3.167	5.879	1.591	3.204	5.404
MAX	2.54	5.27	10.0	33.1	48.8	33.5	10.8	4.10	10.2	1.72	6.76	6.73
(WY)	2002	2000	2000	2000	2000	2001	2000	2001	2000	2000	2002	2000
MIN	0.70	0.91	2.99	4.55	7.02	15.7	5.82	2.59	0.75	1.49	0.54	4.55
(WY)	2001	2002	2001	2001	2001	2000	2001	2002	2002	2001	2001	2001

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 2000 - 2002

ANNUAL TOTAL	2290.82	2850.98	
ANNUAL MEAN	6.276	7.811	
HIGHEST ANNUAL MEAN			7.81 2002
LOWEST ANNUAL MEAN			6.25 2001
HIGHEST DAILY MEAN	246 Mar 21	203 Jan 23	270 Feb 14 2000
LOWEST DAILY MEAN	0.15 Sep 1	0.00 Aug 12	0.00 Aug 12 2002
ANNUAL SEVEN-DAY MINIMUM	0.19 Aug 27	0.01 Aug 10	0.01 Aug 10 2002
MAXIMUM PEAK FLOW		584 Aug 31	1360* Jun 5 2000
MAXIMUM PEAK STAGE		5.72 Aug 31	8.64 Jun 5 2000
INSTANTANEOUS LOW FLOW		0.00* Aug 11	0.00* Aug 11 2002
ANNUAL RUNOFF (CFSM)	0.26	0.33	0.29
ANNUAL RUNOFF (INCHES)	3.55	4.42	3.98
10 PERCENT EXCEEDS	11	15	14
50 PERCENT EXCEEDS	1.7	1.1	1.6
90 PERCENT EXCEEDS	0.37	0.21	0.29

* See REMARKS.

02124692 GOOSE CREEK NEAR FAIRVIEW, NC--Continued



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2000 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1999 to current year.

pH: November 1999 to current year.

WATER TEMPERATURE: November 1999 to current year.

DISSOLVED OXYGEN: November 1999 to current year.

DISSOLVED OXYGEN, PERCENT SATURATION: November 1999 to current year.

INSTRUMENTATION.-- Water-quality monitor with satellite telemetry from November 1999 to current year, optical backscatterance sensor from April 2000 to current year.

REMARKS.--Station operated in cooperation with North Carolina Department of Transportation to characterize water-quality and suspended sediment concentrations in the Goose Creek basin. Dissolved oxygen, percent saturation, computed using barometric pressure of 747 mm Hg. No flow Aug. 11-16, 2002.

EXTREMES FOR PERIOD OF DAILY RECORD.--Extremes listed below may have been exceeded during periods of missing record.

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	414, April 25, 2001	51, August 17, 2002
pH, standard units	8.2, March 9, 2000	6.1, March 21, 2001
WATER TEMPERATURE, °C	27.7, July 30, 2002	0.2, January 28, 2000, January 4, 2001, January 5, 6, 2002
DISSOLVED OXYGEN, mg/L	12.9, January 27, 2000, January 3, 11, 2001	2.5, August 24, 2002
DISSOLVED OXYGEN, PERCENT SATURATION,%	116, March 9, 2000	29, October 26, 2001

EXTREMES FOR CURRENT YEAR.--Extremes listed below may have been exceeded during periods of missing record.

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	402, August 17, 18	51, August 17
pH, standard units	8.0, February 23, 25, 26, March 29	6.2, October 17
WATER TEMPERATURE, °C	27.7, July 30	0.2, January 5, 6
DISSOLVED OXYGEN, mg/L	12.6, March 1	2.5, August 24
DISSOLVED OXYGEN, PERCENT SATURATION,%	112, March 29	29, October 26

02124692 GOOSE CREEK AT FAIRVIEW, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
NOV				
08...	1015	.54	11	.02
08...	1025	.54	9.3	.01
MAR				
12...	1525	5.3	3.7	.05
12...	1640	5.7	3.7	.06
21...	1330	157	115	48.7
MAY				
23...	1215	1.1	28	.08
23...	1218	1.1	30	.09
JUN				
07...	1030	14	57	2.2
10...	1040	.46	53	.07
10...	1115	.46	49	.06
JUL				
23...	1512	3.4	141	1.3
23...	1543	3.1	166	1.4
23...	1557	3.1	156	1.3
23...	1714	2.6	223	1.6
23...	2015	1.9	254	1.3
23...	2030	1.7	263	1.2
24...	1030	.73	210	.41
24...	1058	.73	172	.34
24...	1130	.73	164	.32
24...	1200	.73	196	.39
24...	1447	.63	153	.26
30...	1415	.39	18	.02
AUG				
02...	1200	.22	15	.01
20...	1245	.22	43	.03
22...	1015	.27	23	.02
22...	1130	.18	22	.01
31...	1719	474	659	844
31...	1745	386	562	586
SEP				
03...	1315	4.3	46	.54
27...	1045	2.9	12	.09

PEE DEE RIVER BASIN

02124692 GOOSE CREEK AT FAIRVIEW, NC--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	145	142	143	294	289	291	337	336	336	280	278	279
2	147	144	145	306	294	301	337	335	336	280	276	279
3	148	146	147	315	306	312	337	336	336	281	274	277
4	150	148	149	321	315	319	336	334	335	286	280	284
5	152	150	151	323	319	321	337	333	334	289	282	286
6	157	142	149	326	321	324	333	330	332	288	177	254
7	230	157	188	326	320	323	330	324	328	219	172	189
8	275	230	250	324	322	323	324	307	316	219	212	214
9	307	275	292	325	323	324	307	299	302	222	214	220
10	323	307	315	326	323	325	300	255	289	230	221	226
11	329	323	326	326	325	325	347	166	195	228	226	227
12	329	321	326	325	322	324	225	198	213	230	225	226
13	321	311	316	322	319	321	242	225	233	236	229	232
14	311	109	249	328	317	321	256	242	249	248	233	242
15	161	127	145	327	322	324	271	256	267	243	239	241
16	176	161	169	334	327	331	269	261	265	250	242	244
17	184	176	180	338	334	336	262	252	260	254	250	253
18	188	184	186	342	338	340	325	251	274	255	246	252
19	191	188	189	346	341	344	279	265	269	246	136	226
20	197	191	193	349	345	347	277	268	274	162	131	147
21	202	197	200	351	348	349	268	242	256	214	162	183
22	206	202	205	351	349	350	242	227	234	207	180	184
23	207	206	206	350	344	349	227	221	223	244	108	151
24	210	205	207	349	338	345	221	220	220	199	126	151
25	210	182	200	351	339	346	228	221	223	206	132	151
26	218	200	210	340	338	339	242	228	236	165	142	153
27	240	218	226	341	339	340	256	242	250	178	165	169
28	272	240	258	341	335	339	261	255	258	187	178	184
29	291	271	283	337	335	336	271	261	265	199	185	191
30	295	291	294	337	335	336	277	271	274	204	199	200
31	293	290	292	---	---	---	280	277	278	205	201	204
MONTH	329	109	219	351	289	330	347	166	273	289	108	217

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	210	202	207	217	211	213	137	97	109	242	239	241
2	208	205	207	243	108	209	136	120	129	243	240	241
3	205	178	190	132	103	111	148	136	142	243	235	241
4	197	183	192	132	112	124	151	148	150	243	219	236
5	200	193	196	147	132	139	158	151	156	235	149	173
6	205	200	202	156	147	153	165	156	160	149	144	145
7	236	134	169	166	156	162	169	161	163	165	145	154
8	146	117	127	174	166	169	171	165	167	175	165	171
9	155	135	146	179	173	175	175	171	173	184	175	179
10	183	154	168	185	179	182	184	174	178	199	184	191
11	177	173	175	186	184	185	184	177	180	202	198	200
12	183	174	179	192	180	186	182	175	179	215	201	206
13	190	182	185	214	159	188	181	176	178	221	191	215
14	196	188	190	159	147	150	186	181	182	238	123	171
15	193	190	192	160	147	155	189	186	187	143	123	134
16	195	192	193	169	158	163	193	189	191	151	143	147
17	196	192	194	225	143	176	196	193	195	157	143	154
18	194	192	193	143	134	138	204	195	201	168	146	155
19	195	192	193	153	142	147	209	204	207	211	168	199
20	199	193	196	172	153	159	211	208	210	210	203	205
21	205	196	199	187	126	152	218	211	213	210	200	207
22	205	200	203	146	130	137	220	218	219	200	175	188
23	205	197	200	165	144	151	---	---	---	175	173	174
24	202	197	199	163	157	160	---	---	---	185	175	178
25	202	197	199	170	161	166	223	220	222	204	185	192
26	---	---	---	177	164	170	223	221	222	220	204	210
27	---	---	---	178	176	177	229	223	224	229	220	224
28	211	203	206	178	174	176	234	229	231	234	229	231
29	---	---	---	178	168	172	238	234	236	235	233	234
30	---	---	---	182	172	177	241	237	238	235	230	233
31	---	---	---	184	134	176	---	---	---	237	227	235
MONTH	---	---	---	243	103	164	---	---	---	243	123	196

02124692 GOOSE CREEK AT FAIRVIEW, NC--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	242	220	238	280	275	277	147	140	142	131	95	117
2	252	242	246	285	280	282	143	135	139	139	129	132
3	257	252	254	292	285	288	142	138	140	144	138	141
4	260	257	258	295	292	293	153	142	150	138	133	135
5	269	260	264	329	295	305	157	153	155	140	135	137
6	277	239	269	346	329	339	161	157	159	144	140	142
7	286	224	245	350	343	346	168	161	165	148	144	146
8	237	210	225	346	343	344	170	167	169	152	148	149
9	210	200	205	347	344	346	171	168	169	154	150	153
10	200	187	194	349	346	347	170	167	168	159	154	156
11	187	182	184	351	348	349	---	---	---	163	159	160
12	182	180	181	351	347	350	---	---	---	165	163	163
13	182	180	180	351	317	347	---	---	---	168	165	166
14	183	181	182	328	317	324	---	---	---	168	165	167
15	186	183	184	366	327	343	---	---	---	325	95	131
16	189	186	187	382	366	375	---	---	---	143	100	117
17	191	188	189	383	377	381	402	51	253	132	121	125
18	197	191	194	383	379	381	402	326	367	143	132	138
19	199	194	197	383	380	382	326	312	316	150	143	146
20	200	197	198	385	382	384	312	306	308	159	150	153
21	207	200	203	385	382	384	306	304	305	177	158	164
22	214	207	210	386	382	384	305	302	303	230	174	191
23	222	214	217	393	336	372	303	301	302	176	174	175
24	229	222	224	336	183	307	303	300	302	181	175	177
25	235	228	230	183	81	93	304	251	294	180	177	179
26	251	235	243	112	96	103	286	276	281	190	166	179
27	258	251	254	122	112	116	284	252	275	284	190	247
28	266	258	260	130	122	126	289	276	285	331	284	304
29	273	266	269	138	130	134	286	253	278	336	299	326
30	276	273	274	144	137	140	253	238	244	299	245	273
31	---	---	---	146	140	142	238	70	142	---	---	---
MONTH	286	180	222	393	81	293	---	---	---	336	95	170

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.0	6.9	6.9	6.7	6.6	6.6	7.4	7.1	7.2	7.6	7.3	7.4
2	7.0	6.9	6.9	6.7	6.6	6.6	7.5	7.1	7.2	7.6	7.3	7.4
3	7.0	6.9	6.9	6.7	6.6	6.7	7.3	7.2	7.2	7.6	7.3	7.4
4	7.0	6.9	7.0	6.8	6.7	6.8	7.3	7.2	7.2	7.5	7.3	7.4
5	7.1	6.9	7.0	6.8	6.7	6.8	7.3	7.2	7.2	7.6	7.4	7.5
6	7.0	6.8	6.9	6.8	6.7	6.7	7.3	7.1	7.2	7.5	7.0	7.3
7	7.1	6.9	7.0	6.8	6.6	6.7	7.3	7.2	7.2	7.1	7.0	7.1
8	7.1	7.1	7.1	6.8	6.6	6.7	7.3	7.2	7.2	7.2	7.1	7.1
9	7.1	7.0	7.1	6.8	6.8	6.8	7.3	7.2	7.2	7.2	7.1	7.2
10	7.1	7.0	7.0	6.8	6.8	6.8	7.2	7.1	7.2	7.2	7.2	7.2
11	7.0	6.9	6.9	6.9	6.8	6.9	7.2	6.9	7.0	7.3	7.1	7.2
12	6.9	6.8	6.9	6.9	6.9	6.9	7.0	6.9	7.0	7.3	7.1	7.2
13	6.8	6.7	6.8	7.0	6.9	6.9	7.0	6.9	6.9	7.3	7.1	7.2
14	6.8	6.3	6.6	7.0	6.9	7.0	7.0	6.9	6.9	7.3	7.1	7.2
15	6.6	6.3	6.5	7.0	7.0	7.0	7.0	6.9	6.9	7.3	7.1	7.2
16	6.4	6.3	6.4	7.1	7.0	7.1	7.0	7.0	7.0	7.3	7.0	7.2
17	6.5	6.2	6.3	7.2	7.1	7.1	7.1	7.0	7.1	7.3	7.0	7.1
18	6.6	6.4	6.5	7.1	7.1	7.1	7.2	7.0	7.1	7.5	7.0	7.2
19	6.5	6.3	6.4	7.1	7.1	7.1	7.2	7.2	7.2	7.3	6.8	7.2
20	6.4	6.3	6.3	7.1	7.1	7.1	7.3	7.2	7.2	6.9	6.7	6.8
21	6.4	6.3	6.3	7.1	7.1	7.1	7.2	7.0	7.1	7.1	6.9	7.0
22	6.4	6.3	6.4	7.2	7.1	7.1	7.1	7.0	7.0	7.1	7.0	7.0
23	6.5	6.4	6.4	7.2	7.1	7.2	7.0	6.9	7.0	7.1	6.7	6.8
24	6.5	6.3	6.4	7.2	7.1	7.2	7.1	6.9	7.0	7.0	6.7	6.9
25	6.6	6.4	6.5	7.2	7.1	7.2	7.1	6.9	7.0	6.9	6.8	6.8
26	6.7	6.5	6.6	7.2	7.1	7.1	7.1	6.9	7.0	7.0	6.9	6.9
27	6.7	6.6	6.7	7.2	7.1	7.2	7.4	6.9	7.1	7.0	7.0	7.0
28	6.7	6.6	6.7	7.3	7.1	7.2	7.4	7.2	7.3	7.1	7.0	7.0
29	6.7	6.6	6.7	7.4	7.1	7.2	7.5	7.2	7.3	7.1	7.0	7.1
30	6.7	6.6	6.7	7.4	7.2	7.3	7.6	7.3	7.4	7.2	7.1	7.1
31	6.7	6.6	6.7	---	---	---	7.6	7.3	7.4	7.2	7.1	7.1
MONTH	7.1	6.2	6.7	7.4	6.6	7.0	7.6	6.9	7.1	7.6	6.7	7.1

PEE DEE RIVER BASIN

02124692 GOOSE CREEK AT FAIRVIEW, NC--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.2	7.1	7.2	7.8	7.4	7.6	6.9	6.6	6.7	7.2	7.0	7.2
2	7.3	7.2	7.2	7.6	6.8	7.4	7.0	6.7	6.9	7.2	7.0	7.1
3	7.3	7.2	7.3	6.8	6.8	6.8	7.2	6.9	7.0	7.2	7.1	7.1
4	7.4	7.2	7.3	7.0	6.8	6.9	7.3	7.0	7.1	7.3	7.1	7.1
5	7.4	7.3	7.4	7.1	7.0	7.0	7.3	7.1	7.2	7.3	7.0	7.2
6	7.5	7.3	7.4	7.3	6.9	7.1	7.4	7.1	7.2	7.0	6.9	7.0
7	7.5	7.1	7.3	7.2	7.0	7.1	7.5	7.2	7.3	7.2	6.9	7.0
8	7.2	7.0	7.1	7.2	7.0	7.1	7.5	7.2	7.3	7.2	7.1	7.1
9	7.1	7.0	7.1	7.3	6.9	7.1	7.4	7.2	7.3	7.2	7.1	7.1
10	7.1	7.0	7.0	7.4	6.9	7.1	7.4	7.1	7.2	7.2	7.1	7.1
11	7.2	7.0	7.1	7.4	6.8	7.1	7.4	7.1	7.3	7.2	7.1	7.2
12	7.1	7.0	7.0	7.1	6.8	7.0	7.3	7.1	7.2	7.2	7.2	7.2
13	7.1	7.0	7.0	7.2	7.0	7.1	7.3	7.1	7.2	7.2	7.1	7.2
14	7.3	6.9	7.1	7.3	7.0	7.1	7.3	7.1	7.2	7.2	7.0	7.1
15	7.4	7.2	7.3	7.5	7.1	7.3	7.3	7.2	7.2	7.2	7.0	7.1
16	7.4	7.2	7.3	7.6	7.2	7.3	7.2	7.1	7.2	7.2	7.0	7.1
17	7.6	7.2	7.4	7.3	7.0	7.2	7.2	7.1	7.2	7.1	7.0	7.1
18	7.6	7.3	7.4	7.3	7.0	7.2	7.2	7.1	7.1	7.1	7.0	7.1
19	7.7	7.4	7.5	7.4	7.2	7.3	7.2	7.0	7.1	7.3	7.1	7.2
20	7.7	7.4	7.5	7.5	7.3	7.4	7.1	7.0	7.1	7.3	7.3	7.3
21	7.8	7.4	7.6	7.4	7.0	7.2	7.2	7.1	7.1	7.3	7.2	7.3
22	7.9	7.4	7.6	7.1	7.0	7.1	7.1	7.1	7.1	7.3	7.1	7.2
23	8.0	7.3	7.6	7.2	7.0	7.1	---	---	---	7.2	7.1	7.2
24	7.9	7.3	7.6	7.3	7.1	7.2	---	---	---	7.2	7.1	7.2
25	8.0	7.4	7.6	7.5	7.2	7.3	7.4	7.2	7.3	7.3	7.2	7.2
26	---	---	---	7.6	7.1	7.3	7.3	7.2	7.2	7.3	7.2	7.2
27	---	---	---	7.7	7.2	7.4	7.4	7.2	7.3	7.3	7.1	7.2
28	7.8	7.4	7.6	7.9	7.3	7.5	7.3	7.2	7.2	7.2	7.1	7.1
29	---	---	---	8.0	7.2	7.5	7.2	7.1	7.2	7.3	7.1	7.2
30	---	---	---	7.7	7.1	7.3	7.2	7.1	7.2	7.3	7.2	7.2
31	---	---	---	7.3	6.9	7.1	---	---	---	7.2	7.0	7.1
MONTH	---	---	---	8.0	6.8	7.2	---	---	---	7.3	6.9	7.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.2	7.1	7.1	7.4	7.2	7.3	7.2	7.0	7.1	7.2	7.0	7.1
2	7.2	7.1	7.1	7.4	7.2	7.3	7.3	6.8	7.1	7.2	7.2	7.2
3	7.2	7.0	7.1	7.4	7.2	7.3	7.3	7.1	7.2	7.3	7.2	7.2
4	7.0	6.9	7.0	7.4	7.2	7.3	7.2	7.1	7.1	7.2	7.1	7.2
5	7.2	7.0	7.0	7.3	7.1	7.2	7.3	7.2	7.2	7.2	7.0	7.1
6	7.2	7.0	7.1	7.3	7.2	7.3	7.3	7.2	7.3	7.1	7.0	7.0
7	7.1	6.9	7.0	7.4	7.2	7.3	7.3	7.1	7.2	7.1	7.0	7.0
8	7.0	6.9	6.9	7.5	7.2	7.3	7.3	7.1	7.2	7.0	6.9	6.9
9	7.0	6.9	7.0	7.6	7.2	7.4	7.3	7.2	7.3	7.0	6.9	6.9
10	7.0	6.9	7.0	7.6	7.3	7.4	7.3	7.2	7.2	7.0	6.8	6.9
11	7.0	7.0	7.0	7.4	7.2	7.3	---	---	---	6.9	6.8	6.8
12	7.1	7.0	7.1	7.6	7.2	7.4	---	---	---	6.9	6.7	6.8
13	7.2	7.1	7.1	7.5	7.3	7.4	---	---	---	6.9	6.8	6.8
14	7.2	7.1	7.1	7.3	7.2	7.2	---	---	---	6.8	6.6	6.7
15	7.2	7.1	7.2	7.3	7.2	7.2	---	---	---	6.8	6.4	6.6
16	7.2	7.1	7.2	7.3	7.2	7.2	---	---	---	6.8	6.5	6.7
17	7.2	7.0	7.1	7.4	7.2	7.3	7.2	6.4	7.0	6.9	6.7	6.8
18	7.1	7.0	7.1	7.4	7.2	7.3	7.0	6.9	7.0	6.9	6.7	6.8
19	7.2	7.0	7.1	7.4	7.2	7.3	7.0	7.0	7.0	6.9	6.8	6.9
20	7.2	7.1	7.2	7.4	7.1	7.2	7.1	6.9	7.0	7.0	6.9	6.9
21	7.3	7.2	7.2	7.4	7.2	7.3	7.0	6.8	6.9	7.0	6.9	7.0
22	7.4	7.2	7.3	7.4	7.2	7.3	7.0	6.8	6.9	7.0	6.9	6.9
23	7.4	7.3	7.4	7.3	6.9	7.2	7.0	6.8	6.9	7.0	6.9	7.0
24	7.4	7.3	7.3	7.2	6.8	7.1	7.0	6.8	6.9	7.5	7.0	7.2
25	7.5	7.3	7.4	6.8	6.6	6.6	6.9	6.8	6.8	7.4	7.4	7.4
26	7.5	7.3	7.4	6.7	6.6	6.6	7.0	6.7	6.8	7.4	7.2	7.3
27	7.6	7.4	7.4	6.7	6.6	6.7	6.9	6.8	6.8	7.4	7.2	7.3
28	7.5	7.3	7.4	7.0	6.7	6.9	7.3	6.8	7.0	7.4	7.2	7.2
29	7.4	7.2	7.3	6.8	6.6	6.7	7.3	7.2	7.3	7.2	7.1	7.2
30	7.4	7.2	7.2	6.8	6.6	6.7	7.4	7.3	7.4	7.1	7.0	7.1
31	---	---	---	7.1	6.8	6.9	7.5	6.8	7.1	---	---	---
MONTH	7.6	6.9	7.2	7.6	6.6	7.2	---	---	---	7.5	6.4	7.0

02124692 GOOSE CREEK AT FAIRVIEW, NC--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15.1	11.5	13.5	11.7	8.0	9.8	16.4	12.9	14.6	4.8	2.6	3.5
2	15.9	12.3	14.2	13.1	9.9	11.5	14.2	10.8	12.3	2.8	0.9	2.3
3	16.8	13.0	15.0	15.4	12.3	13.6	12.4	9.0	10.5	1.7	1.1	1.5
4	17.1	13.7	15.4	14.4	11.7	13.2	11.3	7.5	9.2	2.2	0.4	1.1
5	17.8	14.2	16.1	12.8	9.9	11.2	11.7	7.5	9.3	1.9	0.2	1.0
6	17.2	15.0	16.6	11.3	8.0	9.7	12.7	8.4	10.2	2.2	0.2	0.9
7	15.0	12.9	14.2	11.3	7.2	9.2	13.1	9.2	10.9	3.7	2.2	3.0
8	13.3	11.0	12.4	11.2	7.3	9.2	13.3	10.3	11.8	3.4	2.0	2.6
9	12.7	10.2	11.6	11.6	7.7	9.5	12.7	10.9	11.6	3.3	1.6	2.5
10	13.6	10.3	11.9	11.9	6.7	9.2	10.9	9.3	10.1	5.9	3.1	4.5
11	14.9	11.7	13.3	11.4	7.9	9.7	10.3	8.8	9.6	8.1	5.8	6.9
12	15.5	13.5	14.5	10.7	7.3	8.9	10.9	10.3	10.6	6.5	4.8	5.9
13	16.6	13.5	15.2	9.4	5.6	7.5	11.8	10.9	11.4	6.5	4.8	5.8
14	20.2	15.5	17.2	8.9	5.8	7.3	13.5	11.8	12.7	5.2	3.8	4.6
15	19.2	16.1	17.4	9.8	6.9	8.1	13.2	11.2	12.4	5.8	3.6	4.8
16	16.1	13.8	15.0	10.8	6.1	8.4	11.2	9.6	10.2	4.9	3.0	4.2
17	13.8	11.8	12.9	11.5	7.0	9.7	11.6	9.7	10.6	5.3	3.0	4.3
18	12.3	9.8	11.2	10.8	6.9	8.8	11.8	10.6	11.3	7.2	5.3	5.9
19	12.2	9.0	10.7	12.3	8.2	9.8	10.6	9.0	9.7	5.8	4.6	5.3
20	12.8	10.0	11.5	11.1	8.0	9.5	9.0	7.0	8.0	6.4	4.9	5.6
21	13.7	10.6	12.2	9.3	6.1	7.6	7.2	5.2	6.1	7.3	5.5	6.2
22	15.0	12.4	13.6	8.9	5.2	7.0	6.2	4.3	5.1	6.7	4.8	5.8
23	16.3	13.4	14.7	9.3	5.5	7.4	6.8	4.3	5.4	8.4	6.2	7.1
24	17.5	14.0	15.7	10.9	8.6	9.8	8.3	5.8	7.1	10.7	8.4	9.6
25	17.3	14.9	16.5	13.2	10.7	12.0	6.0	4.4	5.2	10.9	8.5	10.2
26	15.0	12.6	14.0	14.6	12.4	13.3	6.1	3.5	4.8	8.5	5.9	7.0
27	12.6	9.9	11.2	15.6	12.6	13.9	4.9	2.7	3.5	8.2	5.6	6.7
28	10.5	7.9	9.2	16.0	12.5	14.1	5.1	2.6	3.7	10.3	8.1	9.1
29	10.2	6.6	8.5	16.5	12.8	14.5	6.6	3.9	4.9	11.2	8.8	10.1
30	10.7	6.7	8.7	16.2	14.9	15.5	5.5	3.4	4.2	13.4	10.8	12.1
31	10.7	7.0	8.8	---	---	---	4.6	3.0	3.8	14.6	12.3	13.4
MONTH	20.2	6.6	13.3	16.5	5.2	10.3	16.4	2.6	8.7	14.6	0.2	5.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	16.1	13.9	14.9	7.1	3.3	5.4	17.4	14.0	15.6	18.8	16.6	17.7
2	14.6	10.1	12.6	8.1	5.1	6.0	17.3	13.3	15.5	21.1	18.2	19.5
3	10.1	8.2	8.9	10.5	8.0	9.1	19.4	15.6	17.4	20.5	18.8	19.7
4	8.2	5.6	7.3	9.8	6.6	7.9	17.9	14.3	15.8	18.8	15.5	17.0
5	5.8	4.1	5.1	6.6	4.1	5.6	15.5	12.3	13.8	16.0	14.7	15.4
6	5.4	4.5	5.0	8.2	4.7	6.4	14.8	11.8	13.0	16.5	14.7	15.7
7	7.0	4.8	5.8	9.9	6.1	7.9	14.5	10.5	12.3	18.8	16.2	17.4
8	8.6	6.1	7.3	11.5	7.5	9.4	15.6	11.1	13.3	20.3	18.1	19.1
9	8.2	6.0	7.3	13.5	9.7	11.7	16.7	13.8	15.3	21.7	19.8	20.6
10	9.0	7.6	8.2	13.8	11.3	12.5	18.6	15.7	16.9	21.5	20.1	20.9
11	9.5	8.2	8.8	12.0	8.7	10.6	19.5	16.3	17.9	20.8	19.5	20.1
12	8.2	6.0	7.2	10.6	9.2	9.9	18.6	17.0	17.4	20.7	18.9	19.8
13	7.9	6.3	7.0	11.6	10.0	10.8	18.4	16.4	17.5	21.8	20.0	20.7
14	8.0	5.8	6.7	13.8	10.7	12.2	19.5	16.6	18.2	20.2	17.6	18.9
15	8.3	5.2	6.7	16.7	13.5	14.9	20.7	18.2	19.6	17.6	15.9	16.8
16	9.9	6.7	8.1	17.7	14.9	16.2	22.2	19.1	20.7	18.0	15.7	16.9
17	9.0	6.9	7.9	16.4	13.3	15.2	22.7	20.1	21.5	19.8	17.1	18.3
18	7.6	5.0	6.4	13.3	11.7	12.5	22.9	20.6	22.0	19.4	17.1	18.7
19	7.4	4.2	6.0	13.8	12.4	13.1	23.0	21.3	22.3	17.1	15.2	16.0
20	9.2	6.5	8.0	14.9	13.1	13.9	22.8	21.5	22.2	15.2	13.9	14.6
21	11.9	9.0	10.3	14.6	12.9	13.8	23.1	21.1	22.2	14.6	13.4	14.1
22	10.6	8.7	9.9	12.9	10.1	11.2	22.7	20.5	22.0	14.8	12.3	13.5
23	10.1	8.5	9.3	10.7	7.8	9.5	---	---	---	15.1	11.6	13.4
24	9.7	6.4	8.1	12.6	8.6	10.5	---	---	---	16.4	12.6	14.5
25	9.7	5.8	7.9	15.4	10.9	13.0	19.4	17.1	18.0	17.7	14.5	16.1
26	---	---	---	16.9	14.2	15.6	17.5	15.9	16.7	18.8	15.7	17.3
27	---	---	---	17.9	14.8	16.2	17.1	15.5	16.2	20.0	17.2	18.5
28	7.2	3.9	5.6	15.4	12.7	14.0	19.0	16.7	17.8	20.2	17.1	18.7
29	---	---	---	16.1	11.5	13.7	20.3	18.0	19.0	20.4	17.7	19.1
30	---	---	---	16.4	13.9	15.1	18.4	16.3	17.3	20.8	18.9	19.7
31	---	---	---	16.7	15.1	15.9	---	---	---	22.3	19.4	20.7
MONTH	---	---	---	17.9	3.3	11.6	---	---	---	22.3	11.6	17.7

PEE DEE RIVER BASIN

02124692 GOOSE CREEK AT FAIRVIEW, NC--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	23.1	20.0	21.4	24.9	22.1	23.5	25.9	24.0	25.1	20.9	20.2	20.5
2	23.9	20.6	22.2	25.1	22.2	23.7	25.8	23.4	24.6	21.4	20.3	20.8
3	24.0	21.6	22.7	25.3	23.0	24.2	25.7	22.9	24.2	22.1	20.6	21.3
4	24.1	21.4	22.8	24.8	22.3	23.6	25.2	22.4	24.0	23.2	21.2	22.2
5	24.9	22.1	23.4	24.4	22.0	23.3	25.5	22.4	24.1	23.9	22.1	22.9
6	24.5	22.6	23.4	25.4	23.3	24.3	25.4	22.8	24.3	22.9	20.2	21.7
7	22.7	21.8	22.3	24.3	21.9	23.3	24.6	21.4	22.7	22.1	19.9	21.2
8	22.0	20.1	21.2	23.8	20.9	22.6	22.1	19.2	20.8	21.9	19.0	20.7
9	21.7	18.2	20.1	24.7	21.4	23.1	21.5	18.9	20.4	21.8	19.5	20.8
10	22.2	17.9	20.1	25.5	23.1	24.2	21.7	19.1	20.4	21.9	19.5	20.7
11	22.4	18.5	20.5	24.6	21.7	23.2	---	---	---	22.3	19.3	20.9
12	23.0	19.7	21.4	21.9	20.7	21.3	---	---	---	21.1	18.9	20.2
13	23.9	20.6	22.3	22.3	20.2	21.3	---	---	---	21.0	18.4	19.8
14	23.6	21.4	22.4	23.9	21.9	22.7	---	---	---	21.6	20.5	21.0
15	23.1	21.0	22.1	23.5	22.1	22.8	---	---	---	21.9	20.5	21.5
16	22.4	18.9	20.8	25.4	22.4	23.8	---	---	---	23.0	21.7	22.4
17	22.2	19.5	20.9	25.4	22.1	23.9	24.4	22.7	23.6	23.1	22.4	22.8
18	21.8	19.1	20.5	25.7	22.8	24.3	25.5	23.3	24.3	23.1	22.5	22.8
19	22.9	19.5	21.2	26.2	23.6	24.9	25.7	23.5	24.4	23.2	22.3	22.6
20	22.5	19.9	21.3	25.8	23.6	24.7	25.2	22.9	24.2	23.2	22.2	22.6
21	22.1	18.9	20.7	25.7	23.3	24.5	25.7	23.0	24.3	23.1	21.5	22.4
22	21.8	19.6	20.8	25.4	23.2	24.2	25.8	23.8	24.8	23.0	21.7	22.4
23	23.7	20.7	21.9	24.6	23.0	23.9	26.2	24.0	25.0	22.6	21.5	22.1
24	23.7	20.7	22.3	25.5	23.8	24.4	26.5	24.2	25.2	21.5	20.4	20.9
25	24.4	21.3	22.8	24.2	23.5	23.8	25.5	23.8	24.6	20.6	19.7	20.1
26	24.2	22.7	23.4	25.1	23.3	24.2	24.6	23.4	24.0	20.2	19.4	19.7
27	25.0	22.6	23.8	26.4	24.0	25.2	23.8	22.7	23.1	21.9	20.1	21.1
28	24.3	22.6	23.5	27.0	24.3	25.7	22.9	21.3	21.7	21.8	21.1	21.5
29	25.0	22.4	23.7	27.5	24.8	26.2	21.5	20.8	21.2	21.5	20.5	21.1
30	24.4	22.1	23.4	27.7	25.0	26.5	21.2	20.8	21.0	21.2	19.7	20.5
31	---	---	---	26.8	24.4	25.8	20.8	20.2	20.6	---	---	---
MONTH	25.0	17.9	22.0	27.7	20.2	24.0	---	---	---	23.9	18.4	21.4

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.6	6.9	7.3	5.7	5.0	5.4	7.6	4.7	5.6	12.0	9.8	10.7
2	7.8	7.0	7.3	5.6	5.1	5.4	8.4	4.6	5.9	11.9	10.2	10.8
3	7.9	6.9	7.3	5.3	4.5	4.9	6.9	5.0	5.7	12.0	10.3	11.0
4	7.8	6.9	7.3	5.1	4.5	4.8	6.7	5.3	5.9	12.0	10.9	11.4
5	7.8	6.7	7.2	4.9	4.3	4.6	6.7	5.7	6.1	12.4	11.3	11.8
6	7.2	5.4	6.5	4.8	4.3	4.5	6.8	5.8	6.2	11.8	11.0	11.4
7	7.6	5.6	7.0	4.8	4.3	4.6	6.7	5.6	6.0	11.1	10.6	10.9
8	---	---	---	5.3	4.5	4.9	6.4	5.4	5.8	11.2	10.6	11.0
9	---	---	---	5.5	4.8	5.1	6.3	5.3	5.7	11.3	10.8	11.1
10	8.2	7.3	7.8	5.8	4.8	5.2	6.8	5.3	5.7	10.8	10.0	10.6
11	7.9	7.0	7.4	5.6	4.8	5.1	8.6	6.8	8.3	10.3	9.5	9.9
12	7.6	6.6	7.0	5.6	4.8	5.2	7.9	7.3	7.6	10.6	9.4	9.9
13	7.6	6.4	6.9	5.8	4.9	5.3	7.3	6.6	7.0	10.6	9.5	10.0
14	7.6	5.0	6.6	5.6	5.0	5.2	6.7	6.4	6.5	11.2	10.1	10.6
15	6.1	5.7	5.9	6.1	5.6	5.8	7.0	6.3	6.6	11.5	10.3	10.8
16	5.8	5.3	5.7	6.5	5.6	6.0	7.3	6.8	7.0	12.2	10.4	11.2
17	---	---	---	6.4	5.6	5.9	7.6	6.9	7.2	12.0	10.6	11.2
18	6.4	5.9	6.1	6.5	5.5	5.9	7.6	6.7	7.1	11.9	10.2	10.9
19	6.5	6.0	6.2	6.2	5.3	5.7	8.1	7.5	7.8	10.5	9.8	10.1
20	6.5	6.1	6.3	5.9	5.3	5.5	8.6	7.7	8.2	10.5	9.7	10.1
21	6.7	6.0	6.4	6.1	5.6	5.9	9.2	8.3	8.7	9.9	9.6	9.7
22	6.4	5.7	6.1	6.3	5.8	6.0	9.5	8.9	9.1	10.2	9.2	9.8
23	6.1	5.1	5.7	6.6	6.0	6.3	10.0	8.9	9.4	10.2	8.9	9.5
24	5.5	3.9	5.0	6.5	5.9	6.2	9.9	8.9	9.3	9.1	7.5	8.3
25	5.3	3.4	3.9	6.0	5.3	5.8	10.4	9.1	9.6	8.7	7.8	8.4
26	3.9	2.9	3.6	6.2	5.6	5.9	10.6	9.4	9.9	9.3	8.6	9.0
27	4.5	3.9	4.2	6.4	5.4	5.9	11.1	9.7	10.3	8.9	7.8	8.6
28	5.6	4.1	5.2	6.8	5.4	6.0	11.2	9.7	10.3	8.0	7.5	7.8
29	5.8	5.2	5.5	7.7	5.4	6.3	11.4	9.5	10.3	8.3	7.3	7.7
30	5.8	5.2	5.5	7.1	4.9	5.7	11.6	9.6	10.4	8.1	7.3	7.8
31	5.9	5.3	5.6	---	---	---	11.9	9.8	10.5	7.8	7.1	7.4
MONTH	---	---	---	7.7	4.3	5.5	11.9	4.6	7.7	12.4	7.1	10.0

PEE DEE RIVER BASIN

02124692 GOOSE CREEK AT FAIRVIEW, NC--Continued

OXYGEN DISSOLVED (% OF SATURATION), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	77	68	72	52	46	49	79	46	57	95	76	82
2	79	69	73	54	47	50	83	42	56	90	74	80
3	82	69	74	54	44	48	66	44	52	87	74	80
4	82	69	74	51	43	46	62	46	52	89	77	82
5	84	68	74	47	39	43	63	49	54	90	79	85
6	76	55	68	44	38	40	65	52	56	85	80	82
7	75	57	70	44	39	41	65	51	55	84	81	82
8	---	---	---	48	39	43	62	51	55	85	80	82
9	---	---	---	52	42	46	60	49	53	86	80	83
10	80	70	74	55	42	46	61	48	52	88	81	83
11	80	69	72	52	42	45	76	60	74	89	79	83
12	77	66	70	51	42	45	72	67	69	87	75	81
13	80	66	70	51	42	46	67	62	65	88	76	82
14	81	51	70	48	42	44	65	61	63	89	80	84
15	66	59	63	54	48	50	68	60	63	94	80	86
16	60	54	58	59	49	52	68	61	64	97	79	88
17	---	---	---	60	49	52	71	64	66	96	80	88
18	60	55	57	60	48	52	71	62	66	100	82	89
19	61	55	57	59	47	52	74	67	70	86	78	81
20	63	57	59	55	46	49	75	66	70	85	79	82
21	64	58	61	54	48	50	78	67	72	82	78	80
22	64	57	60	55	48	51	78	70	73	83	76	80
23	63	52	58	58	50	53	83	72	76	84	75	80
24	58	41	51	58	53	56	86	73	78	79	69	74
25	56	35	41	58	49	55	85	73	77	79	72	77
26	38	29	35	62	54	57	87	74	78	78	72	75
27	42	36	39	65	53	58	88	74	79	74	67	71
28	51	37	45	70	52	59	89	75	80	73	66	69
29	51	46	48	80	52	64	94	75	82	77	65	70
30	52	46	48	74	50	58	94	75	81	77	70	73
31	53	47	49	---	---	---	94	75	81	78	68	72
MONTH	---	---	---	80	38	50	94	42	67	100	65	80
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	78	70	73	106	84	96	88	77	82	72	59	64
2	81	70	75	97	87	92	88	76	81	71	54	61
3	80	71	75	93	85	88	91	72	79	63	51	55
4	83	70	75	91	84	87	92	71	80	75	52	59
5	83	71	77	93	84	89	95	75	83	75	67	72
6	82	73	78	93	83	87	97	77	85	68	64	66
7	80	75	79	95	80	86	100	79	87	67	60	63
8	---	---	---	98	80	87	102	79	88	64	54	60
9	---	---	---	101	80	88	98	79	87	62	56	58
10	---	---	---	104	77	88	100	76	86	60	54	56
11	---	---	---	107	77	90	101	76	87	59	51	55
12	---	---	---	97	79	86	85	74	79	58	48	55
13	---	---	---	87	79	83	91	68	79	68	55	58
14	---	---	---	95	79	85	90	69	79	72	45	67
15	98	84	90	100	77	86	83	66	74	66	62	64
16	99	83	89	98	77	85	78	62	69	67	59	63
17	97	80	87	84	74	79	74	57	65	66	61	63
18	98	79	87	89	80	83	66	55	60	67	56	61
19	101	81	90	91	78	83	65	53	59	74	63	69
20	101	81	89	91	77	81	65	54	58	70	67	69
21	101	78	88	84	72	79	64	55	59	71	61	67
22	101	74	86	92	80	85	63	55	58	74	66	69
23	103	77	90	96	80	87	---	---	---	75	67	70
24	106	79	92	99	80	88	---	---	---	77	68	71
25	107	81	94	101	80	88	69	59	63	78	68	71
26	---	---	---	102	75	85	69	59	62	79	68	71
27	---	---	---	101	74	85	76	61	67	79	68	71
28	105	82	93	105	78	88	74	62	66	77	66	70
29	---	---	---	112	80	92	69	59	63	76	65	69
30	---	---	---	103	76	86	71	57	64	77	60	67
31	---	---	---	94	75	81	---	---	---	81	62	69
MONTH	---	---	---	112	72	86	---	---	---	81	45	65

PEE DEE RIVER BASIN

02124742 ROCKY RIVER NEAR STANFIELD, NC

LOCATION.--Lat 35°10'10", long 80°28'23", North American Datum of 1983, Union County, Hydrologic Unit 03040105, on right bank at bridge on Secondary Road 1606, 1.3 mi upstream from Crooked Creek, and 5.0 mi southwest of Stanfield

DRAINAGE AREA.--628 mi².

PERIOD OF RECORD.--April 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 440 ft above NGVD of 1929 (from topographic map). Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. WSACC Rocky River waste water treatment plant discharged an average of 22.6 ft³/s during the current water year as treated effluent 16.5 mi upstream from station. Minimum discharge for period of record and current water year affected by regulation.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	77	84	74	266	156	1920	138	222	51	46	1180
2	72	77	83	74	254	258	841	134	106	50	48	294
3	67	93	78	80	227	2800	520	132	87	53	44	138
4	67	115	82	91	209	1540	445	144	76	167	43	94
5	68	66	83	110	196	631	360	261	69	148	43	75
6	74	64	82	162	189	439	315	196	64	e71	46	62
7	88	63	84	575	581	357	286	150	233	e53	42	55
8	86	64	85	281	2090	309	267	133	238	e48	41	52
9	76	64	83	184	864	279	259	129	116	47	41	47
10	73	66	94	147	523	260	269	123	79	50	40	46
11	71	67	580	131	534	239	272	120	69	53	40	47
12	67	67	308	117	415	233	246	146	63	58	36	44
13	67	72	162	114	337	732	253	128	60	53	40	42
14	139	73	123	120	292	1370	252	353	54	58	46	42
15	175	77	106	111	261	618	237	246	51	499	57	122
16	96	78	94	106	246	439	233	142	50	188	62	456
17	72	77	85	100	232	479	221	112	43	98	325	267
18	63	74	157	98	217	1170	212	107	48	75	289	152
19	60	69	221	258	204	660	217	151	52	61	110	150
20	61	73	137	2410	200	490	197	114	48	57	92	97
21	65	73	106	618	202	818	185	95	48	54	60	77
22	59	73	93	547	197	926	176	89	41	52	53	67
23	63	70	84	3280	188	532	171	89	45	165	50	60
24	64	79	84	4300	178	420	164	86	45	74	48	61
25	67	135	85	1760	170	362	162	84	47	125	46	59
26	111	117	80	930	170	331	167	81	47	161	53	59
27	87	97	77	534	167	375	159	75	60	136	54	182
28	64	88	77	408	160	373	151	72	58	104	61	173
29	57	90	77	341	---	309	147	73	75	66	67	135
30	66	91	76	301	---	291	146	69	69	61	64	87
31	72	---	74	267	---	366	---	175	---	53	814	---
TOTAL	2391	2389	3724	18629	9769	18562	9450	4147	2363	2989	2901	4422
MEAN	77.13	79.63	120.1	600.9	348.9	598.8	315.0	133.8	78.77	96.42	93.58	147.4
MAX	175	135	580	4300	2090	2800	1920	353	238	499	814	1180
MIN	57	63	74	74	160	156	146	69	41	47	36	42
CFSM	0.12	0.13	0.19	0.96	0.56	0.95	0.50	0.21	0.13	0.15	0.15	0.23
IN.	0.14	0.14	0.22	1.10	0.58	1.10	0.56	0.25	0.14	0.18	0.17	0.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

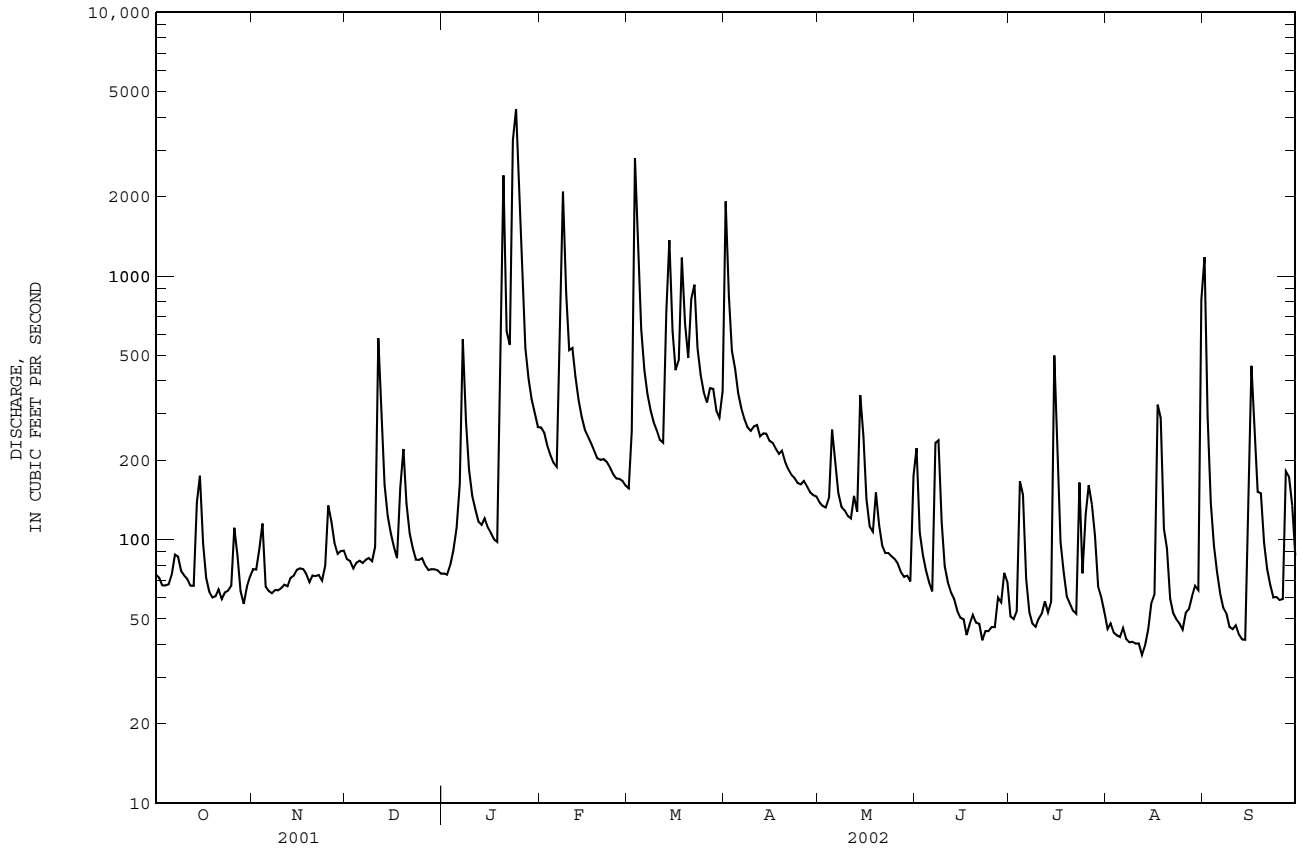
	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
MEAN	72.11	97.85	108.2	372.4	285.4	674.7	344.2	151.4	140.9	120.2	113.5	207.1
MAX	73.6	119	112	595	345	760	488	196	232	160	126	314
(WY)	2002	2001	2001	2002	2002	2001	2000	2000	2001	2001	2001	2000
MIN	70.6	76.7	104	150	226	589	246	124	81.6	95.8	93.6	147
(WY)	2001	2002	2002	2001	2001	2002	2001	2002	2002	2002	2002	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 2000 - 2002

ANNUAL TOTAL	75126	81736	
ANNUAL MEAN	205.8	223.9	214.7
HIGHEST ANNUAL MEAN			221
LOWEST ANNUAL MEAN			208
HIGHEST DAILY MEAN	6030	4300	6030
LOWEST DAILY MEAN	50	36	35
ANNUAL SEVEN-DAY MINIMUM	53	40	40
MAXIMUM PEAK FLOW		6450	6550
MAXIMUM PEAK STAGE		7.99	8.03
INSTANTANEOUS LOW FLOW		29*	29*
ANNUAL RUNOFF (CFSM)	0.33	0.36	0.34
ANNUAL RUNOFF (INCHES)	4.45	4.84	4.65
10 PERCENT EXCEEDS	331	441	410
50 PERCENT EXCEEDS	113	97	110
90 PERCENT EXCEEDS	65	50	56

e Estimated.
* See REMARKS.

02124742 ROCKY RIVER NEAR STANFIELD, NC--Continued



PEE DEE RIVER BASIN

02125000 BIG BEAR CREEK NEAR RICHFIELD, NC

LOCATION.--Lat 35°20'05", long 80°20'08", North American Datum of 1983, 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 mi².

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 NGVD of 1929. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. No flow occurs several days in most years.

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.4	1.3	2.6	28	8.2	151	3.8	1.1	0.03	0.00	377
2	1.00	1.4	1.2	2.6	22	54	66	3.8	0.95	0.03	0.01	34
3	0.78	1.4	1.1	3.0	18	260	43	3.6	1.3	0.02	0.00	15
4	0.63	1.3	1.0	3.1	16	113	34	4.6	1.1	0.01	0.00	9.6
5	0.51	1.2	1.0	2.9	14	55	27	5.3	0.69	0.00	0.00	6.5
6	0.71	1.6	1.1	21	13	39	22	4.3	1.2	0.00	0.00	4.6
7	0.91	1.5	1.1	44	98	31	20	3.9	0.82	0.00	0.00	3.5
8	0.88	1.5	1.1	27	266	26	18	3.7	0.83	0.00	0.00	2.7
9	0.72	1.3	1.1	18	86	23	16	3.3	0.47	0.00	0.00	2.2
10	0.58	1.1	1.9	14	67	21	19	2.8	0.26	0.00	0.00	1.9
11	0.52	1.1	28	12	72	18	18	2.6	0.11	0.00	0.00	1.5
12	0.43	1.1	12	9.9	45	18	15	2.4	0.04	0.00	0.00	1.2
13	0.37	1.1	8.7	11	34	32	16	2.4	0.03	0.00	0.00	0.97
14	31	1.1	7.2	9.5	27	36	14	3.6	0.03	0.00	0.01	1.0
15	26	1.1	6.0	8.6	22	28	14	2.7	0.03	0.00	0.19	37
16	9.3	1.1	4.8	7.7	21	23	12	2.5	0.02	0.00	0.45	118
17	5.5	1.0	3.9	7.2	19	32	11	2.1	0.02	0.00	45	33
18	4.3	1.0	6.3	6.6	16	54	9.9	2.2	0.01	0.00	11	16
19	3.6	1.1	6.3	137	14	41	9.3	2.1	0.02	0.00	2.6	12
20	3.2	1.1	5.5	266	14	34	8.6	1.9	0.01	0.00	2.0	8.8
21	2.9	1.2	4.7	95	14	90	8.0	1.7	0.00	0.00	1.0	6.8
22	2.2	1.2	4.3	73	12	82	7.3	1.6	0.00	0.00	0.49	5.5
23	2.0	1.1	4.0	1280	12	48	6.5	1.5	0.00	0.01	0.18	4.4
24	1.7	1.5	3.9	221	11	37	6.0	1.5	0.00	0.01	0.08	3.8
25	1.6	1.5	3.7	230	12	30	5.9	1.3	0.00	0.02	0.06	3.3
26	1.4	1.5	3.4	99	11	26	5.5	1.1	0.31	0.03	0.06	4.9
27	1.6	1.5	3.2	57	9.6	28	5.1	0.93	0.71	0.02	0.07	9.1
28	1.7	1.4	3.1	42	8.9	25	5.0	0.75	0.08	0.01	0.09	9.9
29	1.8	1.3	2.9	33	---	21	4.5	0.69	0.04	0.00	0.09	7.8
30	1.4	1.2	2.8	27	---	20	4.0	0.84	0.03	0.00	0.08	5.7
31	1.4	---	2.8	23	---	23	---	1.1	---	0.00	323	---
TOTAL	111.84	37.9	139.4	2793.7	1002.5	1376.2	601.6	76.61	10.21	0.19	386.46	747.67
MEAN	3.608	1.263	4.497	90.12	35.80	44.39	20.05	2.471	0.340	0.006	12.47	24.92
MAX	31	1.6	28	1280	266	260	151	5.3	1.3	0.03	323	377
MIN	0.37	1.0	1.0	2.6	8.9	8.2	4.0	0.69	0.00	0.00	0.00	0.97
CFSM	0.06	0.02	0.08	1.62	0.64	0.80	0.36	0.04	0.01	0.00	0.22	0.45
IN.	0.07	0.03	0.09	1.87	0.67	0.92	0.40	0.05	0.01	0.00	0.26	0.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2002, BY WATER YEAR (WY)

	MEAN	40.07	30.64	53.75	109.5	130.4	120.0	71.03	35.85	27.41	30.63	23.46	19.85
MAX	355	212	186	357	284	345	247	234	140	220	223	125	
(WY)	1991	1986	1977	1998	1984	1993	1958	1975	1957	1984	1967	1995	
MIN	0.006	0.34	2.12	4.38	16.2	13.2	6.87	1.32	0.12	0.00	0.002	0.000	
(WY)	1962	1962	1966	1981	1986	1981	1967	1986	2002	2002	1980	1993	

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

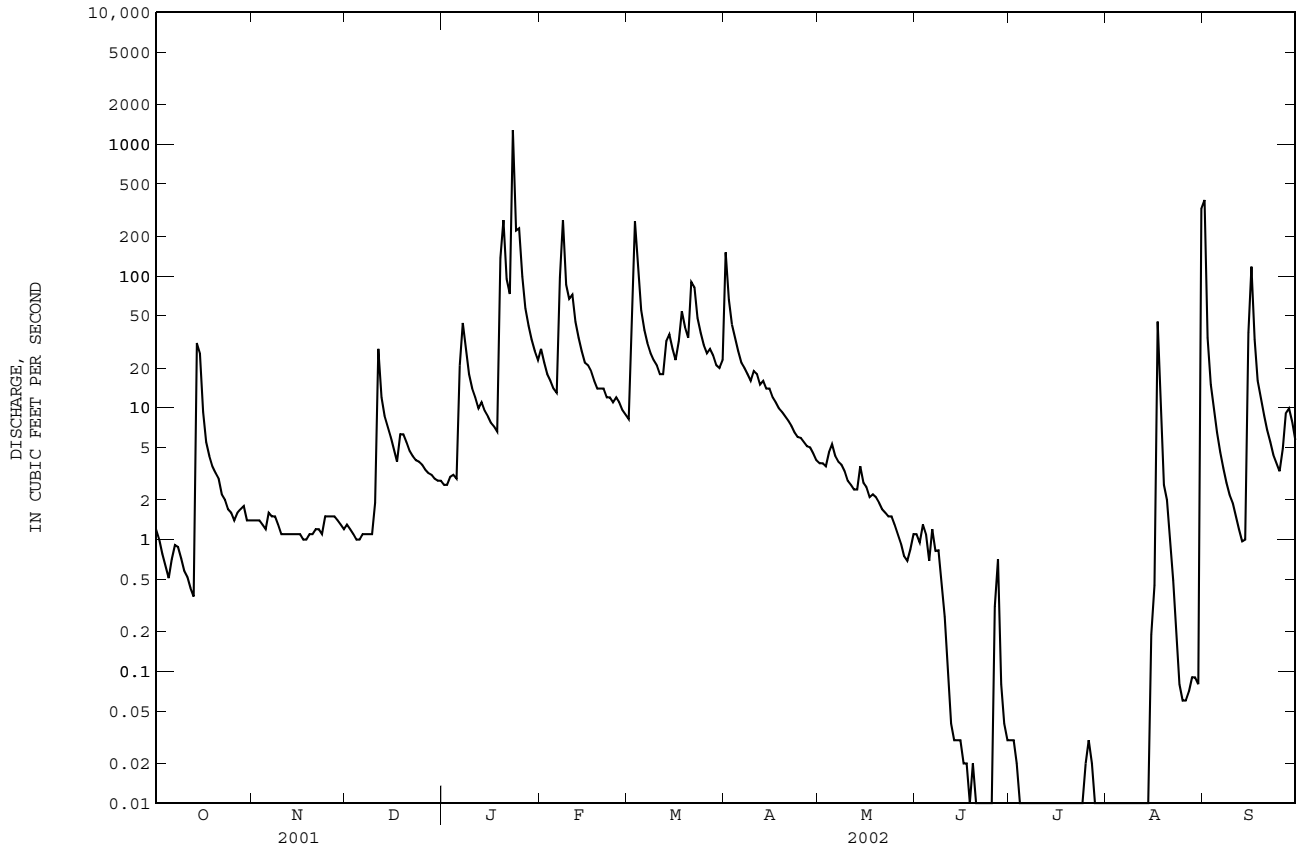
FOR 2002 WATER YEAR

WATER YEARS 1954 - 2002

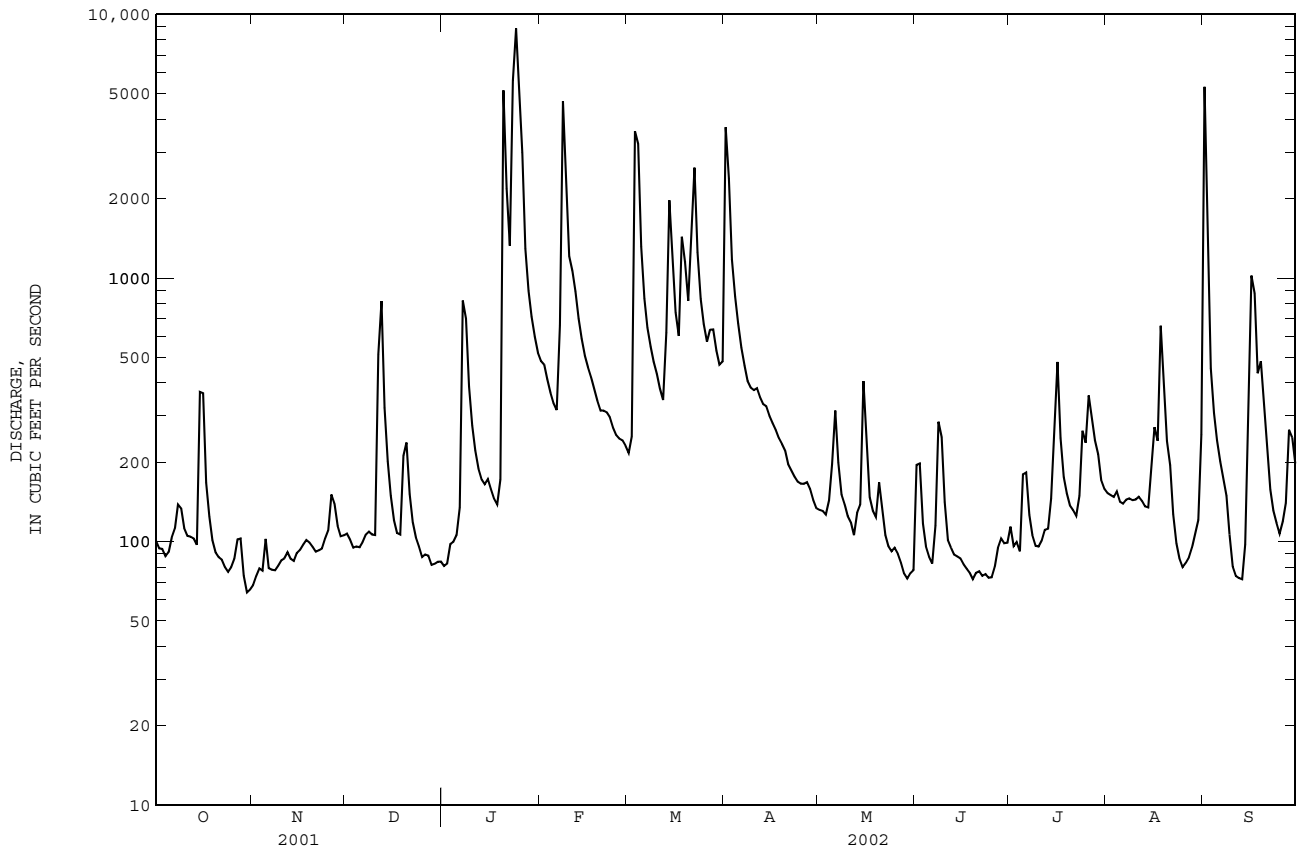
ANNUAL TOTAL	6666.25	7284.28	
ANNUAL MEAN	18.26	19.96	57.52
HIGHEST ANNUAL MEAN			112
LOWEST ANNUAL MEAN			18.2
HIGHEST DAILY MEAN	622	Mar 21	1280
LOWEST DAILY MEAN	0.00	Aug 6	0.00
ANNUAL SEVEN-DAY MINIMUM	0.02	Sep 14	0.00
MAXIMUM PEAK FLOW			3840
MAXIMUM PEAK STAGE			9.50
INSTANTANEOUS LOW FLOW			0.00*
ANNUAL RUNOFF (CFSM)	0.33		0.36
ANNUAL RUNOFF (INCHES)	4.46		4.87
10 PERCENT EXCEEDS	31		36
50 PERCENT EXCEEDS	3.7		2.8
90 PERCENT EXCEEDS	0.77		0.00

* See REMARKS.

02125000 BIG BEAR CREEK NEAR RICHFIELD, NC--Continued



02126000 ROCKY RIVER NEAR NORWOOD, NC--Continued



PEE DEE RIVER BASIN

02128000 LITTLE RIVER NEAR STAR, NC

LOCATION.--Lat 35°23'14", long 79°49'53", North American Datum of 1983, Montgomery County, Hydrologic Unit 03040104, on left bank 9 ft downstream from 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 from West Fork Little River, and 3 mi west of Star.

DRAINAGE AREA.--106 mi².

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 NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No flow also occurred Aug. 13-15, 25-26, 2002.

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	4.0	7.5	5.7	33	21	261	16	6.6	0.98	e0.09	528
2	3.2	3.7	7.0	5.6	30	25	126	16	5.5	2.6	e0.07	86
3	2.9	3.6	6.4	8.0	27	243	69	16	7.2	9.8	e0.06	32
4	2.6	4.4	6.2	8.6	26	157	51	17	6.9	5.4	e0.05	17
5	2.4	7.4	6.2	8.0	24	73	42	21	5.5	2.1	e0.03	10
6	2.8	e5.8	6.2	15	24	49	38	21	4.5	1.6	e0.02	6.1
7	2.1	5.4	6.8	57	49	41	35	22	4.2	2.0	e0.02	4.0
8	2.2	5.9	6.9	54	173	36	33	27	3.0	1.5	0.02	2.4
9	2.6	6.7	6.5	33	103	34	32	31	2.3	0.97	0.02	1.5
10	2.5	6.9	7.6	25	61	33	36	23	1.8	0.79	0.01	0.99
11	2.4	7.1	59	23	51	31	37	17	1.6	1.3	0.01	0.68
12	2.3	7.6	52	19	48	30	35	14	1.4	0.91	0.00	0.53
13	2.4	7.3	26	20	41	33	34	13	1.4	0.55	0.00	0.45
14	5.8	6.7	16	18	35	64	32	13	1.3	0.47	0.00	1.0
15	18	6.2	11	16	32	60	31	16	0.97	0.40	0.00	2.7
16	9.6	8.2	8.3	15	30	43	30	15	0.92	0.40	0.01	6.2
17	7.2	8.1	6.7	14	29	40	29	13	0.90	0.33	0.02	19
18	7.8	7.3	8.5	13	26	54	27	12	0.88	0.29	0.02	11
19	5.2	7.0	8.0	59	25	61	26	12	0.89	0.24	0.02	256
20	4.1	6.8	6.9	557	25	50	26	11	0.79	0.23	0.02	49
21	3.9	e7.2	6.3	150	25	54	26	9.8	0.69	0.18	0.01	22
22	3.7	7.7	6.5	111	25	110	25	9.6	0.62	0.15	0.01	12
23	3.2	7.5	7.4	943	24	66	24	8.9	0.62	0.63	0.01	7.1
24	3.2	14	7.7	665	24	48	24	8.1	0.55	0.65	0.01	4.2
25	3.7	17	7.0	270	23	42	25	7.5	0.61	0.48	0.00	2.3
26	3.6	15	6.8	164	23	39	21	7.0	0.93	0.44	0.00	2.1
27	4.5	12	6.4	84	23	42	20	6.5	2.5	0.61	0.01	2.7
28	3.4	10	6.3	59	22	53	19	6.0	5.8	0.54	0.01	2.0
29	3.6	8.5	6.2	48	---	45	19	5.0	4.2	e0.31	0.01	1.4
30	3.6	8.0	6.1	41	---	39	17	5.2	1.5	e0.15	0.02	0.96
31	3.9	---	5.7	36	---	54	---	6.1	---	e0.09	15	---
TOTAL	131.9	233.0	342.1	3544.9	1081	1770	1250	425.7	76.57	37.09	15.58	1091.31
MEAN	4.255	7.767	11.04	114.4	38.61	57.10	41.67	13.73	2.552	1.196	0.503	36.38
MAX	18	17	59	943	173	243	261	31	7.2	9.8	15	528
MIN	2.1	3.6	5.7	5.6	22	21	17	5.0	0.55	0.09	0.00	0.45
CFSM	0.04	0.07	0.10	1.08	0.36	0.54	0.39	0.13	0.02	0.01	0.00	0.34
IN.	0.05	0.08	0.12	1.24	0.38	0.62	0.44	0.15	0.03	0.01	0.01	0.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2002, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
MEAN	67.04	65.08	94.08	169.4	209.0
MAX	337	366	361	511	467
(WY)	1991	1986	1973	1998	1960
MIN	4.03	7.77	11.0	23.5	38.6
(WY)	1987	2002	2002	2001	2002

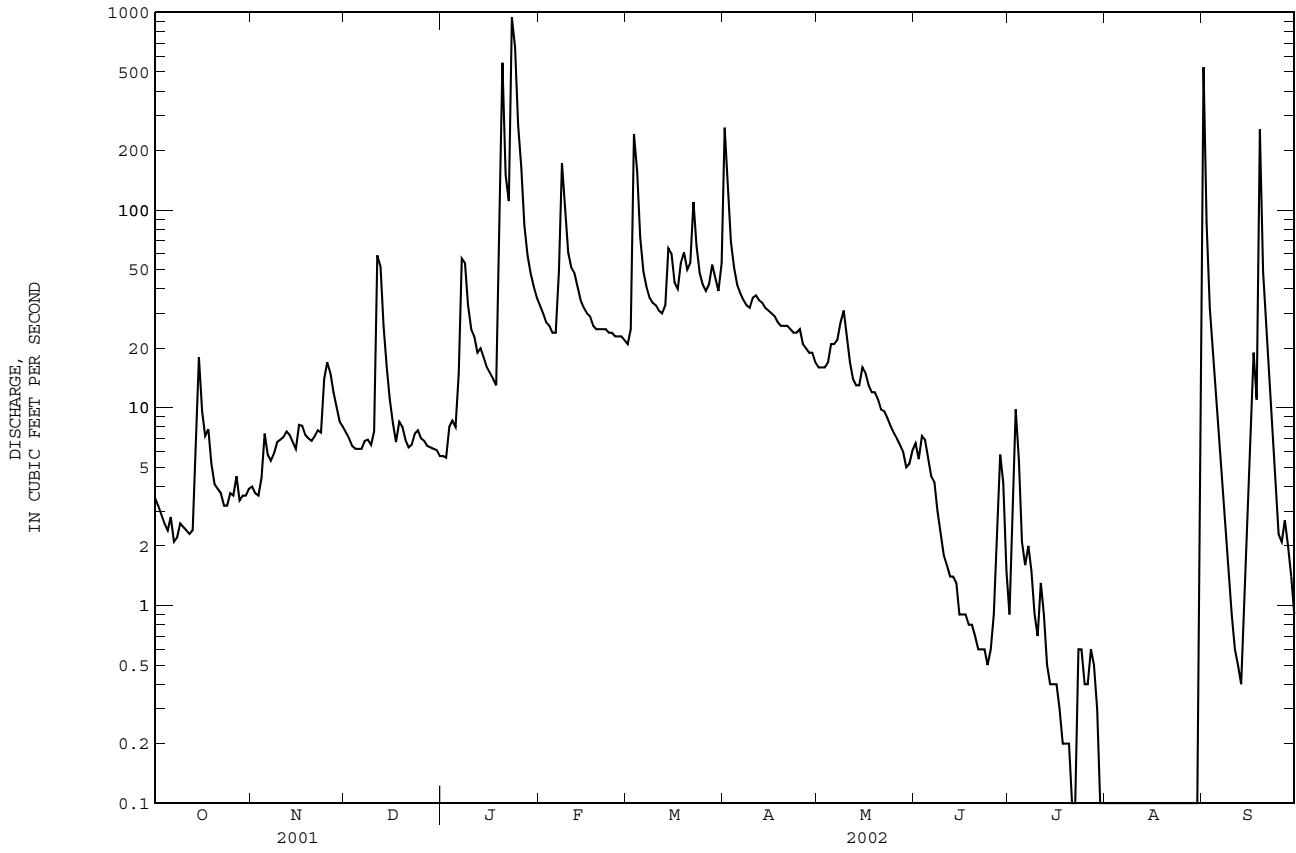
SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1954 - 2002

ANNUAL TOTAL	11192.61	9999.15	
ANNUAL MEAN	30.66	27.39	109.7
HIGHEST ANNUAL MEAN			209
LOWEST ANNUAL MEAN			27.6
HIGHEST DAILY MEAN	1050	Mar 30	943
LOWEST DAILY MEAN	0.65	Sep 18	0.00
ANNUAL SEVEN-DAY MINIMUM	1.1	Sep 13	0.00
MAXIMUM PEAK FLOW			2050
MAXIMUM PEAK STAGE			7.79
INSTANTANEOUS LOW FLOW			0.00*
ANNUAL RUNOFF (CFSM)	0.29		0.26
ANNUAL RUNOFF (INCHES)	3.93		3.51
10 PERCENT EXCEEDS	56		51
50 PERCENT EXCEEDS	15		7.4
90 PERCENT EXCEEDS	3.8		0.27

e Estimated.

* See REMARKS.

02128000 LITTLE RIVER NEAR STAR, NC--Continued



PEE DEE RIVER BASIN

02129000 PEE DEE RIVER NEAR ROCKINGHAM, NC

LOCATION.--Lat 34°56'45", long 79°52'11", North American Datum of 1983, 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 mi².

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".

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 NGVD of 1929 (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 and satellite telemetry at station.

REMARKS.--Records good except those below 1000 ft³/s. Flow regulated since 1928 by Blewett Falls Lake and five other reservoirs upstream. Prior to regulation, maximum discharge: 276,000 ft³/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 ft³/s, Sept. 3, 1907. Minimum discharge for period of record also occurred Dec. 2, 3, 1951; minimum daily discharge for period of record: 58 ft³/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 ft³/s, Oct. 25, 1943; minimum daily discharge: 120 ft³/s, Oct. 8, 1961.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1990	438	407	1920	7490	4270	6640	732	3110	4010	809	4710
2	447	495	411	4650	4510	2290	6630	573	1700	3580	971	7340
3	347	433	487	5800	1890	2990	8400	2970	4120	3200	1040	1070
4	304	422	612	8220	5760	6070	8310	1860	1480	924	933	959
5	375	394	495	680	6080	10800	2860	614	848	766	958	917
6	288	464	488	488	6070	9590	1530	2120	1370	725	972	932
7	432	390	1740	4450	7290	2660	1150	438	2440	693	1000	963
8	390	397	1560	3800	9790	804	5020	4430	536	2350	1010	924
9	274	456	425	2850	10500	715	3140	2440	918	3280	1040	948
10	358	438	2580	1450	3060	534	4790	2100	2420	3360	937	977
11	382	396	4700	1900	5510	3750	4370	1870	2540	804	922	948
12	257	400	1920	1070	7620	4810	4810	612	2210	718	1080	950
13	355	419	937	627	6060	6160	852	2940	2960	747	977	1000
14	200	426	491	2700	5600	5080	3450	3120	2630	753	955	933
15	1310	386	908	1690	4970	3600	4120	837	632	711	914	925
16	783	433	740	1710	937	3810	3140	1990	328	1810	911	1240
17	371	422	1510	2300	1200	3490	5960	3940	1240	2570	973	972
18	409	407	4850	1720	5110	1620	2890	1960	2340	3250	909	973
19	292	399	3740	3380	5420	1910	747	982	2860	913	988	988
20	565	389	3040	4420	4040	2440	487	1500	991	748	1010	1010
21	554	390	3460	9490	1730	5790	495	269	2410	717	873	951
22	418	397	530	3540	1950	8070	3530	2410	2630	700	971	946
23	495	412	393	6910	327	6460	3500	2210	437	1090	923	933
24	601	425	390	21000	320	1970	3250	4640	2920	2350	965	970
25	360	430	504	17800	2810	6020	1340	1250	2900	2690	998	955
26	374	419	1560	12400	2990	6070	715	382	1100	2520	1120	963
27	362	458	2690	7850	6270	7790	495	307	1220	1020	1150	1120
28	464	409	3070	2410	7680	6310	491	4420	3030	1020	1030	953
29	709	415	1260	2050	---	7420	4900	1170	1370	642	994	949
30	633	417	571	4110	---	5450	4320	1930	437	1670	1020	1020
31	500	---	3070	7850	---	1710	---	3600	---	1390	1000	---
TOTAL	15599	12576	49539	151235	132984	140453	102332	60616	56127	51721	30353	39439
MEAN	503.2	419.2	1598	4879	4749	4531	3411	1955	1871	1668	979.1	1315
MAX	1990	495	4850	21000	10500	10800	8400	4640	4120	4010	1150	7340
MIN	200	386	390	488	320	534	487	269	328	642	809	917
†	+95	+688	+48	+1156	-1263	+1020	-310	-453	-1306	-536	-237	+1311

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2002,* BY WATER YEAR (WY)

	MEAN	5879	5459	7382	10980	12470	13320	10670	7155	5823	5206	5310	5317
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	503	419	1598	2475	3032	4117	2692	1955	1853	1668	979	1008	
(WY)	2002	2002	2002	1956	2001	1981	1981	2002	1986	2002	2002	1954	

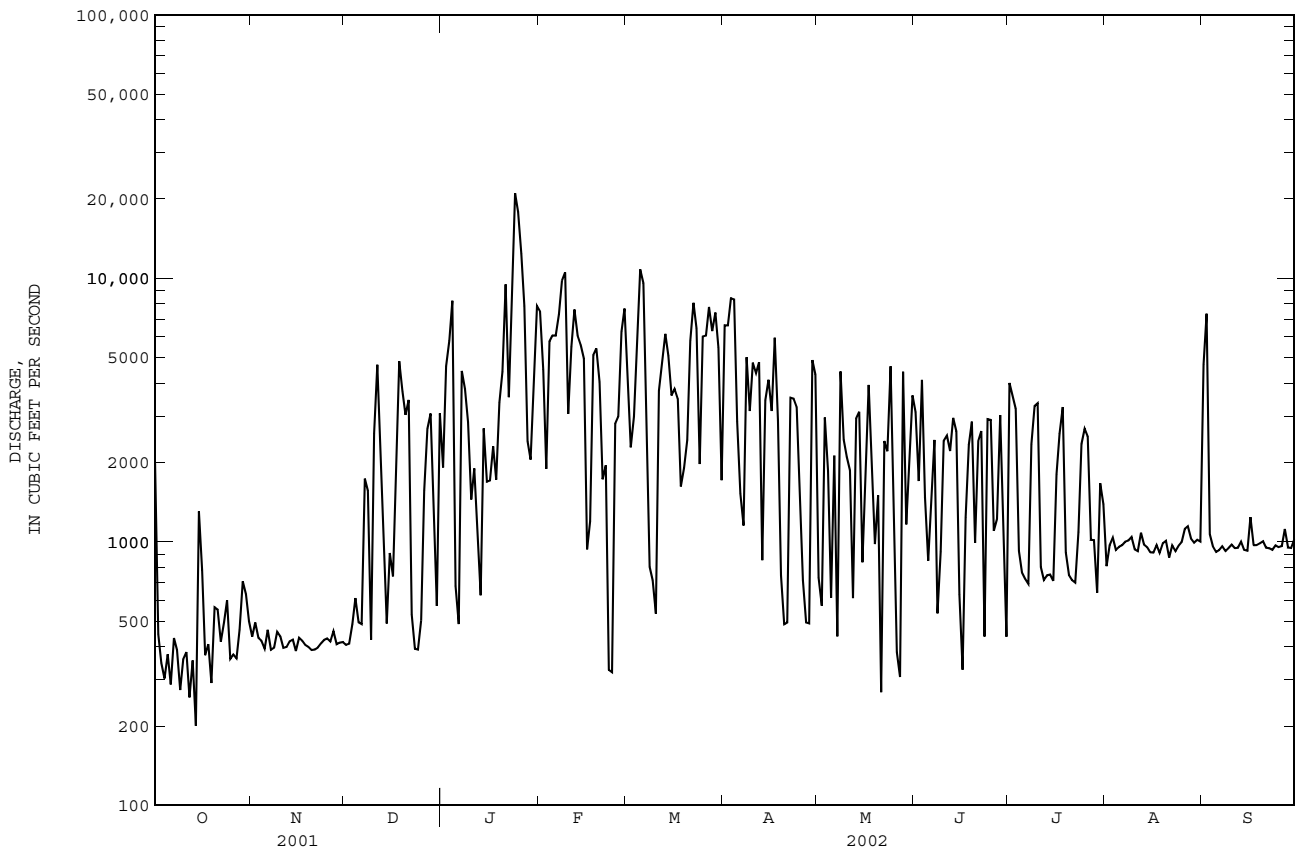
02129000 PEE DEE RIVER NEAR ROCKINGHAM, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1928 - 2002*	
ANNUAL TOTAL	1000016		842974		7891 (UNADJUSTED)	
ANNUAL MEAN	2740		2310		2310 1975	
HIGHEST ANNUAL MEAN					13000 2002	
LOWEST ANNUAL MEAN					2310 1975	
HIGHEST DAILY MEAN	26300	Mar 31	21000	Jan 24	242000	Sep 18 1945
LOWEST DAILY MEAN	200	Oct 14	200	Oct 14	58*	Dec 2 1951
ANNUAL SEVEN-DAY MINIMUM	317	Oct 8	317	Oct 8	185	Sep 28 1985
MAXIMUM PEAK FLOW			24000	Jan 24	270000*	Sep 18 1945
MAXIMUM PEAK STAGE			6.68	Jan 24	30.80*	Sep 18 1945
INSTANTANEOUS LOW FLOW			170	Oct 23	50*	Dec 2 1951
10 PERCENT EXCEEDS	5720		5790		14200	
50 PERCENT EXCEEDS	2010		1100		5520	
90 PERCENT EXCEEDS	395		408		1530	

† 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 Company.

‡ Adjusted for change in contents.

* For regulated period only (1928-2002). See REMARKS.



PEE DEE RIVER BASIN

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 mi².

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 NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Maximum discharge for period of record from rating curve extended above 600 ft³/s by logarithmic plotting. Minimum discharge for period of record and current water year also occurred Aug. 14, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	24	37	32	59	42	111	24	24	11	19	41
2	32	24	34	32	56	45	113	23	19	7.8	21	40
3	29	24	33	35	54	74	128	22	16	7.1	14	35
4	26	24	32	39	51	88	132	25	12	6.0	9.9	28
5	26	24	31	42	49	76	100	33	10	6.8	7.5	23
6	27	24	31	49	48	65	77	35	8.0	6.4	7.3	19
7	32	24	31	75	75	59	66	30	23	7.0	4.7	15
8	36	24	30	88	109	55	61	26	28	6.0	3.4	12
9	32	25	30	77	125	52	57	25	25	5.1	4.5	12
10	28	25	30	66	127	52	54	25	18	3.3	2.9	10
11	26	25	32	61	107	51	53	25	16	7.3	1.9	9.4
12	30	24	37	59	81	47	51	22	14	11	2.6	8.3
13	31	25	38	61	68	45	55	20	11	9.8	1.3	7.0
14	25	24	45	61	62	52	54	20	9.7	8.7	1.0	7.1
15	25	25	50	58	58	56	62	21	9.0	8.9	1.9	12
16	31	26	39	54	56	52	55	19	7.9	9.9	4.3	20
17	26	26	36	51	53	56	52	18	7.1	6.9	6.0	32
18	24	26	38	49	51	61	51	22	6.2	4.9	14	30
19	23	26	41	47	50	59	47	26	6.1	3.5	15	29
20	23	26	39	64	49	54	43	24	5.4	2.9	16	28
21	23	26	36	85	49	53	40	21	4.9	2.8	19	25
22	23	26	35	92	48	58	37	20	4.4	2.8	10	21
23	23	27	34	101	47	57	35	18	8.5	2.7	7.2	18
24	23	39	34	124	46	52	32	19	16	6.4	5.6	15
25	22	53	33	145	45	46	34	17	31	11	5.8	14
26	22	50	33	164	44	44	33	16	25	12	5.2	14
27	22	44	33	158	43	51	31	16	20	11	17	20
28	34	40	33	121	44	55	29	14	16	7.6	22	34
29	25	50	32	85	---	49	28	13	14	5.3	24	32
30	24	43	32	71	---	46	25	16	13	3.6	30	26
31	24	---	32	64	---	55	---	21	---	4.2	36	---
TOTAL	833	893	1081	2310	1754	1707	1746	676	428.2	209.7	340.0	636.8
MEAN	26.87	29.77	34.87	74.52	62.64	55.06	58.20	21.81	14.27	6.765	10.97	21.23
MAX	36	53	50	164	127	88	132	35	31	12	36	41
MIN	22	24	30	32	43	42	25	13	4.4	2.7	1.0	7.0
CFSM	0.32	0.36	0.42	0.89	0.75	0.66	0.70	0.26	0.17	0.08	0.13	0.25
IN.	0.37	0.40	0.48	1.03	0.78	0.76	0.78	0.30	0.19	0.09	0.15	0.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2002, BY WATER YEAR (WY)

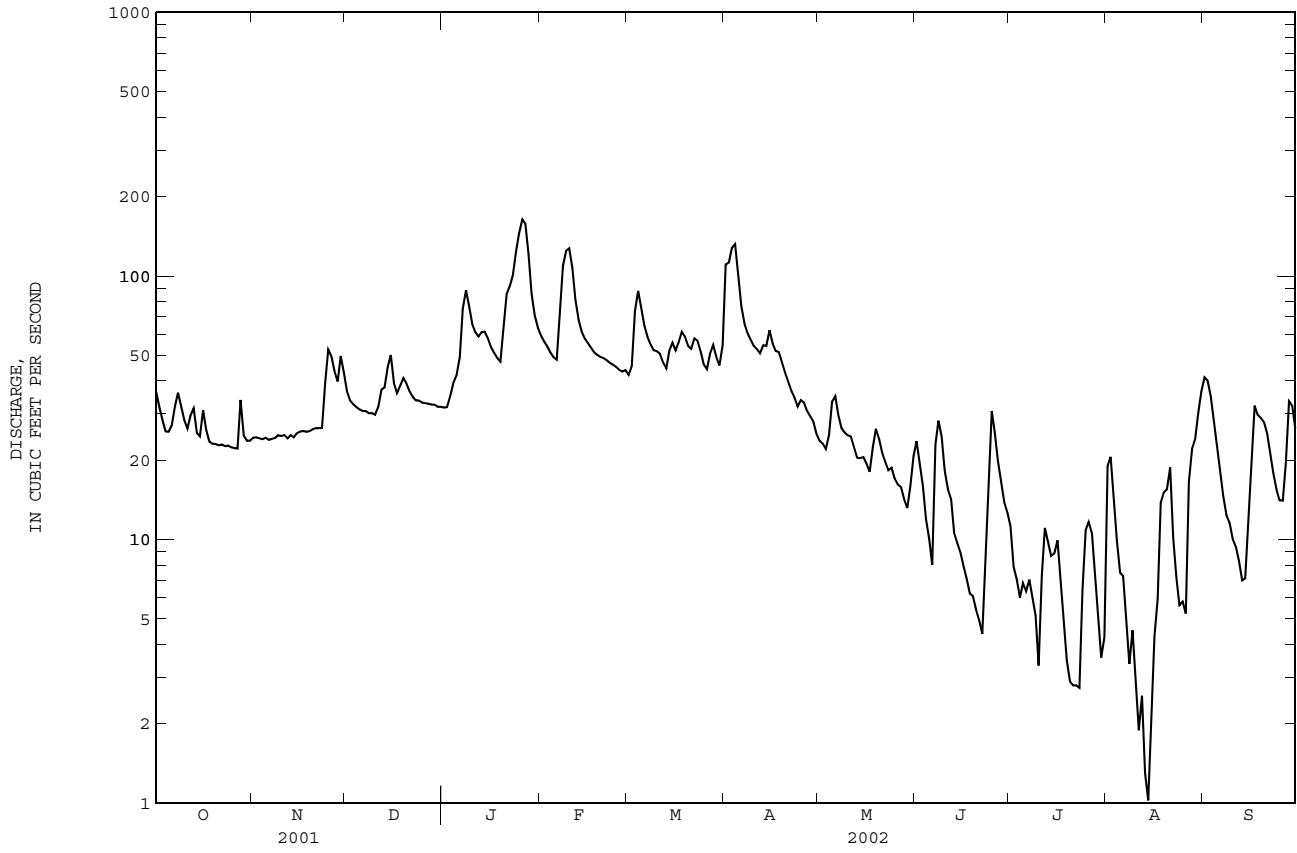
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	88.42	84.33	93.91	137.9	138.7	143.9	104.6	65.95	57.20	54.53	59.89	73.85				
MAX	329	143	141	283	342	327	229	157	122	175	171	161				
(WY)	2000	1996	1990	2000	1998	1998	1998	1989	1995	1989	1991	1999				
MIN	26.9	29.8	34.9	69.3	62.0	55.1	58.2	21.8	14.3	6.76	11.0	20.3				
(WY)	2002	2002	2002	1989	1989	2002	2002	2002	2002	2002	2002	1990				

SUMMARY STATISTICS

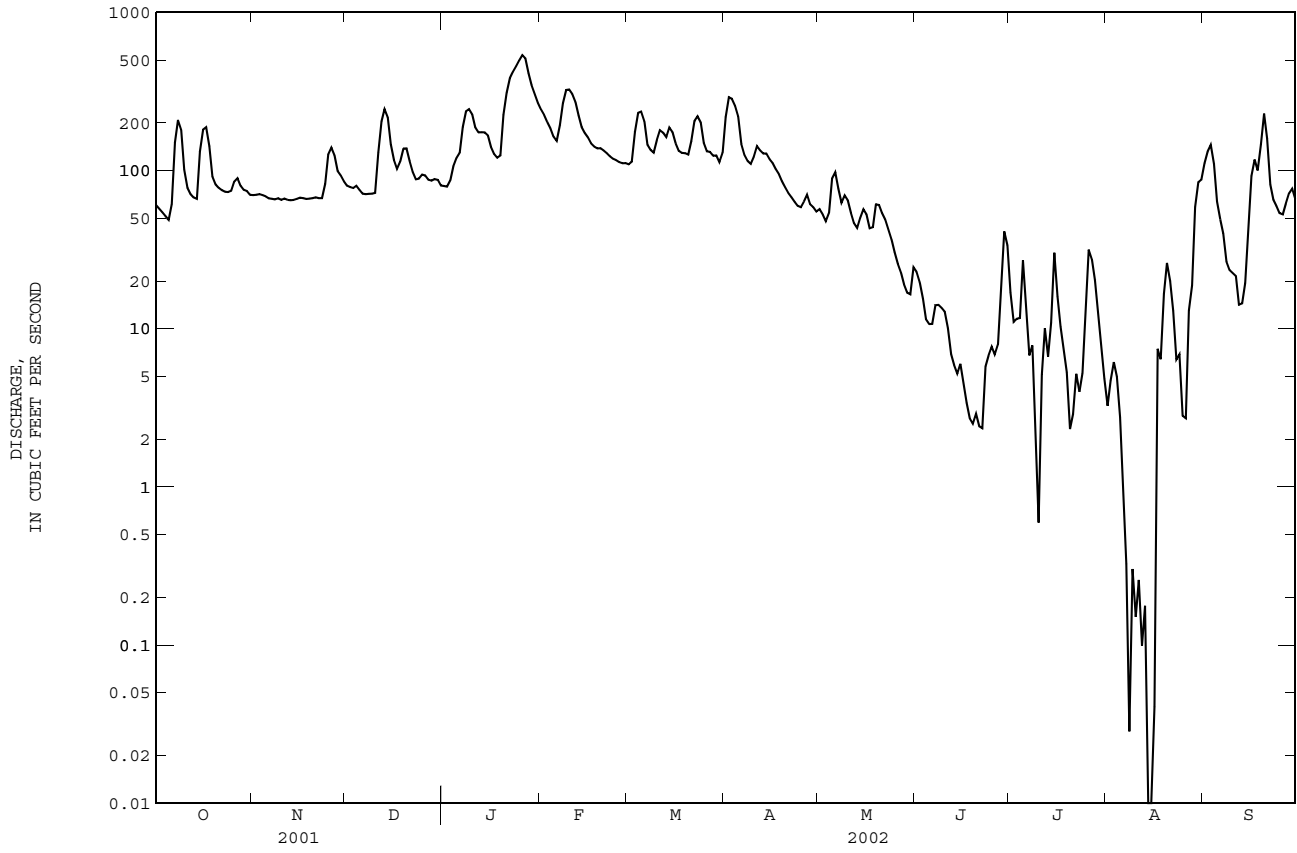
	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1987 - 2002	
ANNUAL TOTAL	17248		12614.7			
ANNUAL MEAN	47.25		34.56		91.70	
HIGHEST ANNUAL MEAN					146	2000
LOWEST ANNUAL MEAN					34.6	2002
HIGHEST DAILY MEAN	149	Mar 18	164	Jan 26	1150	Oct 20 1999
LOWEST DAILY MEAN	15	Aug 11	1.0	Aug 14	1.0	Aug 14 2002
ANNUAL SEVEN-DAY MINIMUM	16	Aug 11	2.3	Aug 10	2.3	Aug 10 2002
MAXIMUM PEAK FLOW			167	Jan 26	1360*	Oct 19 1999
MAXIMUM PEAK STAGE			3.48	Jan 26	5.03	Oct 19 1999
INSTANTANEOUS LOW FLOW			0.50*	Aug 13	0.50*	Aug 13 2002
ANNUAL RUNOFF (CFSM)	0.57		0.41		1.10	
ANNUAL RUNOFF (INCHES)	7.70		5.63		14.96	
10 PERCENT EXCEEDS	92		61		175	
50 PERCENT EXCEEDS	34		28		69	
90 PERCENT EXCEEDS	20		7.0		26	

* See REMARKS.

02132320 BIG SHOE HEEL CREEK NEAR LAURINBURG, NC--Continued



02133500 DROWNING CREEK NEAR HOFFMAN, NC--Continued



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 mi².

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 NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Minimum discharge for period of record and current water year also occurred on Aug. 14, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	328	155	210	178	881	249	457	143	89	74	69	158
2	239	153	206	171	733	257	587	137	95	72	67	188
3	204	157	190	178	642	299	745	137	87	62	59	208
4	183	159	172	189	559	365	758	139	78	54	53	218
5	168	151	167	212	491	436	732	148	74	55	52	218
6	161	145	166	249	446	481	722	177	69	59	46	194
7	181	143	162	302	454	497	649	199	88	62	42	153
8	278	142	156	360	495	483	515	194	94	52	38	126
9	366	143	162	421	582	415	353	172	97	44	35	107
10	415	148	158	459	672	345	299	158	86	43	33	90
11	430	149	156	480	707	326	286	165	74	54	34	81
12	334	143	193	494	730	329	309	156	69	54	33	75
13	243	142	262	498	764	347	338	138	64	57	28	72
14	211	141	308	460	740	385	352	124	61	63	29	71
15	181	138	349	427	673	449	367	123	62	61	32	72
16	189	141	384	409	563	510	327	130	59	66	34	79
17	253	144	355	388	448	524	285	131	54	91	39	116
18	291	149	271	351	385	443	263	130	49	80	46	167
19	306	144	244	320	342	355	239	132	49	68	50	194
20	280	141	252	337	322	317	222	146	49	59	51	201
21	221	143	262	401	314	320	211	152	49	56	59	216
22	187	150	256	489	313	338	196	e145	48	49	e66	241
23	171	150	235	592	309	404	178	e131	59	45	63	241
24	165	168	210	704	300	461	169	122	71	48	54	e194
25	162	200	197	1020	291	479	165	114	63	51	53	e147
26	162	239	195	1510	271	463	160	108	61	57	49	e128
27	166	263	193	1560	260	425	155	99	59	84	49	e118
28	173	273	189	1540	251	400	162	89	57	102	62	135
29	174	255	183	1460	---	380	162	85	55	90	73	e164
30	161	225	181	1380	---	332	148	83	60	79	84	e162
31	155	---	181	1160	---	332	---	84	---	68	113	---
TOTAL	7138	4994	6805	18699	13938	12146	10511	4191	2029	1959	1595	4534
MEAN	230.3	166.5	219.5	603.2	497.8	391.8	350.4	135.2	67.63	63.19	51.45	151.1
MAX	430	273	384	1560	881	524	758	199	97	102	113	241
MIN	155	138	156	171	251	249	148	83	48	43	28	71
CFSM	0.63	0.46	0.60	1.65	1.36	1.07	0.96	0.37	0.19	0.17	0.14	0.41
IN.	0.73	0.51	0.69	1.91	1.42	1.24	1.07	0.43	0.21	0.20	0.16	0.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2002, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	389.0	404.2	445.2	612.2	631.7	660.1	560.1	358.7	289.5	280.2	265.6	331.1				
MAX	827	661	650	926	1205	1267	1106	769	575	690	577	915				
(WY)	2000	1996	1990	1998	1998	1998	1998	1989	1995	1995	1989	1996				
MIN	184	166	221	364	300	363	303	136	65.6	61.3	50.7	130				
(WY)	1988	2002	2002	1992	1992	1992	1992	2002	2002	2002	2002	1990				

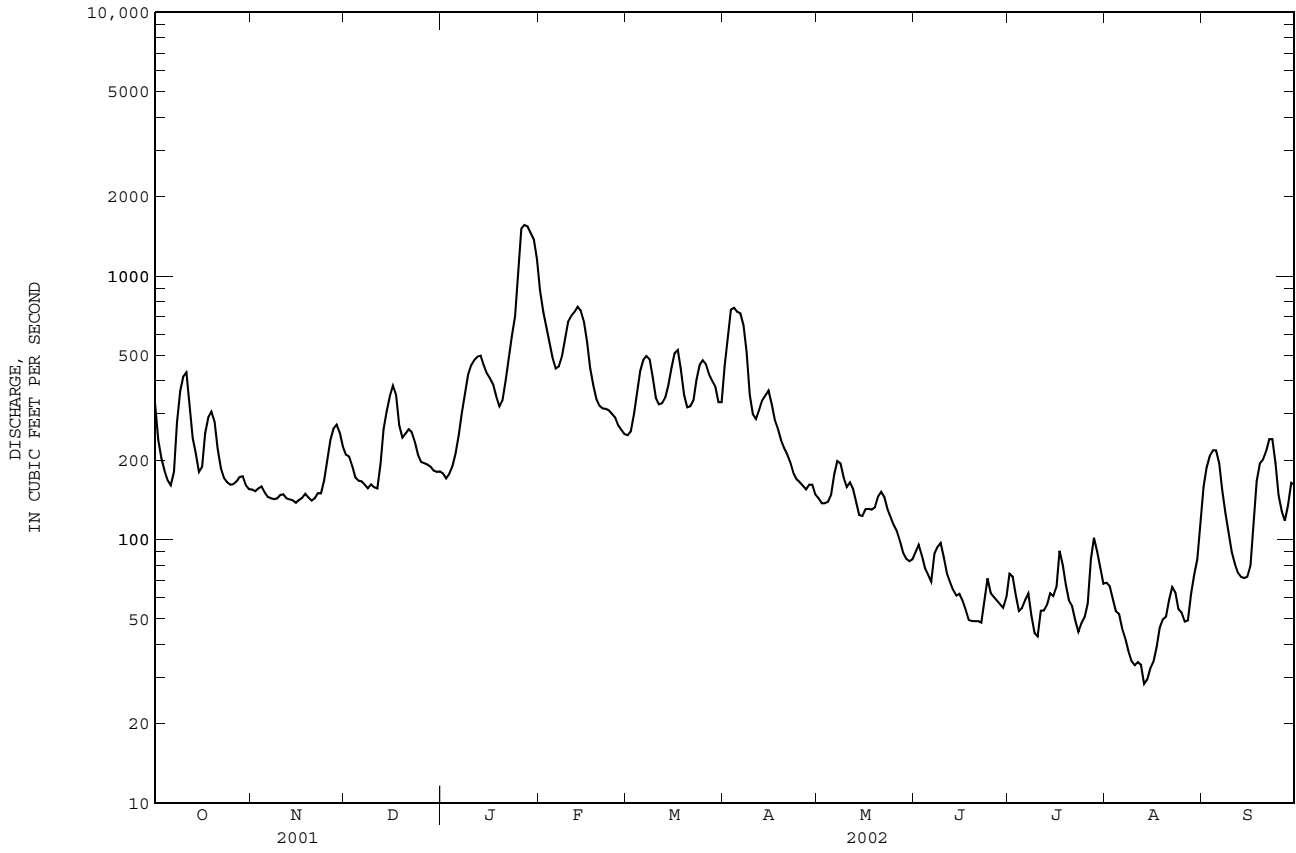
SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1987 - 2002	
ANNUAL TOTAL	120571		88539			
ANNUAL MEAN	330.3		242.6		434.8	
HIGHEST ANNUAL MEAN					640 1998	
LOWEST ANNUAL MEAN					248 2002	
HIGHEST DAILY MEAN	1530	Apr 5	1560	Jan 27	3070	Mar 22 1998
LOWEST DAILY MEAN	85	Aug 9	28	Aug 13	29	Aug 13 2002
ANNUAL SEVEN-DAY MINIMUM	92	Aug 7	32	Aug 10	33	Aug 9 2002
MAXIMUM PEAK FLOW			1590		3380 Mar 22 1998	
MAXIMUM PEAK STAGE			10.64		13.52 Mar 22 1998	
INSTANTANEOUS LOW FLOW			27*		27* Aug 13 2002	
ANNUAL RUNOFF (CFSM)	0.91		0.66		1.19	
ANNUAL RUNOFF (INCHES)	12.29		9.02		16.19	
10 PERCENT EXCEEDS	612		485		781	
50 PERCENT EXCEEDS	280		168		384	
90 PERCENT EXCEEDS	141		54		151	

e Estimated.

* See REMARKS.

02133624 LUMBER RIVER NEAR MAXTON, NC--Continued



PEE DEE RIVER BASIN

02134170 LUMBER RIVER AT LUMBERTON, NC

LOCATION.--Lat 34°37'12", long 79°00'39", Robeson County, Hydrologic Unit 03040203, on right bank at upstream side of bridge on Fifth Street in Lumberton and 1.0 mi below Saddletree Swamp.

DRAINAGE AREA.--708 mi².

PERIOD OF RECORD.--Occasional measurements water years 1954, 1959, 1967. July 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 110 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Minimum discharge for period of record and current water year also occurred Aug. 14, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	383	199	329	247	1120	358	983	207	110	70	169	137
2	418	195	313	244	1080	370	1040	197	106	70	104	133
3	419	193	286	262	1020	472	931	187	103	72	89	149
4	331	189	272	278	922	524	856	219	104	78	83	174
5	249	189	264	286	805	551	865	218	103	74	78	193
6	230	191	253	373	704	549	891	207	98	71	72	205
7	229	190	245	453	756	555	905	203	103	68	68	212
8	206	187	239	463	772	557	879	209	94	66	65	209
9	195	185	234	482	757	553	830	222	100	66	60	193
10	212	183	229	497	741	546	768	225	105	67	57	169
11	250	185	240	506	741	528	678	222	104	75	56	149
12	279	185	241	522	727	493	568	209	99	65	54	130
13	300	186	243	574	730	466	495	204	91	65	51	117
14	302	185	252	575	736	448	467	212	98	67	59	129
15	275	185	281	573	734	446	470	186	134	69	59	118
16	241	188	312	561	726	452	475	166	90	75	54	114
17	225	188	334	540	717	463	467	155	82	70	55	109
18	215	187	364	509	684	487	448	164	79	68	57	108
19	231	188	381	481	633	518	417	171	77	75	54	119
20	256	192	371	474	566	531	394	165	73	82	56	144
21	275	192	334	468	520	537	369	166	72	78	60	172
22	279	189	314	473	471	522	334	165	70	72	63	191
23	261	192	310	528	439	509	303	171	69	90	64	202
24	232	350	313	632	414	494	277	167	69	71	67	217
25	214	327	301	690	402	482	260	158	68	147	71	228
26	204	325	290	739	397	488	244	150	79	128	76	223
27	199	323	272	767	390	510	239	139	85	88	121	197
28	195	326	265	813	376	507	230	131	78	79	210	175
29	194	333	260	911	---	501	220	124	74	79	189	159
30	198	339	259	1040	---	493	211	122	75	89	158	153
31	201	---	250	1110	---	549	---	120	---	115	148	---
TOTAL	7898	6666	8851	17071	19080	15459	16514	5561	2692	2449	2627	4928
MEAN	254.8	222.2	285.5	550.7	681.4	498.7	550.5	179.4	89.73	79.00	84.74	164.3
MAX	419	350	381	1110	1120	557	1040	225	134	147	210	228
MIN	194	183	229	244	376	358	211	120	68	65	51	108
CFSM	0.36	0.31	0.40	0.78	0.96	0.70	0.78	0.25	0.13	0.11	0.12	0.23
IN.	0.41	0.35	0.47	0.90	1.00	0.81	0.87	0.29	0.14	0.13	0.14	0.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

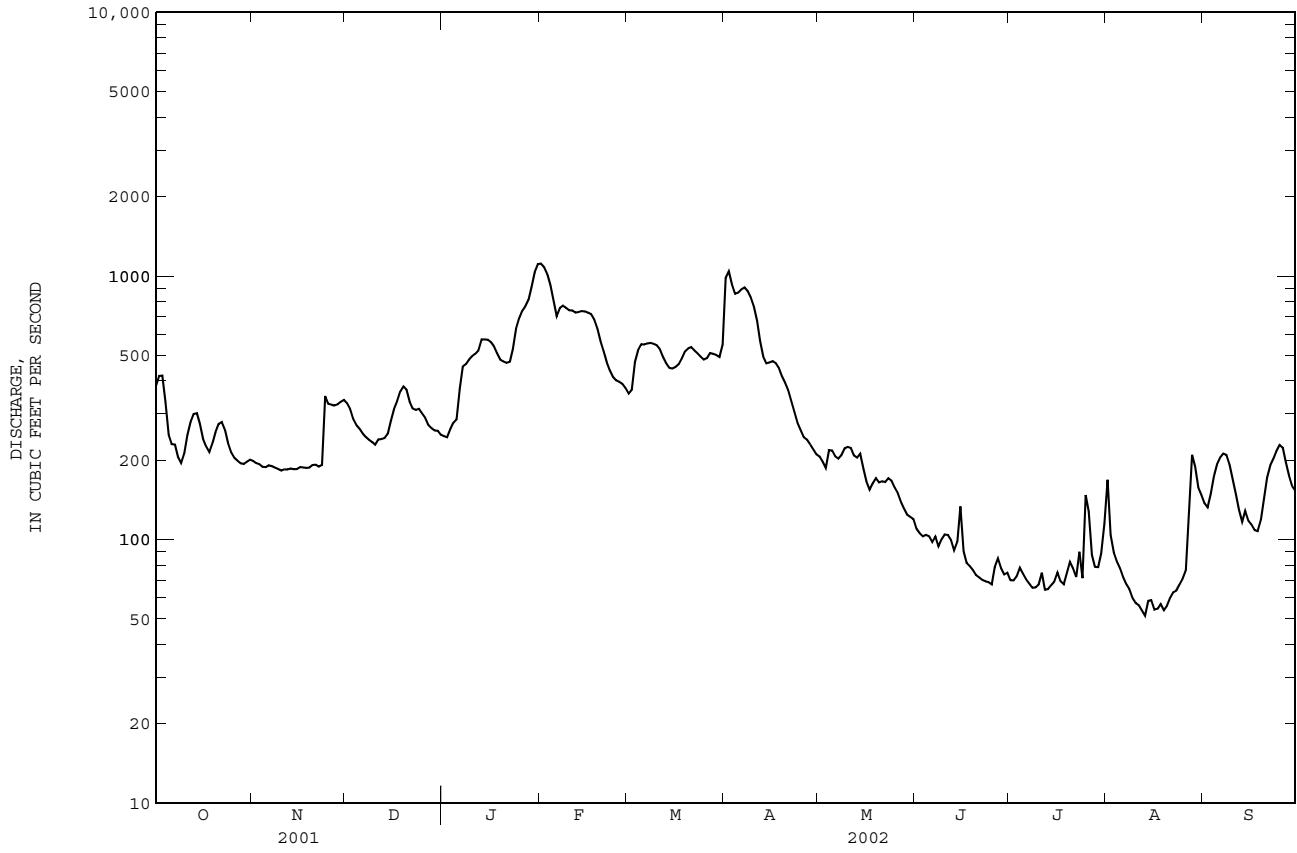
	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
MEAN	425.3	347.4	498.5	556.9	682.9	716.2	615.0	239.0	392.5	213.8	235.9	497.5
MAX	596	472	711	563	684	934	680	299	695	349	401	1127
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000	2000
MIN	255	222	286	551	681	499	550	179	89.7	79.0	84.7	164
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 2000 - 2002

ANNUAL TOTAL	163232	109796	
ANNUAL MEAN	447.2	300.8	416.9
HIGHEST ANNUAL MEAN			533
LOWEST ANNUAL MEAN			301
HIGHEST DAILY MEAN	1270	Jun 17	2130
LOWEST DAILY MEAN	116	Aug 11	51
ANNUAL SEVEN-DAY MINIMUM	127	Aug 9	55
MAXIMUM PEAK FLOW			1130
MAXIMUM PEAK STAGE			11.45
INSTANTANEOUS LOW FLOW			51*
ANNUAL RUNOFF (CFSM)	0.63	0.42	0.59
ANNUAL RUNOFF (INCHES)	8.58	5.77	8.00
10 PERCENT EXCEEDS	907	651	863
50 PERCENT EXCEEDS	353	219	334
90 PERCENT EXCEEDS	180	71	100

* See REMARKS.

02134170 LUMBER RIVER AT LUMBERTON, NC--Continued



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 mi².

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 NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records poor. No flow, also occurred Sept. 1-4, 1993, June 13, July 3-27, Aug. 7-28, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e35	2.9	63	23	204	50	284	3.2	5.5	0.74	1.3	145
2	e29	2.7	45	22	176	54	485	2.8	3.4	0.14	2.1	165
3	e24	2.5	37	28	140	93	631	2.3	2.3	0.00	1.4	163
4	e18	2.9	32	34	103	128	608	7.8	1.1	0.00	0.67	131
5	e14	3.3	29	42	80	154	516	14	0.45	0.00	0.35	86
6	e10	5.0	27	84	68	177	430	20	0.01	0.00	0.06	59
7	7.6	5.5	26	156	124	192	365	18	1.0	0.00	0.00	41
8	6.1	6.3	25	185	180	188	316	15	1.8	0.00	0.00	27
9	5.5	7.5	24	204	216	160	272	12	1.2	0.00	0.00	20
10	7.2	8.6	24	224	258	133	230	8.6	0.60	0.00	0.00	16
11	7.1	11	28	237	307	124	195	10	0.02	0.00	0.00	12
12	6.1	12	31	222	320	93	167	8.2	0.00	0.00	0.00	8.9
13	5.2	15	33	206	301	90	148	5.4	0.00	0.00	0.00	10
14	4.2	18	36	188	266	100	139	6.1	0.04	0.00	0.00	15
15	5.5	19	36	179	229	112	141	7.3	3.7	0.00	0.00	18
16	6.1	20	33	171	201	115	131	9.2	4.5	0.00	0.00	21
17	6.8	24	29	156	172	121	107	9.0	4.2	0.00	0.00	22
18	6.7	29	29	129	140	127	81	9.6	3.5	0.00	0.00	25
19	6.7	32	30	102	115	129	61	14	2.9	0.00	0.00	25
20	6.7	32	30	98	102	126	43	20	2.0	0.00	0.00	21
21	6.3	38	30	104	98	130	28	24	1.1	0.00	0.00	17
22	5.1	42	30	121	90	135	18	25	0.56	0.00	0.00	12
23	4.0	46	28	152	81	141	12	23	1.0	0.00	0.00	8.5
24	3.2	61	27	209	74	146	7.4	19	3.7	0.00	0.00	5.9
25	2.3	66	26	255	68	143	7.6	14	3.8	0.00	0.00	4.9
26	1.9	92	25	305	63	130	10	9.8	3.3	0.00	0.00	5.7
27	3.7	119	24	342	58	118	12	8.5	3.0	0.00	0.00	6.9
28	4.4	137	24	345	51	98	11	8.5	2.7	0.10	0.00	8.7
29	4.0	142	25	319	---	83	9.7	7.6	2.4	0.28	53	6.2
30	3.5	107	24	278	---	75	6.7	6.3	1.6	0.38	85	4.3
31	3.2	---	23	237	---	99	---	6.8	---	0.51	117	---
TOTAL	259.1	1109.2	933	5357	4285	3764	5472.4	355.0	61.38	2.15	260.88	1111.0
MEAN	8.358	36.97	30.10	172.8	153.0	121.4	182.4	11.45	2.046	0.069	8.415	37.03
MAX	35	142	63	345	320	192	631	25	5.5	0.74	117	165
MIN	1.9	2.5	23	22	51	50	6.7	2.3	0.00	0.00	0.00	4.3
CFSM	0.04	0.16	0.13	0.75	0.67	0.53	0.80	0.05	0.01	0.00	0.04	0.16
IN.	0.04	0.18	0.15	0.87	0.70	0.61	0.89	0.06	0.01	0.00	0.04	0.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2002, BY WATER YEAR (WY)

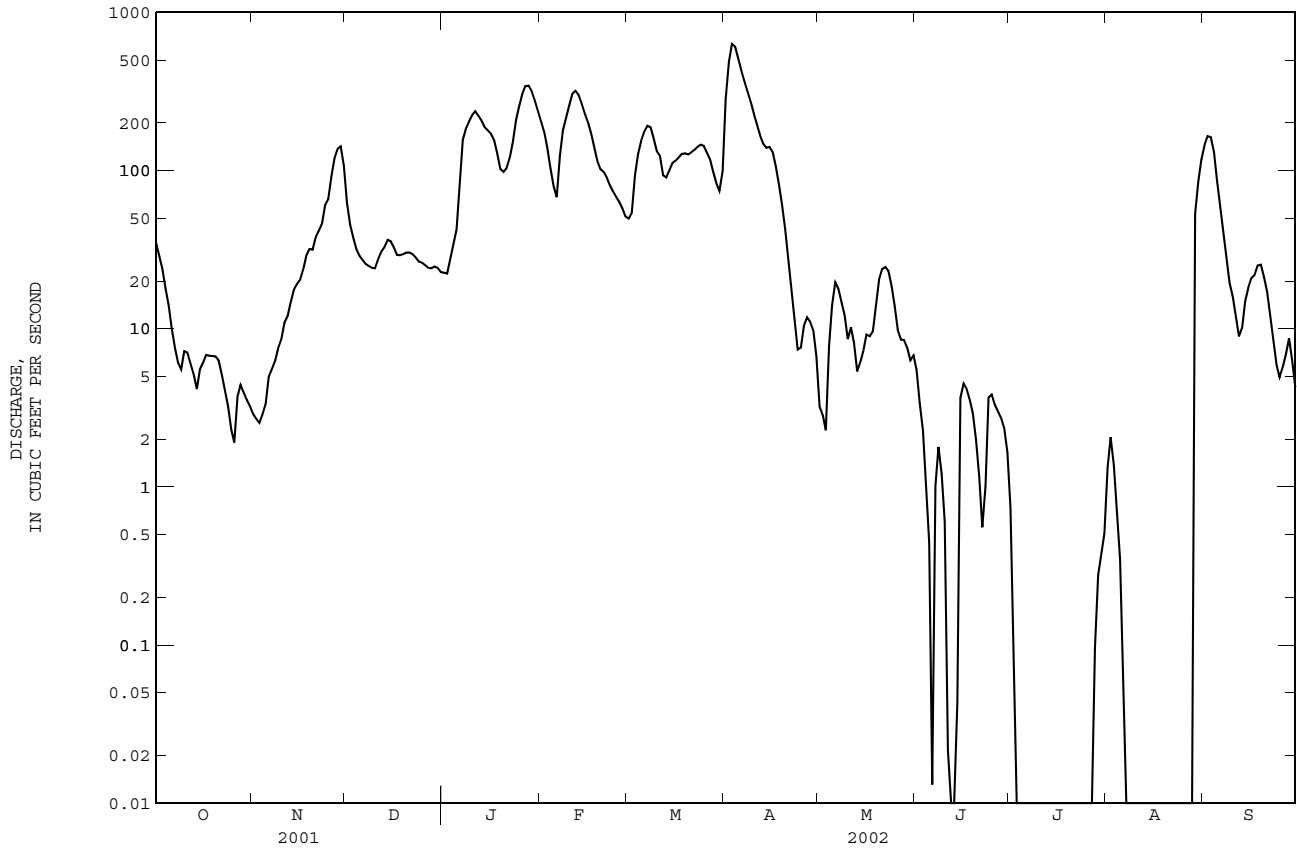
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	187.5	158.0	216.6	417.1	393.8	409.3	253.3	114.4	93.42	84.98	115.2	204.4					
MAX	1094	382	396	1001	1418	1194	571	362	474	407	358	923					
(WY)	2000	1993	1990	1993	1998	1998	1993	1999	1995	1995	1991	1999					
MIN	3.43	15.3	30.1	92.9	127	121	66.8	11.5	2.05	0.069	8.42	6.98					
(WY)	1999	1999	2002	1986	1986	2002	1986	2002	2002	2002	2002	1997					

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1986 - 2002

ANNUAL TOTAL	38370.2	22970.11	
ANNUAL MEAN	105.1	62.93	219.8
HIGHEST ANNUAL MEAN			395 1998
LOWEST ANNUAL MEAN			62.9 2002
HIGHEST DAILY MEAN	456 Jun 21	631 Apr 3	3900 Feb 6 1998
LOWEST DAILY MEAN	1.9 Oct 26	0.00 Jun 12	0.00 Aug 31 1993
ANNUAL SEVEN-DAY MINIMUM	3.0 Oct 30	0.00 Jul 3	0.00 Jul 3 2002
MAXIMUM PEAK FLOW		657 Apr 3	3980 Mar 11 1998
MAXIMUM PEAK STAGE		11.23 Apr 3	14.34 Sep 17 1999
INSTANTANEOUS LOW FLOW		0.00* Jun 12	0.00* Aug 31 1993
ANNUAL RUNOFF (CFSM)	0.46	0.27	0.96
ANNUAL RUNOFF (INCHES)	6.23	3.73	13.04
10 PERCENT EXCEEDS	283	186	493
50 PERCENT EXCEEDS	49	19	129
90 PERCENT EXCEEDS	8.2	0.00	10

e Estimated.
* See REMARKS.

02134480 BIG SWAMP NEAR TARHEEL, NC--Continued



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 150 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 mi².

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 NGVD of 1929 (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 fair except those for estimated daily discharges, which are poor. Maximum discharge for period of record also occurred Sept. 19, 1999. Maximum gage height for current year, from floodmark. Minimum discharge for period of record and current water year also occurred Aug. 15, 2002.

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 ft³/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 ft³/s.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	349	226	400	312	1110	558	809	304	159	77	100	271
2	362	227	406	307	1190	553	962	293	146	74	150	277
3	377	e224	407	318	1240	597	1230	282	133	67	172	256
4	394	e220	400	332	1250	617	1340	275	124	63	123	236
5	405	e216	383	347	1230	657	1330	308	120	66	97	235
6	394	209	360	382	1170	702	1320	346	120	70	84	245
7	362	211	342	468	1210	732	1350	342	124	68	75	257
8	332	212	328	485	1170	740	1410	318	122	63	67	267
9	308	210	316	521	1130	745	e1500	300	118	59	61	273
10	283	208	307	542	1110	746	e1600	289	111	62	56	269
11	267	206	316	555	1090	741	e1550	290	113	77	51	249
12	271	202	317	567	1060	737	e1500	291	115	84	47	216
13	289	200	317	602	1040	758	1380	283	112	83	43	184
14	308	201	325	627	1030	755	1260	268	107	72	42	164
15	327	202	331	663	1030	727	1140	261	111	67	42	160
16	337	202	333	696	1050	695	1020	263	164	64	57	166
17	325	202	345	719	1050	664	922	240	153	69	57	151
18	299	203	367	729	1040	644	841	222	107	70	49	141
19	279	201	383	728	1020	633	773	219	99	65	46	135
20	268	201	396	722	1000	635	705	226	94	63	44	132
21	274	202	406	707	1000	672	643	219	89	75	44	135
22	288	204	407	698	943	708	592	211	87	81	47	146
23	300	205	396	689	864	719	544	209	86	82	51	161
24	306	233	382	694	782	718	501	209	82	88	53	173
25	297	299	371	718	708	705	459	209	78	98	58	183
26	275	372	365	781	651	693	419	202	78	105	72	193
27	253	408	357	831	608	688	386	191	79	163	72	203
28	238	388	346	872	578	680	360	179	92	145	91	205
29	229	390	334	908	---	682	339	166	91	110	179	192
30	224	393	323	950	---	689	320	161	83	90	235	172
31	223	---	317	1020	---	711	---	156	---	85	256	---
TOTAL	9443	7277	11083	19490	28354	21301	28505	7732	3297	2505	2621	6047
MEAN	304.6	242.6	357.5	628.7	1013	687.1	950.2	249.4	109.9	80.81	84.55	201.6
MAX	405	408	407	1020	1250	758	1600	346	164	163	256	277
MIN	223	200	307	307	578	553	320	156	78	59	42	132
CFSM	0.25	0.20	0.29	0.51	0.82	0.56	0.77	0.20	0.09	0.07	0.07	0.16
IN.	0.29	0.22	0.34	0.59	0.86	0.65	0.86	0.23	0.10	0.08	0.08	0.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2002, BY WATER YEAR (WY)

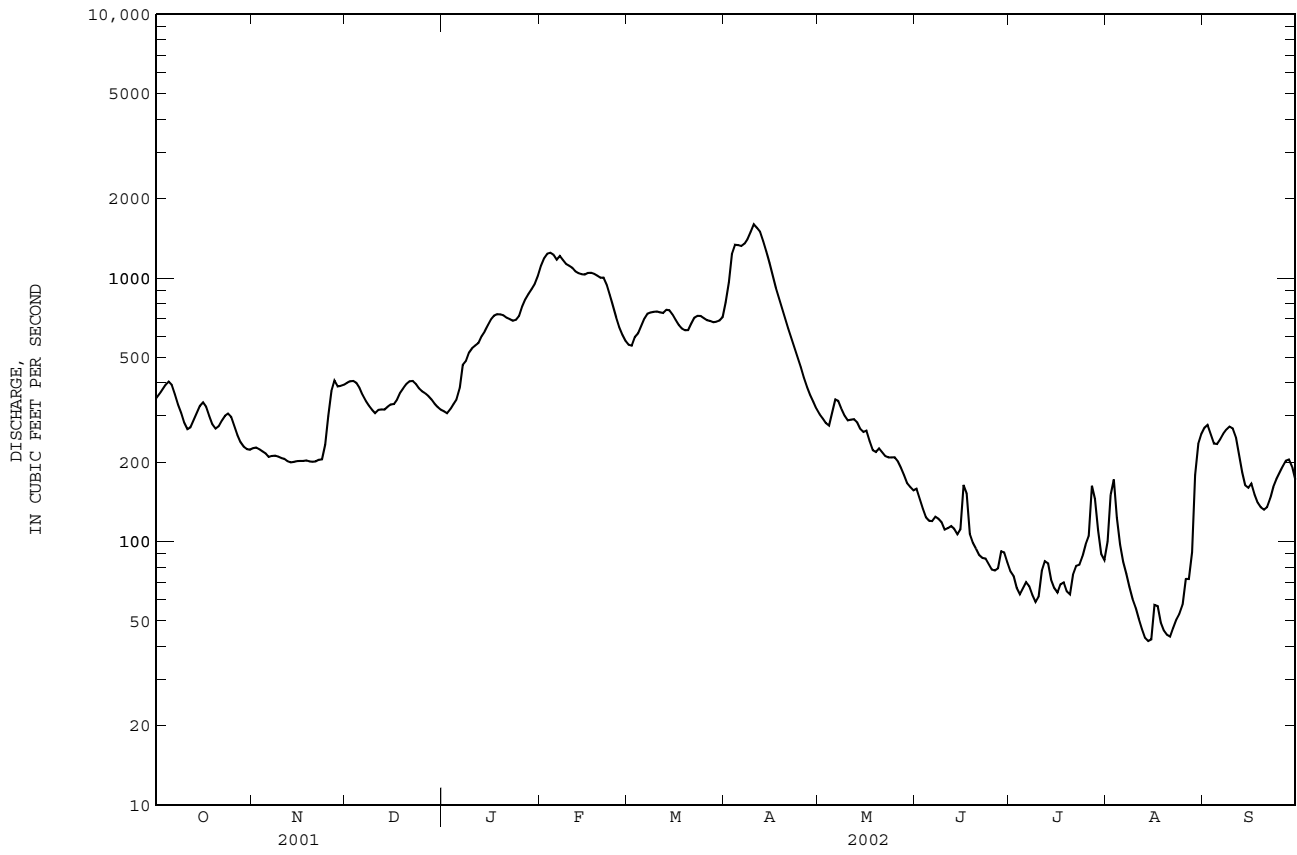
	MEAN	893.5	883.6	1294	1867	2230	2326	1839	980.7	746.7	786.7	911.1	1054
MAX	5496	4142	3977	4575	5944	5259	5688	3430	2587	2808	3741	4930	
(WY)	2000	1948	1949	1993	1998	1983	1936	1978	1969	1943	1974	1999	
MIN	141	211	237	262	429	611	420	249	110	80.8	84.5	92.2	
(WY)	1941	1934	1934	1934	1934	1934	1934	1981	2002	2002	2002	2002	1968

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1930 - 2002	
ANNUAL TOTAL	234945		147655			
ANNUAL MEAN	643.7		404.5		1313	
HIGHEST ANNUAL MEAN					2391	
LOWEST ANNUAL MEAN					405	
HIGHEST DAILY MEAN	2020	Mar 26	1600	Apr 10	13400	Sep 24 1945
LOWEST DAILY MEAN	158	Aug 12	42	Aug 14	42	Aug 14 2002
ANNUAL SEVEN-DAY MINIMUM	171	Aug 9	48	Aug 18	48	Aug 18 2002
MAXIMUM PEAK FLOW			1630	Apr 10	13400*	Sep 24 1945
MAXIMUM PEAK STAGE			6.44*	Apr 10	10.70	Sep 19 1999
INSTANTANEOUS LOW FLOW			40*	Aug 14	40*	Aug 14 2002
ANNUAL RUNOFF (CFSM)	0.52		0.33		1.07	
ANNUAL RUNOFF (INCHES)	7.12		4.47		14.53	
10 PERCENT EXCEEDS	1320		977		2810	
50 PERCENT EXCEEDS	406		290		948	
90 PERCENT EXCEEDS	217		75		289	

e Estimated.

* See REMARKS.

02134500 LUMBER RIVER AT BOARDMAN, NC--Continued



PEE DEE RIVER BASIN

351812080445545 CRN01

LOCATION.--Lat 35°18'11", long 80°45'00", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03040105, Fire Station 27, Ken Hoffman Drive, Charlotte, NC.

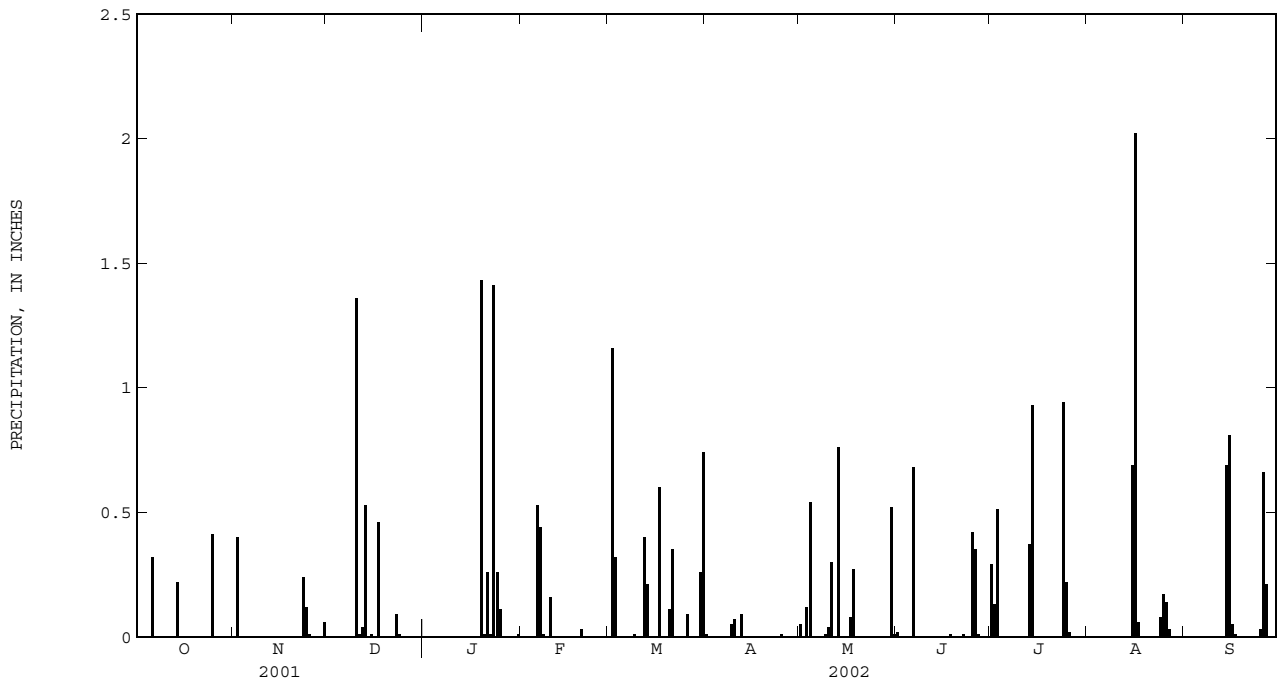
PERIOD OF RECORD.--September 1992 to current year. Records for period September 1992 to September 1998 published in USGS OFR 96-150, 98-67 and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.02	0.29	0.00	---
2	0.00	0.40	0.00	---	0.00	1.16	0.00	0.00	0.00	0.13	0.00	---
3	0.00	0.00	0.00	---	0.00	0.32	0.00	0.12	0.00	0.51	0.00	---
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.54	0.00	0.00	0.00	---
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.32	0.00	0.00	---	0.53	0.00	0.00	0.00	0.68	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.36	0.00	0.16	0.00	0.07	0.04	0.00	0.00	0.00	0.00
11	0.00	0.00	0.01	---	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00
12	0.00	0.00	0.04	---	0.00	0.40	0.09	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.53	0.00	0.00	0.21	0.00	0.76	0.00	0.37	0.00	0.00
14	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.69
15	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.81
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.02	0.05
17	0.00	0.00	0.46	0.00	0.00	0.60	0.00	0.08	0.00	0.00	0.06	0.01
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.01	0.00	0.00	0.00
19	0.00	0.00	0.00	1.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.01	0.03	0.11	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.26	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
23	0.00	0.24	0.09	1.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.12	0.01	0.26	0.00	0.00	0.00	0.00	0.00	0.94	0.08	0.00
25	0.41	0.01	0.00	0.11	0.00	0.00	0.01	0.00	0.42	0.22	0.17	0.03
26	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.35	0.02	0.14	0.66
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.03	0.21
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	---	0.00
30	0.00	0.06	0.00	0.00	---	0.26	0.00	0.52	0.00	0.00	---	0.00
31	0.00	---	0.00	0.01	---	0.74	---	0.01	---	0.00	---	---
TOTAL	0.95	0.83	2.51	---	1.17	4.25	0.23	2.70	1.50	3.41	---	---



351540080430045 CRN16

LOCATION.--Lat 35°15'42", long 80°43'08", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03040105, Reedy Creek Park Environmental Center, Rocky River Road, Charlotte, NC.

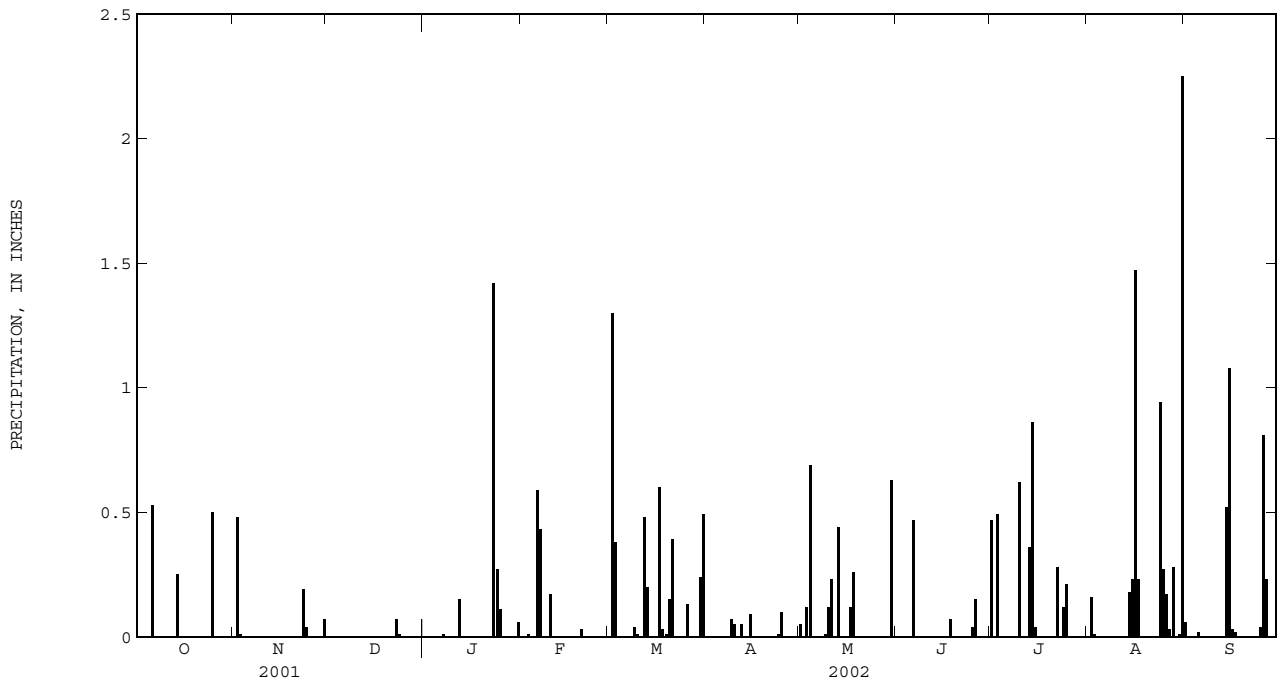
PERIOD OF RECORD.--March 1993 to current year. Records for period March 1993 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.47	0.00	0.06
2	0.00	0.48	0.00	0.00	0.00	1.30	0.00	0.00	0.00	0.00	0.16	0.00
3	0.00	0.01	0.00	---	0.01	0.38	0.00	0.12	0.00	0.49	0.01	0.00
4	0.00	0.00	---	---	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.00
5	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
6	0.53	0.00	---	---	0.59	0.00	0.00	0.00	0.47	0.00	0.00	0.00
7	0.00	0.00	---	0.01	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	---	0.00	0.00	0.04	0.07	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	---	0.00	0.17	0.01	0.05	0.12	0.00	0.62	0.00	0.00
11	0.00	0.00	---	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00
12	0.00	0.00	---	0.15	0.00	0.48	0.05	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	---	0.00	0.00	0.20	0.00	0.44	0.00	0.36	0.00	0.00
14	0.25	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.86	0.18	0.52
15	0.00	0.00	---	0.00	0.00	0.00	0.09	0.00	0.00	0.04	0.23	1.08
16	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.47	0.03
17	0.00	0.00	---	0.00	0.00	0.60	0.00	0.12	0.00	0.00	0.23	0.02
18	0.00	0.00	---	0.00	0.00	0.03	0.00	0.26	0.07	0.00	0.00	0.00
19	0.00	0.00	---	---	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	---	0.03	0.15	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	---	0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00
23	0.00	0.19	0.07	1.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.04	0.01	0.27	0.00	0.00	0.01	0.00	0.00	0.12	0.94	0.00
25	0.50	0.00	0.00	0.11	0.00	0.00	0.10	0.00	0.04	0.21	0.27	0.04
26	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.15	0.00	0.17	0.81
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.23
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.07	0.00	0.00	---	0.24	0.00	0.63	0.00	0.00	0.01	0.00
31	0.00	---	0.00	0.06	---	0.49	---	0.00	---	0.00	2.25	---
TOTAL	1.28	0.79	---	---	1.23	4.45	0.37	2.67	0.73	3.45	6.23	2.81



PEE DEE RIVER BASIN

351302080412701 CRN23

LOCATION.--Lat 35°13'02", long 80°41'27", Mecklenburg County, Hydrologic Unit 03040105, Charles T. Myers golf course, Harrisburg Road, Charlotte, NC.

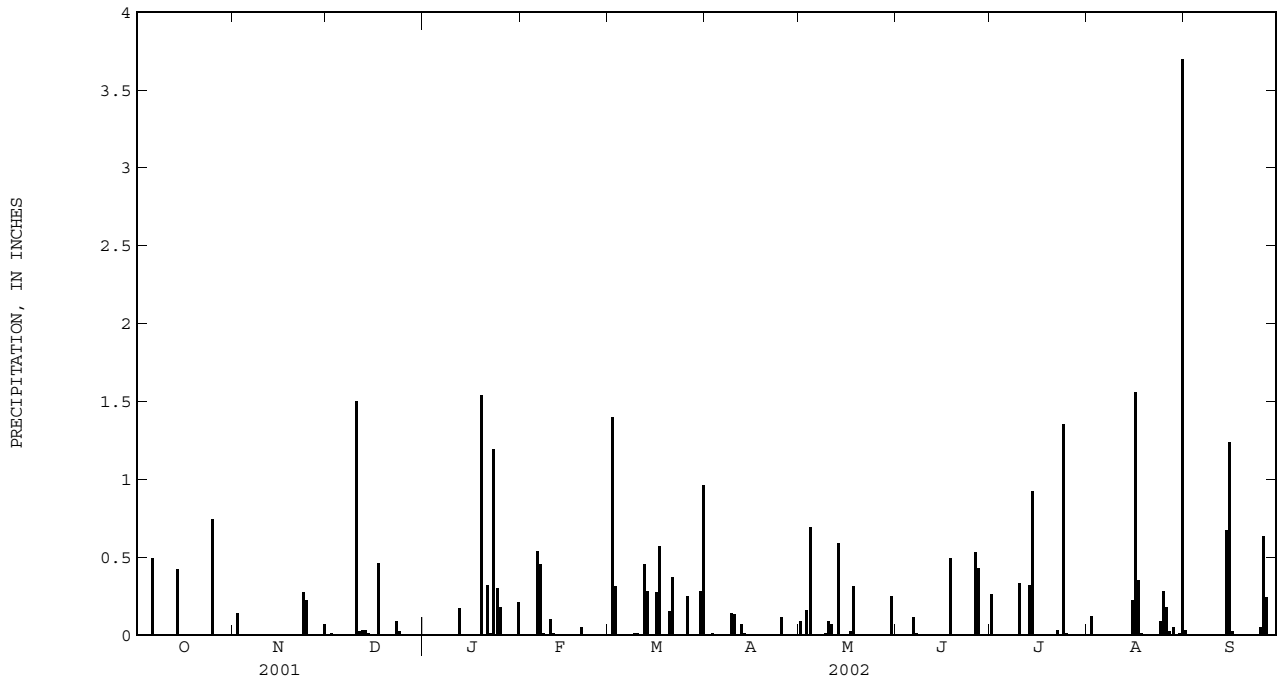
PERIOD OF RECORD.--October 1988 to current year. Records for period October 1988 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at site.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.26	0.00	0.03
2	0.00	0.14	0.01	0.00	0.00	1.40	0.00	0.00	0.00	0.00	0.12	0.00
3	0.00	0.00	0.00	---	0.00	0.31	0.01	0.16	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.49	0.00	0.00	---	0.54	0.00	0.00	0.00	0.11	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.14	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.50	0.00	0.10	0.01	0.13	0.09	0.00	0.33	0.00	0.00
11	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.07	0.00	0.00	0.00	0.00
12	0.00	0.00	0.03	0.17	0.00	0.45	0.07	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.03	0.00	0.00	0.28	0.01	0.59	0.00	0.32	0.00	0.00
14	0.42	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.67
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	1.24
16	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	1.56	0.02
17	0.00	0.00	0.46	0.00	0.00	0.57	0.00	0.02	0.00	0.00	0.35	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.49	0.00	0.01	0.00
19	0.00	0.00	0.00	1.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.05	0.15	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.32	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
23	0.00	0.27	0.09	1.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.22	0.02	0.30	0.00	0.00	0.00	0.00	0.00	1.35	0.09	0.00
25	0.74	0.00	0.00	0.18	0.00	0.00	0.11	0.00	0.00	0.01	0.28	0.05
26	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.53	0.00	0.18	0.63
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.02	0.24
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.07	0.00	0.00	---	0.28	0.00	0.25	0.00	0.00	0.01	0.00
31	0.00	---	0.00	0.21	---	0.96	---	0.00	---	0.00	3.70	---
TOTAL	1.65	0.70	2.17	---	1.16	5.31	0.47	2.28	1.57	3.22	6.59	2.88



352432080473745 CRN26

LOCATION.--Lat 35°24'33", long 80°47'38", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03040105, Bradford Airfield, Huntersville-Concord Road, Huntersville, NC.

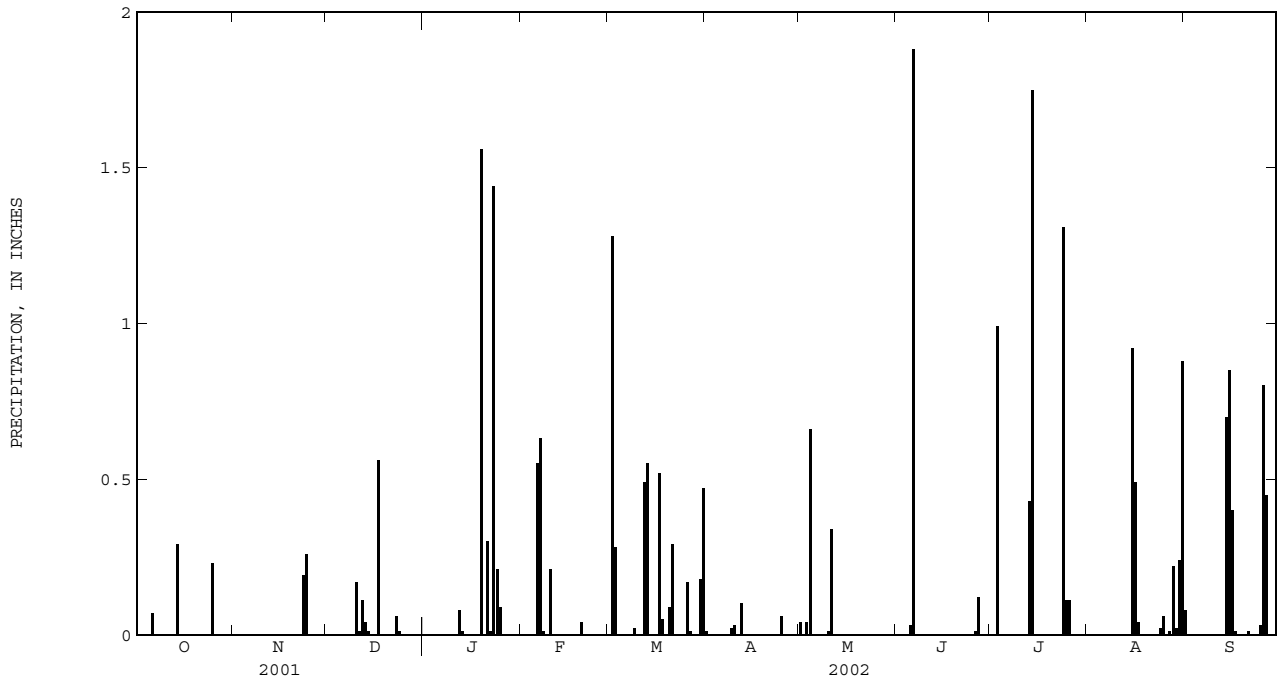
PERIOD OF RECORD.--June 1994 to current year. Records for period June 1994 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04	---	0.00	0.00	0.08
2	0.00	0.00	0.00	---	0.00	1.28	0.00	0.00	---	0.00	0.00	0.00
3	0.00	0.00	0.00	---	0.00	0.28	0.00	0.04	---	0.99	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.66	---	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
6	0.07	0.00	0.00	---	0.55	0.00	0.00	0.00	1.88	0.00	0.00	0.00
7	0.00	0.00	0.00	---	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.17	0.00	0.21	0.00	0.03	0.01	0.00	0.00	0.00	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.00
12	0.00	0.00	0.11	0.08	0.00	0.49	0.10	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.04	0.01	0.00	0.55	0.00	0.00	0.00	0.43	0.00	0.00
14	0.29	0.00	0.01	0.00	0.00	0.00	0.00	---	0.00	1.75	0.00	0.70
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.92	0.85
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.49	0.40
17	0.00	0.00	0.56	0.00	0.00	0.52	0.00	---	0.00	0.00	0.04	0.01
18	0.00	0.00	0.00	0.00	0.00	0.05	0.00	---	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.56	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.04	0.09	0.00	---	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.30	0.00	0.29	0.00	---	0.00	0.00	0.00	0.01
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00
23	0.00	0.19	0.06	1.44	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00
24	0.00	0.26	0.01	0.21	0.00	0.00	0.00	---	0.00	1.31	0.02	0.00
25	0.23	0.00	0.00	0.09	0.00	0.00	0.06	---	0.00	0.11	0.06	0.03
26	0.00	0.00	0.00	0.00	0.00	0.17	0.00	---	0.01	0.11	0.00	0.80
27	0.00	0.00	0.00	0.00	0.00	0.01	0.00	---	0.12	0.00	0.01	0.45
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.22	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	---	0.00	0.00	0.02	0.00
30	0.00	0.00	0.00	0.00	---	0.18	0.00	---	0.00	0.00	0.24	0.00
31	0.00	---	0.00	0.00	---	0.47	---	---	---	0.00	0.88	---
TOTAL	0.59	0.45	0.97	---	1.44	4.40	0.22	---	---	4.70	2.90	3.33



PEE DEE RIVER BASIN

351218080331345 CRN29

LOCATION.--Lat 35°12'18", long 80°33'13", Mecklenburg County, Hydrologic Unit 03040105, Clear Creek Boy Scout Camp, Belt Road, Midland, NC.

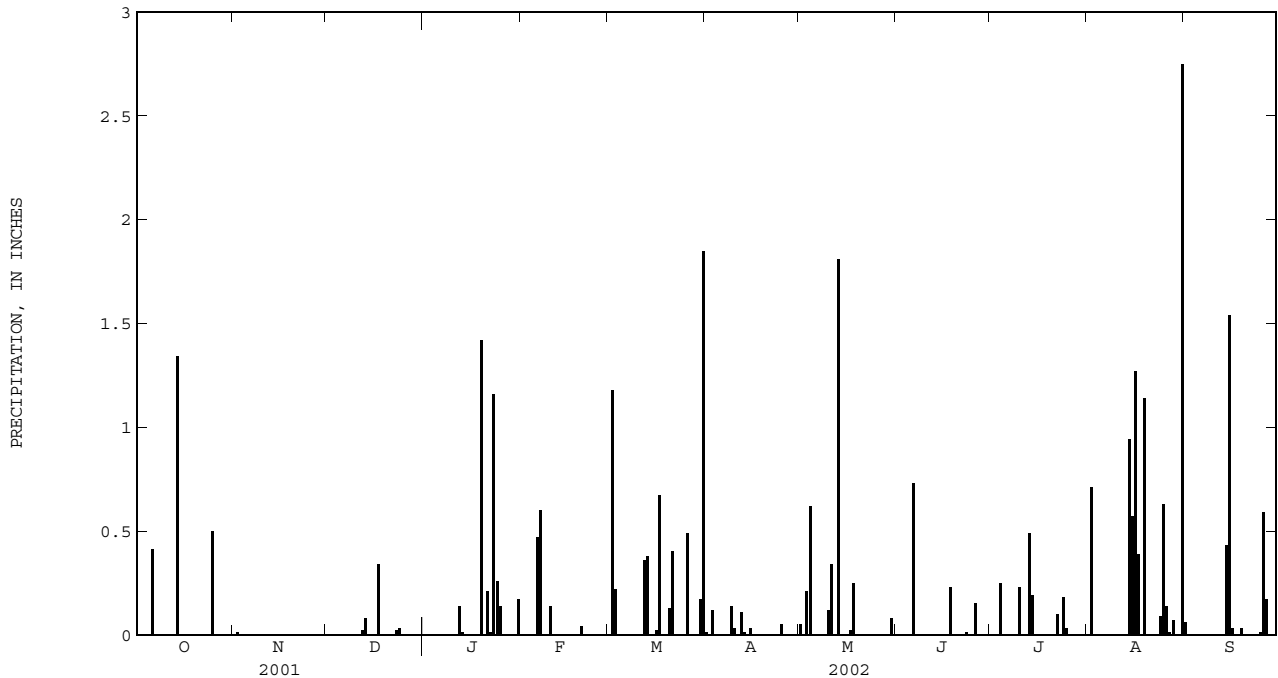
PERIOD OF RECORD.--February 1996 to current year. Records for period February 1996 to September 1998 published in USGS OFR 98-67 and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	---	0.00	0.00	0.00	0.01	0.05	0.00	0.00	0.00	0.06
2	0.00	0.01	---	0.00	0.00	1.18	0.00	0.00	0.00	0.00	0.71	0.00
3	0.00	0.00	---	---	0.00	0.22	0.12	0.21	0.00	0.00	0.00	0.00
4	0.00	0.00	---	---	0.00	0.00	0.00	0.62	0.00	0.25	0.00	0.00
5	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.41	0.00	---	---	0.47	0.00	0.00	0.00	0.73	0.00	0.00	0.00
7	0.00	0.00	---	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	---	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	---	0.00	0.14	0.00	0.03	0.12	0.00	0.23	0.00	0.00
11	0.00	0.00	---	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.14	0.00	0.36	0.11	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.08	0.01	0.00	0.38	0.01	1.81	0.00	0.49	0.00	0.00
14	1.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.94	0.43
15	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.57	1.54
16	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	1.27	0.03
17	0.00	0.00	0.34	0.00	0.00	0.67	0.00	0.02	0.00	0.00	0.39	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.23	0.00	0.00	0.00
19	0.00	0.00	0.00	1.42	0.00	0.00	0.00	0.00	0.00	0.00	1.14	0.03
20	0.00	0.00	0.00	0.00	0.04	0.13	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.21	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00
23	0.00	0.00	0.02	1.16	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
24	0.00	---	0.03	0.26	0.00	0.00	0.00	0.00	0.00	0.18	0.09	0.00
25	0.50	---	0.00	0.14	0.00	0.00	0.05	0.00	0.00	0.03	0.63	0.01
26	0.00	---	0.00	0.00	0.00	0.49	0.00	0.00	0.15	0.00	0.14	0.59
27	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.17
28	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00
29	0.00	---	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	---	0.00	0.00	---	0.17	0.00	0.08	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.17	---	1.85	---	0.00	---	0.00	2.75	---
TOTAL	2.25	---	---	---	1.25	5.87	0.50	3.50	1.12	1.47	8.71	2.86



351455080374445 CRN30

LOCATION.--Lat 35°14'55", long 80°37'44", Mecklenburg County, Hydrologic Unit 03040105, private residence, Peach Orchard Road, Mint Hill, NC.

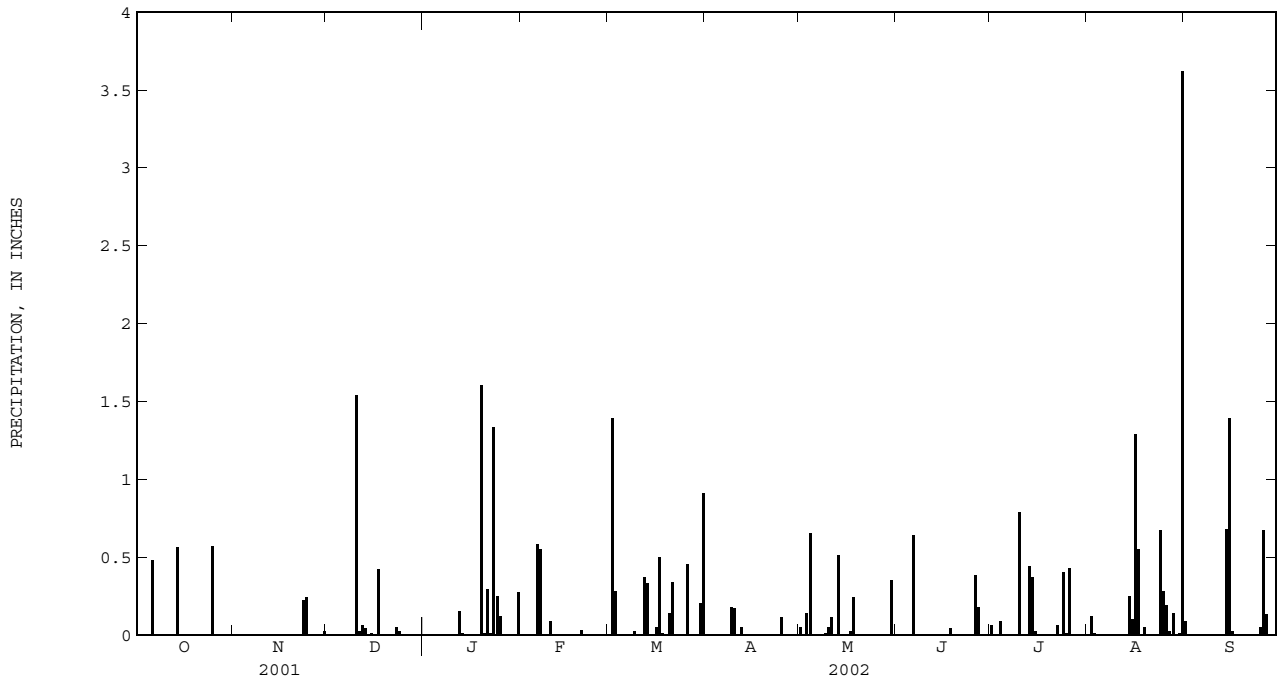
PERIOD OF RECORD.--February 1996 to current year. Records for period February 1996 to September 1998 published in USGS OFR 98-67 and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.06	0.00	0.09
2	0.00	0.00	0.00	0.00	0.00	1.39	0.00	0.00	0.00	0.00	0.12	0.00
3	0.00	0.00	0.00	---	0.00	0.28	0.00	0.14	0.00	0.00	0.01	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.65	0.00	0.09	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.48	0.00	0.00	---	0.58	0.00	0.00	0.00	0.64	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.02	0.18	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.54	0.00	0.09	0.00	0.17	0.05	0.00	0.79	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00
12	0.00	0.00	0.06	0.15	0.00	0.37	0.05	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.04	0.01	0.00	0.33	0.00	0.51	0.00	0.44	0.00	0.00
14	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.25	0.68
15	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.10	1.39
16	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	1.29	0.02
17	0.00	0.00	0.42	0.00	0.00	0.50	0.00	0.02	0.00	0.00	0.55	0.00
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.24	0.04	0.00	0.00	0.00
19	0.00	0.00	0.00	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00
20	0.00	0.00	0.00	0.01	0.03	0.14	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.29	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
23	0.00	0.22	0.05	1.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.24	0.02	0.25	0.00	0.00	0.00	0.00	0.00	0.40	0.67	0.00
25	0.57	0.00	0.00	0.12	0.00	0.00	0.11	0.00	0.00	0.01	0.28	0.05
26	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.38	0.43	0.19	0.67
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.02	0.13
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.02	0.00	0.00	---	0.20	0.00	0.35	0.00	0.00	0.01	0.00
31	0.00	---	0.00	0.27	---	0.91	---	0.00	---	0.00	3.62	---
TOTAL	1.61	0.48	2.16	---	1.25	4.99	0.51	2.13	1.24	2.67	7.30	3.03



PEE DEE RIVER BASIN

351028080385545 CRN32

LOCATION.--Lat 35°10'29", long 80°38'54", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03040105, Bain Elementary School, Bain School Road, Mint Hill, NC.

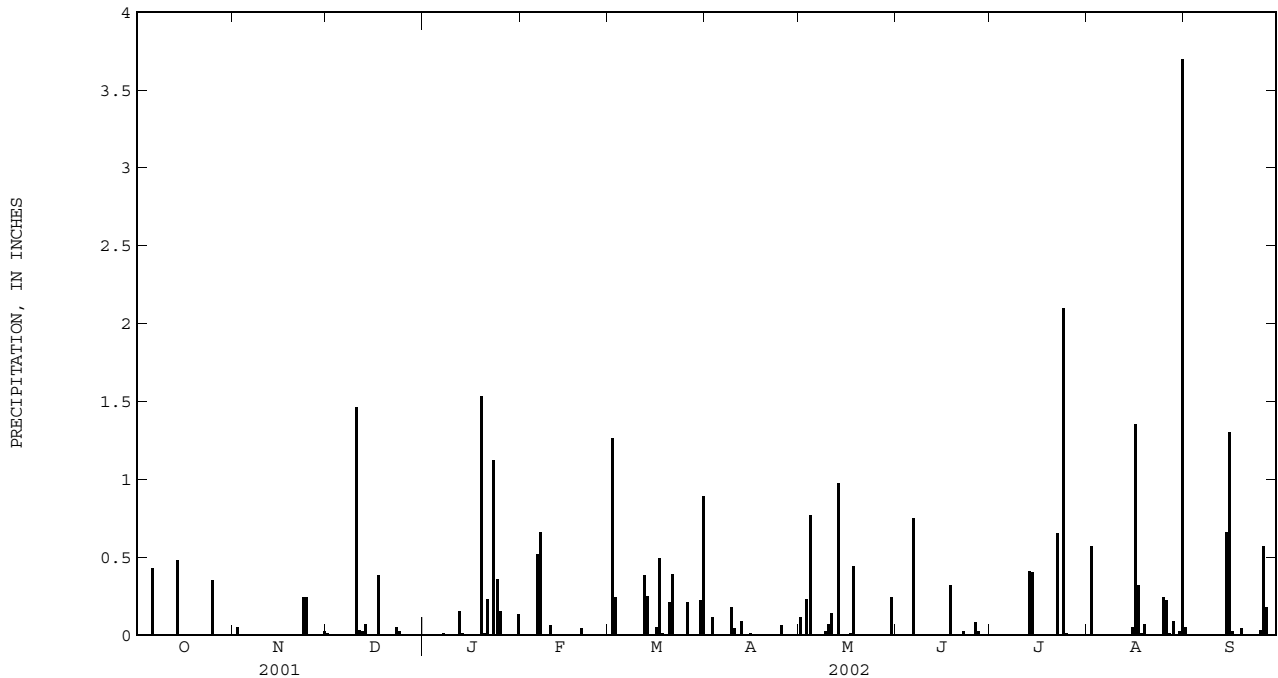
PERIOD OF RECORD.--February 1996 to current year. Records for period February 1996 to September 1998 published in USGS OFR 98-67 and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.05
2	0.00	0.05	---	0.00	0.00	1.26	0.00	0.00	0.00	0.00	0.57	0.00
3	0.00	0.00	---	---	0.00	0.24	0.11	0.23	0.00	0.00	0.00	0.00
4	0.00	0.00	---	---	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.00
5	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.43	0.00	---	---	0.52	0.00	0.00	0.00	0.75	0.00	0.00	0.00
7	0.00	0.00	---	0.01	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.02	0.00	0.00	0.00	0.00
10	0.00	0.00	1.46	0.00	0.06	0.00	0.04	0.07	0.00	0.00	0.00	0.00
11	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.15	0.00	0.38	0.09	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.07	0.01	0.00	0.25	0.00	0.97	0.00	0.41	0.00	0.00
14	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.66
15	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.05	1.30
16	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	1.35	0.02
17	0.00	0.00	0.38	0.00	0.00	0.49	0.00	0.01	0.00	0.00	0.32	0.00
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.44	0.32	0.00	0.01	0.00
19	0.00	0.00	0.00	1.53	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.04
20	0.00	0.00	0.00	0.01	0.04	0.21	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.23	0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.65	0.00	0.00
23	0.00	0.24	0.05	1.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.24	0.02	0.36	0.00	0.00	0.00	0.00	0.00	2.10	0.00	0.00
25	0.35	0.00	0.00	0.15	0.00	0.00	0.06	0.00	0.00	0.01	0.24	0.03
26	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.08	0.00	0.22	0.57
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.18
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.02	0.00	0.00	---	0.22	0.00	0.24	0.00	0.00	0.02	0.00
31	0.00	---	0.00	0.13	---	0.89	---	0.00	---	0.00	3.70	---
TOTAL	1.26	0.55	---	---	1.28	4.60	0.49	3.00	1.19	3.57	6.65	2.85



352000080414645 CRN33

LOCATION.--Lat 35°20'07", long 80°41'51", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03040105, Mallard Creek WWTP, U.S. Highway 29 North, Charlotte, NC.

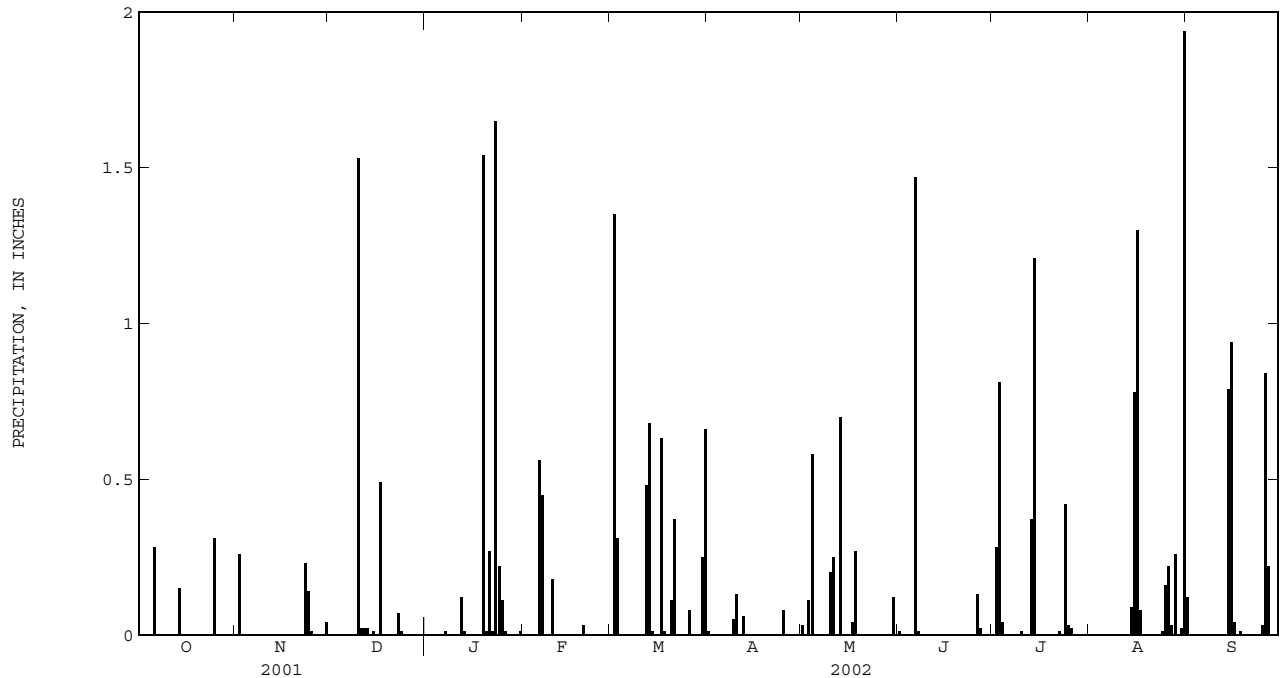
PERIOD OF RECORD.--December 1995 to current year. Records for period December 1995 to September 1998 published in USGS OFR 98-67 and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.01	0.00	0.00	0.12
2	0.00	0.26	0.00	0.00	0.00	1.35	0.00	0.00	0.00	0.28	0.00	0.00
3	0.00	0.00	0.00	---	0.00	0.31	0.00	0.11	0.00	0.81	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.58	0.00	0.04	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.28	0.00	0.00	---	0.56	0.00	0.00	0.00	1.47	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.45	0.00	0.00	0.00	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.53	0.00	0.18	0.00	0.13	0.20	0.00	0.01	0.00	---
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.12	0.00	0.48	0.06	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.02	0.01	0.00	0.68	0.00	0.70	0.00	0.37	0.00	0.00
14	0.15	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	1.21	0.09	0.79
15	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.94
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	0.04
17	0.00	0.00	0.49	0.00	0.00	0.63	0.00	0.04	0.00	0.00	0.08	0.00
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.27	0.00	0.00	0.00	0.01
19	0.00	0.00	0.00	1.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.01	0.03	0.11	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.27	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
23	0.00	0.23	0.07	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.14	0.01	0.22	0.00	0.00	0.00	0.00	0.00	0.42	0.01	0.00
25	0.31	0.01	0.00	0.11	0.00	0.00	0.08	0.00	0.00	0.03	0.16	0.03
26	0.00	0.00	0.00	0.01	0.00	0.08	0.00	0.00	0.13	0.02	0.22	0.84
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.03	0.22
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.04	0.00	0.00	---	0.25	0.00	0.12	0.00	0.00	0.02	0.00
31	0.00	---	0.00	0.01	---	0.66	---	0.00	---	0.00	1.94	---
TOTAL	0.74	0.68	2.17	---	1.22	4.94	0.33	2.30	1.64	3.20	4.89	---



PEE DEE RIVER BASIN

352921080473245 CRN36

LOCATION.--Lat 35°29'22", long 80°47'32", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03040105, Westfork Substation, Shearer Road, Davidson, NC.

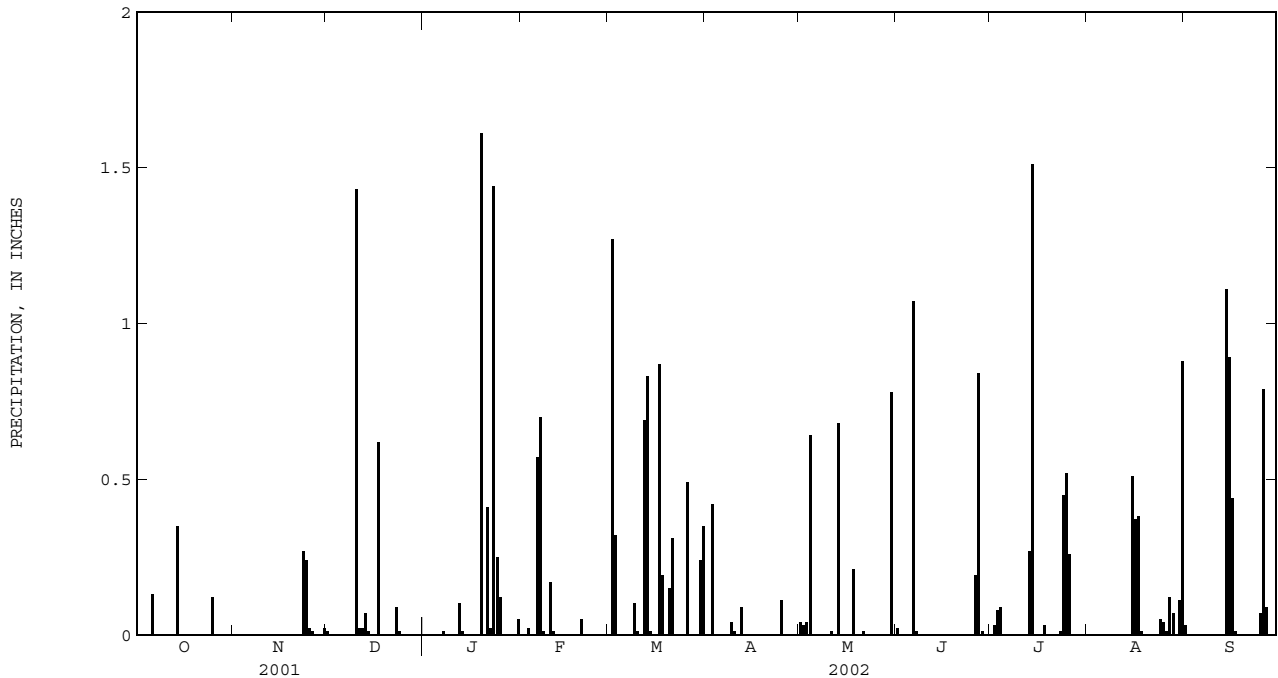
PERIOD OF RECORD.--February 1996 to current year. Records for period February 1996 to September 1998 published in USGS OFR 98-67 and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.04	0.02	0.00	0.00	0.03
2	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.03	0.00	0.03	0.00	0.00
3	0.00	0.00	0.00	---	0.02	0.32	0.42	0.04	0.00	0.08	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.64	0.00	0.09	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.13	0.00	0.00	---	0.57	0.00	0.00	0.00	1.07	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.70	0.00	0.00	0.00	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.10	0.04	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.43	0.00	0.17	0.01	0.01	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.10	0.00	0.69	0.09	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.07	0.01	0.00	0.83	0.00	0.68	0.00	0.27	0.00	0.00
14	0.35	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	1.51	0.00	1.11
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.89
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.44
17	0.00	0.00	0.62	0.00	0.00	0.87	0.00	0.00	0.00	0.00	0.38	0.01
18	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.21	0.00	0.03	0.01	0.00
19	0.00	0.00	0.00	1.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.05	0.15	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.41	0.00	0.31	0.00	0.01	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.27	0.09	1.44	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
24	0.00	0.24	0.01	0.25	0.00	0.00	0.00	0.00	0.00	0.45	0.05	0.00
25	0.12	0.02	0.00	0.12	0.00	0.00	0.11	0.00	0.00	0.52	0.04	0.07
26	0.00	0.01	0.00	0.00	0.00	0.49	0.00	0.00	0.19	0.26	0.01	0.79
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.12	0.09
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.07	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.02	0.00	0.00	---	0.24	0.00	0.78	0.00	0.00	0.11	0.00
31	0.00	---	0.00	0.05	---	0.35	---	0.00	---	0.00	0.88	---
TOTAL	0.60	0.56	2.28	---	1.53	5.83	0.67	2.44	2.14	3.25	2.55	3.43



350634080405245 CRN39

LOCATION.--Lat 35°06'35", long 80°40'52", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03040105, private residence, Mount Harmony Church Road, Matthews, NC.

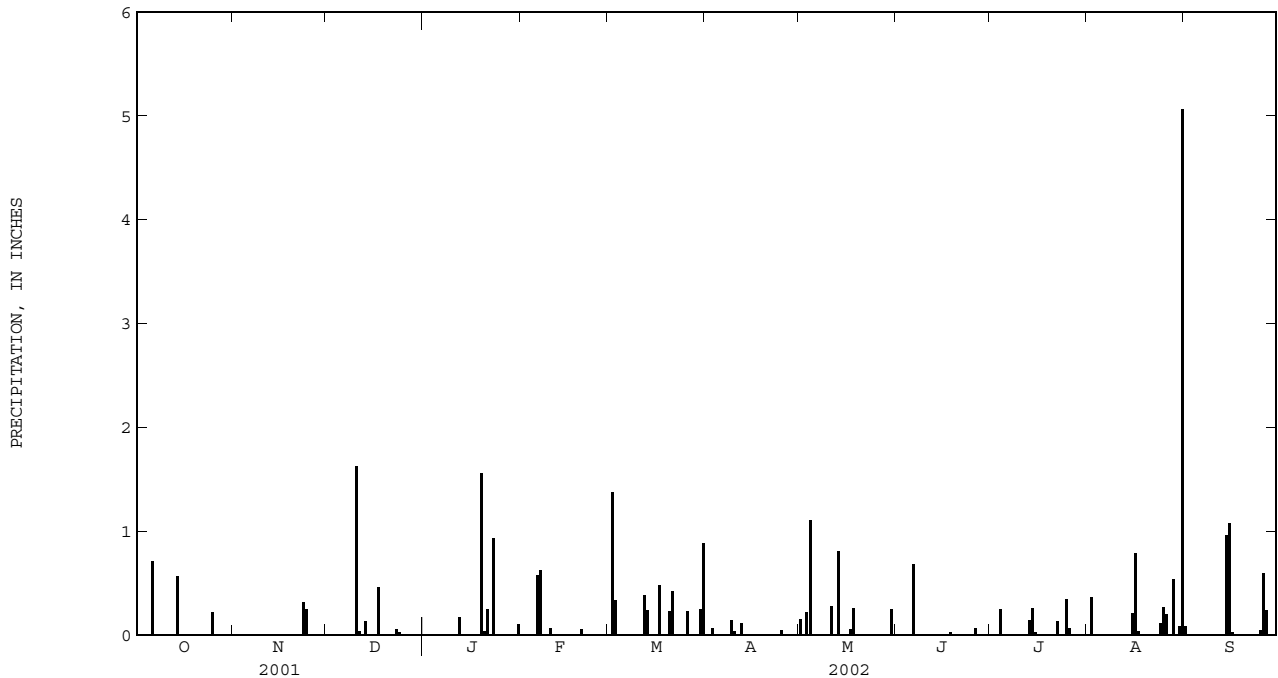
PERIOD OF RECORD.--February 1996 to current year. Records for period February 1996 to September 1998 published in USGS OFR 98-67 and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.15	0.00	0.00	0.00	0.08
2	0.00	0.00	0.00	0.00	0.00	1.37	0.00	0.00	0.00	0.00	0.36	0.00
3	0.00	0.00	0.00	---	0.00	0.33	0.06	0.22	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	1.10	0.00	0.25	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
6	0.71	0.00	0.00	---	0.57	0.00	0.00	0.00	0.68	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.14	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.62	0.00	0.06	0.00	0.03	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00
12	0.00	0.00	0.01	0.17	0.00	0.38	0.11	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.13	0.01	0.00	0.24	0.00	0.80	0.00	0.14	0.00	0.00
14	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.96
15	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.21	1.08
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.02
17	0.00	0.00	0.46	0.00	0.00	0.48	0.00	0.05	0.00	0.00	0.03	0.01
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.26	0.02	0.00	0.00	0.00
19	0.00	0.00	0.00	1.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.03	0.05	0.23	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.25	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00
23	0.00	0.31	0.05	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.25	0.02	---	0.00	0.00	0.00	0.00	0.00	0.01	0.11	0.00
25	0.22	0.00	0.00	---	0.00	0.00	0.04	0.00	0.00	0.34	0.27	0.04
26	0.00	0.00	0.00	---	0.00	0.23	0.00	0.00	0.06	0.06	0.20	0.59
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.24
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.01
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.01	0.00	0.00	---	0.25	0.00	0.25	0.01	0.00	0.08	0.00
31	0.00	---	0.00	0.10	---	0.88	---	0.01	---	0.00	5.06	---
TOTAL	1.49	0.57	2.32	---	1.31	4.83	0.39	3.13	0.77	1.21	7.65	3.03



PEE DEE RIVER BASIN

352718080484345 CRN44

LOCATION.--Lat 35°27'19", long 80°48'43", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03040105, private residence, Mayes Road, Huntersville, NC.

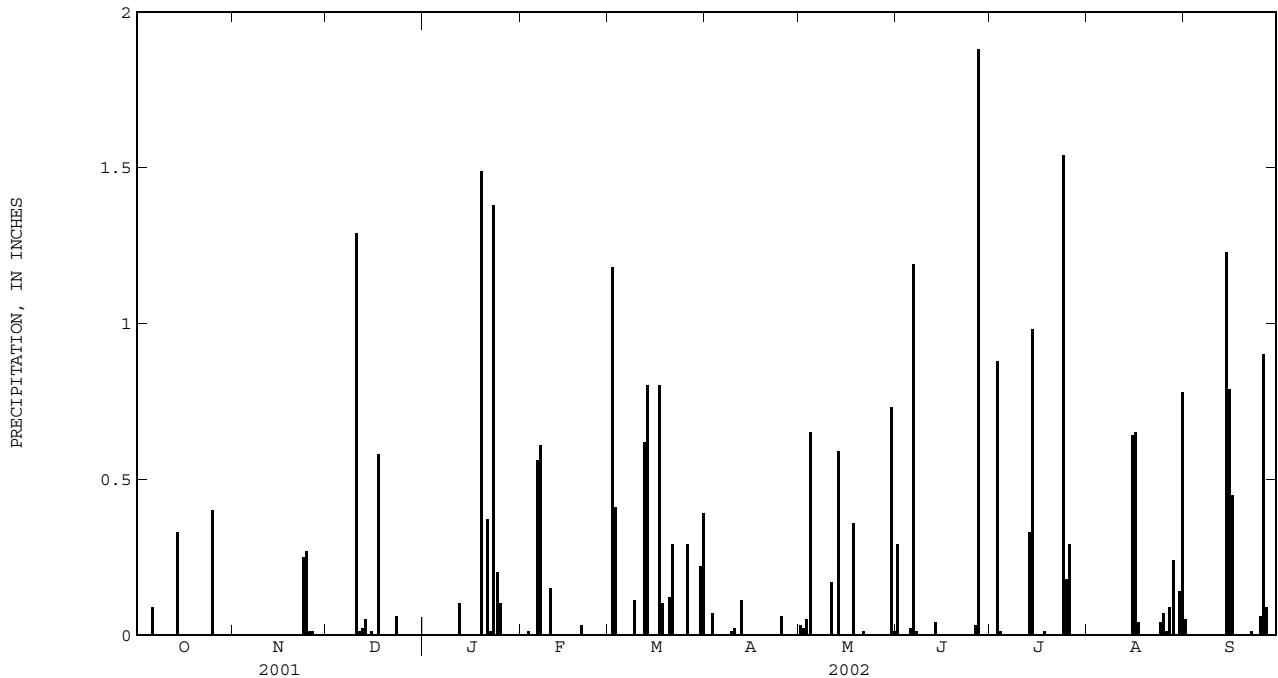
PERIOD OF RECORD.--January 1997 to current year. Records for period January 1997 to September 1998 published in USGS OFR 98-67 and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.29	0.00	0.00	0.05
2	0.00	0.00	0.00	0.00	0.00	1.18	0.00	0.02	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	---	0.01	0.41	0.07	0.05	0.00	0.88	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.65	0.00	0.01	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
6	0.09	0.00	0.00	---	0.56	0.00	0.00	0.00	1.19	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.11	0.01	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.29	0.00	0.15	0.00	0.02	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.10	0.00	0.62	0.11	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.05	0.00	0.00	0.80	0.00	0.59	0.04	0.33	0.00	0.00
14	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	1.23
15	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.79
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.45
17	0.00	0.00	0.58	0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.04	0.00
18	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.36	0.00	0.01	0.00	0.00
19	0.00	0.00	0.00	1.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.03	0.12	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.37	0.00	0.29	0.00	0.01	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
23	0.00	0.25	0.06	1.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.27	0.00	0.20	0.00	0.00	0.00	0.00	0.00	1.54	0.04	0.00
25	0.40	0.01	0.00	0.10	0.00	0.00	0.06	0.00	0.00	0.18	0.07	0.06
26	0.00	0.01	0.00	0.00	0.00	0.29	0.00	0.00	0.03	0.29	0.01	0.90
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.88	0.00	0.09	0.09
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.22	0.00	0.73	0.00	0.00	0.14	0.00
31	0.00	---	0.00	0.00	---	0.39	---	0.01	---	0.00	0.78	---
TOTAL	0.82	0.54	2.02	---	1.36	5.33	0.27	2.62	3.46	4.22	2.70	3.58



352135080462045 CRN46

LOCATION.--Lat 35°21'36", long 80°46'20", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03040105, private residence, Johnston-Oehler Road, Charlotte, NC.

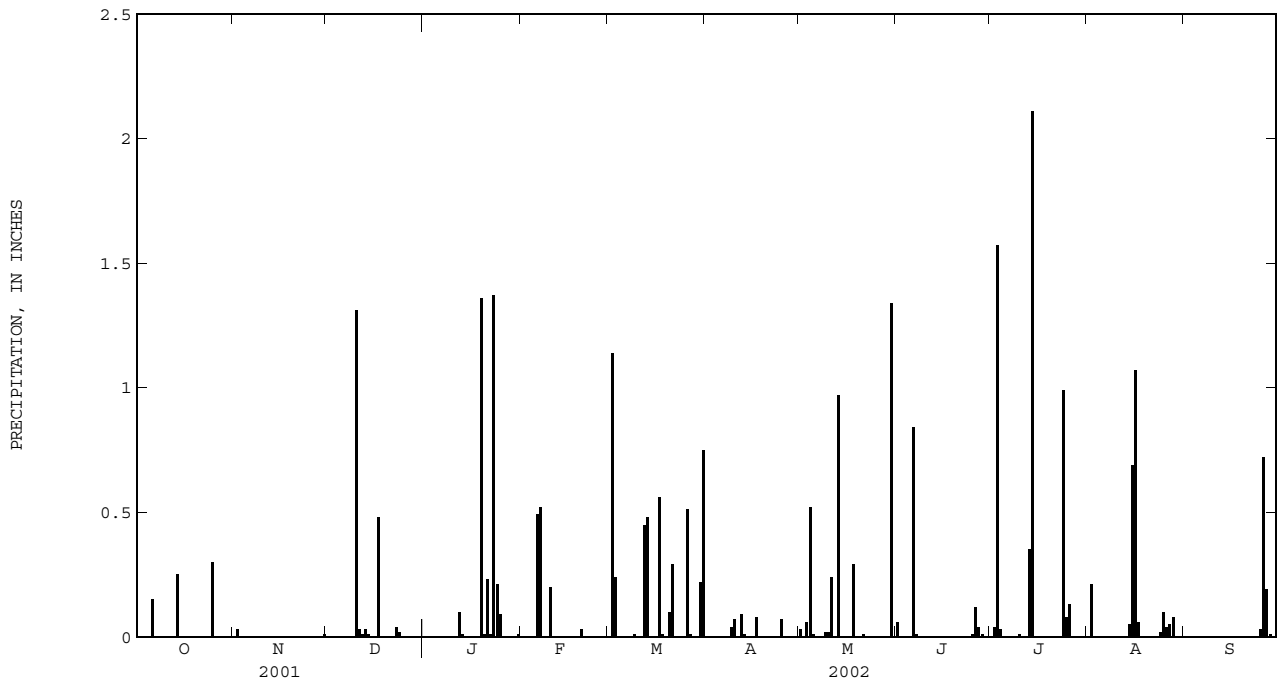
PERIOD OF RECORD.--January 1997 to current year. Records for period January 1997 to September 1998 published in USGS OFR 98-67 and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.06	0.00	0.00	---
2	0.00	0.03	0.00	0.00	0.00	1.14	0.00	0.00	0.00	0.04	0.21	---
3	0.00	0.00	0.00	---	0.00	0.24	0.00	0.06	0.00	1.57	0.00	---
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.52	0.00	0.03	0.00	---
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.01	0.00	0.00	0.00	---
6	0.15	0.00	0.00	---	0.49	0.00	0.00	0.00	0.84	0.00	0.00	---
7	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.01	0.00	0.00	---
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---
9	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.02	0.00	0.00	0.00	---
10	0.00	0.00	1.31	0.00	0.20	0.00	0.07	0.02	0.00	0.01	0.00	---
11	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	---
12	0.00	0.00	0.01	0.10	0.00	0.45	0.09	0.00	0.00	0.00	0.00	---
13	0.00	0.00	0.03	0.01	0.00	0.48	0.01	0.97	0.00	0.35	0.00	---
14	0.25	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	2.11	0.05	---
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	---
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07	---
17	0.00	0.00	0.48	0.00	0.00	0.56	0.08	0.00	0.00	0.00	0.06	---
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.29	0.00	0.00	0.00	---
19	0.00	0.00	0.00	1.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.01	0.03	0.10	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.23	0.00	0.29	0.00	0.01	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	---	0.04	1.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	---	0.02	0.21	0.00	0.00	0.00	0.00	0.00	0.99	0.02	0.00
25	0.30	---	0.00	0.09	0.00	0.00	0.07	0.00	0.01	0.08	0.10	0.03
26	0.00	---	0.00	0.00	0.00	0.51	0.00	0.00	0.12	0.13	0.04	0.72
27	0.00	---	0.00	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.05	0.19
28	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.08	0.01
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.01	0.00	0.00	---	0.22	0.00	1.34	0.00	0.00	---	0.00
31	0.00	---	0.00	0.01	---	0.75	---	0.00	---	0.00	---	---
TOTAL	0.70	---	1.93	---	1.24	4.77	0.36	3.51	1.09	5.31	---	---



LOCATION.--Lat 35°26'24", long 80°43'46", Cabarrus County, Hydrologic Unit 03040105, Odell Volunteer Fire Department, NC Hwy 73, Concord, NC.

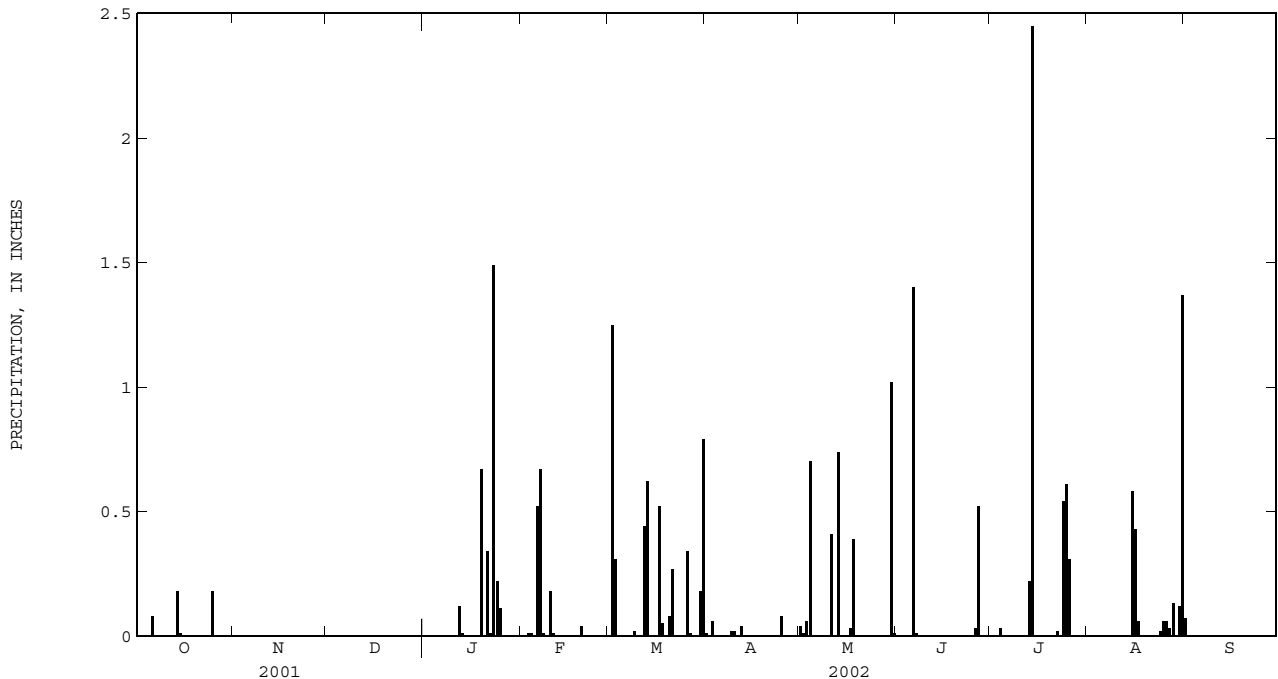
PERIOD OF RECORD.--October 2001 to September 2002 (discontinued).

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	---	---	0.00	0.00	0.01	0.04	0.00	0.00	0.00	0.07
2	0.00	0.00	---	---	0.00	1.25	0.00	0.01	0.00	0.00	0.00	0.00
3	0.00	0.00	---	---	0.01	0.31	0.06	0.06	0.00	0.00	0.00	0.00
4	0.00	0.00	---	---	0.01	0.00	0.00	0.70	0.00	0.03	0.00	0.00
5	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---
6	0.08	0.00	---	---	0.52	0.00	0.00	0.00	1.40	0.00	0.00	---
7	0.00	0.00	---	---	0.67	0.00	0.00	0.00	0.01	0.00	0.00	---
8	0.00	0.00	---	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	---
9	0.00	0.00	---	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	---
10	0.00	0.00	---	0.00	0.18	0.00	0.02	0.00	0.00	0.00	0.00	---
11	0.00	0.00	---	0.00	0.01	0.00	0.00	0.41	0.00	0.00	0.00	---
12	0.00	0.00	---	0.12	0.00	0.44	0.04	0.00	0.00	0.00	0.00	---
13	0.00	0.00	---	0.01	0.00	0.62	0.00	0.74	0.00	0.22	0.00	---
14	0.18	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	2.45	0.00	---
15	0.01	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	---
16	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	---
17	0.00	0.00	---	0.00	0.00	0.52	0.00	0.03	0.00	0.00	0.06	---
18	0.00	0.00	---	0.00	0.00	0.05	0.00	0.39	0.00	0.00	0.00	---
19	0.00	0.00	---	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---
20	0.00	0.00	---	0.00	0.04	0.08	0.00	0.00	0.00	0.00	0.00	---
21	0.00	0.00	---	0.34	0.00	0.27	0.00	0.00	0.00	0.00	0.00	---
22	0.00	0.00	---	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	---
23	0.00	0.00	---	1.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---
24	0.00	---	---	0.22	0.00	0.00	0.00	0.00	0.00	0.54	0.02	---
25	0.18	---	---	0.11	0.00	0.00	0.08	0.00	0.00	0.61	0.06	---
26	0.00	---	---	0.00	0.00	0.34	0.00	0.00	0.03	0.31	0.06	---
27	0.00	---	---	0.00	0.00	0.01	0.00	0.00	0.52	0.00	0.03	---
28	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	---
29	0.00	---	---	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	---
30	0.00	---	---	0.00	---	0.18	0.00	1.02	0.00	0.00	0.12	---
31	0.00	---	---	0.00	---	0.79	---	0.01	---	0.00	1.37	---
TOTAL	0.45	---	---	---	1.45	4.88	0.23	3.41	1.96	4.18	2.86	---



351536080410645 CRN65

LOCATION.--Lat 35°15'36", long 80°41'06", Mecklenburg County, Hydrologic Unit 03040105, Reedy Creek Elementary School, Plaza Road Extension, Charlotte, NC.

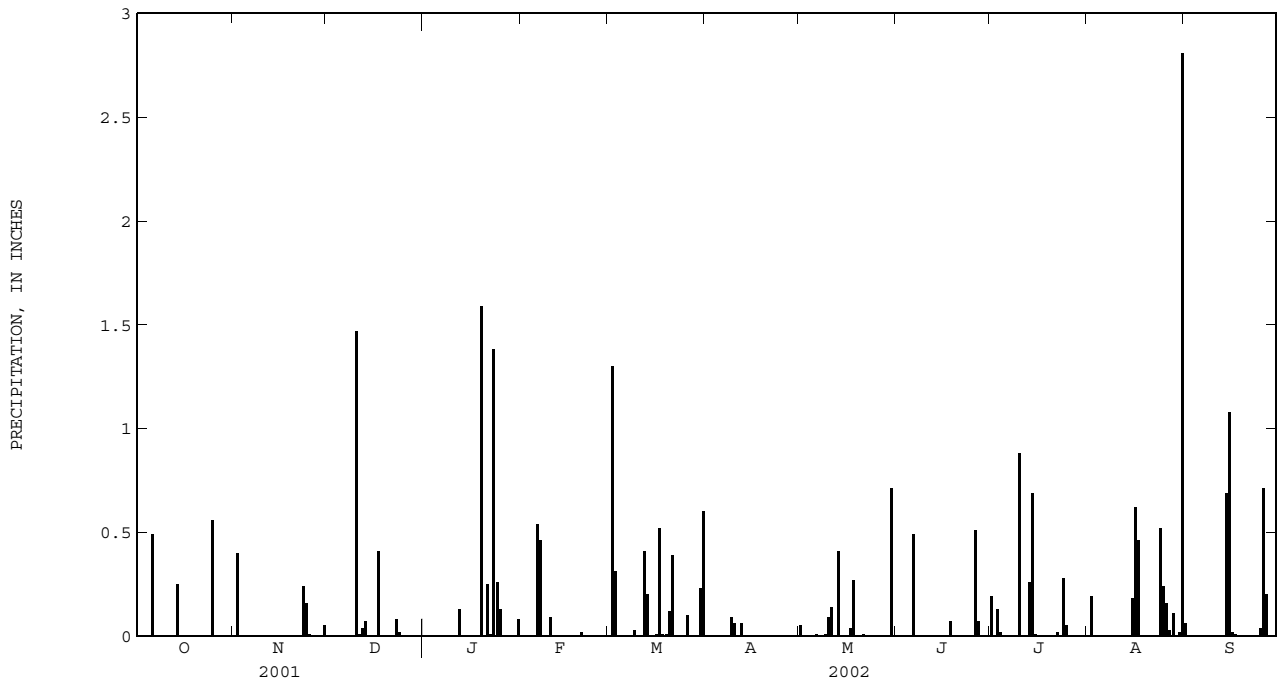
PERIOD OF RECORD.--October 2001 to September 2002.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.19	0.00	0.06
2	0.00	0.40	0.00	---	0.00	1.30	0.00	0.00	0.00	0.00	0.19	0.00
3	0.00	0.00	0.00	---	0.00	0.31	0.00	0.00	0.00	0.13	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.49	0.00	0.00	---	0.54	0.00	0.00	0.01	0.49	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.03	0.09	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.47	0.00	0.09	0.00	0.06	0.09	0.00	0.88	0.00	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00
12	0.00	0.00	0.04	0.13	0.00	0.41	0.06	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.07	0.00	0.00	0.20	0.00	0.41	0.00	0.26	0.00	0.00
14	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.00	0.69
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.18	1.08
16	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.62	0.02
17	0.00	0.00	0.41	0.00	0.00	0.52	0.00	0.04	0.00	0.00	0.46	0.01
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.27	0.07	0.00	0.00	0.00
19	0.00	0.00	0.00	1.59	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.02	0.12	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.25	0.00	0.39	0.00	0.01	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
23	0.00	0.24	0.08	1.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.16	0.02	0.26	0.00	0.00	0.00	0.00	0.00	0.28	0.52	0.00
25	0.56	0.01	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.05	0.24	0.04
26	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.51	0.00	0.16	0.71
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.03	0.20
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.05	0.00	0.00	---	0.23	0.00	0.71	0.00	0.00	0.02	0.00
31	0.00	---	0.00	0.08	---	0.60	---	0.00	---	0.00	2.81	---
TOTAL	1.30	0.86	2.10	---	1.11	4.24	0.21	1.74	1.14	2.53	5.34	2.81



PEE DEE RIVER BASIN

351145080371945 CRN68

LOCATION.--Lat 35°11'45", long 80°37'19", Mecklenburg County, Hydrologic Unit 03040105, White Farm, Bartlett Road, Mint Hill, NC.

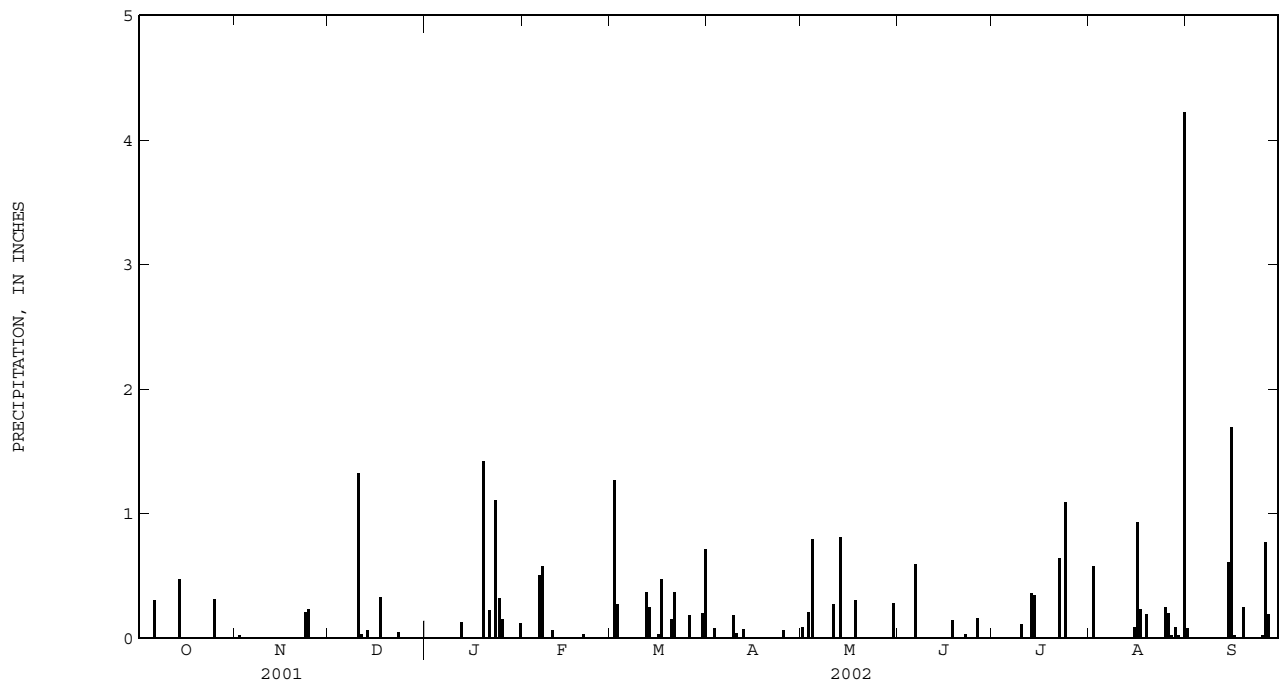
PERIOD OF RECORD.--October 2001 to September 2002.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.09	0.00	0.00	0.00	0.08
2	0.00	0.02	0.00	---	0.00	1.27	0.00	0.00	0.00	0.00	0.58	0.00
3	0.00	0.00	0.00	---	0.00	0.27	0.08	0.21	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.79	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.30	0.00	0.00	---	0.50	0.00	0.00	0.00	0.59	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.32	0.00	0.06	0.00	0.04	0.01	0.00	0.11	0.00	0.00
11	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00
12	0.00	0.00	0.01	0.13	0.00	0.37	0.07	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.06	0.00	0.00	0.25	0.00	0.81	0.00	0.36	0.00	0.00
14	0.47	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.61
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	1.69
16	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.93	0.02
17	0.00	0.00	0.33	0.00	0.00	0.47	0.00	0.01	0.00	0.00	0.23	0.00
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.30	0.14	0.00	0.01	0.00
19	0.00	0.00	0.00	1.42	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.25
20	0.00	0.00	0.00	0.01	0.03	0.15	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.22	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.03	0.64	0.00	0.00
23	0.00	0.21	0.05	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.23	0.01	0.32	0.00	0.00	0.00	0.00	0.00	1.09	0.00	0.00
25	0.31	0.00	0.00	0.15	0.00	0.00	0.06	0.00	0.00	0.01	0.25	0.02
26	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.16	0.00	0.20	0.77
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.19
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.02	0.00
30	0.00	0.01	0.00	0.00	---	0.20	0.00	0.28	0.00	0.00	0.01	0.00
31	0.00	---	0.00	0.12	---	0.71	---	0.00	---	0.00	4.22	---
TOTAL	1.08	0.47	1.82	---	1.19	4.28	0.43	2.78	0.92	2.55	6.84	3.63



354822080521501 STATESVILLE - PRECIPITATION

LOCATION.--Lat 35°48'37", long 80°52'51", North American Datum of 1983, Iredell County, Hydrologic Unit 03040102, Statesville WWTP, Sunset Hill Road, Statesville, NC.

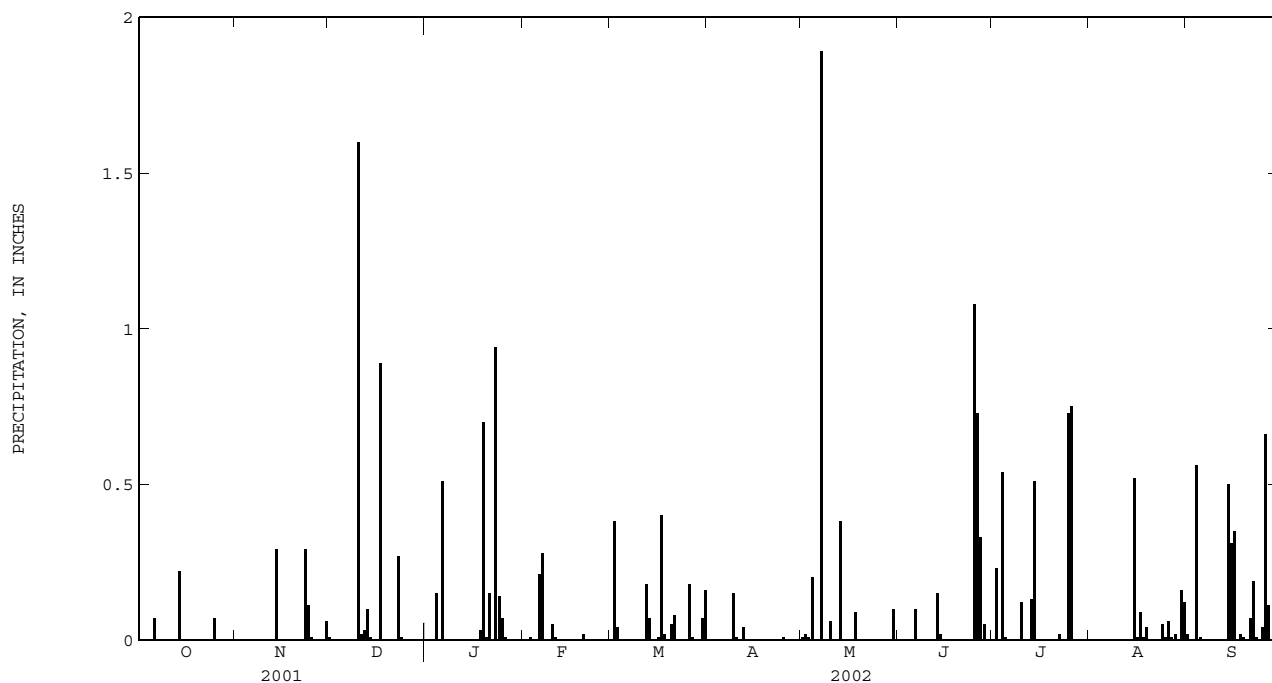
PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.02
2	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.02	0.00	0.23	0.00	0.00
3	0.00	0.00	0.00	0.00	0.01	0.04	0.00	0.01	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.20	0.00	0.54	0.00	0.56
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01
6	0.07	0.00	0.00	0.51	0.21	0.00	0.00	0.00	0.10	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.28	0.00	0.00	1.89	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.60	0.00	0.05	0.00	0.01	0.06	0.00	0.12	0.00	0.00
11	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.03	0.00	0.00	0.18	0.04	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.10	0.00	0.00	0.07	0.00	0.38	0.15	0.13	0.00	0.00
14	0.22	0.29	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.51	0.00	0.50
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.31
16	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.35
17	0.00	0.00	0.89	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.09	0.00
18	0.00	0.00	0.00	0.03	0.00	0.02	0.00	0.09	0.00	0.00	0.01	0.02
19	0.00	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.01
20	0.00	0.00	0.00	0.01	0.02	0.05	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.15	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.07
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.19
23	0.00	0.29	0.27	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
24	0.00	0.11	0.01	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00
25	0.07	0.01	0.00	0.07	0.00	0.00	0.01	0.00	1.08	0.73	0.01	0.04
26	0.00	0.00	0.00	0.01	0.00	0.18	0.00	0.00	0.73	0.75	0.06	0.66
27	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.33	0.00	0.01	0.11
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.02	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.06	0.00	0.00	---	0.07	0.00	0.10	0.00	0.00	0.16	0.00
31	0.00	---	0.00	0.00	---	0.16	---	0.00	---	0.00	0.12	---
TOTAL	0.36	0.76	2.94	2.71	0.58	1.65	0.21	2.76	2.46	3.04	1.10	2.86



PEE DEE RIVER BASIN

354057080362601 NC-193

LOCATION.--Lat 35°40'58", long 80°36'25"(revised), North American Datum of 1983, Rowan County, Hydrologic Unit 03040102, 0.75 mi south of Secondary Road 1526 on Piedmont Research Station road, 2.75 mi south of Barber.

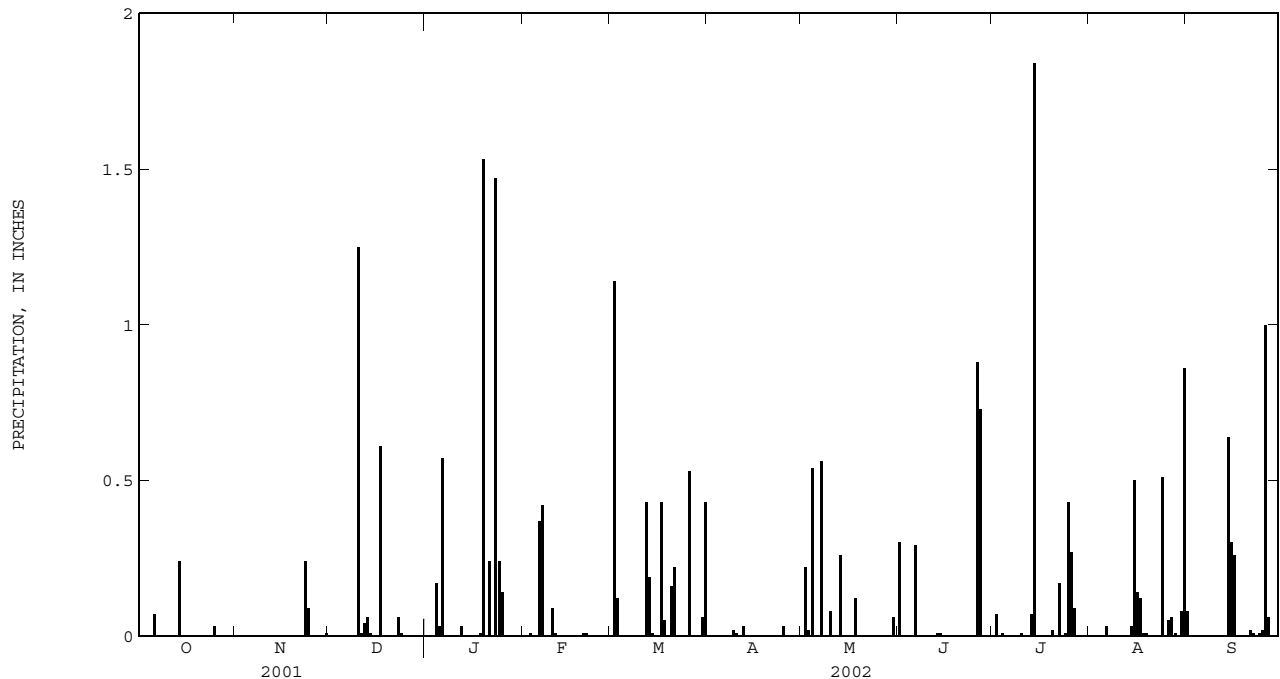
PERIOD OF RECORD.--April 1996 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Gage is operated as part of climatic-effects network. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.08
2	0.00	0.00	0.00	0.00	0.00	1.14	0.00	0.22	0.00	0.07	0.00	0.00
3	0.00	0.00	0.00	0.00	0.01	0.12	0.00	0.02	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.54	0.00	0.01	0.00	0.00
5	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.07	0.00	0.00	0.57	0.37	0.00	0.00	0.00	0.29	0.00	0.03	0.00
7	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.56	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.25	0.00	0.09	0.00	0.01	0.08	0.00	0.01	0.00	0.00
11	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.04	0.03	0.00	0.43	0.03	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.06	0.00	0.00	0.19	0.00	0.26	0.01	0.07	0.00	0.00
14	0.24	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	1.84	0.03	0.64
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.30
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.26
17	0.00	0.00	0.61	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.12	0.00
18	0.00	0.00	0.00	0.01	0.00	0.05	0.00	0.12	0.00	0.00	0.01	0.00
19	0.00	0.00	0.00	1.53	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
20	0.00	0.00	0.00	0.00	0.01	0.16	0.00	0.00	0.00	0.02	0.00	0.00
21	0.00	0.00	0.00	0.24	0.01	0.22	0.00	0.00	0.00	0.00	0.00	0.02
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.01
23	0.00	0.24	0.06	1.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.09	0.01	0.24	0.00	0.00	0.00	0.00	0.00	0.01	0.51	0.01
25	0.03	0.00	0.00	0.14	0.00	0.00	0.03	0.00	0.00	0.43	0.00	0.02
26	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.88	0.27	0.05	1.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.09	0.06	0.06
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.01	0.00	0.00	---	0.06	0.00	0.06	0.00	0.00	0.08	0.00
31	0.00	---	0.00	0.00	---	0.43	---	0.00	---	0.00	0.86	---
TOTAL	0.34	0.34	2.05	4.43	0.92	3.77	0.09	1.86	2.22	2.99	2.41	2.40





Dry Falls on the Cullasaja River near Highlands, North Carolina.

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 mi².

WATER-DISCHARGE RECORDS

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 NGVD of 1929, from topographic map. Satellite telemetry at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	59	75	72	128	85	233	116	101	59	27	41
2	55	60	67	70	117	133	206	111	94	65	28	38
3	53	60	64	70	111	198	186	104	91	58	42	33
4	51	58	62	68	108	126	168	143	92	73	30	32
5	51	57	60	e68	102	111	156	136	419	57	26	28
6	53	56	60	101	108	107	146	114	206	51	24	25
7	51	56	60	111	231	104	139	106	194	47	22	23
8	50	55	60	85	294	101	134	101	133	46	20	22
9	50	55	60	80	199	99	146	97	112	43	19	21
10	50	53	80	81	172	99	169	106	98	42	18	18
11	51	53	209	80	156	93	143	125	84	42	18	16
12	58	51	118	77	142	109	139	120	79	46	17	14
13	67	51	106	75	133	282	164	122	76	54	16	15
14	124	51	108	73	125	228	157	138	102	83	15	26
15	107	51	98	72	117	176	149	117	79	95	16	96
16	75	50	91	70	119	161	140	113	69	65	66	98
17	67	50	100	69	115	319	136	110	67	52	61	53
18	65	50	200	68	103	345	139	160	64	47	61	42
19	64	50	139	139	101	264	134	126	61	43	46	53
20	63	50	119	296	103	231	125	115	60	41	42	76
21	62	50	104	187	104	229	119	114	57	43	33	62
22	61	49	97	155	98	199	115	112	54	41	27	104
23	61	51	93	516	96	178	109	109	54	39	32	130
24	61	140	98	418	94	165	106	107	57	46	28	71
25	63	151	88	346	92	156	135	103	53	49	34	68
26	60	100	85	256	91	179	112	100	87	46	45	496
27	56	80	81	208	e89	200	108	121	111	42	44	1440
28	59	72	79	177	84	162	107	143	77	37	43	425
29	60	68	78	159	---	154	101	108	68	33	34	206
30	60	78	75	145	---	186	97	102	69	31	33	148
31	60	---	73	134	---	205	---	101	---	28	34	---
TOTAL	1925	1915	2887	4526	3532	5384	4218	3600	2968	1544	1001	3920
MEAN	62.10	63.83	93.13	146.0	126.1	173.7	140.6	116.1	98.93	49.81	32.29	130.7
MAX	124	151	209	516	294	345	233	160	419	95	66	1440
MIN	50	49	60	68	84	85	97	97	53	28	15	14
CFSM	0.49	0.50	0.73	1.15	0.99	1.37	1.11	0.91	0.78	0.39	0.25	1.03
IN.	0.56	0.56	0.85	1.33	1.03	1.58	1.24	1.05	0.87	0.45	0.29	1.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2002, BY WATER YEAR (WY)

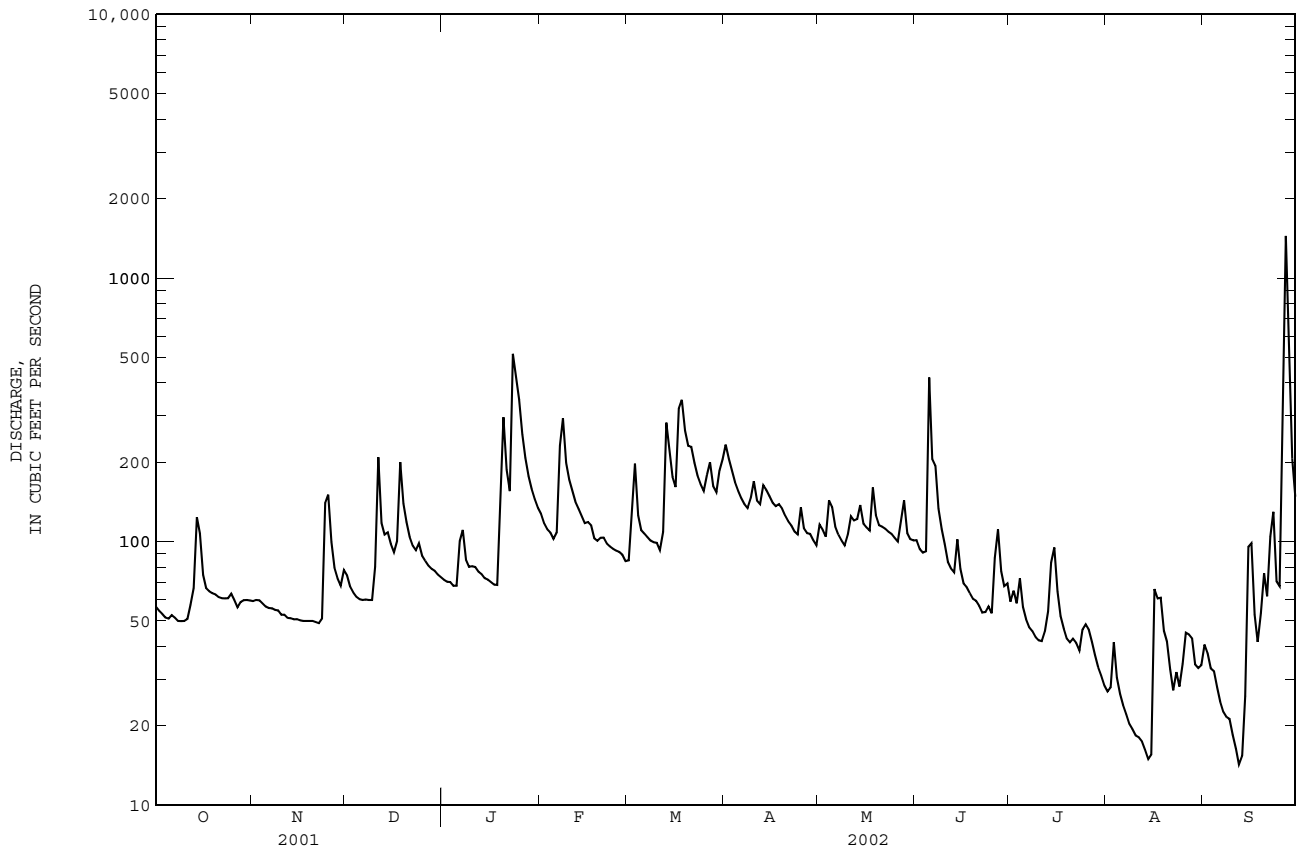
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	180.0	200.3	218.3	275.0	325.1	340.5	307.2	234.4	196.9	155.0	184.2	158.4											
MAX	550	606	573	620	739	622	688	444	652	339	513	435											
(WY)	1996	1986	1984	1995	1998	1990	1983	1984	1992	1991	1995	1989											
MIN	52.4	63.8	77.6	107	110	130	138	76.2	65.1	49.8	32.3	43.3											
(WY)	2001	2002	1989	1981	2001	1988	1986	2001	2001	2002	2002	1999											

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1981 - 2002

ANNUAL TOTAL	38311	37420	
ANNUAL MEAN	105.0	102.5	230.7
HIGHEST ANNUAL MEAN			351
LOWEST ANNUAL MEAN			103
HIGHEST DAILY MEAN	810	Mar 30	1440
LOWEST DAILY MEAN	37	Jul 16	14
ANNUAL SEVEN-DAY MINIMUM	42	Jul 12	17
MAXIMUM PEAK FLOW			2730
MAXIMUM PEAK STAGE			6.43
INSTANTANEOUS LOW FLOW			11
ANNUAL RUNOFF (CFSM)	0.83		0.81
ANNUAL RUNOFF (INCHES)	11.22		10.96
10 PERCENT EXCEEDS	176		177
50 PERCENT EXCEEDS	79		81
90 PERCENT EXCEEDS	51		34

e Estimated.

02137727 CATAWBA RIVER NEAR PLEASANT GARDENS, NC--Continued



SANTEE RIVER BASIN

02137727 CATAWBA RIVER NEAR PLEASANT GARDENS, NC--Continued

PRECIPITATION RECORDS

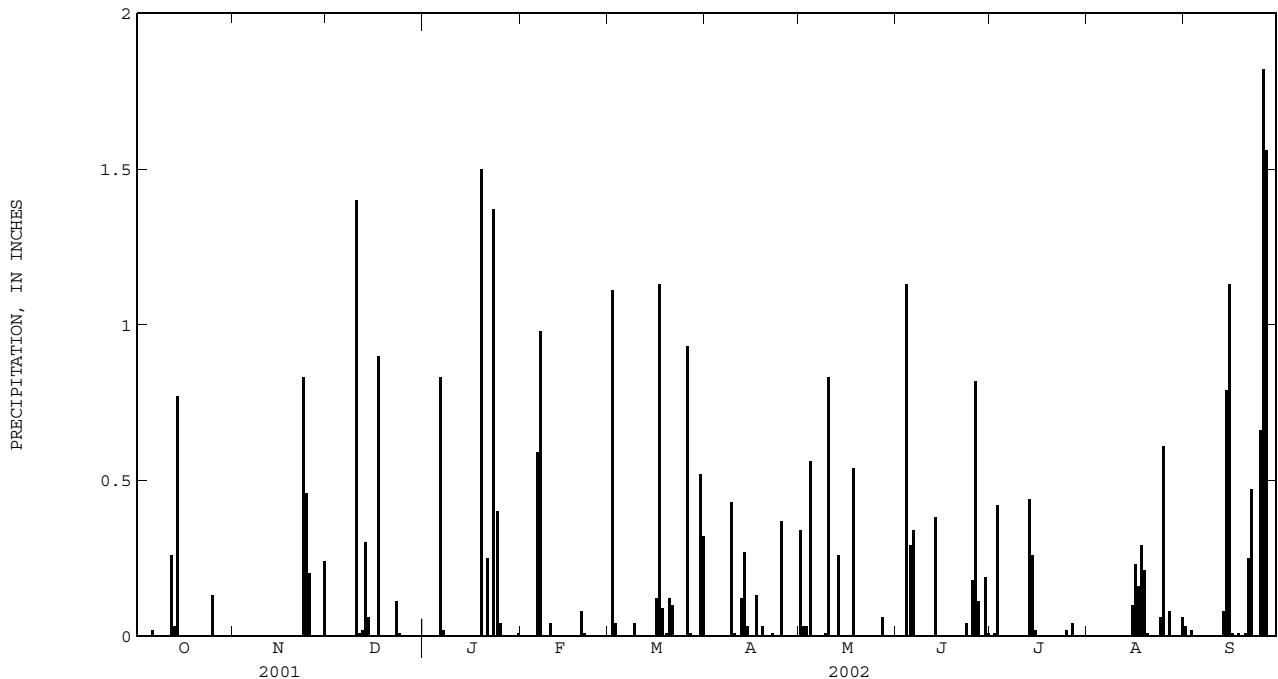
PERIOD OF RECORD.--November 2000 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Satellite and telephone telemetry at station.

REMARKS.--Gage is operated in cooperation with Duke Energy and the North Carolina Department of Environment and Natural Resources. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.03
2	0.00	0.00	0.00	0.00	0.00	1.11	0.00	0.03	0.00	0.01	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.03	0.00	0.42	0.00	0.02
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	1.13	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00
6	0.02	0.00	0.00	0.83	0.59	0.00	0.00	0.00	0.34	0.00	0.00	0.00
7	0.00	0.00	0.00	0.02	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.04	0.43	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.40	0.00	0.04	0.00	0.01	0.83	0.00	0.00	0.00	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.26	0.00	0.02	0.00	0.00	---	0.12	0.00	0.00	0.00	0.00	0.00
13	0.03	0.00	0.30	0.00	0.00	---	0.27	0.26	0.38	0.44	0.00	0.08
14	0.77	0.00	0.06	0.00	0.00	0.00	0.03	0.00	0.00	0.26	0.00	0.79
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.10	1.13
16	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.23	0.01
17	0.00	0.00	0.90	0.00	0.00	1.13	0.13	0.00	0.00	0.00	0.16	0.00
18	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.54	0.00	0.00	0.29	0.01
19	0.00	0.00	0.00	1.50	0.00	0.01	0.03	0.00	0.00	0.00	0.21	0.00
20	0.00	0.00	0.00	0.00	0.08	0.12	0.00	0.00	0.00	0.00	0.01	0.01
21	0.00	0.00	0.00	0.25	0.01	0.10	0.00	0.00	0.00	0.00	0.00	0.25
22	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.47
23	0.00	0.83	0.11	1.37	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
24	0.00	0.46	0.01	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00
25	0.13	0.20	0.00	0.04	0.00	0.00	0.37	0.00	0.18	0.02	0.61	0.66
26	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.82	0.00	0.00	1.82
27	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.06	0.11	0.04	0.08	1.56
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.19	0.00	0.00	0.00
30	0.00	0.24	0.00	0.00	---	0.52	0.00	0.00	0.01	0.00	0.00	0.00
31	0.00	---	0.00	0.01	---	0.32	---	0.00	---	0.00	0.06	---
TOTAL	1.21	1.73	2.81	4.42	1.70	---	1.40	2.66	3.49	1.21	1.81	6.84



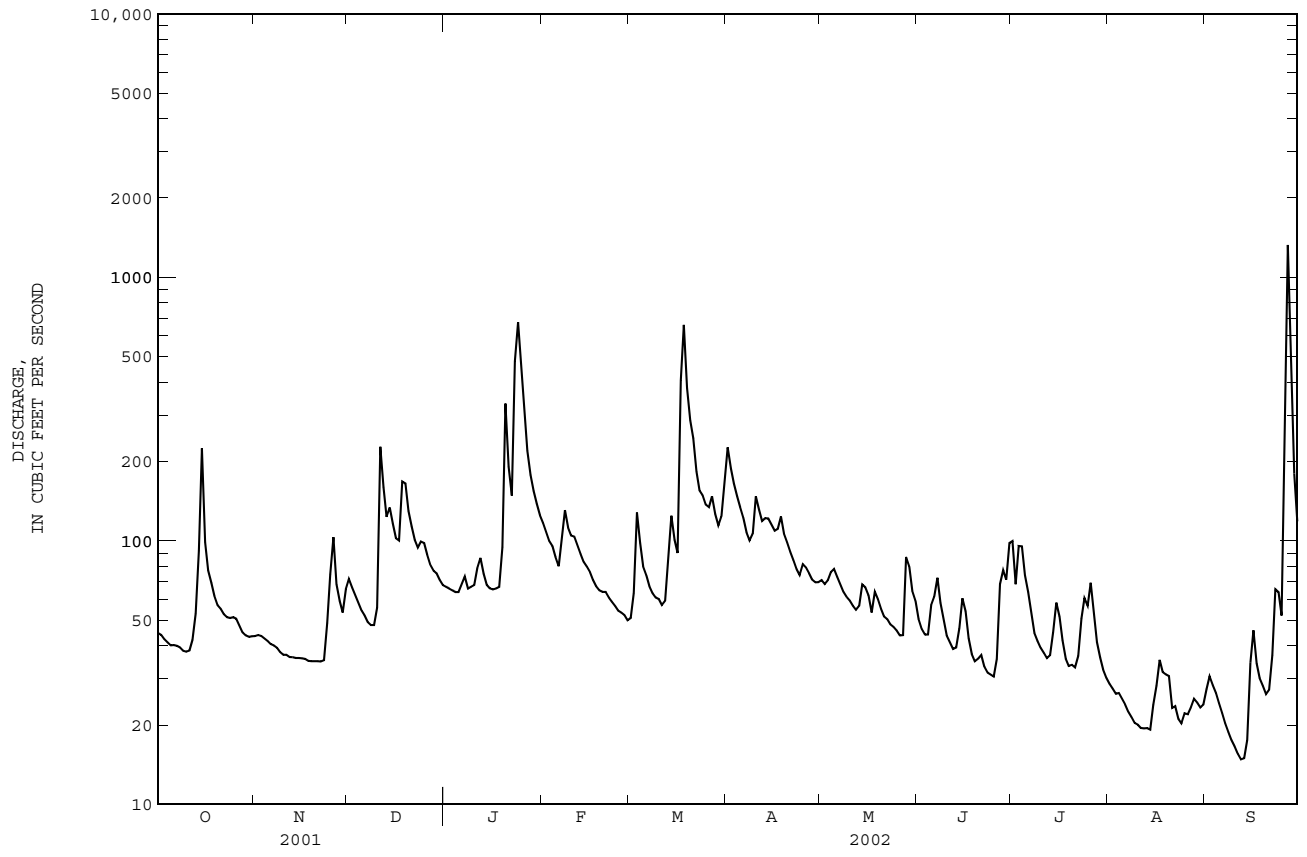


Old gaging structure at Eno River at Hillsborough, North Carolina.

02138500 LINVILLE RIVER NEAR NEBO, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1922 - 2002	
ANNUAL TOTAL	34669		29942		149.0	
ANNUAL MEAN	94.98		82.03		246	
HIGHEST ANNUAL MEAN					1979	
LOWEST ANNUAL MEAN					77.6	
HIGHEST DAILY MEAN	1130	Mar 30	1330	Sep 27	14000	Aug 13 1940
LOWEST DAILY MEAN	32	Jun 20	15	Sep 12	8.0	Sep 7 1925
ANNUAL SEVEN-DAY MINIMUM	35	Nov 17	17	Sep 8	10	Aug 22 1925
MAXIMUM PEAK FLOW			2600		39500*	Aug 13 1940
MAXIMUM PEAK STAGE			4.11		11.40	Aug 13 1940
INSTANTANEOUS LOW FLOW			14*		2.0*	Jan 9 1956
ANNUAL RUNOFF (CFSM)	1.42		1.23		2.23	
ANNUAL RUNOFF (INCHES)	19.34		16.70		30.36	
10 PERCENT EXCEEDS	178		136		265	
50 PERCENT EXCEEDS	67		60		98	
90 PERCENT EXCEEDS	39		27		37	

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 mi².

PERIOD OF RECORD.--July 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,002.40 ft above NGVD of 1929 (levels by City of Morganton). Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. City of Morganton diverted about 13.4 ft³/s from Catawba River for municipal water supply. Considerable regulation, at times, caused by Lake James (station 02138519), 6.5 mi upstream. Maximum discharge for period of record computed on basis of releases from Lake James. Minimum discharge for period of record and current water year affected by regulation.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	481	324	315	308	296	267	308	603	253	447	360	248
2	472	343	296	342	202	242	247	215	242	447	361	192
3	483	329	178	355	204	357	251	202	382	466	370	194
4	244	329	293	344	284	320	236	498	387	544	363	39
5	235	336	295	314	276	228	331	183	487	577	344	227
6	400	330	303	315	282	466	217	164	504	599	335	176
7	239	323	298	342	355	411	207	451	533	582	264	270
8	345	328	299	335	446	413	555	125	410	451	260	180
9	355	330	300	535	366	425	745	180	383	462	246	167
10	363	367	321	259	337	420	1060	77	493	433	254	162
11	322	373	418	242	409	401	561	223	492	430	258	163
12	370	289	363	251	396	412	725	147	487	404	253	36
13	374	319	340	240	384	491	641	439	502	407	246	165
14	361	388	339	266	297	525	301	414	511	584	248	157
15	426	377	279	260	293	469	1150	397	492	477	270	192
16	379	377	190	267	205	281	1160	398	525	471	304	267
17	366	417	335	261	198	404	1010	384	472	451	334	220
18	370	424	425	345	277	784	178	409	467	470	308	195
19	371	418	588	286	277	967	190	187	469	441	240	182
20	349	463	571	249	241	1460	158	405	477	448	257	166
21	368	470	551	196	279	1450	156	302	493	538	246	127
22	373	459	327	392	281	1330	722	389	464	476	244	178
23	369	437	323	638	231	587	1040	382	487	452	251	195
24	374	481	324	463	235	577	1040	384	469	469	235	193
25	379	481	325	425	274	535	202	383	469	502	263	188
26	348	443	312	344	275	512	199	209	464	445	243	244
27	358	318	312	282	275	617	194	264	513	454	253	450
28	363	316	314	338	281	769	209	383	443	404	258	360
29	276	306	270	331	---	1270	189	385	430	437	242	253
30	364	310	264	305	---	1100	283	375	420	425	246	227
31	354	---	305	303	---	548	---	419	---	354	249	---
TOTAL	11231	11205	10373	10133	8156	19038	14465	9976	13620	14547	8605	6013
MEAN	362.3	373.5	334.6	326.9	291.3	614.1	482.2	321.8	454.0	469.3	277.6	200.4
MAX	483	481	588	638	446	1460	1160	603	533	599	370	450
MIN	235	289	178	196	198	228	156	77	242	354	235	36
†	-165	-155	+46	+269	+177	+112	+32	-10	-179	-303	-187	+183

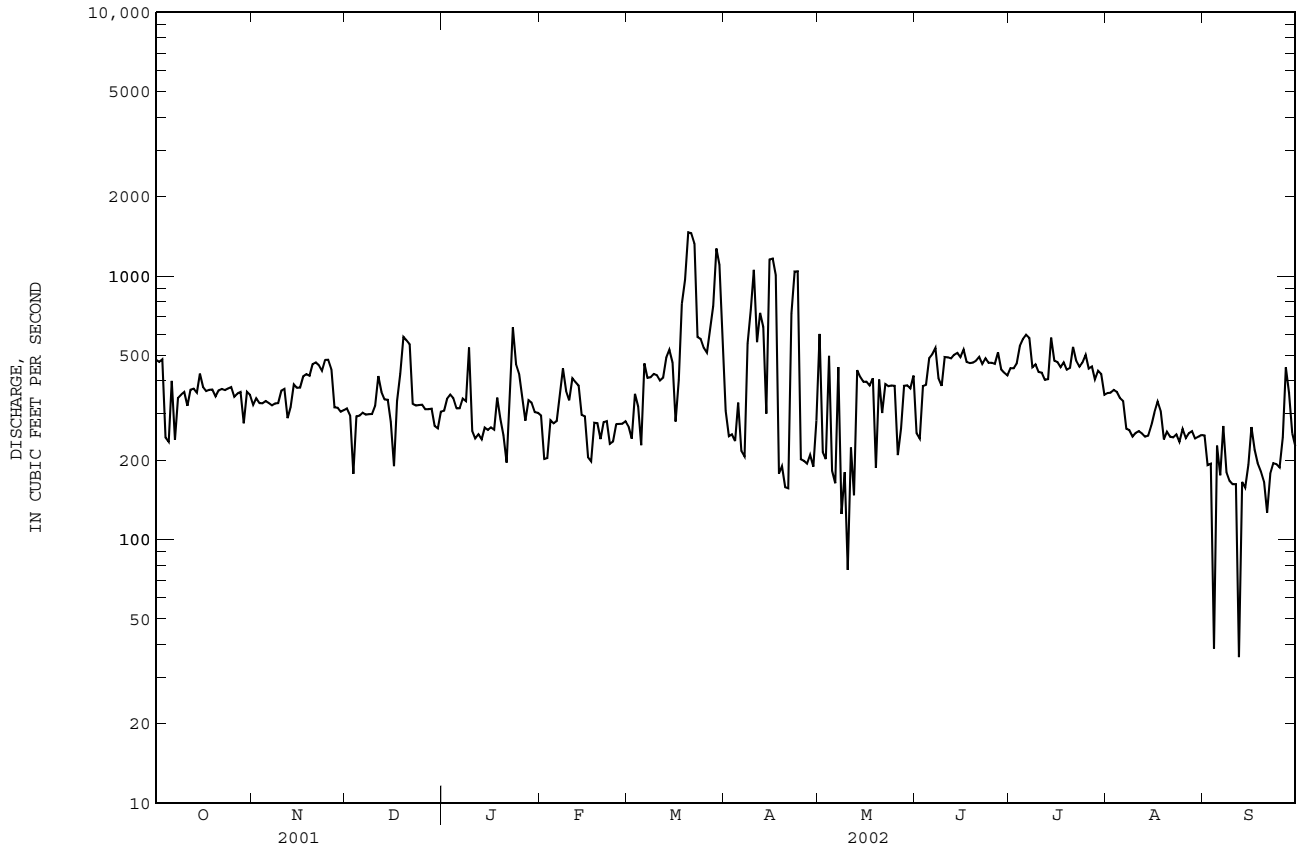
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2002, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	589.2	620.6	756.9	1186	1185	1167	1007	781.3	770.6	581.5	744.0	547.9
MAX	1943	1615	1700	2438	2659	2093	1855	1597	2103	785	2078	1146
(WY)	1996	1993	1993	1995	1998	1993	1993	1993	1992	1995	1994	1995
MIN	228	294	298	327	291	409	437	322	355	380	278	200
(WY)	1994	2001	1999	2002	2002	1999	1999	2002	2001	2001	2002	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1991 - 2002
ANNUAL TOTAL	155533	137362	
ANNUAL MEAN	426.1	376.3	†360
HIGHEST ANNUAL MEAN			823.6 (UNADJUSTED)
LOWEST ANNUAL MEAN			1230
HIGHEST DAILY MEAN	1370	Aug 6	12300
LOWEST DAILY MEAN	112	Jul 17	36
ANNUAL SEVEN-DAY MINIMUM	254	Jan 28	112
MAXIMUM PEAK FLOW			2340
MAXIMUM PEAK STAGE			4.11
INSTANTANEOUS LOW FLOW			2.1*
10 PERCENT EXCEEDS	702	535	1680
50 PERCENT EXCEEDS	368	344	577
90 PERCENT EXCEEDS	256	197	262

† Change in contents, equivalent in cubic feet per second, in Lake James, provided by Duke Power Company.
 ‡ Adjusted for change in contents.
 * See REMARKS.

0213903612 CATAWBA RIVER AT CALVIN, NC--Continued



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 mi².

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 NGVD of 1929. Satellite and telephone 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 11,000 ft³/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. Minimum discharge for period of record and current water year also occurred Sept. 14, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	94	175	124	244	151	398	158	99	105	47	57
2	85	94	130	120	225	169	344	157	91	96	e42	63
3	82	95	119	120	212	370	312	164	86	178	e41	51
4	79	92	114	e119	203	246	284	172	117	129	e40	46
5	79	90	111	e119	196	200	266	181	149	120	e38	43
6	79	87	110	132	192	197	252	155	139	93	e36	37
7	79	86	108	168	313	186	238	143	129	76	e32	32
8	77	86	107	134	408	181	233	153	107	64	e30	30
9	78	86	105	122	306	178	247	143	93	59	e30	28
10	79	86	116	124	280	181	368	133	85	56	e29	26
11	80	85	474	130	273	169	288	131	80	56	e29	24
12	85	84	275	126	247	179	263	128	76	56	e29	21
13	111	84	225	121	233	380	314	130	72	57	e28	19
14	370	84	250	115	218	466	322	164	109	67	28	22
15	379	82	206	112	210	341	291	136	103	210	28	e70
16	177	84	180	110	203	297	270	123	79	114	47	e200
17	137	83	183	109	198	724	254	117	71	77	104	92
18	126	81	372	108	189	972	250	176	67	64	73	59
19	119	79	262	168	183	646	235	151	72	57	56	56
20	115	79	215	462	183	524	221	123	98	56	49	55
21	111	79	189	290	189	452	212	119	70	53	40	52
22	107	78	174	230	177	390	202	118	62	49	36	80
23	105	78	165	523	170	342	189	112	59	130	33	134
24	104	158	194	767	167	314	183	108	59	116	34	94
25	104	287	170	617	163	287	197	105	58	120	33	72
26	97	218	157	488	159	288	189	98	85	165	36	357
27	94	142	148	407	157	356	174	117	135	125	46	1980
28	94	122	143	350	153	282	170	176	146	84	76	839
29	94	112	137	311	---	264	174	118	117	67	56	370
30	95	118	133	281	---	272	160	103	121	57	48	240
31	95	---	129	259	---	321	---	99	---	49	48	---
TOTAL	3602	3113	5576	7366	6051	10325	7500	4211	2834	2805	1322	5249
MEAN	116.2	103.8	179.9	237.6	216.1	333.1	250.0	135.8	94.47	90.48	42.65	175.0
MAX	379	287	474	767	408	972	398	181	149	210	104	1980
MIN	77	78	105	108	153	151	160	98	58	49	28	19
CFSM	0.58	0.52	0.89	1.18	1.08	1.66	1.24	0.68	0.47	0.45	0.21	0.87
IN.	0.67	0.58	1.03	1.36	1.12	1.91	1.39	0.78	0.52	0.52	0.24	0.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2002, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	258.7	310.0	300.7	435.2	404.7	539.5	448.7	332.4	306.3	232.1	279.0	220.3						
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	79.1	104	113	170	138	179	206	128	94.5	75.5	42.6	88.7						
(WY)	2001	2002	1989	2001	2001	1988	1986	2001	2002	1988	2002	1999						

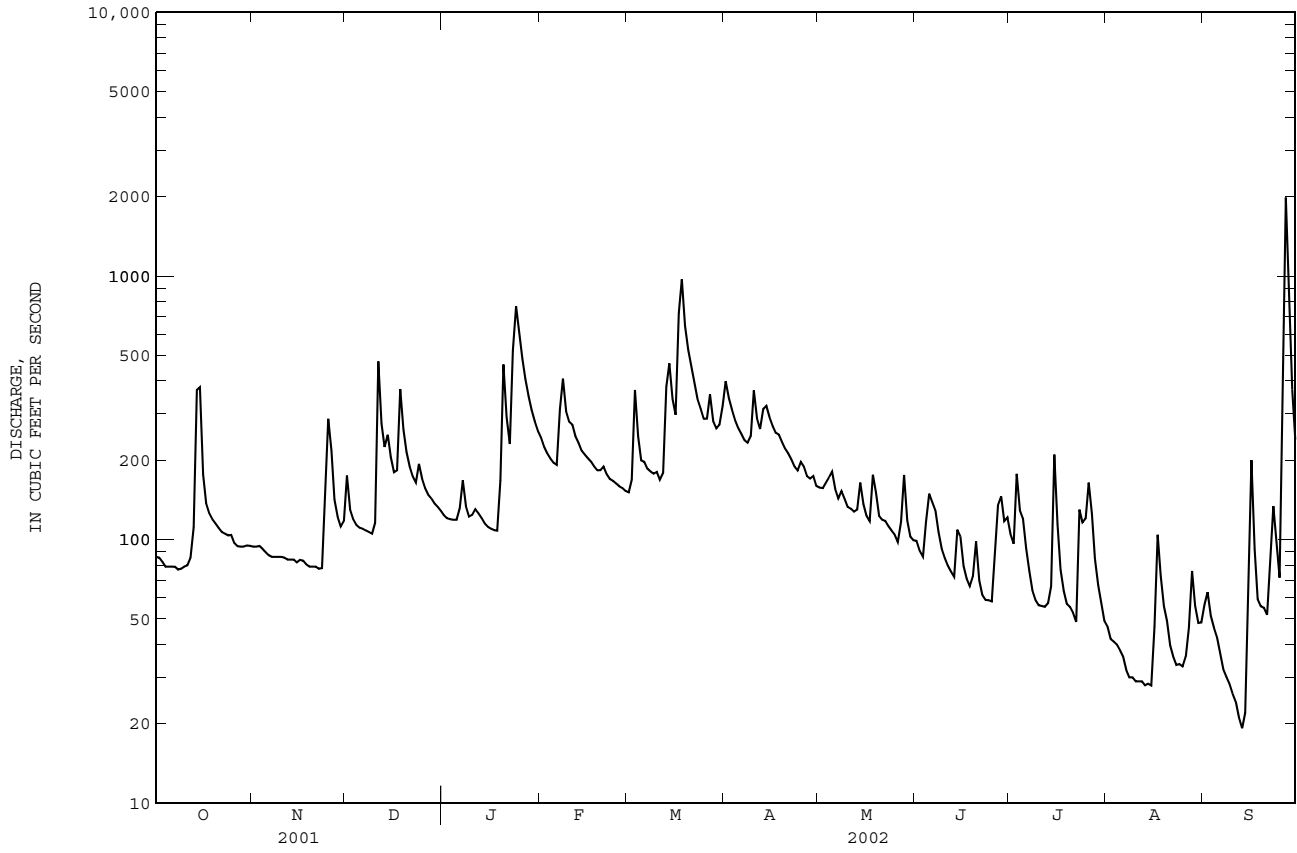
SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1985 - 2002
ANNUAL TOTAL	64603	59954	
ANNUAL MEAN	177.0	164.3	339.1
HIGHEST ANNUAL MEAN			502
LOWEST ANNUAL MEAN			164
HIGHEST DAILY MEAN	1530	Mar 30	1980
LOWEST DAILY MEAN	72	Jun 20	19
ANNUAL SEVEN-DAY MINIMUM	79	Oct 4	24
MAXIMUM PEAK FLOW			3590
MAXIMUM PEAK STAGE			8.15
INSTANTANEOUS LOW FLOW			19*
ANNUAL RUNOFF (CFSM)	0.88	0.82	1.69
ANNUAL RUNOFF (INCHES)	11.96	11.10	22.92
10 PERCENT EXCEEDS	303	312	595
50 PERCENT EXCEEDS	133	121	240
90 PERCENT EXCEEDS	88	49	99

e Estimated.

* See REMARKS.

02140991 JOHNS RIVER AT ARNEYS STORE, NC--Continued



SANTEE RIVER BASIN

02142000 LOWER LITTLE RIVER NEAR ALL HEALING SPRINGS, NC

LOCATION.--Lat 35°56'44", long 81°14'13", Alexander County, Hydrologic Unit 03050101, on left bank at upstream side of bridge on Secondary Road 1313, 0.3 mi downstream of Grassy Creek, 0.4 mi upstream from Lambert Creek, 2.2 mi northeast of All Healing Springs, and 4 mi northwest of Taylorsville.

DRAINAGE AREA.--28.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October to December 1952 (monthly discharge only), January 1953 to September 1995, October 1997 to current year.

REVISED RECORDS.--WDR NC-79-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,070 ft above NGVD of 1929, by barometer. Prior to June 13, 1953, nonrecording gage 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 result of freezeup.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	9.0	9.9	11	27	16	24	11	8.5	6.3	4.8	4.6
2	7.8	9.0	9.4	11	24	26	22	11	7.9	5.5	4.4	4.2
3	7.6	9.0	9.1	11	24	34	22	12	7.6	5.0	4.2	3.9
4	7.3	8.7	9.1	e11	22	25	21	13	7.3	4.7	3.9	3.7
5	7.0	8.5	8.8	e11	21	23	20	12	11	4.6	3.6	3.3
6	7.1	8.5	9.0	16	22	21	20	11	8.2	4.1	3.3	2.7
7	7.0	8.5	8.8	16	39	20	19	13	7.9	3.8	2.7	2.6
8	7.0	8.4	8.9	13	44	20	18	17	7.0	3.8	2.7	2.6
9	7.2	8.3	8.7	13	35	19	20	12	6.6	4.4	2.6	2.3
10	7.3	8.3	15	13	35	18	21	14	6.3	4.8	2.5	2.0
11	7.5	8.4	36	12	32	17	18	18	5.9	5.7	2.4	1.8
12	7.7	8.5	18	12	30	20	19	13	5.7	6.1	2.4	1.5
13	7.8	8.2	15	12	28	39	23	17	5.9	5.9	2.2	1.6
14	28	8.2	14	11	26	36	21	16	6.4	6.5	2.0	2.3
15	15	8.5	13	11	24	31	20	12	6.2	34	2.8	8.6
16	10	8.7	11	10	24	28	19	10	5.3	7.4	4.6	7.7
17	9.4	8.7	21	10	22	49	18	9.8	5.2	5.5	4.1	4.2
18	9.3	8.5	44	10	21	52	17	12	5.0	4.9	4.2	3.9
19	9.4	8.5	e22	24	21	41	16	9.9	5.4	4.4	3.2	4.1
20	9.4	8.6	e18	36	21	36	16	9.5	5.1	4.1	2.6	3.9
21	9.2	8.5	e16	27	21	35	15	9.5	4.5	3.9	2.3	4.2
22	9.0	8.4	15	22	19	31	14	9.3	4.4	3.7	2.1	5.1
23	8.9	8.6	14	69	19	28	13	9.1	4.4	4.9	2.0	5.8
24	8.5	15	20	71	19	27	13	8.9	4.8	19	1.7	4.4
25	9.0	17	15	81	18	25	14	8.4	4.5	11	2.9	4.3
26	8.7	13	14	58	17	29	13	8.0	7.5	16	20	16
27	8.7	11	13	45	17	31	13	19	12	8.1	5.5	36
28	8.5	10	13	39	16	26	13	14	9.1	7.3	4.4	15
29	8.7	9.8	13	35	---	25	12	9.5	7.2	5.9	4.1	9.0
30	9.0	10	12	31	---	25	11	9.1	6.1	5.5	4.1	7.2
31	9.0	---	12	29	---	27	---	9.6	---	4.9	4.3	---
TOTAL	284.0	282.3	465.7	781	688	880	525	367.6	198.9	221.7	118.6	178.5
MEAN	9.161	9.410	15.02	25.19	24.57	28.39	17.50	11.86	6.630	7.152	3.826	5.950
MAX	28	17	44	81	44	52	24	19	12	34	20	36
MIN	7.0	8.2	8.7	10	16	16	11	8.0	4.4	3.7	1.7	1.5
CFSM	0.32	0.33	0.53	0.89	0.87	1.01	0.62	0.42	0.24	0.25	0.14	0.21
IN.	0.37	0.37	0.61	1.03	0.91	1.16	0.69	0.48	0.26	0.29	0.16	0.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2002,[®] BY WATER YEAR (WY)

	27.40	27.50	34.77	42.30	50.33	58.22	57.06	41.17	35.88	27.20	26.08	24.62
MEAN	27.40	27.50	34.77	42.30	50.33	58.22	57.06	41.17	35.88	27.20	26.08	24.62
MAX	103	115	76.3	117	134	153	137	98.5	106	88.1	123	102
(WY)	1965	1978	1984	1978	1960	1975	1958	1975	1975	1984	1970	1979
MIN	6.04	7.03	8.16	9.36	10.8	21.1	17.5	11.9	6.63	7.15	3.83	4.75
(WY)	1955	1956	1956	1956	2001	1956	2002	2002	2002	2002	2002	1954

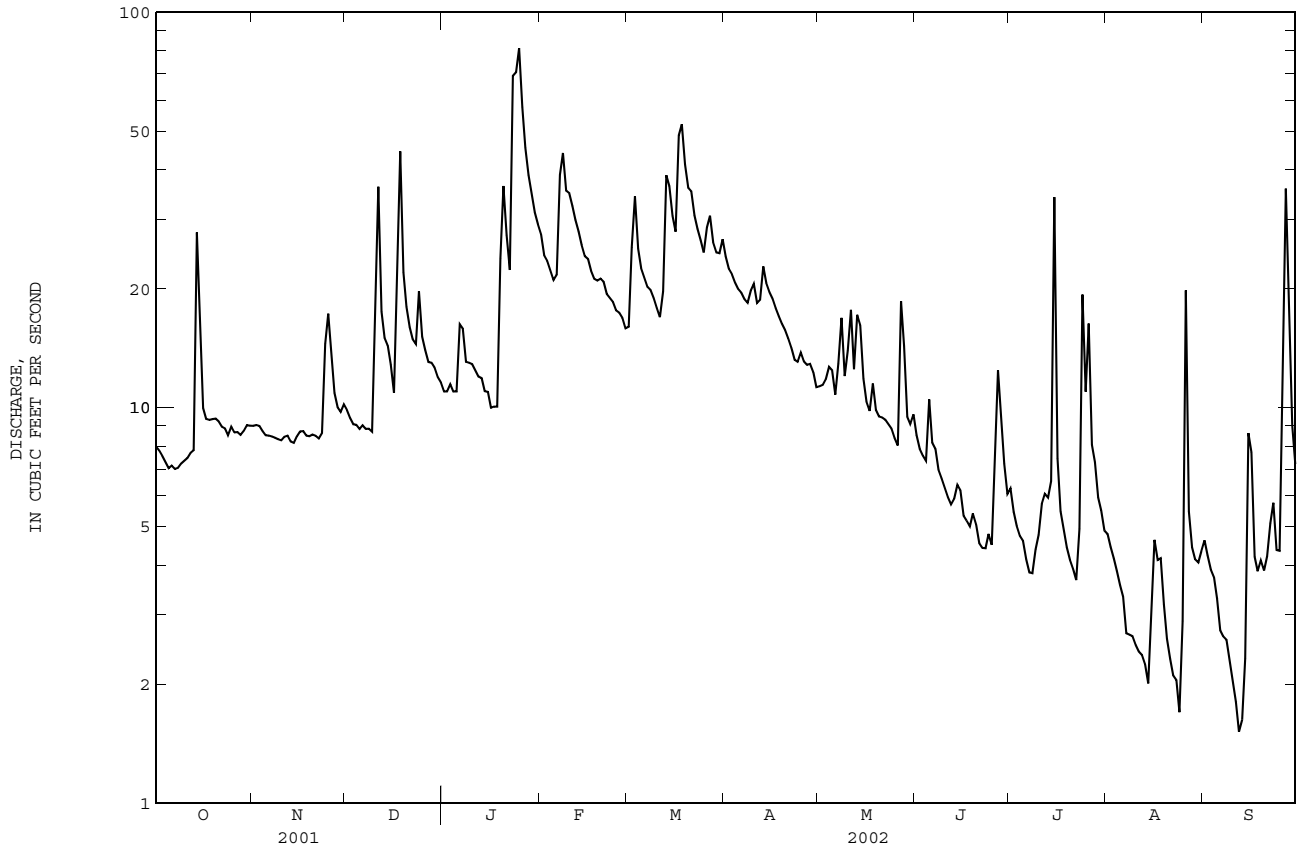
SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1953 - 2002 [®]	
ANNUAL TOTAL	5558.1		4991.3			
ANNUAL MEAN	15.23		13.67		37.80	
HIGHEST ANNUAL MEAN					65.2	
LOWEST ANNUAL MEAN					13.7	
HIGHEST DAILY MEAN	152	Mar 30	81	Jan 25	2270	Aug 10 1970
LOWEST DAILY MEAN	5.4	Jun 21	1.5	Sep 12	1.5	Sep 12 2002
ANNUAL SEVEN-DAY MINIMUM	6.1	Jun 15	2.0	Sep 8	2.0	Sep 8 2002
MAXIMUM PEAK FLOW			129	Jul 15	4850	Aug 10 1970
MAXIMUM PEAK STAGE			2.21	Jul 15	15.68	Aug 10 1970
INSTANTANEOUS LOW FLOW			1.4	Sep 12	0.32*	Jan 3 2001
ANNUAL RUNOFF (CFSM)	0.54		0.48		1.34	
ANNUAL RUNOFF (INCHES)	7.33		6.58		18.21	
10 PERCENT EXCEEDS	25		27		66	
50 PERCENT EXCEEDS	11		9.8		25	
90 PERCENT EXCEEDS	7.0		3.9		11	

e Estimated.

[®] See PERIOD OF RECORD.

* See REMARKS.

02142000 LOWER LITTLE RIVER NEAR ALL HEALING SPRINGS, NC--Continued



SANTEE RIVER BASIN

02142000 LOWER LITTLE RIVER NEAR ALL HEALING SPRINGS, NC--Continued

PRECIPITATION RECORDS

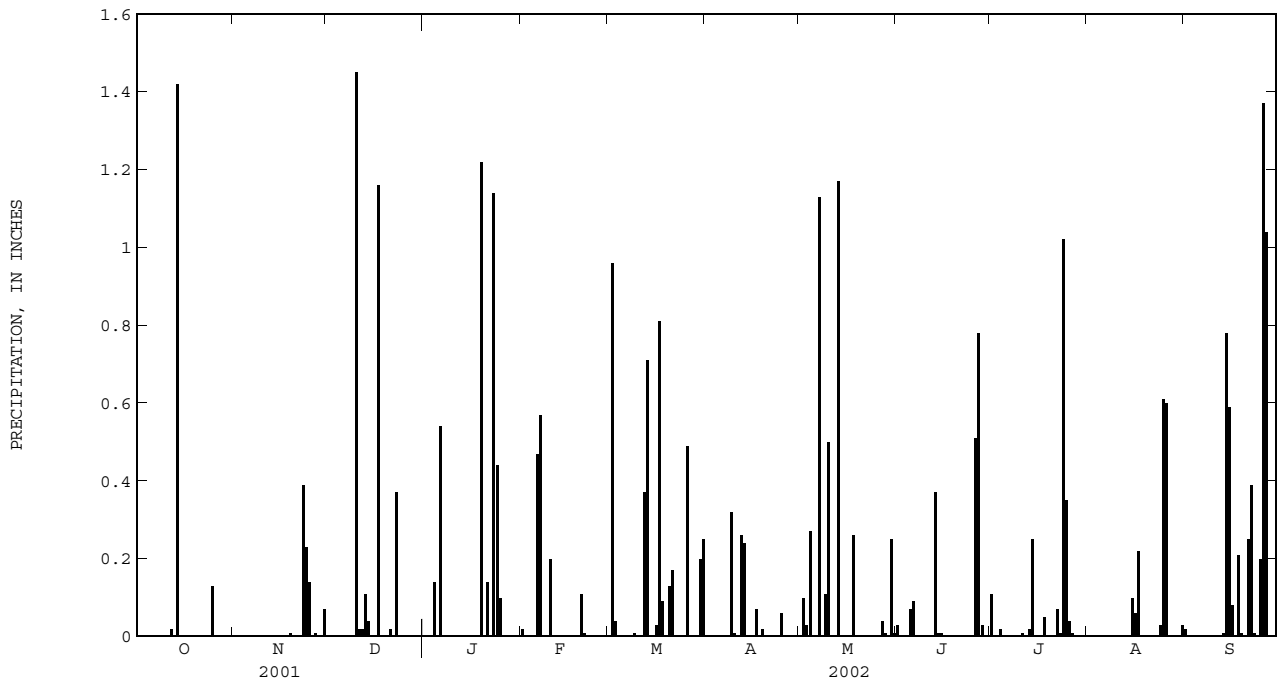
PERIOD OF RECORD.--August 2001 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.03	0.11	0.00	0.02
2	0.00	0.00	0.00	0.00	0.00	0.96	0.00	0.10	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.03	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.27	0.00	0.02	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00
6	0.00	0.00	0.00	0.54	0.47	0.00	0.00	0.00	0.09	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.57	0.00	0.00	1.13	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.32	0.11	0.00	0.00	0.00	0.00
10	0.00	0.00	1.45	0.00	0.20	0.00	0.01	0.50	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
12	0.02	0.00	0.02	0.00	0.00	0.37	0.26	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.11	0.00	0.00	0.71	0.24	1.17	0.37	0.02	0.00	0.01
14	1.42	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.01	0.25	0.00	0.78
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.10	0.59
16	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.06	0.08
17	0.00	0.00	1.16	0.00	0.00	0.81	0.07	0.00	0.00	0.00	0.22	0.00
18	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.26	0.00	0.05	0.00	0.21
19	0.00	0.01	0.00	1.22	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.01
20	0.00	0.00	0.00	0.00	0.11	0.13	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.02	0.14	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.25
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.39
23	0.00	0.39	0.37	1.14	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01
24	0.00	0.23	0.00	0.44	0.00	0.00	0.00	0.00	0.00	1.02	0.03	0.00
25	0.13	0.14	0.00	0.10	0.00	0.00	0.06	0.00	0.00	0.35	0.61	0.20
26	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.51	0.04	0.60	1.37
27	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.04	0.78	0.01	0.00	1.04
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.07	0.00	0.00	---	0.20	0.00	0.25	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.25	---	0.01	---	0.00	0.03	---
TOTAL	1.57	0.85	3.19	3.72	1.38	4.26	0.98	3.88	1.90	1.96	1.65	4.96





Gaging station at Goose Creek at Fairview, North Carolina.

SANTEE RIVER BASIN

0214253830 NORWOOD CREEK NEAR TROUTMAN, NC

LOCATION.--Lat 35°40'50", long 80°56'43", North American Datum of 1983, Iredell County, Hydrologic Unit 03050101, 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 mi².

PERIOD OF RECORD.--December 1983 to current year.

GAGE.--Water-stage recorder. Datum of gage is 761.09 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records poor. Maximum discharge for period of record, from rating curve extended above 400 ft³/s by logarithmic plotting.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.1	2.7	1.5	3.1	3.2	5.0	6.7	2.3	2.0	1.2	0.87
2	1.1	1.2	2.6	1.5	3.0	3.6	4.9	6.4	2.1	1.9	1.2	0.74
3	1.1	1.2	2.7	1.5	3.6	3.8	4.8	6.2	2.1	2.0	1.1	0.65
4	1.0	1.2	2.4	1.5	3.6	3.6	4.8	6.3	2.0	1.9	0.98	0.72
5	1.1	1.2	2.0	1.5	3.6	4.1	4.7	5.8	2.1	1.9	0.84	0.95
6	1.1	1.3	1.7	1.7	3.6	4.1	4.6	5.2	2.1	1.7	0.80	0.76
7	1.00	1.3	1.6	1.7	4.2	4.1	4.6	5.1	2.4	1.5	0.67	0.67
8	0.83	1.2	1.5	1.7	4.3	4.0	4.6	5.6	2.1	1.5	0.53	0.57
9	1.1	1.1	1.7	1.7	4.2	4.1	4.8	4.0	2.0	1.7	0.52	0.59
10	0.95	1.1	2.0	e1.6	4.2	4.1	4.8	3.8	1.9	1.8	0.48	e0.58
11	0.81	1.1	1.5	e1.6	4.1	4.5	4.8	3.9	1.8	1.9	0.56	e0.56
12	0.64	1.1	1.7	e1.5	3.9	4.7	4.9	4.0	1.7	1.8	0.68	e0.54
13	0.66	1.1	1.8	e1.5	3.8	5.3	4.8	4.4	1.7	1.7	0.81	e0.52
14	0.76	1.1	1.8	e1.4	3.6	5.2	4.7	4.5	2.2	2.4	0.85	1.5
15	1.1	1.0	1.8	e1.4	3.4	5.0	4.6	4.0	1.9	1.9	1.2	2.4
16	0.84	1.1	1.9	e1.3	3.4	4.9	4.5	3.6	1.8	1.9	4.1	3.3
17	1.1	e1.0	2.0	e1.2	3.2	5.4	4.3	3.8	1.9	1.8	5.9	6.2
18	1.0	e1.0	2.1	e1.2	3.2	5.6	4.3	3.9	1.8	1.8	2.9	5.9
19	0.90	e0.98	1.8	6.1	3.2	5.3	4.4	3.4	1.8	1.8	0.98	6.2
20	0.91	e0.98	1.7	e4.0	3.3	4.4	4.5	3.3	1.8	1.5	0.48	5.3
21	0.97	e0.96	1.7	e3.0	3.2	4.9	4.6	3.1	1.8	1.4	0.55	4.8
22	1.0	e0.96	1.7	e2.5	3.5	5.1	4.7	3.0	1.8	1.4	0.69	4.6
23	1.0	e1.0	1.7	56	3.6	5.3	4.9	3.0	1.7	1.2	0.83	4.1
24	0.86	e3.0	1.7	4.8	3.4	5.3	4.9	2.8	1.8	1.3	1.1	3.6
25	1.1	1.3	1.7	4.2	3.4	5.3	5.1	2.8	1.8	1.7	1.2	3.1
26	1.4	1.6	1.6	2.9	3.2	5.4	5.5	2.7	2.3	3.1	0.85	e5.0
27	1.2	2.0	1.5	2.3	3.1	5.4	5.5	2.5	2.4	1.5	0.96	e12
28	1.2	2.5	1.4	2.0	3.2	5.2	5.7	2.5	2.4	1.4	1.1	e6.0
29	1.2	2.9	1.8	2.7	---	5.0	6.0	2.3	2.3	1.4	1.1	e4.0
30	1.2	2.9	2.9	2.9	---	5.0	6.1	2.4	2.1	1.3	0.96	3.2
31	1.1	---	4.3	3.1	---	5.0	---	2.6	---	1.3	0.94	---
TOTAL	31.43	41.48	61.0	123.5	99.1	145.9	146.4	123.6	59.9	53.4	37.06	89.92
MEAN	1.014	1.383	1.968	3.984	3.539	4.706	4.880	3.987	1.997	1.723	1.195	2.997
MAX	1.4	3.0	4.3	56	4.3	5.6	6.1	6.7	2.4	3.1	5.9	12
MIN	0.64	0.96	1.4	1.2	3.0	3.2	4.3	2.3	1.7	1.2	0.48	0.52
CFSM	0.14	0.19	0.27	0.55	0.49	0.66	0.68	0.56	0.28	0.24	0.17	0.42
IN.	0.16	0.21	0.32	0.64	0.51	0.76	0.76	0.64	0.31	0.28	0.19	0.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2002, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	8.206	6.950	7.779	10.21	12.28	13.05	10.67	6.993	5.979	5.191	4.902	4.246							
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	1.01	1.38	1.97	2.81	3.54	4.49	3.60	2.39	1.61	1.41	0.85	1.53							
(WY)	2002	2002	2002	2001	2002	1999	1986	2001	1986	2000	2000	2001							

SUMMARY STATISTICS

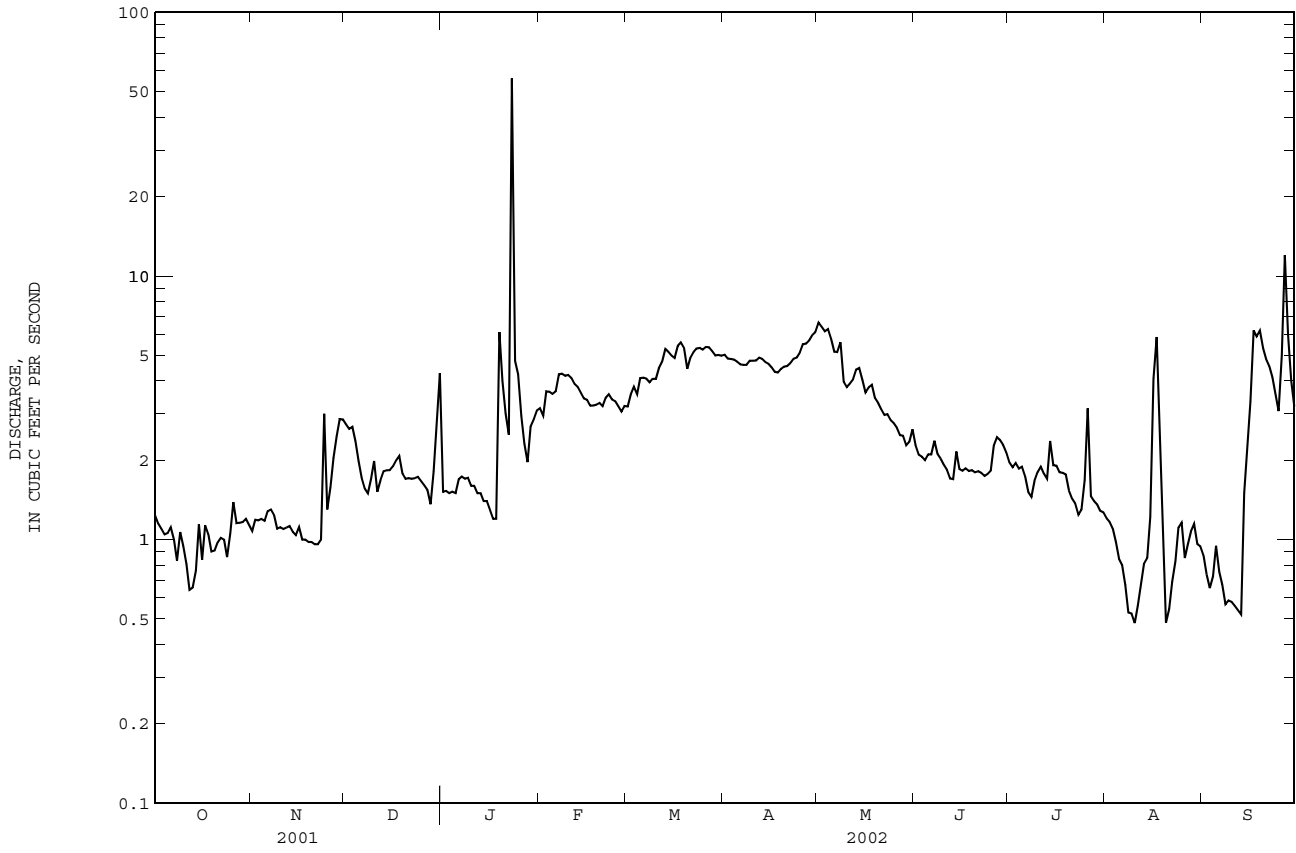
FOR 2002 WATER YEAR

WATER YEARS 1984 - 2002

ANNUAL TOTAL	1012.69		
ANNUAL MEAN	2.774	7.819	
HIGHEST ANNUAL MEAN		13.1	1991
LOWEST ANNUAL MEAN		2.77	2002
HIGHEST DAILY MEAN	56	Jan 23	387
LOWEST DAILY MEAN	0.48	Aug 10	0.48
ANNUAL SEVEN-DAY MINIMUM	0.58	Sep 7	0.58
MAXIMUM PEAK FLOW	272	Jan 23	1480*
MAXIMUM PEAK STAGE	6.10	Jan 23	9.20
INSTANTANEOUS LOW FLOW	0.40	Aug 21	0.40
ANNUAL RUNOFF (CFSM)	0.39		1.09
ANNUAL RUNOFF (INCHES)	5.25		14.80
10 PERCENT EXCEEDS	5.0		11
50 PERCENT EXCEEDS	2.0		5.0
90 PERCENT EXCEEDS	0.93		2.2

e Estimated.
* See REMARKS.

0214253830 NORWOOD CREEK NEAR TROUTMAN, NC--Continued



SANTEE RIVER BASIN

0214262175 LAKE NORMAN (WORK CREEK ARM) NEAR MOUNT MOURNE, NC

LOCATION.--Lat 35°32'00", long 80°52'47", Iredell County, Hydrologic Unit 03050101, approximately 1.9 mi west of Mt. Mourne.

DRAINAGE AREA.--1.8 mi²

PERIOD OF RECORD.--September 2002 to current year.

REMARKS.--Water-quality samples were collected during September 2002 to define water quality as part of the ongoing Piedmont/Mountains ground-water study in cooperation with the North Carolina Department of Environment and Natural Resources, Division of Water Quality, Groundwater Section.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM-PLING DEPTH (M) (00098)	PH WATER FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)
SEP													
03...	1300	5.9	7.1	76	25.6	15	3.13	1.69	1.90	7.23	<.03	6.90	E.1
03...	1500	.50	7.2	74	26.9	15	3.15	1.69	1.98	7.29	<.03	6.56	E.1

Date	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L AS N) (70300)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126)
SEP													
03...	6.56	6.5	34	<.04	.18	<.05	<.008	<.02	<2	20	11	E.9	.1
03...	6.56	6.5	34	<.04	.15	<.05	<.008	<.02	<2	20	<10	E2.1	.2

Date	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)	RADON 222 TOTAL (PCI/L) (82303)
SEP		
03...	1.7	10
03...	2.3	20

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

02142651 CRN24

LOCATION.--Lat 35°27'50", long 80°52'35", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050101, McDowell Creek at Westmoreland Road near Cornelius, NC.

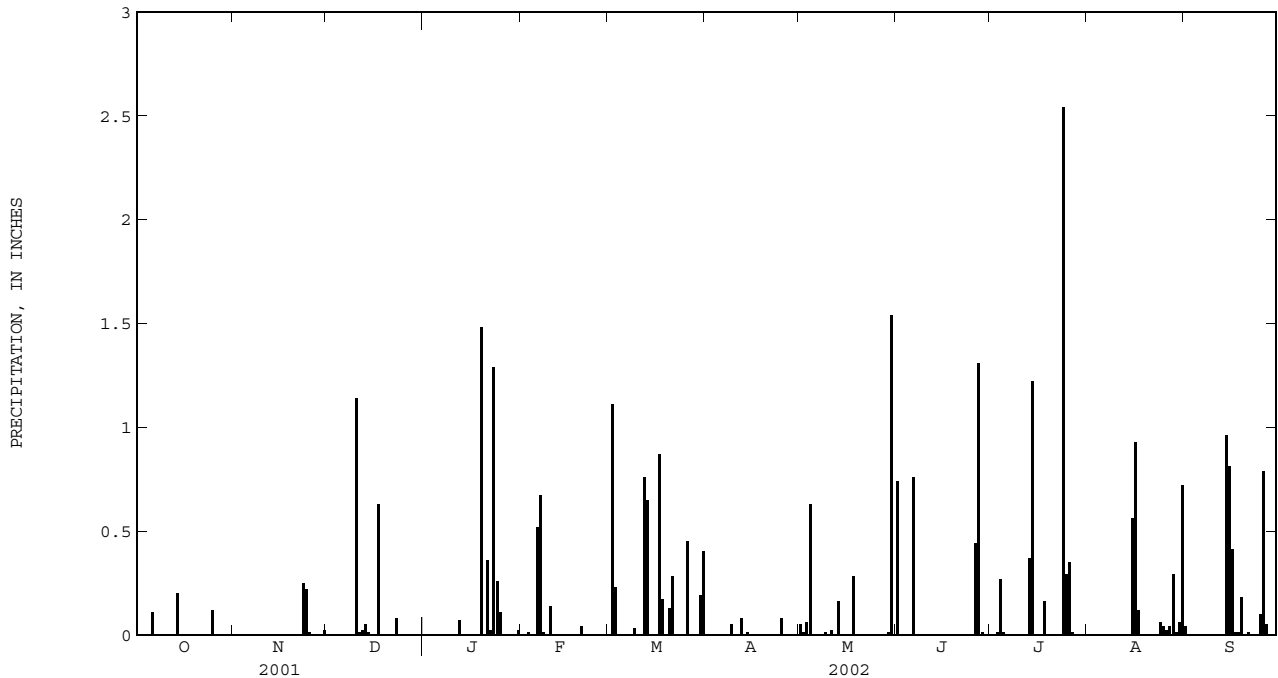
PERIOD OF RECORD.-- May 1994 to current year. Records for period May 1994 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.74	0.00	0.00	0.04
2	0.00	0.00	0.00	0.00	0.00	1.11	0.00	0.01	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	---	0.01	0.23	0.00	0.06	0.00	0.01	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.63	0.00	0.27	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
6	0.11	0.00	0.00	---	0.52	0.00	0.00	0.00	0.76	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.03	0.05	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.14	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.07	0.00	0.76	0.08	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.05	0.00	0.00	0.65	0.00	0.16	0.00	0.37	0.00	0.00
14	0.20	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	1.22	0.00	0.96
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.81
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.41
17	0.00	0.00	0.63	0.00	0.00	0.87	0.00	0.00	0.00	0.00	0.12	0.01
18	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.28	0.00	0.16	0.00	0.01
19	0.00	0.00	0.00	1.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
20	0.00	0.00	---	0.00	0.04	0.13	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	---	0.36	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.01
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.25	0.08	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.22	0.00	0.26	0.00	0.00	0.00	0.00	0.00	2.54	0.06	0.00
25	0.12	0.01	0.00	0.11	0.00	0.00	0.08	0.00	0.00	0.29	0.04	0.10
26	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.44	0.35	0.02	0.79
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.01	0.04	0.05
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.29	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.01	0.00	0.00	0.01	0.00
30	0.00	0.02	0.00	0.00	---	0.19	0.00	1.54	0.00	0.00	0.06	0.00
31	0.00	---	0.00	0.02	---	0.40	---	0.00	---	0.00	0.72	---
TOTAL	0.43	0.50	---	---	1.39	5.27	0.22	2.77	3.26	5.23	2.85	3.37



SANTEE RIVER BASIN

0214266000 MCDOWELL CREEK NEAR CHARLOTTE, NC

LOCATION.--Lat 35°23'23", long 80°55'16", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050101, on right bank at downstream side of bridge on Secondary Road 2074, 2.1 mi downstream of Torrence Creek, 2.8 mi south of Hicks Crossroads, 12.1 mi northwest of city hall, Charlotte.

DRAINAGE AREA.-26.3-mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1996 to current year. Streamflow data for November 1996 to September 1997 previously published in U.S. Geological Survey Open-File Report 98-67.

GAGE.--Water-stage recorder. Datum of gage is 644.87 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Minimum discharge for current water year also occurred July 9, 13.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	3.5	3.1	2.5	12	9.0	34	5.0	24	2.1	4.0	8.5
2	e4.6	3.0	3.0	2.9	9.6	88	13	5.0	16	1.8	3.6	4.2
3	4.7	3.6	3.0	3.8	9.5	105	11	5.2	7.6	3.4	3.7	3.5
4	4.3	3.1	3.1	4.6	9.8	33	11	16	8.2	2.5	4.0	3.1
5	4.0	2.8	3.9	3.3	9.9	19	10	7.2	8.0	1.9	3.7	2.8
6	4.5	3.1	4.1	4.7	10	16	e9.0	5.6	67	1.6	3.7	2.8
7	4.3	2.7	2.9	9.9	87	15	e8.9	5.2	78	1.6	3.3	2.6
8	3.6	3.0	2.9	4.8	84	13	e8.7	5.2	6.7	1.3	3.2	2.4
9	3.8	2.9	3.1	4.0	23	12	8.9	5.1	4.2	1.4	2.9	2.4
10	4.0	2.8	3.0	3.4	22	13	8.4	5.0	3.4	1.5	2.9	2.6
11	3.7	2.9	3.5	3.2	16	11	7.9	7.2	3.1	1.5	3.0	2.5
12	3.8	2.7	5.3	3.2	11	45	8.4	5.2	3.0	1.6	2.8	2.1
13	3.6	2.9	5.1	3.9	12	95	8.8	4.0	2.8	1.5	2.8	2.3
14	6.9	2.6	4.2	2.9	11	36	7.6	18	2.6	5.1	2.5	1.6
15	5.0	3.0	3.7	3.0	11	21	7.6	7.2	2.7	5.4	3.0	5.8
16	3.5	2.7	3.1	2.7	11	17	7.5	5.8	2.5	3.3	2.4	3.8
17	4.0	2.8	7.5	2.6	10	107	7.3	5.6	2.4	2.5	2.5	7.0
18	3.8	2.7	3.4	2.8	10	51	6.7	10	2.3	2.2	6.0	7.4
19	3.9	2.8	5.2	10.2	9.7	23	7.0	6.2	2.4	2.1	4.2	5.3
20	4.4	2.9	3.5	7.8	9.9	19	6.5	6.1	2.1	1.9	3.7	5.0
21	3.8	4.0	3.3	4.3	9.8	48	6.6	5.9	2.2	1.5	3.2	3.5
22	3.7	2.9	3.0	2.1	9.3	21	6.2	7.0	2.2	1.7	2.9	3.5
23	3.7	3.0	2.9	2.8	8.9	15	6.4	5.7	2.1	1.5	3.0	3.1
24	3.5	9.7	3.9	6.2	9.1	13	5.9	5.1	2.1	7.2	2.8	3.1
25	6.2	2.9	3.0	7.5	8.9	12	6.3	5.2	1.9	7.5	3.4	2.8
26	3.4	2.9	2.9	2.6	10	16	6.5	4.3	2.1	4.3	2.9	3.4
27	2.8	3.6	2.8	1.9	9.3	20	5.5	5.1	2.4	2.6	3.0	1.7
28	2.9	2.9	2.7	e18	9.1	12	5.7	5.1	3.0	6.5	3.8	6.8
29	3.2	2.9	3.0	e13	---	11	5.5	5.9	3.5	5.3	3.0	4.0
30	6.0	3.1	2.6	1.2	---	13	5.4	4.9	2.6	4.4	3.5	3.5
31	4.9	---	2.6	1.2	---	17	---	2.1	---	4.3	2.1	---
TOTAL	129.1	96.4	198.4	872.5	462.8	946.0	258.2	295.1	321.7	333.3	164.5	322.8
MEAN	4.165	3.213	6.400	28.15	16.53	30.52	8.607	9.519	10.72	10.75	5.306	10.76
MAX	6.9	9.7	35	281	87	107	34	49	78	75	25	70
MIN	2.8	2.6	2.6	2.5	8.9	9.0	5.4	4.3	1.9	1.3	2.5	2.1
CFSM	0.16	0.12	0.24	1.07	0.63	1.16	0.33	0.36	0.41	0.41	0.20	0.41
IN.	0.18	0.14	0.28	1.23	0.65	1.34	0.37	0.42	0.46	0.47	0.23	0.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)

	12.87	12.89	19.53	36.42	36.66	35.38	21.40	15.04	10.16	13.40	6.373	12.88
MEAN	12.87	12.89	19.53	36.42	36.66	35.38	21.40	15.04	10.16	13.40	6.373	12.88
MAX	36.3	40.7	48.9	94.0	73.3	49.2	37.9	27.4	15.0	27.9	12.3	24.0
(WY)	1998	1998	1998	1998	1998	2001	1997	1997	2001	1997	2000	1997
MIN	3.63	3.21	6.40	10.2	15.4	12.1	8.61	8.96	5.20	4.68	2.50	5.35
(WY)	2001	2002	2002	2001	2001	1999	2002	1999	2000	1999	1999	1999

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

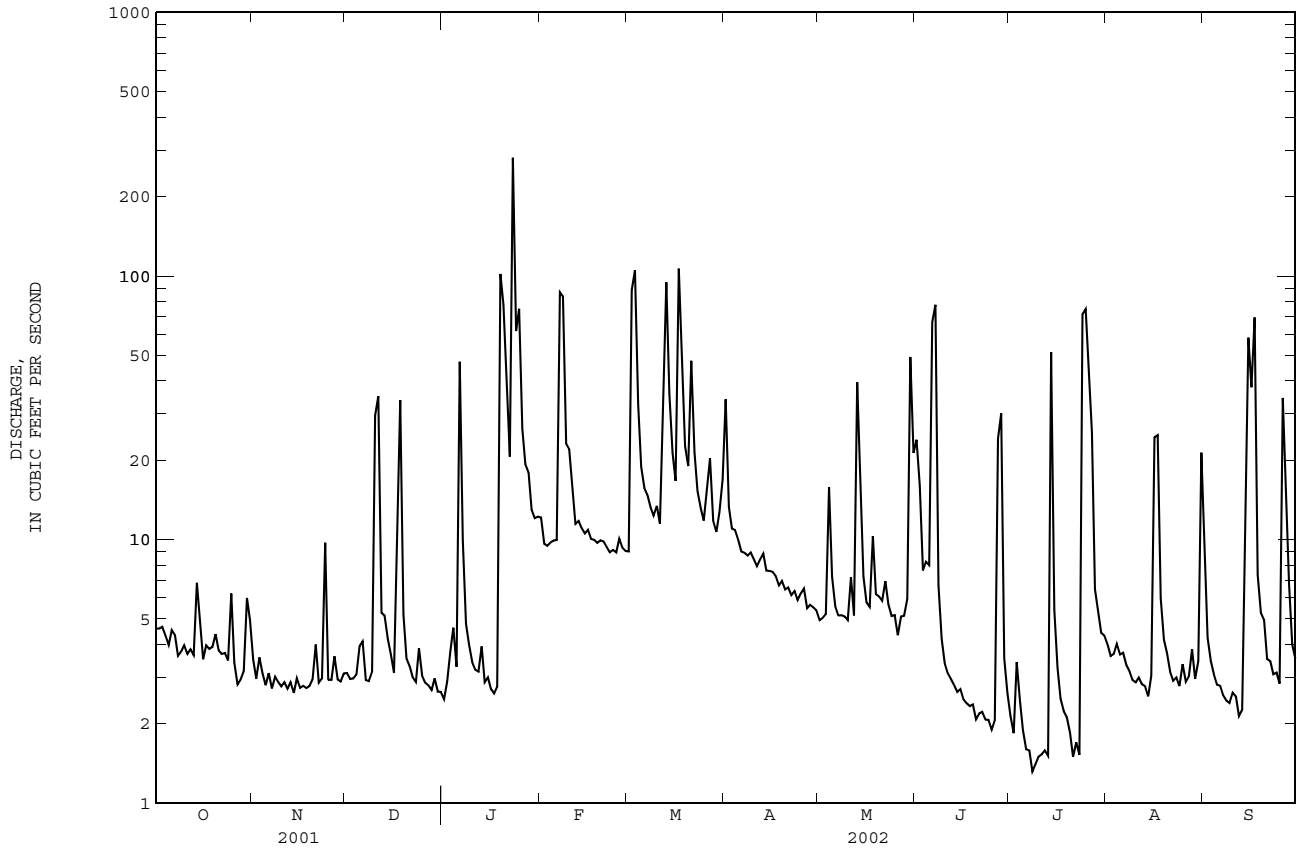
WATER YEARS 1997 - 2002

ANNUAL TOTAL	4643.5	4400.8	
ANNUAL MEAN	12.72	12.06	17.82
HIGHEST ANNUAL MEAN			35.8
LOWEST ANNUAL MEAN			10.6
HIGHEST DAILY MEAN	394	Mar 30	477
LOWEST DAILY MEAN	2.6	Aug 23	0.59
ANNUAL SEVEN-DAY MINIMUM	2.8	Nov 12	0.99
MAXIMUM PEAK FLOW			995
MAXIMUM PEAK STAGE			11.11
INSTANTANEOUS LOW FLOW			0.29
ANNUAL RUNOFF (CFSM)	0.48		0.68
ANNUAL RUNOFF (INCHES)	6.57		9.20
10 PERCENT EXCEEDS	22		35
50 PERCENT EXCEEDS	5.7		7.3
90 PERCENT EXCEEDS	2.9		3.0

e Estimated.

* See REMARKS.

0214266000 MCDOWELL CREEK NEAR CHARLOTTE, NC--Continued



0214266000 MCDOWELL CREEK NEAR CHARLOTTE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1997, 2000 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1996 to September 1997.

WATER TEMPERATURE: November 1996 to September 1997.

SUSPENDED-SEDIMENT DISCHARGE: October 2000 to current year.

INSTRUMENTATION.--Water-quality monitor from November 1996 to September 1997. Optical backscatterance sensor from April 2000 to current year.

REMARKS.--Station operated in cooperation with Mecklenburg County to characterize water quality and suspended sediment in McDowell Creek basin. Miscellaneous water-quality data collected from November 1996 to September 1997 published in U.S. Geological Survey Open File Report 98-67. Continuous record of suspended-sediment concentration was computed by using a relation between optical backscatterance readings and measured suspended-sediment concentrations. Sediment discharge was computed as the product of continuous suspended-sediment concentration and continuous discharge.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 602 microsiemens, June 19, 1997; minimum recorded, 39 microsiemens, July 23, 1997.

WATER TEMPERATURE: Maximum recorded 33.2°C, July 21, 1997; minimum recorded, 0.1°C, Dec. 21, 1996.

SEDIMENT DISCHARGE: Maximum recorded, 266 tons, Sept. 24, 2001; minimum recorded, .01 tons, Sept. 8, 9, 12, 2002.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT LOAD: Maximum recorded, 173 tons, Mar. 17, minimum recorded, .01 tons, Sept. 8, 9, 12.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDE D (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE D (T/DAY) (80155)
NOV				
08...	1650	2.7	--	
DEC				
19...	1025	6.1	43	.71
FEB				
25...	1545	8.9	6.4	.15
MAR				
05...	1430	18	36	1.8
MAY				
14...	0915	16	197	8.5
14...	1255	12	136	4.4
17...	1110	5.4	--	
30...	1310	10	142	3.8
31...	0900	16	162	7.0
31...	1200	19	164	8.4
JUN				
07...	0940	27	227	16.5
07...	1215	22	193	11.5
28...	0820	12	310	10.0
28...	0840	11	297	8.8
JUL				
15...	1025	5.1	59	.81
25...	1231	18	160	7.8
25...	1300	17	155	7.1
AUG				
26...	0915	4.7	15	.19
26...	1000	4.0	13	.14
29...	0900	2.9	6.8	.05
SEP				
09...	1515	2.7	5.4	.04
16...	0745	47	235	29.8
16...	0815	42	221	25.1
16...	0900	35	--	
16...	1200	24	136	8.8
16...	1430	23	113	7.0
16...	1600	21	398	22.6
16...	1630	18	304	14.8
16...	1700	16	236	10.2
17...	0713	69	470	87.5
17...	0842	46	346	43.0
18...	0730	7.6	32	.67
19...	1115	5.1	--	
26...	1333	86	398	92.5
27...	0700	16	97	4.2

SANTEE RIVER BASIN

0214266000 MCDOWELL CREEK NEAR CHARLOTTE--Continued

PRECIPITATION RECORDS

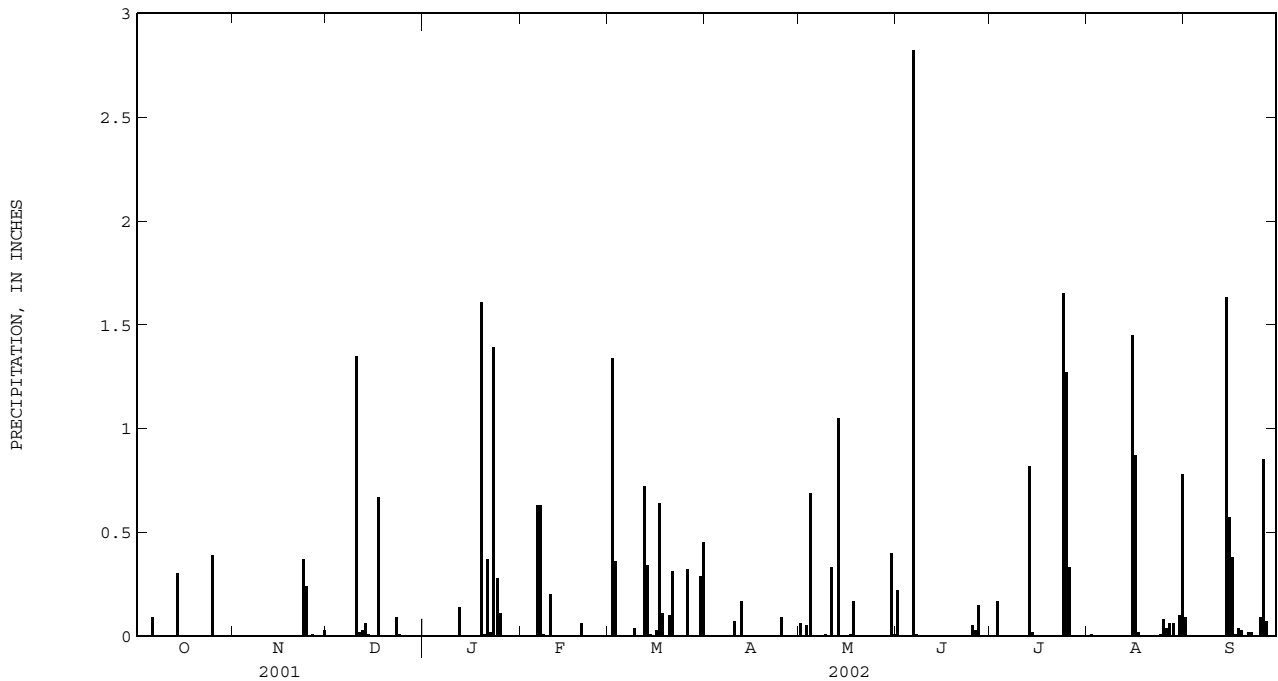
PERIOD OF RECORD.-- November 1996 to current year. Records for period November 1996 to September 1998 published in USGS OFR 98-67, and 99-273.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.22	0.00	0.00	0.09
2	0.00	0.00	0.00	0.00	0.00	1.34	0.00	0.00	0.00	0.00	0.01	0.00
3	0.00	0.00	0.00	---	0.00	0.36	0.00	0.05	0.00	0.17	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.09	0.00	0.00	---	0.63	0.00	0.00	0.00	2.82	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.63	0.00	---	0.00	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	---	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.04	---	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.35	0.00	0.20	0.00	0.07	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00
12	0.00	0.00	0.03	0.14	0.00	0.72	0.17	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.06	0.00	0.00	0.34	0.00	1.05	0.00	0.82	0.00	0.00
14	0.30	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.02	0.00	1.63
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	0.57
16	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.87	0.38
17	0.00	0.00	0.67	0.00	0.00	0.64	0.00	0.01	0.00	0.00	0.02	0.01
18	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.17	0.00	0.00	0.00	0.04
19	0.00	0.00	0.00	1.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
20	0.00	0.00	0.00	0.01	0.06	0.10	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.37	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.02
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
23	0.00	0.37	0.09	1.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.24	0.01	0.28	0.00	0.00	0.00	0.00	0.00	1.65	0.01	0.00
25	0.39	0.00	0.00	0.11	0.00	0.00	0.09	0.00	0.05	1.27	0.08	0.09
26	0.00	0.01	0.00	0.00	0.00	0.32	0.00	0.00	0.03	0.33	0.04	0.85
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.06	0.07
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.03	0.00	0.00	---	0.29	0.00	0.40	0.00	0.00	0.10	0.00
31	0.00	---	0.00	0.00	---	0.45	---	0.01	---	0.00	0.78	---
TOTAL	0.78	0.65	2.24	---	1.53	5.06	---	2.78	3.28	4.26	3.48	3.80



0214266075 CRN25

LOCATION.--Lat 35°21'55", long 80°53'11", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050101, Gar Creek at McCoy Road near Oakdale, NC.

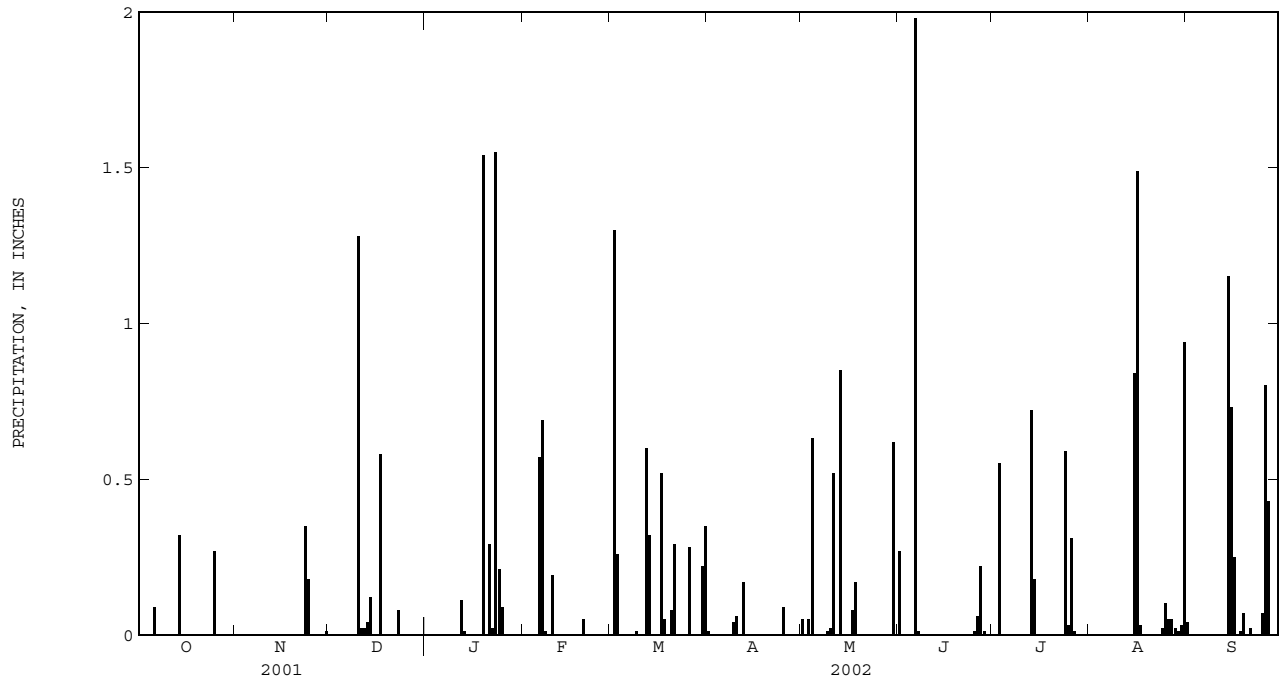
PERIOD OF RECORD.--April 1994 to current year. Records for period April 1994 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.27	0.00	0.00	0.04
2	0.00	0.00	0.00	0.00	0.00	1.30	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	---	0.00	0.26	0.00	0.05	0.00	0.55	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.09	0.00	0.00	---	0.57	0.00	0.00	0.00	1.98	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.28	0.00	0.19	0.00	0.06	0.02	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.11	0.00	0.60	0.17	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.04	0.01	0.00	0.32	0.00	0.85	0.00	0.72	0.00	0.00
14	0.32	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	1.15
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.73
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.49	0.25
17	0.00	0.00	0.58	0.00	0.00	0.52	0.00	0.08	0.00	0.00	0.03	0.00
18	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.17	0.00	0.00	0.00	0.01
19	0.00	0.00	0.00	1.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
20	0.00	0.00	0.00	0.00	0.05	0.08	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.29	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.02
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.35	0.08	1.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.18	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.59	0.02	0.00
25	0.27	0.00	0.00	0.09	0.00	0.00	0.09	0.00	0.01	0.03	0.10	0.07
26	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.06	0.31	0.05	0.80
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.01	0.05	0.43
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
30	0.00	0.01	0.00	0.00	---	0.22	0.00	0.62	0.00	0.00	0.03	0.00
31	0.00	---	0.00	0.00	---	0.35	---	0.00	---	0.00	0.94	---
TOTAL	0.68	0.54	2.14	---	1.51	4.28	0.37	3.00	2.56	2.39	3.58	3.57



SANTEE RIVER BASIN

0214267600 CRN35

LOCATION.--Lat 35°20'03", long 80°59'12", North American Datum of 1983, Gaston County, Hydrologic Unit 03050101, Catawba River at Mountain Island Dam, Mount Holly, NC.

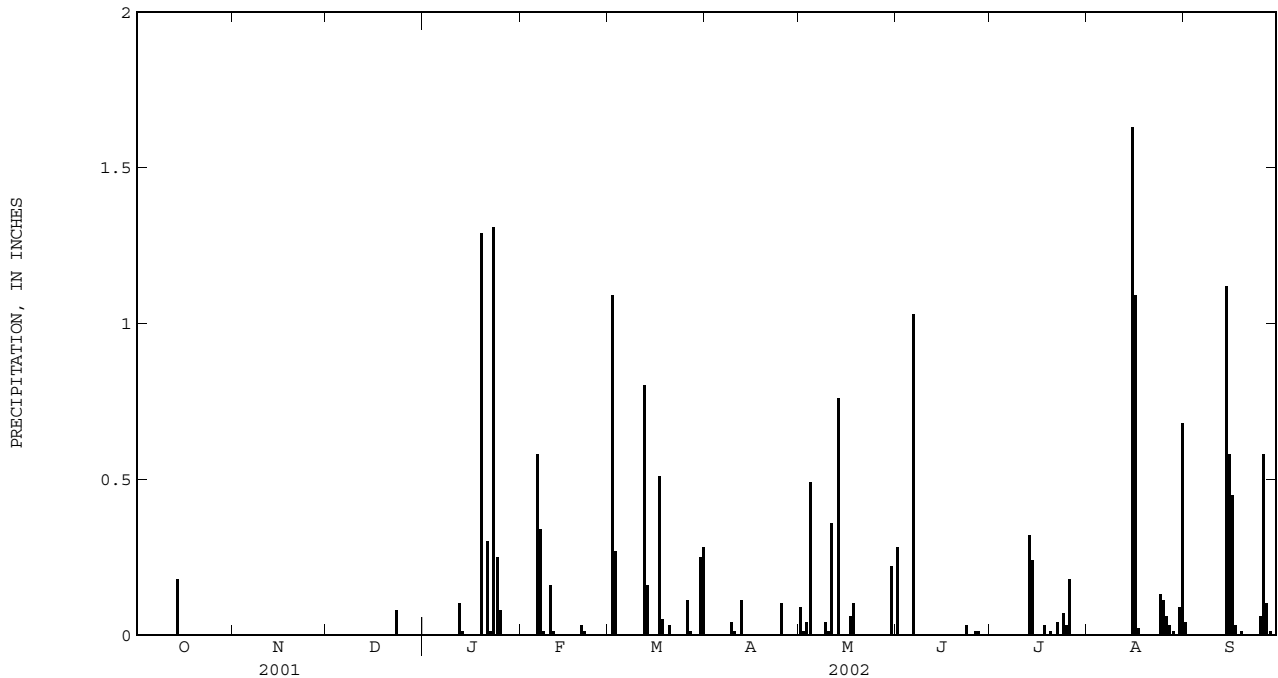
PERIOD OF RECORD.--January 1996 to current year. Records for period January 1996 to September 1998 published in USGS OFR 98-67 and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	0.00	0.00	0.00	0.00	0.09	0.28	0.00	0.00	0.04
2	0.00	---	---	0.00	0.00	1.09	0.00	0.01	0.00	0.00	0.00	0.00
3	0.00	---	---	---	0.00	0.27	0.00	0.04	0.00	0.00	0.00	0.00
4	0.00	---	---	---	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00
5	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	---	---	---	0.58	0.00	0.00	0.00	1.03	0.00	0.00	0.00
7	0.00	---	---	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	---	---	0.00	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.00
10	0.00	---	---	0.00	0.16	0.00	0.01	0.01	0.00	0.00	0.00	0.00
11	0.00	---	---	0.00	0.01	0.00	0.00	0.36	0.00	0.00	0.00	0.00
12	0.00	---	---	0.10	0.00	0.80	0.11	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	0.01	0.00	0.16	0.00	0.76	0.00	0.32	0.00	0.00
14	0.18	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	1.12
15	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.63	0.58
16	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09	0.45
17	0.00	---	---	0.00	0.00	0.51	0.00	0.06	0.00	0.00	0.02	0.03
18	0.00	---	---	0.00	0.00	0.05	0.00	0.10	0.00	0.03	0.00	0.00
19	0.00	---	---	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
20	0.00	---	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.01	0.00	0.00
21	0.00	---	0.00	0.30	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	---	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
23	0.00	---	0.08	1.31	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
24	0.00	---	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.07	0.13	0.00
25	---	---	0.00	0.08	0.00	0.00	0.10	0.00	0.00	0.03	0.11	0.06
26	---	---	0.00	0.00	0.00	0.11	0.00	0.00	0.01	0.18	0.06	0.58
27	---	---	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.03	0.10
28	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
29	---	---	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	---	---	0.00	0.00	---	0.25	0.00	0.22	0.00	0.00	0.09	0.00
31	---	---	0.00	0.00	---	0.28	---	0.00	---	0.00	0.68	---
TOTAL	---	---	---	---	1.14	3.56	0.26	2.18	1.36	0.92	3.85	2.98





Gaging station at Swift Creek at Hilliardston, North Carolina.

SANTEE RIVER BASIN

0214269560 KILLIAN CREEK NEAR MARIPOSA, NC

LOCATION.--Lat 35°26'03", long 81°01'48", North American Datum of 1983, Lincoln County, Hydrologic Unit 03050101, 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 mi².

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 NGVD of 1929 (levels by Duke Power Co).
Satellite telemetry at station.

REMARKS.--Records 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. No flow also occurred Aug. 14, Sept. 10-13, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	4.0	5.7	e5.1	14	9.9	34	11	3.7	e0.86	e0.45	3.4
2	2.6	4.2	5.3	e5.0	12	21	22	12	3.6	e0.83	e0.73	2.0
3	1.8	4.1	5.3	e5.0	12	38	20	11	e2.7	e0.86	e0.36	1.2
4	1.2	4.5	5.3	e4.9	12	23	19	15	e3.5	e1.6	e0.24	0.91
5	0.99	3.9	5.4	e4.9	11	17	18	15	e2.4	e1.7	e0.22	0.61
6	1.1	3.5	5.5	e13	12	15	17	13	e8.4	e1.3	e0.21	0.24
7	1.5	3.8	5.6	e11	26	14	16	12	e19	e0.91	e0.17	0.13
8	1.7	4.3	5.7	e4.9	42	13	16	12	e4.5	e1.2	e0.13	0.07
9	1.9	4.4	5.6	e5.0	25	12	17	11	e2.7	e0.79	e0.18	0.02
10	2.1	4.5	7.2	e5.0	23	12	23	9.9	e3.3	e0.48	e0.14	0.00
11	1.8	4.1	18	e5.0	20	12	16	10	e2.1	e0.38	e0.05	0.00
12	2.3	4.0	8.4	e5.1	17	16	15	10	e1.7	e0.33	e0.02	0.00
13	1.8	4.1	7.0	e5.1	16	---	16	12	e2.0	e0.46	0.00	0.00
14	2.2	4.4	6.7	e4.9	15	---	16	15	e1.8	e0.85	0.00	0.40
15	3.8	4.8	6.2	e4.9	14	30	16	11	e1.5	e0.82	0.09	2.6
16	3.2	4.8	6.4	e4.9	14	24	15	10	e1.8	e0.77	7.6	5.9
17	e2.8	4.9	7.3	e5.0	13	32	15	9.8	e1.4	e0.53	3.7	9.3
18	e2.7	4.9	19	7.1	12	36	15	9.8	e1.4	e0.39	2.7	3.3
19	e2.9	5.3	9.6	17	12	27	13	9.6	e1.2	e0.32	1.5	1.9
20	e3.2	5.3	8.0	41	12	24	12	8.8	e1.1	e0.26	0.97	1.6
21	e3.3	e5.5	e6.0	21	12	31	12	8.9	e0.94	e0.22	0.56	1.7
22	e3.4	e5.6	e5.1	17	12	26	13	8.7	e0.91	e0.22	0.21	1.7
23	2.8	e6.0	e5.0	---	11	22	12	8.6	e1.2	e0.24	0.13	1.7
24	3.3	7.9	e6.3	---	11	20	12	8.9	e1.4	e0.60	0.12	1.6
25	3.1	6.6	e5.3	49	11	19	13	7.1	e1.2	e0.64	0.15	1.4
26	2.7	5.8	e5.1	32	10	17	12	5.6	e1.2	e9.0	0.13	5.5
27	2.5	5.4	e5.0	24	9.8	18	12	4.2	e1.3	e1.9	0.32	8.5
28	4.1	5.5	e5.1	20	9.8	16	12	3.8	e1.1	e0.84	0.42	6.9
29	3.1	5.2	e5.0	17	---	16	12	3.4	e0.90	e0.68	0.69	4.5
30	3.5	5.6	e5.0	16	---	17	11	3.7	e0.88	e0.63	0.80	3.4
31	4.1	---	e5.1	15	---	20	---	7.3	---	e0.69	2.4	---

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1991 - 2002[®]

LOWEST DAILY MEAN
MAXIMUM PEAK STAGE
INSTANTANEOUS LOW FLOW

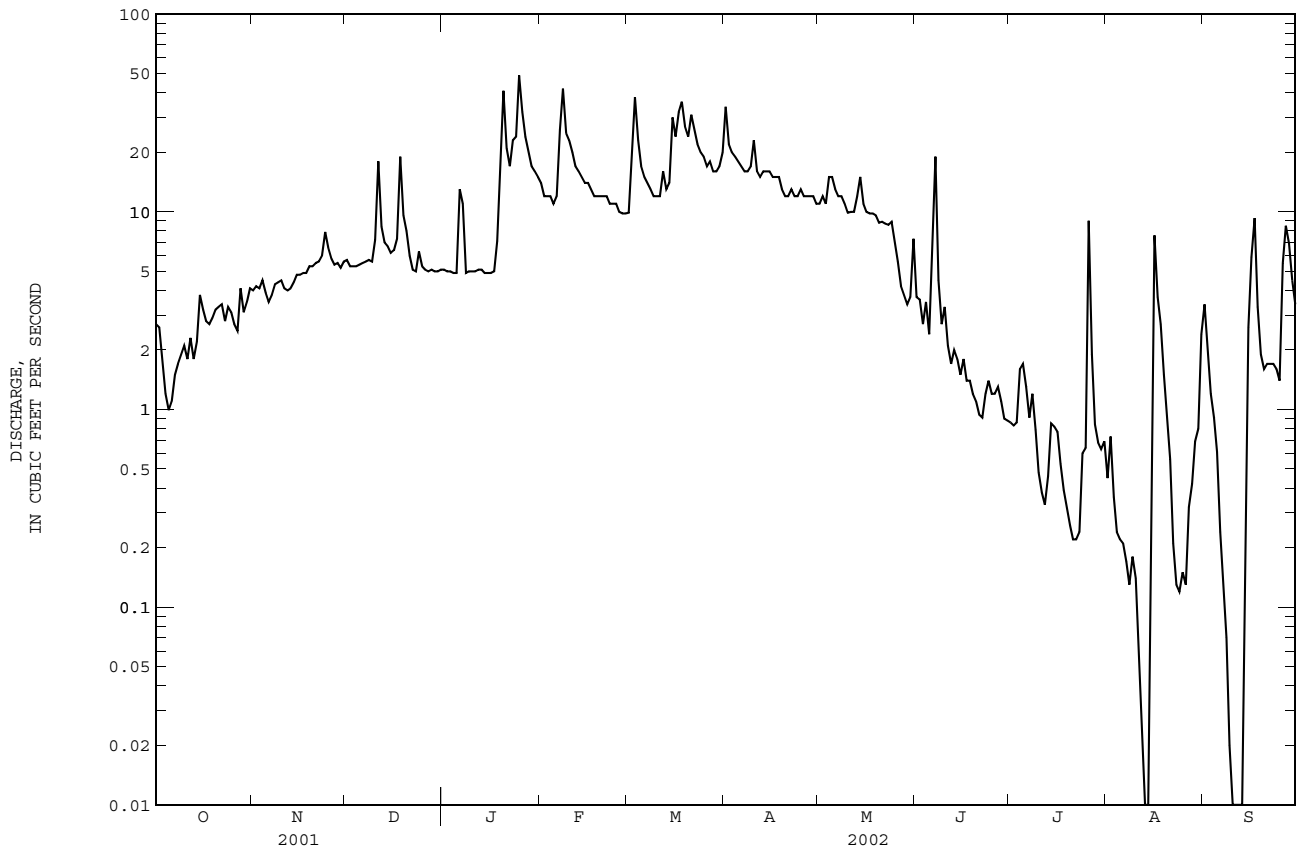
.75 Aug 28

0.00 Aug 13
4.78 Jan 23
0.00* Aug 13

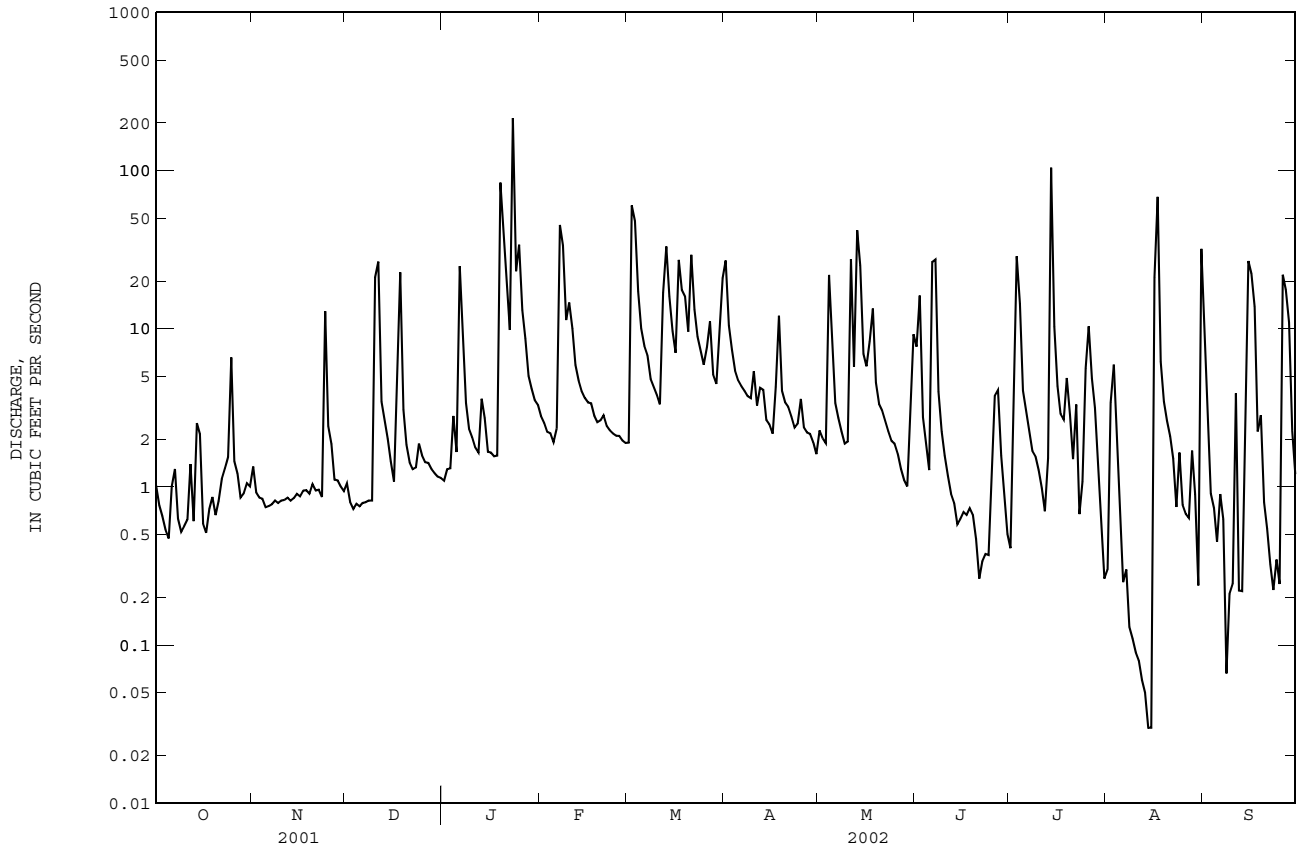
0.00 Aug 13 2002
15.25 Apr 29 1997
0.00* Aug 13 2002

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

0214269560 KILLIAN CREEK NEAR MARIPOSA, NC--Continued



02142900 LONG CREEK NEAR PAW CREEK, NC--Continued



SANTEE RIVER BASIN

02142900 LONG CREEK NEAR PAW CREEK, NC--Continued

PRECIPITATION RECORDS

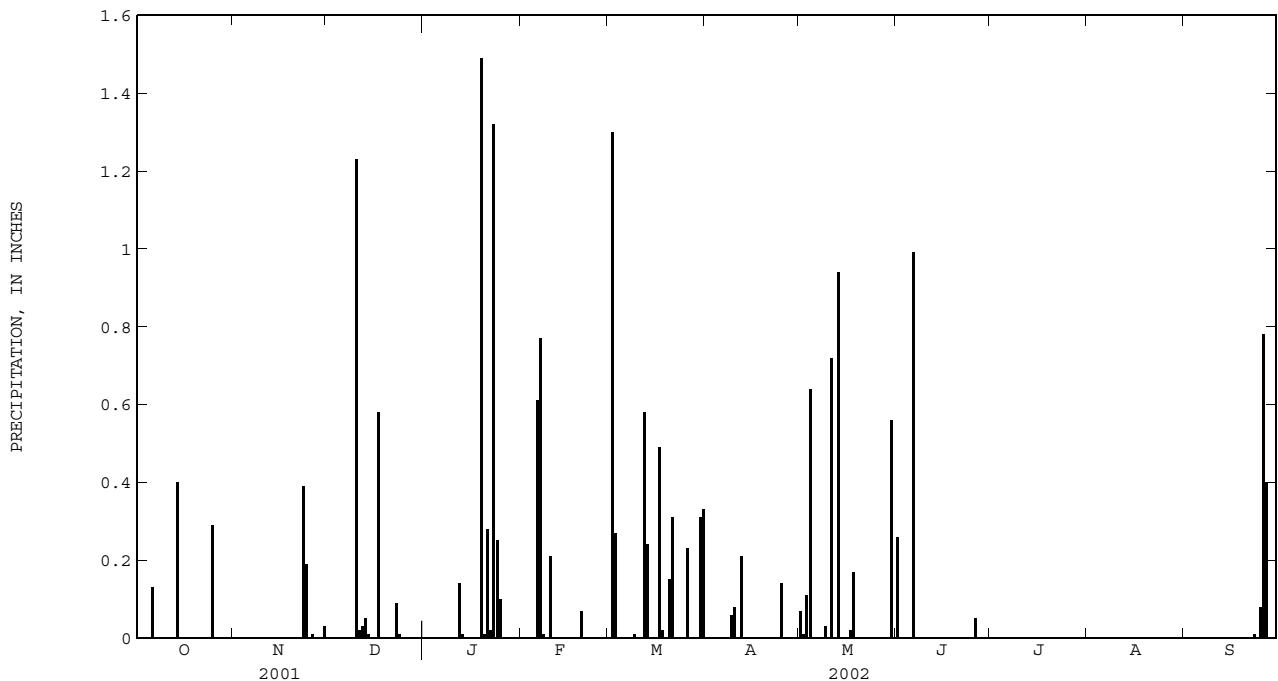
PERIOD OF RECORD.--March 1993 to current year. Records for period March 1993 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.26	0.00	---	---
2	0.00	0.00	0.00	0.00	0.00	1.30	0.00	0.01	0.00	0.00	---	---
3	0.00	0.00	0.00	---	0.00	0.27	0.00	0.11	0.00	---	---	---
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.64	0.00	---	---	---
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	---	---	---
6	0.13	0.00	0.00	---	0.61	0.00	0.00	0.00	0.99	---	---	---
7	0.00	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.00	---	---	---
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	---	---	---
9	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.03	0.00	---	---	---
10	0.00	0.00	1.23	0.00	0.21	0.00	0.08	0.00	0.00	---	---	---
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.72	0.00	---	---	---
12	0.00	0.00	0.03	0.14	0.00	0.58	0.21	0.00	0.00	---	---	---
13	0.00	0.00	0.05	0.01	0.00	0.24	0.00	0.94	0.00	---	---	---
14	0.40	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
17	0.00	0.00	0.58	0.00	0.00	0.49	0.00	0.02	0.00	---	---	---
18	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.17	0.00	---	---	---
19	0.00	0.00	0.00	1.49	0.00	0.00	0.00	0.00	0.00	---	---	---
20	0.00	0.00	0.00	0.01	0.07	0.15	0.00	0.00	0.00	---	---	---
21	0.00	0.00	0.00	0.28	0.00	0.31	0.00	0.00	0.00	---	---	---
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	---	---	---
23	0.00	0.39	0.09	1.32	0.00	0.00	0.00	0.00	0.00	---	---	0.01
24	0.00	0.19	0.01	0.25	0.00	0.00	0.00	0.00	0.00	---	---	0.00
25	0.29	0.00	0.00	0.10	0.00	0.00	0.14	0.00	0.00	---	---	0.08
26	0.00	0.01	0.00	0.00	0.00	0.23	0.00	0.00	0.05	---	---	0.78
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	0.40
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	---	---	0.00
30	0.00	0.03	0.00	0.00	---	0.31	0.00	0.56	0.00	---	---	0.00
31	0.00	---	0.00	0.00	---	0.33	---	0.00	---	---	---	---
TOTAL	0.82	0.62	2.02	---	1.67	4.24	0.49	3.27	1.30	---	---	---





USGS hydrographer making a wading discharge measurement at Pee Dee River below Lake Tillery, North Carolina.

SANTEE RIVER BASIN

0214291555 LONG CREEK NEAR RHYNE, NC

LOCATION.--Lat 35°18'02", long 80°58'22", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050101, on right bank 1.6 mi downstream of Gum Branch, .6 mi upstream from bridge on NC Highway 27 and 0.55 mi northwest of Rhyne.

DRAINAGE AREA.--31.49 mi².

PERIOD OF RECORD.-- October 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage 610 ft above NGVD of 1929, from topographic map. Radio telemetry at station.

REMARKS.--Records poor. Frequent diversions during summer months for irrigation by upstream golf course. Minimum discharge for current water year and period of record affected by regulation. Maximum discharge for current water year and period of record from slope area computation of peak flow. Maximum gage height for period of record from floodmarks. Minimum discharge for period of record also occurred on Sept. 3, 2001.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	2.3	3.4	2.8	8.0	5.1	51	4.8	5.9	0.99	0.44	19
2	1.0	3.2	2.9	3.1	8.8	94	17	4.8	21	25	0.52	5.2
3	0.82	2.4	2.6	3.4	6.7	130	13	4.6	3.8	24	5.2	2.4
4	0.85	2.5	2.4	4.6	6.4	38	10	23	3.0	29	1.1	1.7
5	0.96	2.6	2.5	3.7	6.4	18	9.3	10	2.6	3.5	0.62	1.1
6	0.98	2.5	2.5	4.2	8.1	14	8.7	5.1	16	2.2	0.74	1.4
7	1.4	2.3	2.5	16	86	12	8.2	5.4	50	1.7	0.48	1.4
8	1.1	2.5	2.4	5.8	87	10	8.0	4.8	5.2	1.5	0.29	0.82
9	0.89	2.5	2.2	4.4	20	9.4	8.0	4.1	3.4	1.1	e0.28	2.2
10	0.84	2.4	19	4.0	22	8.9	9.4	3.8	2.9	0.94	e0.26	0.40
11	0.86	2.4	57	3.7	17	8.0	7.9	35	2.6	0.92	e0.22	0.24
12	0.96	2.4	5.9	3.6	11	27	8.7	6.8	2.0	0.80	e0.20	0.20
13	1.3	2.5	4.5	5.3	9.1	56	9.1	45	2.0	1.4	e0.20	0.12
14	1.5	2.6	3.7	4.7	8.0	27	7.4	44	1.8	152	e0.18	15
15	4.0	2.6	2.9	3.5	7.4	16	7.0	7.3	1.8	15	3.4	47
16	0.99	2.4	2.4	3.4	7.1	13	6.7	5.4	1.7	5.9	28	46
17	0.78	2.3	4.3	3.2	6.8	46	6.2	6.8	1.7	3.7	82	22
18	0.98	2.5	33	3.3	6.3	31	12	10	1.6	2.8	6.0	3.7
19	1.2	2.5	5.0	100	6.1	23	6.3	6.0	1.5	4.0	3.2	4.8
20	1.3	2.4	3.2	95	6.2	15	5.6	4.5	1.5	2.4	1.9	2.6
21	1.4	2.5	2.7	32	6.4	52	5.4	4.5	1.3	2.1	1.3	1.2
22	1.7	2.5	2.6	16	6.0	24	5.0	4.2	1.2	2.3	0.96	1.00
23	1.6	3.0	2.6	341	5.7	15	4.7	4.0	1.4	1.3	0.85	0.90
24	1.7	19	3.0	52	5.5	13	5.1	3.6	1.3	0.67	0.74	0.67
25	7.7	6.2	3.1	72	5.4	11	6.3	3.5	1.3	2.4	2.3	0.77
26	3.5	4.5	2.7	25	5.5	12	5.6	4.0	2.3	7.7	1.5	29
27	2.0	2.8	2.7	16	5.3	18	5.2	3.6	4.8	4.8	1.3	27
28	1.7	2.9	2.9	12	5.1	10	4.9	3.0	1.8	2.3	1.9	14
29	e1.4	2.6	2.9	10	---	9.1	4.6	2.7	1.5	1.4	2.5	3.2
30	e1.2	2.8	2.8	8.8	---	14	4.3	5.4	1.2	0.77	1.3	1.9
31	1.9	---	2.8	8.2	---	25	---	11	---	0.55	54	---
TOTAL	49.51	98.6	195.1	908.5	389.3	804.5	270.6	290.7	150.1	305.14	203.88	256.92
MEAN	1.597	3.287	6.294	29.31	13.90	25.95	9.020	9.377	5.003	9.843	6.577	8.564
MAX	7.7	19	57	341	87	130	51	45	50	152	82	47
MIN	0.78	2.3	2.2	2.8	5.1	5.1	4.3	2.7	1.2	0.55	0.18	0.12
CFSM	0.05	0.10	0.20	0.93	0.44	0.82	0.29	0.30	0.16	0.31	0.21	0.27
IN.	0.06	0.12	0.23	1.07	0.46	0.95	0.32	0.34	0.18	0.36	0.24	0.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
MEAN	8.607	7.326	10.37	27.57	25.95	41.91	19.55	8.484	6.769	9.989	6.163	10.33
MAX	24.2	10.4	18.8	39.8	44.1	70.2	36.8	9.38	10.4	16.2	13.7	18.4
(WY)	2000	2000	1999	1999	2000	2001	2000	2002	1999	2000	2000	2000
MIN	1.60	3.29	6.29	9.69	13.9	13.0	9.02	7.61	5.00	4.66	1.43	5.41
(WY)	2002	2002	2002	2001	2002	1999	2002	2001	2002	2001	2001	1999

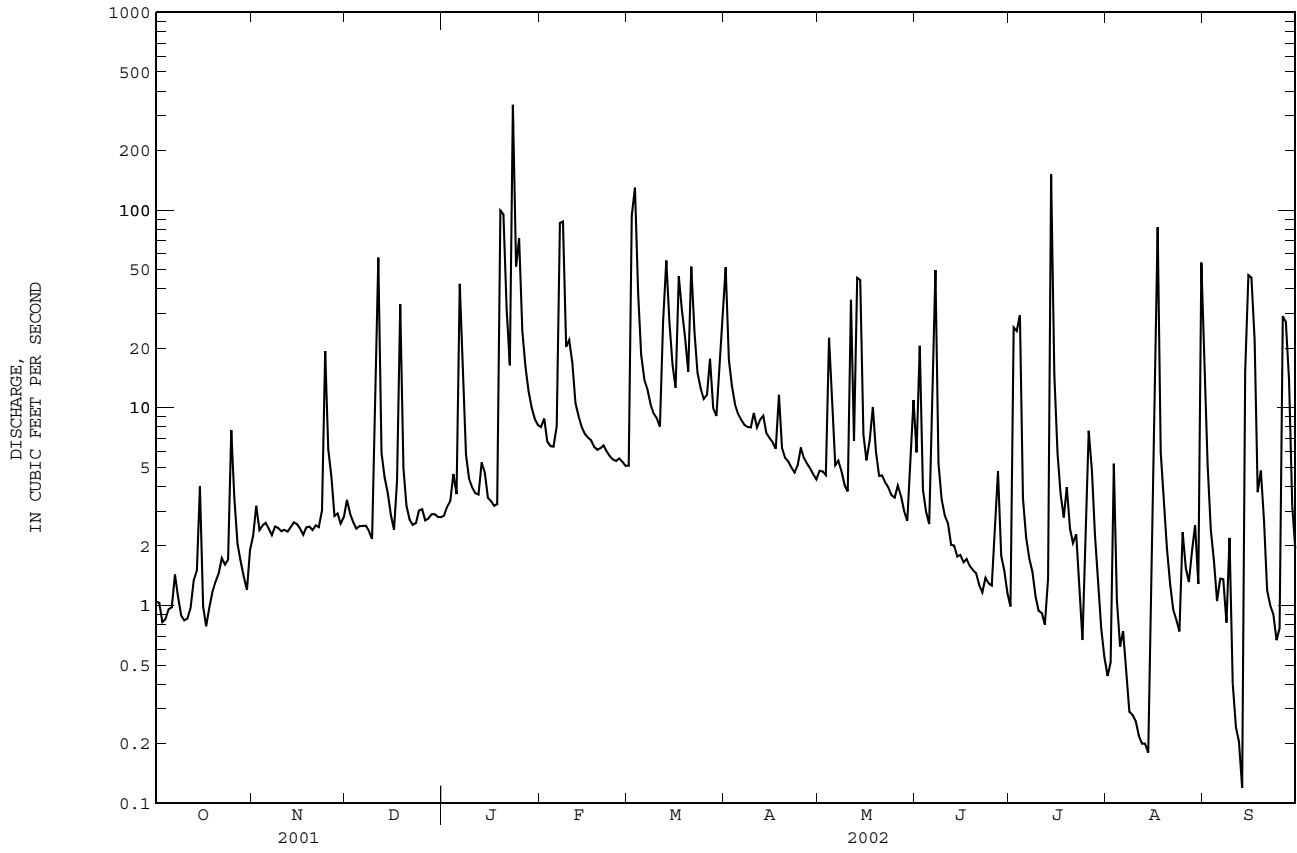
SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1999 - 2002

	2001 CALENDAR YEAR	2002 WATER YEAR	1999 - 2002
ANNUAL TOTAL	4533.14	3922.85	
ANNUAL MEAN	12.42	10.75	15.22
HIGHEST ANNUAL MEAN			23.1
LOWEST ANNUAL MEAN			10.7
HIGHEST DAILY MEAN	587	341	587
LOWEST DAILY MEAN	0.15	0.12	0.12
ANNUAL SEVEN-DAY MINIMUM	0.29	0.23	0.23
MAXIMUM PEAK FLOW		881	2600*
MAXIMUM PEAK STAGE		7.31	9.45*
INSTANTANEOUS LOW FLOW		NOT DETERMINED	0.02*
ANNUAL RUNOFF (CFSM)	0.39	0.34	0.48
ANNUAL RUNOFF (INCHES)	5.36	4.63	6.57
10 PERCENT EXCEEDS	19	25	27
50 PERCENT EXCEEDS	4.3	3.7	5.7
90 PERCENT EXCEEDS	1.0	0.96	1.6

e Estimated.

* See REMARKS.

0214291555 LONG CREEK NEAR RHYNE, NC--Continued



SANTEE RIVER BASIN

0214295600 PAW CREEK AT WILKINSON BOULEVARD NEAR CHARLOTTE, NC

LOCATION.--Lat 35°14'25", long 80°58'28", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050101, 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 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 568.92 ft above NGVD of 1929 (Mecklenburg County benchmark). Prior to October 1, 1999 at same site at datum 570.92 ft. Radio telemetry at station.

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. 24, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.73	0.11	0.39	0.83	0.74	0.84	18	e3.4	7.7	0.58	0.41	6.0
2	0.70	0.10	0.38	0.82	0.78	46	5.4	3.1	10	3.7	0.48	1.5
3	0.70	0.14	0.42	0.93	0.78	45	4.2	3.4	4.2	7.6	0.53	0.86
4	0.66	0.16	0.38	1.3	0.77	14	3.5	32	3.3	1.2	0.53	e0.66
5	0.63	0.22	0.39	1.3	0.77	7.4	3.2	41	3.6	0.81	0.56	0.28
6	1.1	0.14	0.41	21	1.1	5.1	3.2	e4.8	19	0.75	0.49	0.23
7	0.94	0.15	0.47	4.2	34	4.4	3.4	2.0	9.5	0.91	0.40	0.14
8	0.64	0.19	0.41	2.1	26	4.1	3.3	1.8	2.6	0.74	0.38	0.19
9	0.57	0.24	0.40	1.4	3.6	4.1	3.2	2.3	2.1	0.95	0.34	0.24
10	0.54	0.23	19	1.2	5.6	3.8	3.7	1.7	1.9	0.93	0.45	0.22
11	0.50	0.26	15	1.2	2.6	3.4	3.3	14	1.7	0.68	0.55	0.22
12	0.55	0.34	1.9	1.1	1.2	15	3.7	3.2	1.7	0.70	0.48	0.15
13	0.52	0.25	1.3	1.8	0.94	13	4.3	22	1.6	0.76	0.40	0.12
14	1.6	0.29	1.0	1.3	0.87	5.8	3.2	9.7	1.3	42	0.43	20
15	1.7	0.38	0.81	1.1	0.85	4.2	3.1	4.2	1.2	4.5	3.2	41
16	0.65	0.41	0.75	0.97	0.85	3.3	3.2	3.3	1.2	2.8	32	21
17	0.76	0.45	2.3	0.95	0.86	21	3.0	3.1	1.1	1.1	21	9.0
18	0.59	0.46	12	0.92	0.87	9.2	2.9	8.1	1.0	0.98	1.5	1.1
19	0.57	0.52	1.6	54	0.85	5.3	2.8	4.1	0.89	0.72	0.87	0.55
20	0.58	0.45	1.5	21	0.83	4.7	2.7	3.3	0.89	0.69	0.56	1.2
21	0.64	0.49	0.97	8.7	0.82	21	3.0	2.8	0.78	0.69	0.51	0.43
22	0.74	0.40	0.84	3.0	0.84	7.0	3.2	3.0	0.79	0.72	1.3	0.38
23	0.73	0.45	0.82	113	0.85	4.8	e3.2	2.9	0.92	0.84	0.62	0.33
24	0.68	7.7	1.2	9.9	0.85	3.8	e2.8	2.9	1.1	0.81	1.0	0.31
25	3.7	1.0	0.97	20	0.84	3.4	e3.9	2.5	0.89	0.81	4.5	0.42
26	0.42	0.60	0.83	3.2	0.83	4.1	e2.0	2.6	2.8	1.1	5.4	16
27	0.17	0.42	0.80	1.6	0.85	4.4	e3.1	2.6	2.5	0.84	3.7	e12
28	0.18	0.38	0.80	1.1	0.85	2.9	e2.6	2.6	1.1	0.46	1.0	e5.0
29	0.14	0.42	0.80	0.99	---	2.8	e2.3	2.5	0.62	0.44	0.54	e2.1
30	0.06	0.41	0.79	0.83	---	5.9	e1.7	15	0.62	0.45	0.33	e0.95
31	0.08	---	0.80	0.79	---	11	---	11	---	0.38	47	---
TOTAL	22.77	17.76	70.43	282.53	91.59	290.74	111.1	220.9	88.60	80.64	131.46	142.58
MEAN	0.735	0.592	2.272	9.114	3.271	9.379	3.703	7.126	2.953	2.601	4.241	4.753
MAX	3.7	7.7	19	113	34	46	18	41	19	42	47	41
MIN	0.06	0.10	0.38	0.79	0.74	0.84	1.7	1.7	0.62	0.38	0.33	0.12
CFSM	0.07	0.05	0.21	0.84	0.30	0.87	0.34	0.66	0.27	0.24	0.39	0.44
IN.	0.08	0.06	0.24	0.97	0.32	1.00	0.38	0.76	0.31	0.28	0.45	0.49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2002, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	6.790	7.165	6.404	14.43	16.10	14.61	11.97	6.077
MAX	23.0	26.1	14.0	28.9	33.4	18.9	22.0	13.2
(WY)	1996	1996	1998	1998	1995	2001	1998	1995
MIN	0.73	0.59	2.27	2.79	3.27	4.54	3.29	3.21
(WY)	2002	2002	2002	2001	2002	1999	2001	2000

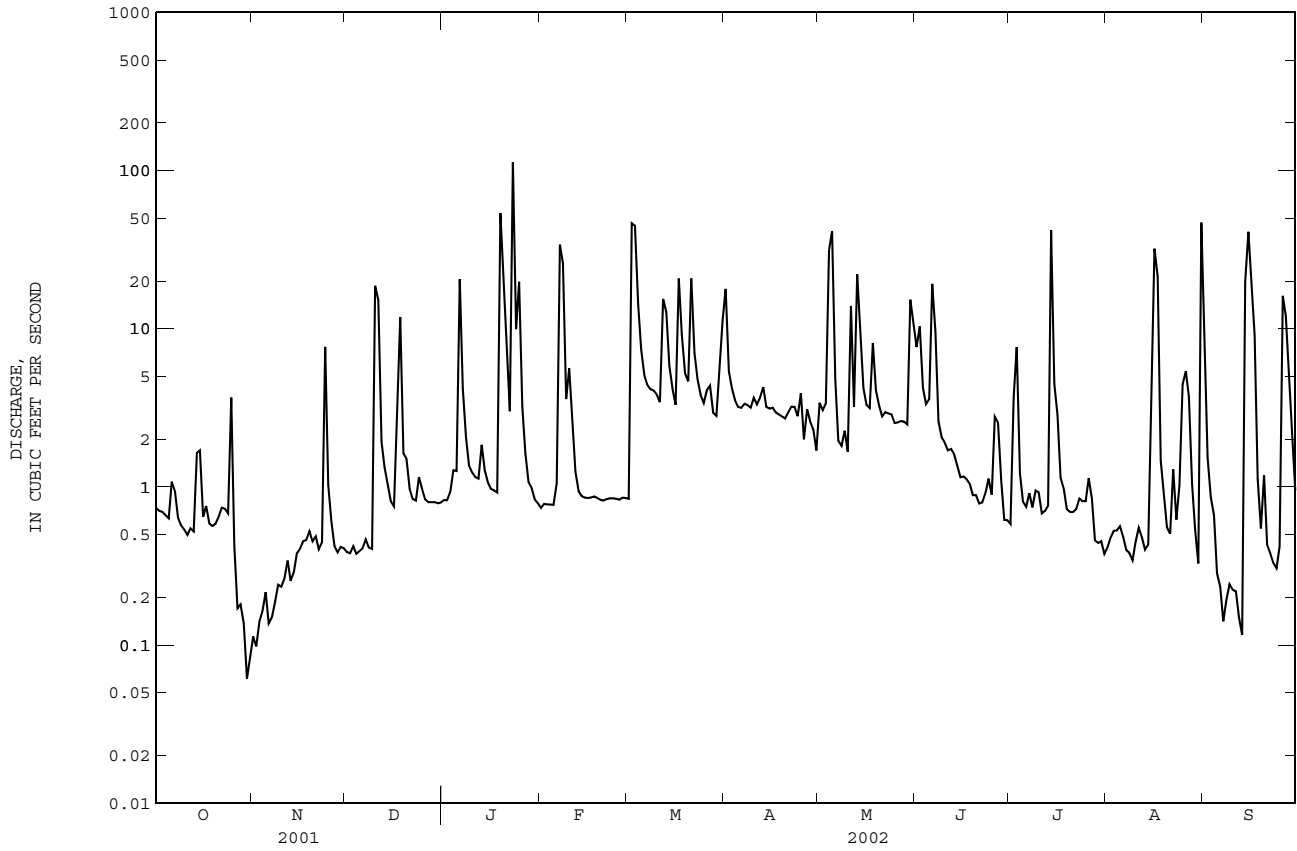
SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1995 - 2002

ANNUAL TOTAL	1343.83	1551.10	
ANNUAL MEAN	3.682	4.250	8.784
HIGHEST ANNUAL MEAN			13.6
LOWEST ANNUAL MEAN			3.93
HIGHEST DAILY MEAN	179	Mar 29	835
LOWEST DAILY MEAN	0.06	Oct 30	0.06
ANNUAL SEVEN-DAY MINIMUM	0.11	Oct 29	0.11
MAXIMUM PEAK FLOW			383
MAXIMUM PEAK STAGE			7.17
INSTANTANEOUS LOW FLOW			0.03*
ANNUAL RUNOFF (CFSM)	0.34		0.39
ANNUAL RUNOFF (INCHES)	4.63		5.34
10 PERCENT EXCEEDS	6.5		9.9
50 PERCENT EXCEEDS	1.3		1.1
90 PERCENT EXCEEDS	0.30		0.38

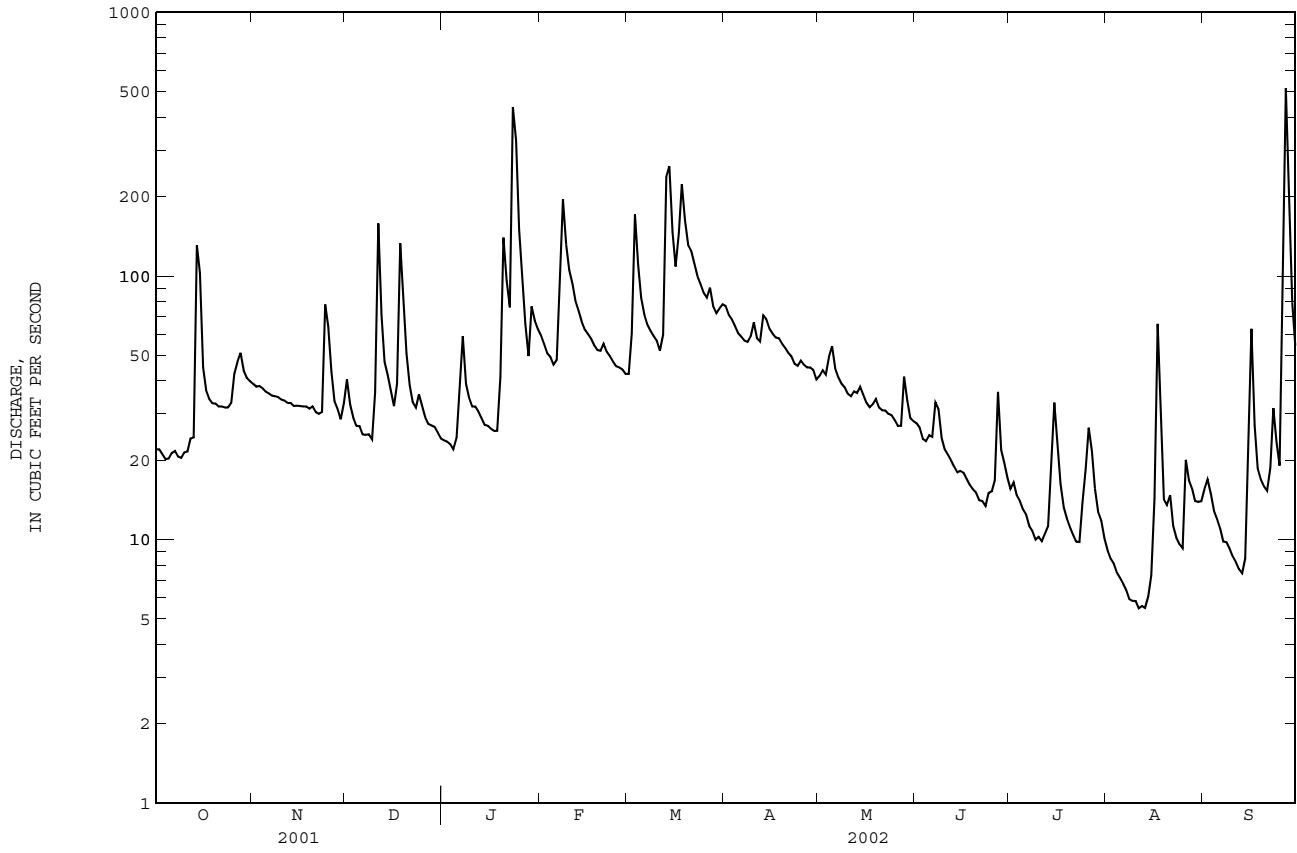
e Estimated.

* See REMARKS.

0214295600 PAW CREEK AT WILKINSON BOULEVARD NEAR CHARLOTTE, NC--Continued



02143000 HENRY FORK NEAR HENRY RIVER, NC--Continued



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 mi²

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 NGVD of 1929. 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 3,400 ft³/s on basis of contracted-opening measurement of peak flow.

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	7.3	12	8.8	18	12	26	13	7.3	3.6	1.4	7.8
2	4.6	7.4	9.4	e8.8	16	24	24	13	6.6	3.3	1.1	7.3
3	4.7	7.4	8.5	e8.8	14	60	23	13	6.1	2.8	1.1	5.7
4	4.6	7.4	8.1	e8.8	14	35	21	18	5.9	2.4	1.0	4.9
5	4.7	7.1	7.7	e8.8	13	25	19	17	7.6	2.3	e0.95	4.5
6	5.3	7.0	7.5	14	15	21	19	13	6.4	2.1	e0.93	4.0
7	5.4	7.0	7.4	18	42	18	18	12	8.9	1.8	e0.92	3.6
8	5.2	7.0	7.4	13	88	17	18	12	6.9	1.7	e0.92	3.4
9	5.1	7.0	7.3	11	46	16	20	11	6.0	1.5	e0.91	3.2
10	5.3	7.1	15	11	36	16	23	10	5.5	1.4	e0.90	2.9
11	5.4	6.9	52	12	30	14	18	12	5.1	1.5	e0.90	2.7
12	5.7	6.8	21	11	25	19	20	11	5.0	1.8	e0.89	2.5
13	6.5	6.9	16	11	22	137	32	12	4.9	2.1	e0.87	2.6
14	73	7.1	14	10	19	98	31	13	4.6	6.2	e1.2	6.8
15	22	7.1	13	9.9	18	49	28	10	4.6	7.4	10	42
16	10	7.1	12	9.5	17	36	24	9.8	4.3	4.9	22	51
17	8.6	7.1	17	9.2	17	68	22	9.2	4.1	3.7	9.2	14
18	7.8	7.1	51	9.0	15	98	21	9.7	3.9	2.9	6.7	9.7
19	7.4	7.0	25	20	14	61	19	9.3	3.6	2.5	6.2	8.8
20	7.4	7.0	17	67	15	49	18	8.6	3.6	2.2	6.8	7.5
21	7.3	6.9	13	42	16	48	17	8.6	3.4	1.9	5.3	7.2
22	7.0	6.8	12	33	14	42	16	8.6	3.1	1.7	4.2	8.9
23	6.9	7.4	11	214	13	37	14	8.4	3.2	1.9	3.7	15
24	7.0	29	14	131	13	33	13	8.0	3.3	4.5	3.7	9.7
25	6.9	15	12	98	13	29	14	7.6	3.1	4.2	5.7	9.2
26	6.7	11	11	64	13	29	13	7.1	3.3	4.2	9.9	134
27	6.8	9.2	10	39	13	30	13	7.1	5.6	3.7	7.8	424
28	6.8	8.5	10	29	12	25	13	15	5.3	2.9	6.3	116
29	7.0	8.1	9.9	24	---	23	13	8.5	4.4	2.4	5.8	33
30	7.2	11	9.5	21	---	25	12	7.4	3.8	1.8	5.5	20
31	7.3	---	8.9	18	---	27	---	7.3	---	1.6	6.1	---
TOTAL	280.3	254.7	449.6	992.6	601	1221	582	330.2	149.4	88.9	138.89	971.9
MEAN	9.042	8.490	14.50	32.02	21.46	39.39	19.40	10.65	4.980	2.868	4.480	32.40
MAX	73	29	52	214	88	137	32	18	8.9	7.4	22	424
MIN	4.6	6.8	7.3	8.8	12	12	12	7.1	3.1	1.4	0.87	2.5
CFSM	0.35	0.33	0.56	1.25	0.84	1.53	0.75	0.41	0.19	0.11	0.17	1.26
IN.	0.41	0.37	0.65	1.44	0.87	1.77	0.84	0.48	0.22	0.13	0.20	1.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2002, BY WATER YEAR (WY)

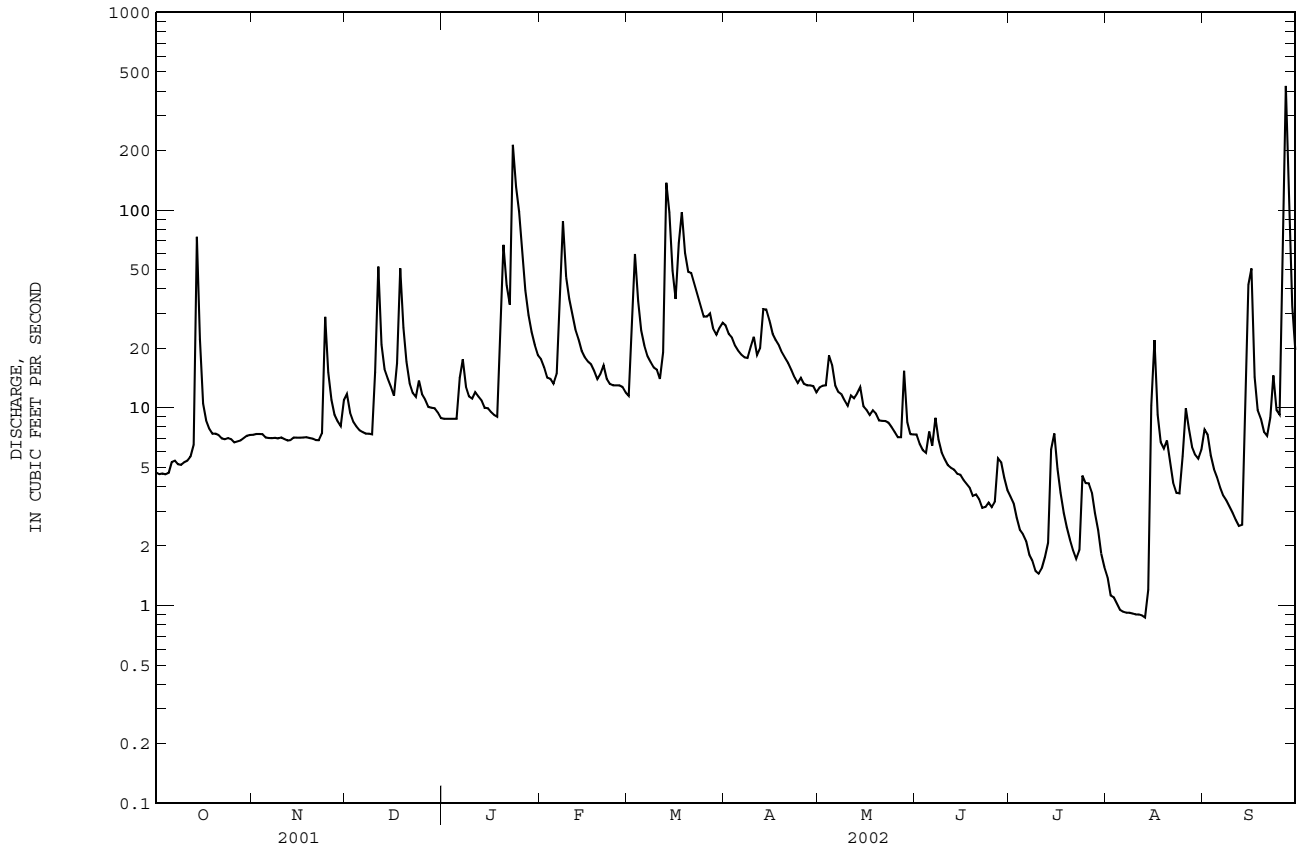
	1965	1978	1984	1993	1966	1975	1983	1984	1972	1985	1970	1989
MEAN	39.73	40.26	45.85	58.28	65.31	75.99	66.38	51.06	40.13	32.74	31.81	27.85
MAX	154	130	92.6	131	134	177	157	109	82.3	72.7	152	102
(WY)	1965	1978	1984	1993	1966	1975	1983	1984	1972	1985	1970	1989
MIN	7.83	8.49	14.5	15.6	19.3	27.4	19.4	9.93	4.98	2.87	4.48	7.94
(WY)	2001	2002	2002	2001	2001	1988	2002	2001	2002	2002	2002	2001

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1962 - 2002	
ANNUAL TOTAL	6041.1		6060.49			
ANNUAL MEAN	16.55		16.60		47.87	
HIGHEST ANNUAL MEAN					80.8	
LOWEST ANNUAL MEAN					16.6	
HIGHEST DAILY MEAN	282		424		1730	
LOWEST DAILY MEAN	4.2		0.87		0.87	
ANNUAL SEVEN-DAY MINIMUM	4.6		0.90		0.90	
MAXIMUM PEAK FLOW			885		7220*	
MAXIMUM PEAK STAGE			5.79		19.74	
INSTANTANEOUS LOW FLOW			0.79		0.79	
ANNUAL RUNOFF (CFSM)	0.64		0.65		1.86	
ANNUAL RUNOFF (INCHES)	8.74		8.77		25.31	
10 PERCENT EXCEEDS	29		31		84	
50 PERCENT EXCEEDS	10		8.9		32	
90 PERCENT EXCEEDS	5.6		2.9		13	

e Estimated.
* See REMARKS.

02143040 JACOB FORK AT RAMSEY, NC--Continued



02143040 JACOB FORK AT RAMSEY, NC--Continued

PRECIPITATION RECORDS

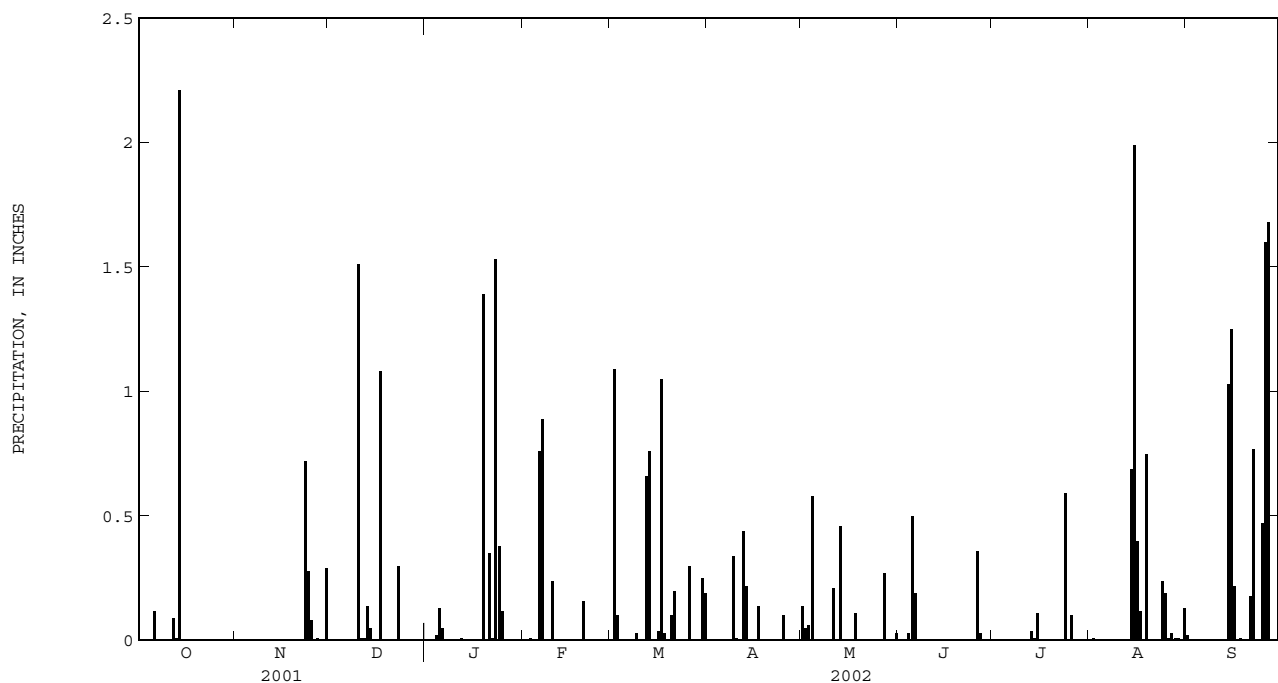
PERIOD OF RECORD.--November 2000 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Gage is operated in cooperation with North Carolina Department of Environment and Natural Resources. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

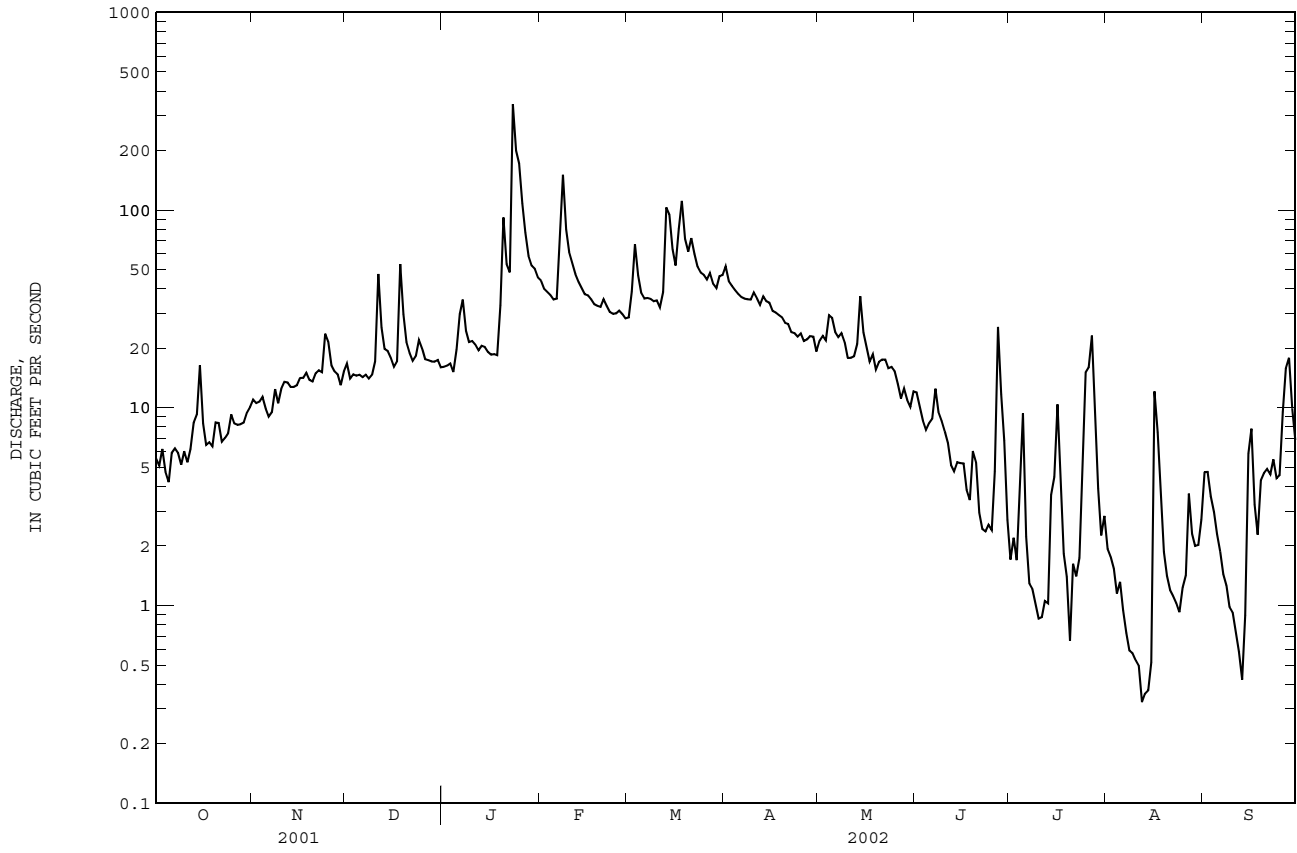
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.02
2	0.00	0.00	0.00	0.00	0.00	1.09	0.00	0.05	0.00	0.00	0.01	0.00
3	0.00	0.00	0.00	0.00	0.01	0.10	0.00	0.06	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.58	0.03	0.00	0.00	0.00
5	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00
6	0.12	0.00	0.00	0.05	0.76	0.00	0.00	0.00	0.19	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.03	0.34	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.51	0.00	0.24	0.00	0.01	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00
12	0.09	0.00	0.01	0.01	0.00	0.66	0.44	0.00	0.00	0.00	0.00	0.00
13	0.01	0.00	0.14	0.00	0.00	0.76	0.22	0.46	0.00	0.04	0.00	0.00
14	2.21	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.69	1.03
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	1.99	1.25
16	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.40	0.22
17	0.00	0.00	1.08	0.00	0.00	1.05	0.14	0.00	0.00	0.00	0.12	0.00
18	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.11	0.00	0.00	0.00	0.01
19	0.00	0.00	0.00	1.39	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00
20	0.00	0.00	0.00	0.00	0.16	0.10	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.35	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.18
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77
23	0.00	0.72	0.30	1.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.28	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.59	0.24	0.00
25	0.00	0.08	0.00	0.12	0.00	0.00	0.10	0.00	0.00	0.00	0.19	0.47
26	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.36	0.10	0.01	1.60
27	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.27	0.03	0.00	0.03	1.68
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
30	0.00	0.29	0.00	0.00	---	0.25	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.19	---	0.03	---	0.00	0.13	---
TOTAL	2.43	1.38	3.10	3.99	2.06	4.80	1.25	1.91	1.11	0.85	4.58	7.23



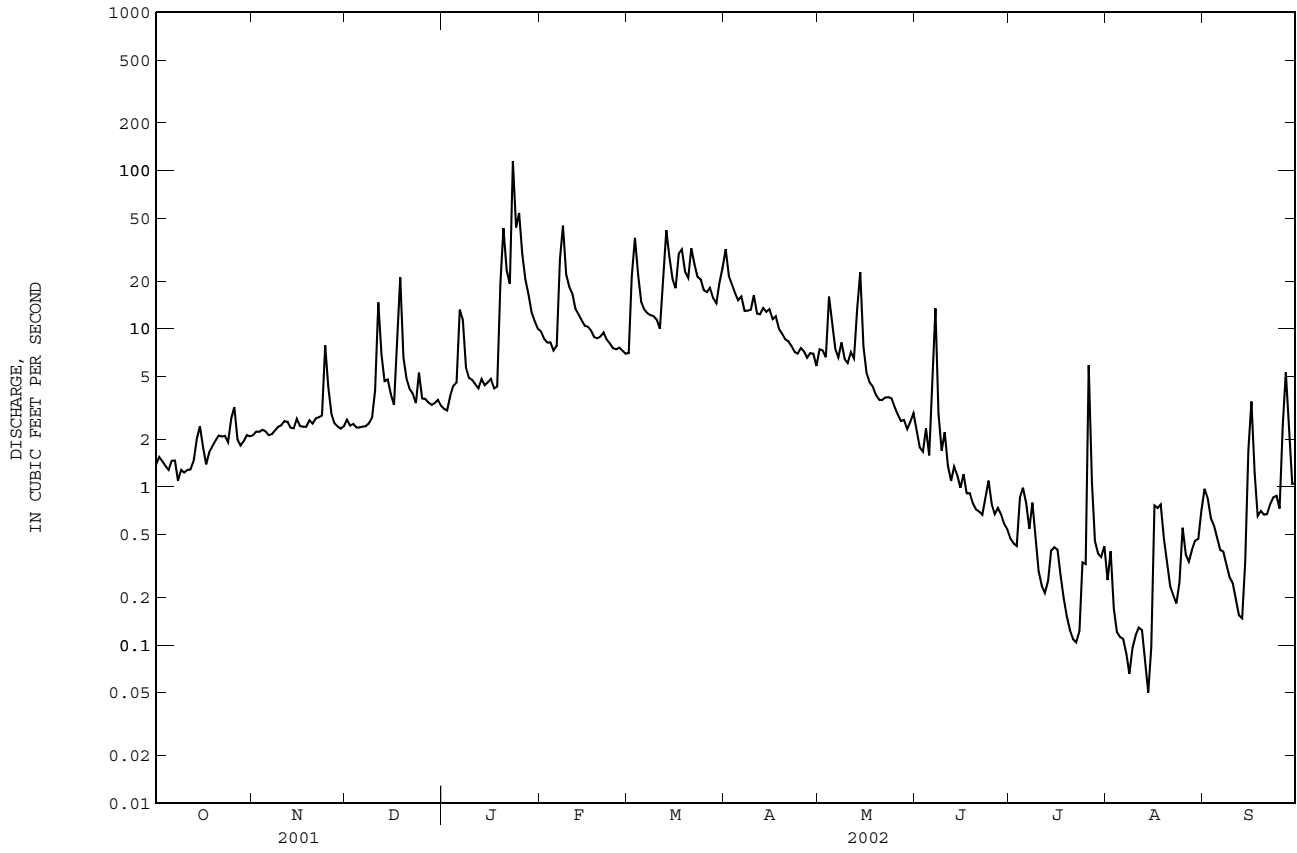


Twelve Mile Creek near Waxhaw, North Carolina.

02143500 INDIAN CREEK NEAR LABORATORY, NC--Continued



02144000 LONG CREEK NEAR BESSEMER CITY, NC--Continued



SANTEE RIVER BASIN

02144000 LONG CREEK NEAR BESSEMER CITY, NC--Continued

PRECIPITATION RECORDS

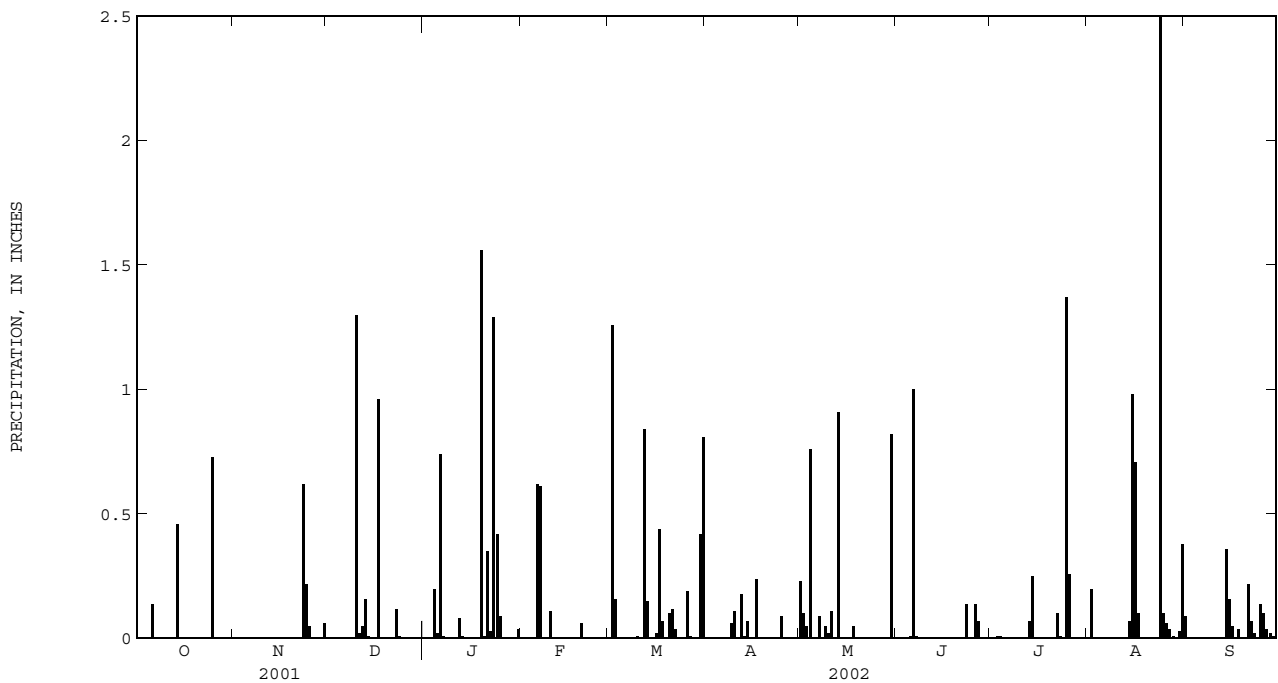
PERIOD OF RECORD.--October 2001 to September 2002.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record in poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.09
2	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.10	0.00	0.00	0.20	0.00
3	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.05	0.00	0.01	0.00	0.00
4	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.76	0.00	0.01	0.00	0.00
5	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
6	0.14	0.00	0.00	0.74	0.62	0.00	0.00	0.00	1.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.61	0.00	0.00	0.09	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.05	0.00	0.00	0.00	0.00
10	0.00	0.00	1.30	0.00	0.11	0.01	0.11	0.02	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00
12	0.00	0.00	0.05	0.08	0.00	0.84	0.18	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.16	0.01	0.00	0.15	0.01	0.91	0.00	0.07	0.00	0.00
14	0.46	0.00	0.01	0.00	0.00	0.00	0.07	0.00	0.00	0.25	0.07	0.36
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.16
16	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.71	0.05
17	0.00	0.00	0.96	0.00	0.00	0.44	0.24	0.00	0.00	0.00	0.10	0.00
18	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.05	0.00	0.00	0.00	0.04
19	0.00	0.00	0.00	1.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.01	0.06	0.10	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.35	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.22
22	0.00	0.00	0.00	0.03	0.00	0.04	0.00	0.00	0.00	0.10	0.00	0.07
23	0.00	0.62	0.12	1.29	0.00	0.00	0.00	0.00	0.14	0.01	0.00	0.02
24	0.00	0.22	0.01	0.42	0.00	0.00	0.00	0.00	0.00	0.00	2.50	0.00
25	0.73	0.05	0.00	0.09	0.00	0.00	0.09	0.00	0.00	1.37	0.10	0.14
26	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.14	0.26	0.06	0.10
27	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.07	0.00	0.04	0.04
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.01
30	0.00	0.06	0.00	0.00	---	0.42	0.00	0.82	0.00	0.00	0.03	0.00
31	0.00	---	0.00	0.04	---	0.81	---	0.00	---	0.00	0.38	---
TOTAL	1.33	0.95	2.63	4.85	1.40	4.64	0.76	3.19	1.37	2.08	5.18	1.32





Gaging station at Mayo Creek near Bethel Hill, North Carolina.

SANTÉE RIVER BASIN

02145000 SOUTH FORK CATAWBA RIVER AT LOWELL, NC

LOCATION.--Lat 35°17'07", long 81°06'04", North American Datum of 1983, 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 mi².

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 NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. 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 ft³/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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	146	e240	199	424	306	599	251	132	101	84	123
2	92	177	e200	215	413	376	484	249	152	86	81	143
3	133	126	e205	214	390	682	444	250	135	80	80	98
4	100	148	199	221	378	646	420	279	136	75	81	103
5	136	152	189	215	317	540	418	339	125	71	81	104
6	90	173	172	289	312	410	405	337	130	87	81	93
7	78	141	186	454	557	401	365	293	229	77	79	89
8	e80	149	177	366	1040	365	381	253	196	73	76	85
9	e70	151	180	310	896	362	390	238	173	68	75	81
10	117	157	211	285	694	366	396	220	130	65	71	82
11	94	154	509	270	619	357	392	205	146	64	68	73
12	133	150	495	259	535	396	392	207	99	61	67	66
13	97	173	381	263	500	634	393	247	101	57	47	63
14	122	138	284	257	448	998	394	377	100	60	28	67
15	240	156	278	244	420	885	429	309	103	58	25	102
16	362	176	244	237	388	659	412	254	94	144	104	173
17	231	e170	265	247	e390	626	337	194	90	150	250	201
18	180	e152	605	210	e380	1120	376	206	96	107	482	198
19	133	158	520	324	e360	941	362	200	88	84	410	132
20	112	179	418	899	326	743	337	216	81	77	163	129
21	138	143	327	689	349	737	326	198	76	70	117	120
22	162	158	257	639	351	689	326	206	75	68	96	112
23	121	158	261	1290	347	584	307	205	75	69	89	109
24	142	225	270	2330	330	538	288	168	73	77	102	148
25	159	266	276	1760	307	508	293	175	72	159	138	141
26	187	269	264	1140	315	494	275	162	70	353	98	203
27	93	240	223	837	306	542	235	155	68	337	88	372
28	121	208	201	662	300	469	271	165	346	224	99	959
29	166	208	223	551	---	447	309	154	161	163	110	647
30	130	244	220	493	---	454	253	174	115	122	100	320
31	123	---	223	435	---	488	---	191	---	90	116	---
TOTAL	4288	5245	8703	16804	12392	17763	11009	7077	3667	3377	3586	5336
MEAN	138.3	174.8	280.7	542.1	442.6	573.0	367.0	228.3	122.2	108.9	115.7	177.9
MAX	362	269	605	2330	1040	1120	599	377	346	353	482	959
MIN	70	126	172	199	300	306	235	154	68	57	25	63
CFSM	0.22	0.28	0.45	0.86	0.70	0.91	0.58	0.36	0.19	0.17	0.18	0.28
IN.	0.25	0.31	0.52	1.00	0.73	1.05	0.65	0.42	0.22	0.20	0.21	0.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2002,® BY WATER YEAR (WY)

MEAN	617.6	612.9	766.4	997.4	1201	1280	1026	729.0	610.3	519.6	560.8	483.4
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	175	235	242	443	561	367	228	122	109	116	110
(WY)	1955	2002	1956	1956	2002	1955	2002	2002	2002	2002	2002	1954

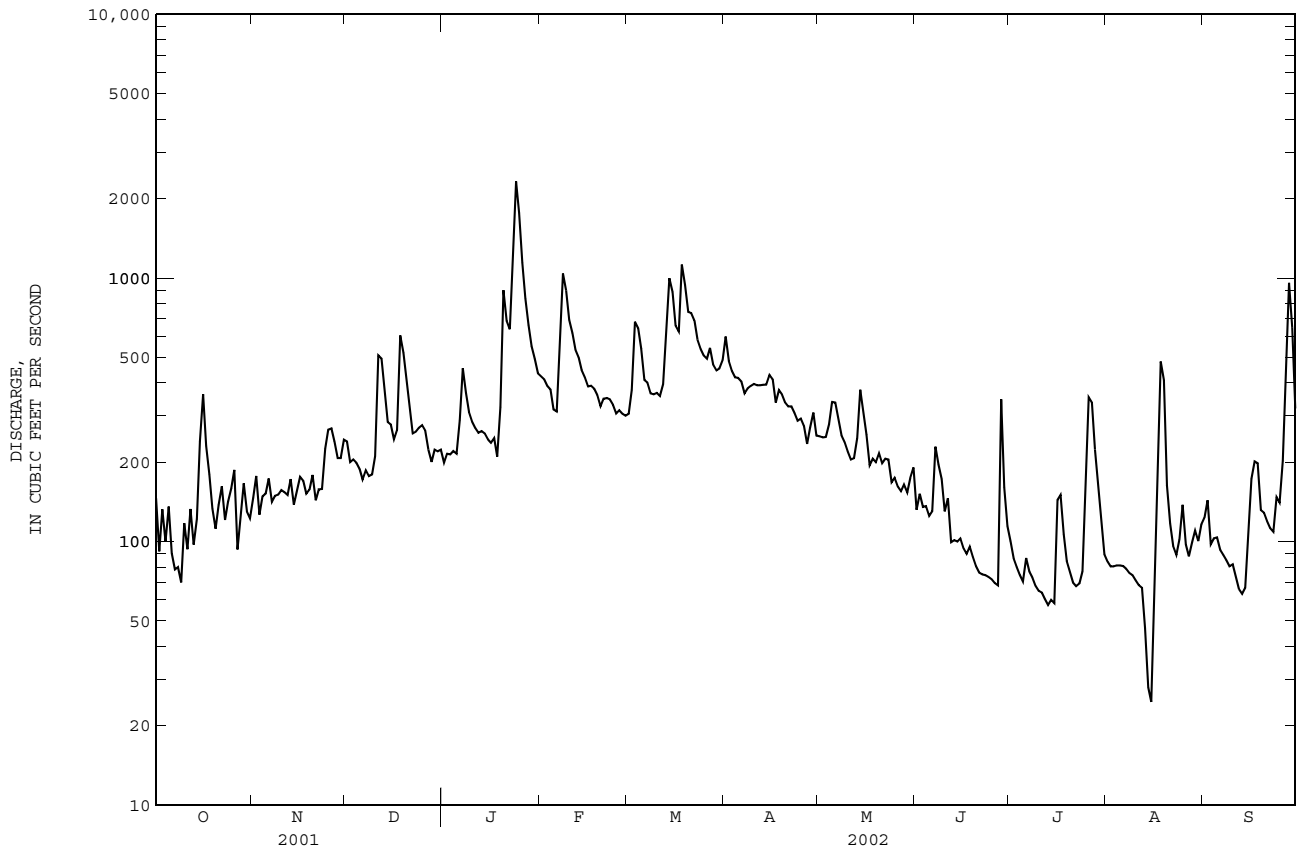
SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1942 - 2002®	
ANNUAL TOTAL	128335		99247			
ANNUAL MEAN	351.6		271.9		782.6	
HIGHEST ANNUAL MEAN					1341	1993
LOWEST ANNUAL MEAN					272	2002
HIGHEST DAILY MEAN	4840	Mar 30	2330	Jan 24	21700	Aug 11 1970
LOWEST DAILY MEAN	70	Oct 9	25	Aug 15	25	Aug 15 2002
ANNUAL SEVEN-DAY MINIMUM	94	Sep 13	54	Aug 9	54	Aug 9 2002
MAXIMUM PEAK FLOW			2580		Jan 24	24800
MAXIMUM PEAK STAGE			5.93		Jan 24	17.38
INSTANTANEOUS LOW FLOW			22*		Aug 15	13*
ANNUAL RUNOFF (CFSM)	0.56		0.43		1.25	
ANNUAL RUNOFF (INCHES)	7.60		5.88		16.93	
10 PERCENT EXCEEDS	609		526		1350	
50 PERCENT EXCEEDS	264		205		550	
90 PERCENT EXCEEDS	121		78		260	

e Estimated.

® See PERIOD OF RECORD.

* See REMARKS.

02145000 SOUTH FORK CATAWBA RIVER AT LOWELL, NC--Continued



SANTEE RIVER BASIN

0214620760 CRN03

LOCATION.--Lat 35°16'33", long 80°49'34", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Irwin Creek at Starita Road at Charlotte, NC.

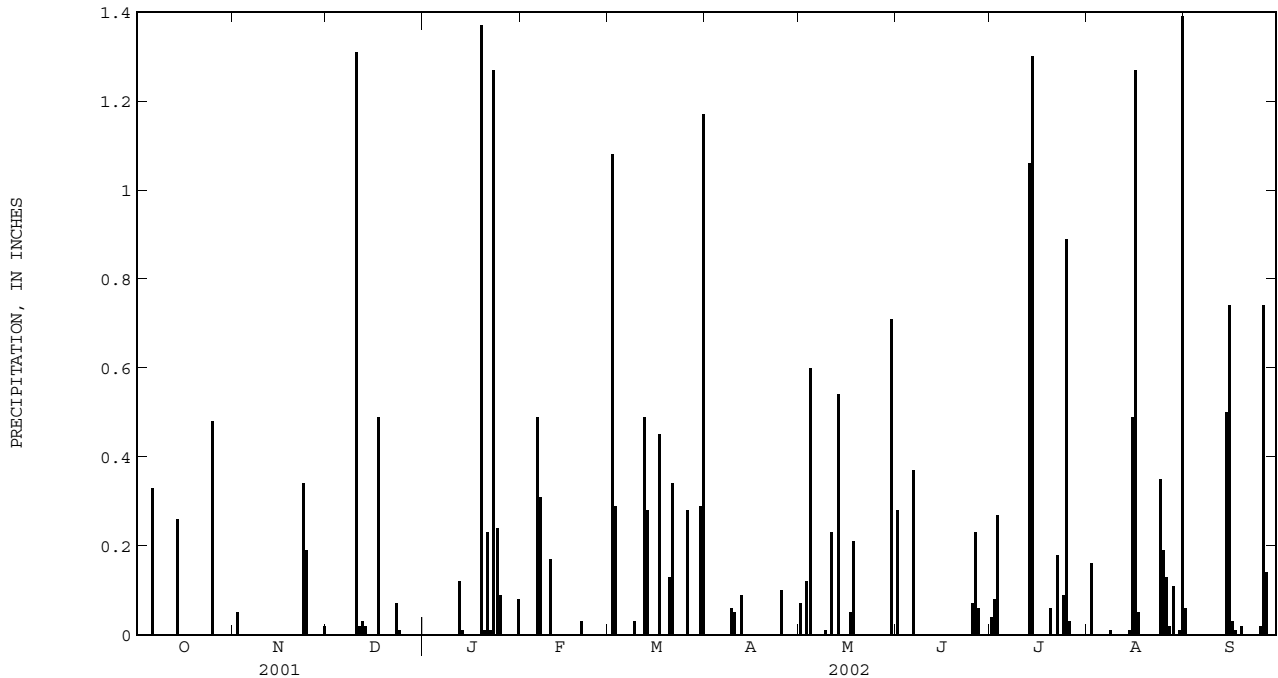
PERIOD OF RECORD.--October 1992 to current year. Records for period October 1992 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.28	0.04	0.00	0.06
2	0.00	0.05	0.00	0.00	0.00	1.08	0.00	0.00	0.00	0.08	0.16	0.00
3	0.00	0.00	0.00	---	0.00	0.29	0.00	0.12	0.00	0.27	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.33	0.00	0.00	---	0.49	0.00	0.00	0.00	0.37	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
9	0.00	0.00	0.00	0.00	0.00	0.03	0.06	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.31	0.00	0.17	0.00	0.05	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00
12	0.00	0.00	0.03	0.12	0.00	0.49	0.09	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.02	0.01	0.00	0.28	0.00	0.54	0.00	1.06	0.00	0.00
14	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	0.01	0.50
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.74
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.03
17	0.00	0.00	0.49	0.00	0.00	0.45	0.00	0.05	0.00	0.00	0.05	0.01
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
20	0.00	0.00	0.00	0.01	0.03	0.13	0.00	0.00	0.00	0.06	0.00	0.00
21	0.00	0.00	0.00	0.23	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00
23	0.00	0.34	0.07	1.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.19	0.01	0.24	0.00	0.00	0.00	0.00	0.00	0.09	0.35	0.00
25	0.48	0.00	0.00	0.09	0.00	0.00	0.10	0.00	0.07	0.89	0.19	0.02
26	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.23	0.03	0.13	0.74
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.02	0.14
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.02	0.00	0.00	---	0.29	0.00	0.71	0.00	0.00	0.01	0.00
31	0.00	---	0.00	0.08	---	1.17	---	0.00	---	0.00	1.39	---
TOTAL	1.07	0.60	1.95	---	1.00	4.83	0.30	2.54	1.01	4.00	4.19	2.26





Gaging station at Long Creek near Paw Creek, North Carolina.

SANTEE RIVER BASIN

0214627970 STEWART CREEK AT STATE STREET AT CHARLOTTE, NC

LOCATION.--Lat 35°14'25", long 80°52'06", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, on right upstream side of culvert on State Street, 1.1 mi upstream of Irwin Creek, and 2.1 mi northwest of city hall, Charlotte.

DRAINAGE AREA.--9.27 mi².

PERIOD OF RECORD.--June 2000 to current year.

GAGE.--Water-stage recorder. Datum of gage is 630.54 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minimum discharge for period of record and current water year affected by regulation of unknown origin.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	8.7	7.2	6.9	6.6	7.1	21	9.0	9.7	20	3.8	10
2	7.5	8.3	8.8	7.5	6.2	64	8.9	6.2	8.4	10	8.4	6.6
3	7.8	6.9	7.5	7.8	7.5	36	7.7	7.4	8.5	9.5	4.9	4.9
4	6.7	8.0	9.3	7.5	5.3	11	7.1	24	8.5	7.1	5.5	4.4
5	6.8	7.2	8.8	7.7	6.9	8.5	7.0	8.1	9.1	8.5	4.4	4.0
6	11	7.3	8.4	38	16	8.0	6.8	5.7	25	9.7	4.4	4.7
7	6.8	8.2	7.9	10	41	5.6	6.6	7.7	10	7.7	3.9	4.4
8	7.4	11	8.0	9.4	19	7.9	6.9	6.4	7.8	6.3	5.8	4.2
9	6.8	7.2	10	7.6	8.6	6.6	7.6	7.9	9.6	10	3.6	4.5
10	7.2	8.6	61	7.0	14	7.7	7.9	5.4	7.8	10	4.8	4.8
11	e7.1	7.3	18	5.3	8.1	7.2	6.0	22	e7.4	9.5	4.4	5.0
12	e7.5	8.5	8.9	6.7	7.5	23	8.1	8.0	7.7	7.0	4.6	4.4
13	e6.5	8.1	9.6	7.7	7.9	18	6.2	38	7.1	54	4.0	3.5
14	e13	11	6.8	7.3	8.9	12	7.1	11	7.0	170	4.6	21
15	e8.0	7.7	5.9	6.0	8.6	7.2	6.7	10	7.8	8.3	7.6	39
16	9.1	9.8	7.0	5.3	9.1	6.5	6.5	7.4	7.4	6.1	36	14
17	7.9	9.1	25	6.2	8.3	29	6.4	6.6	6.6	8.5	16	10
18	9.8	9.0	13	5.8	7.6	10	5.3	12	6.7	8.1	5.4	5.7
19	7.7	7.5	9.4	93	5.9	9.9	5.8	6.6	8.8	5.9	6.0	12
20	7.4	8.5	8.8	19	5.1	9.1	7.1	e8.9	7.7	7.5	4.8	5.2
21	6.2	8.0	6.1	19	7.1	27	6.3	e9.0	5.9	6.3	5.4	4.9
22	10	9.8	6.0	11	6.2	9.7	5.7	e7.2	8.8	6.9	4.1	4.9
23	8.9	8.6	8.2	130	5.7	8.2	5.3	e5.7	5.3	4.9	4.7	6.1
24	12	24	7.8	17	5.6	8.4	7.1	7.2	7.1	5.1	11	5.0
25	23	9.0	6.1	24	6.4	8.8	7.7	5.7	6.8	11	9.3	4.6
26	7.1	8.3	5.3	11	8.3	11	4.4	6.4	11	7.6	7.2	35
27	7.1	9.7	8.0	9.4	8.7	10	5.3	6.9	9.0	6.2	7.5	15
28	6.2	14	7.3	6.9	11	6.5	6.9	e6.7	8.3	4.4	5.6	7.3
29	8.5	8.6	6.9	7.4	---	7.7	5.2	8.4	6.0	5.7	4.7	5.6
30	8.2	7.0	5.7	7.6	---	13	5.5	14	7.1	7.1	3.7	5.6
31	8.2	---	7.4	6.7	---	53	---	8.8	---	4.5	70	---
TOTAL	264.9	274.9	324.1	521.7	267.1	457.6	212.1	304.3	253.9	453.4	276.1	266.3
MEAN	8.545	9.163	10.45	16.83	9.539	14.76	7.070	9.816	8.463	14.63	8.906	8.877
MAX	23	24	61	130	41	64	21	38	25	170	70	39
MIN	6.2	6.9	5.3	5.3	5.1	5.6	4.4	5.4	5.3	4.4	3.6	3.5
CFSM	0.92	0.99	1.13	1.82	1.03	1.59	0.76	1.06	0.91	1.58	0.96	0.96
IN.	1.06	1.10	1.30	2.09	1.07	1.84	0.85	1.22	1.02	1.82	1.11	1.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

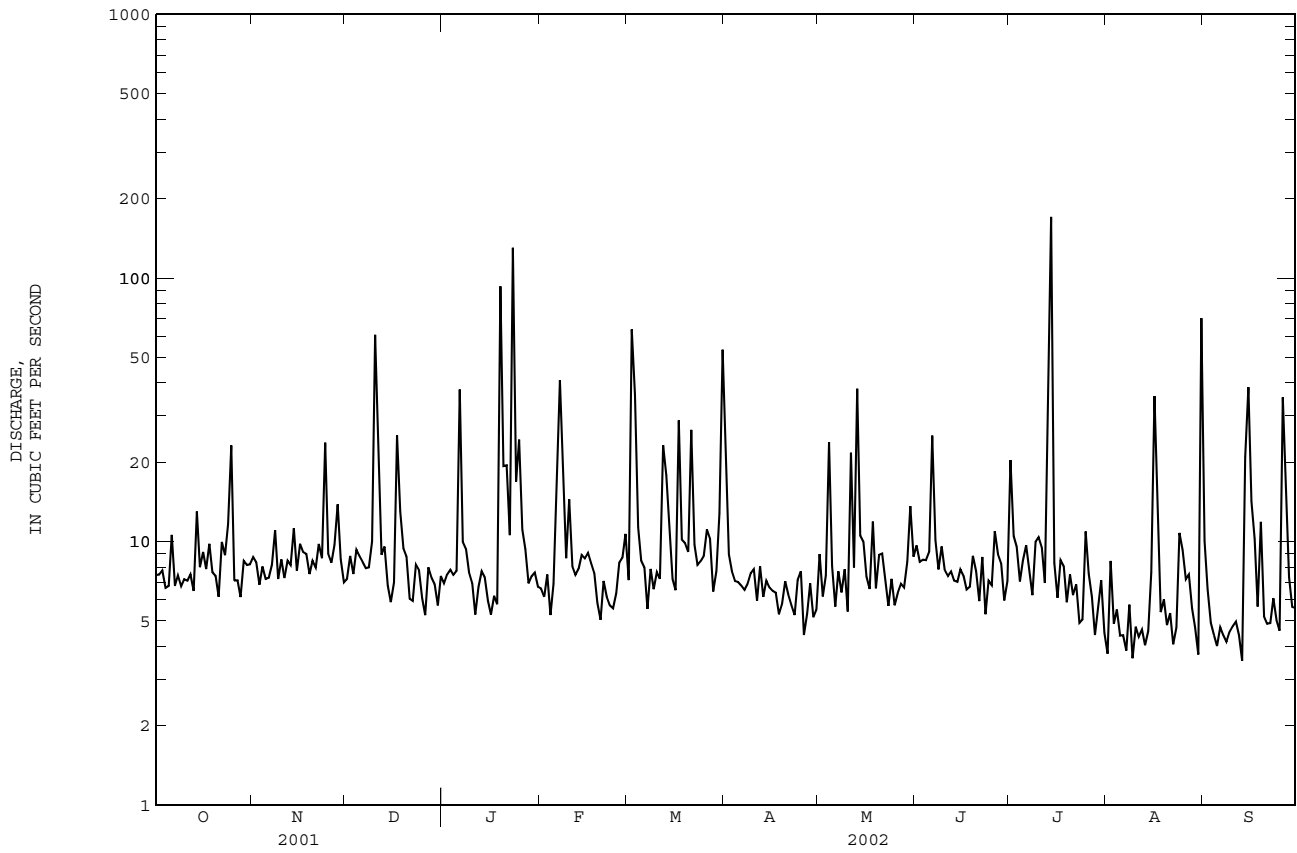
	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
MEAN	7.892	9.718	9.960	14.42	11.47	19.76	8.923	9.624	8.290	12.03	8.930	13.43
MAX	8.55	10.3	10.5	16.8	13.4	24.8	10.8	9.82	8.65	14.6	11.5	16.8
(WY)	2002	2001	2002	2002	2001	2001	2001	2002	2001	2002	2000	2000
MIN	7.24	9.16	9.46	12.0	9.54	14.8	7.07	9.43	7.75	8.41	6.37	8.88
(WY)	2001	2002	2001	2001	2002	2002	2002	2001	2000	2001	2001	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 2000 - 2002

ANNUAL TOTAL	4151.6	3876.4	
ANNUAL MEAN	11.37	10.62	11.14
HIGHEST ANNUAL MEAN			12.3 2000
LOWEST ANNUAL MEAN			10.6 2002
HIGHEST DAILY MEAN	220 Mar 29	170 Jul 14	220 Mar 29 2001
LOWEST DAILY MEAN	3.9 Aug 3	3.5 Sep 13	3.5 Sep 13 2002
ANNUAL SEVEN-DAY MINIMUM	4.9 Aug 3	4.4 Sep 7	4.4 Sep 7 2002
MAXIMUM PEAK FLOW		1330 Jul 14	1530 Jul 12 2000
MAXIMUM PEAK STAGE		5.84 Jul 14	6.14 Jul 12 2000
INSTANTANEOUS LOW FLOW		1.6* Aug 6	1.6* Aug 6 2002
ANNUAL RUNOFF (CFSM)	1.23	1.15	1.20
ANNUAL RUNOFF (INCHES)	16.66	15.56	16.32
10 PERCENT EXCEEDS	14	15	16
50 PERCENT EXCEEDS	8.4	7.6	7.8
90 PERCENT EXCEEDS	6.1	5.1	5.4

e Estimated.
* See REMARKS.

0214627970 STEWART CREEK AT STATE STREET AT CHARLOTTE, NC--Continued



SANTEE RIVER BASIN

02146285 STEWART CREEK AT WEST MOREHEAD STREET AT CHARLOTTE, NC

LOCATION.--Lat 35°13'42", long 80°52'09", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, on right bank at bridge on West Morehead Street (US 29), 0.5 mi upstream of Irwin Creek, and 1.8 mi northeast of city hall, Charlotte.

DRAINAGE AREA.--11.1 mi².

PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Water-stage recorder. Datum of gage is 617.43 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Minimum discharge for period of record and current water year affected by regulation of unknown origin. Minimum discharge for period of record and current water year also occurred Aug. 5, 6, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	9.4	7.7	7.1	8.9	9.2	28	11	13	46	4.0	13
2	8.8	9.6	9.4	7.8	8.0	94	11	7.0	9.9	10	13	7.9
3	9.3	7.4	8.2	9.4	9.6	46	9.0	8.9	9.5	9.8	5.8	5.5
4	8.1	8.9	10	7.9	7.1	11	7.9	37	9.1	6.9	6.5	5.1
5	7.8	7.5	9.6	8.1	8.8	7.8	7.8	9.5	9.8	8.1	5.3	4.3
6	17	8.0	9.0	50	23	7.4	7.5	6.2	31	9.6	5.4	5.3
7	7.6	8.6	8.5	10	56	5.0	7.3	8.4	12	7.4	4.5	4.8
8	8.7	12	8.8	9.7	25	7.1	7.5	7.2	8.3	5.6	6.8	4.6
9	7.6	7.5	11	7.7	11	6.1	8.6	8.8	11	9.4	4.4	4.6
10	8.4	9.5	81	7.0	20	7.1	9.3	6.4	8.4	9.5	5.5	5.0
11	8.3	8.1	23	5.0	11	6.4	6.6	28	7.7	8.9	5.2	5.5
12	8.5	9.6	9.5	7.0	9.6	32	9.8	8.9	7.9	6.2	5.5	4.8
13	7.7	9.2	11	8.1	10	21	7.0	47	7.4	81	4.9	3.7
14	15	13	7.2	7.3	11	12	8.0	12	7.0	229	5.2	29
15	8.5	9.4	6.1	5.8	11	6.8	7.8	11	8.1	11	11	54
16	10	13	7.2	5.1	12	6.1	7.0	7.9	7.5	7.6	55	19
17	9.0	13	31	5.9	11	39	7.2	7.2	6.5	11	24	22
18	11	13	16	5.7	10	10	5.8	17	6.3	10	6.1	6.4
19	8.3	11	9.9	124	7.9	9.4	6.1	7.0	8.6	7.2	7.1	13
20	8.3	13	9.3	23	6.9	9.5	7.8	9.6	7.8	8.9	5.4	6.0
21	6.5	12	6.5	24	9.5	35	7.0	10	5.4	7.8	6.1	5.3
22	11	16	6.2	10	8.1	9.6	6.3	8.2	8.7	9.2	4.4	5.1
23	9.6	15	8.4	195	7.6	7.8	5.5	6.0	5.0	5.9	5.2	6.3
24	13	32	9.1	24	7.6	8.2	8.0	7.6	6.6	6.3	14	5.1
25	32	9.7	6.5	35	8.4	8.5	9.6	6.1	6.7	14	14	4.4
26	7.7	8.8	5.3	14	11	15	4.8	6.7	14	11	9.2	50
27	7.6	10	8.2	12	11	11	5.7	7.7	8.9	7.3	11	18
28	6.9	15	7.6	9.2	14	6.3	7.9	7.3	8.0	5.0	7.2	8.6
29	9.1	9.4	7.3	9.4	---	7.5	5.7	9.3	5.6	6.3	5.8	5.8
30	8.9	7.7	5.8	9.8	---	16	5.8	18	6.6	8.4	4.2	5.7
31	9.0	---	7.4	8.7	---	87	---	11	---	5.2	106	---
TOTAL	308.3	336.3	371.7	672.7	355.0	564.8	243.3	363.9	272.3	589.5	377.7	337.8
MEAN	9.945	11.21	11.99	21.70	12.68	18.22	8.110	11.74	9.077	19.02	12.18	11.26
MAX	32	32	81	195	56	94	28	47	31	229	106	54
MIN	6.5	7.4	5.3	5.0	6.9	5.0	4.8	6.0	5.0	5.0	4.0	3.7
CFSM	0.90	1.01	1.08	1.95	1.14	1.64	0.73	1.06	0.82	1.71	1.10	1.01
IN.	1.03	1.13	1.25	2.25	1.19	1.89	0.82	1.22	0.91	1.98	1.27	1.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

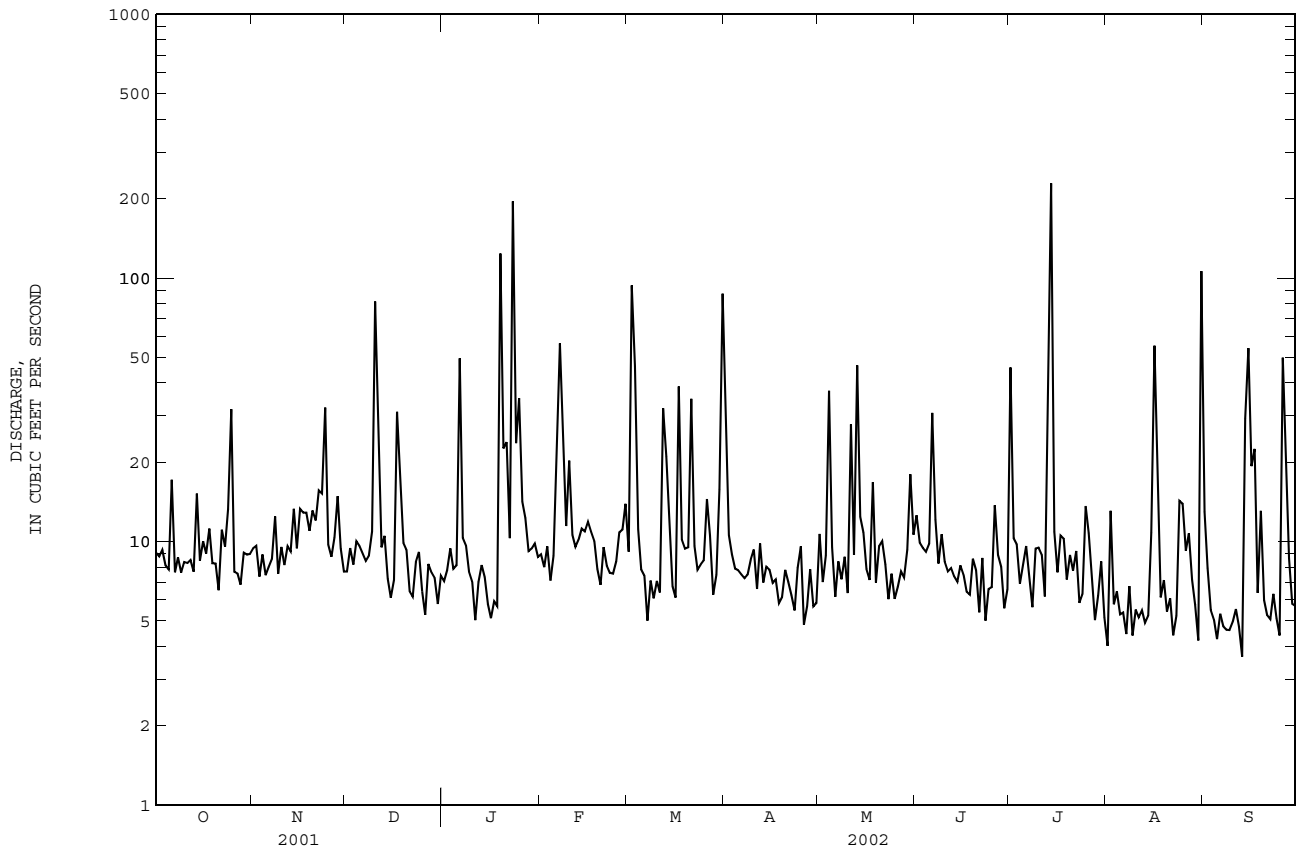
	2001	2001	2002	2002	2001	2002	2001	2002	2001	2002	2001	2002
MEAN	9.365	11.83	11.21	17.73	14.47	24.68	10.47	11.48	9.908	14.82	9.598	15.01
MAX	9.95	12.4	12.0	21.7	16.3	30.9	12.8	11.7	10.7	19.0	12.2	18.8
(WY)	2002	2001	2002	2002	2001	2001	2001	2002	2001	2002	2002	2001
MIN	8.78	11.2	10.4	13.8	12.7	18.5	8.11	11.2	9.08	10.6	7.01	11.3
(WY)	2001	2002	2001	2001	2002	2002	2002	2001	2002	2001	2001	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 2001 - 2002

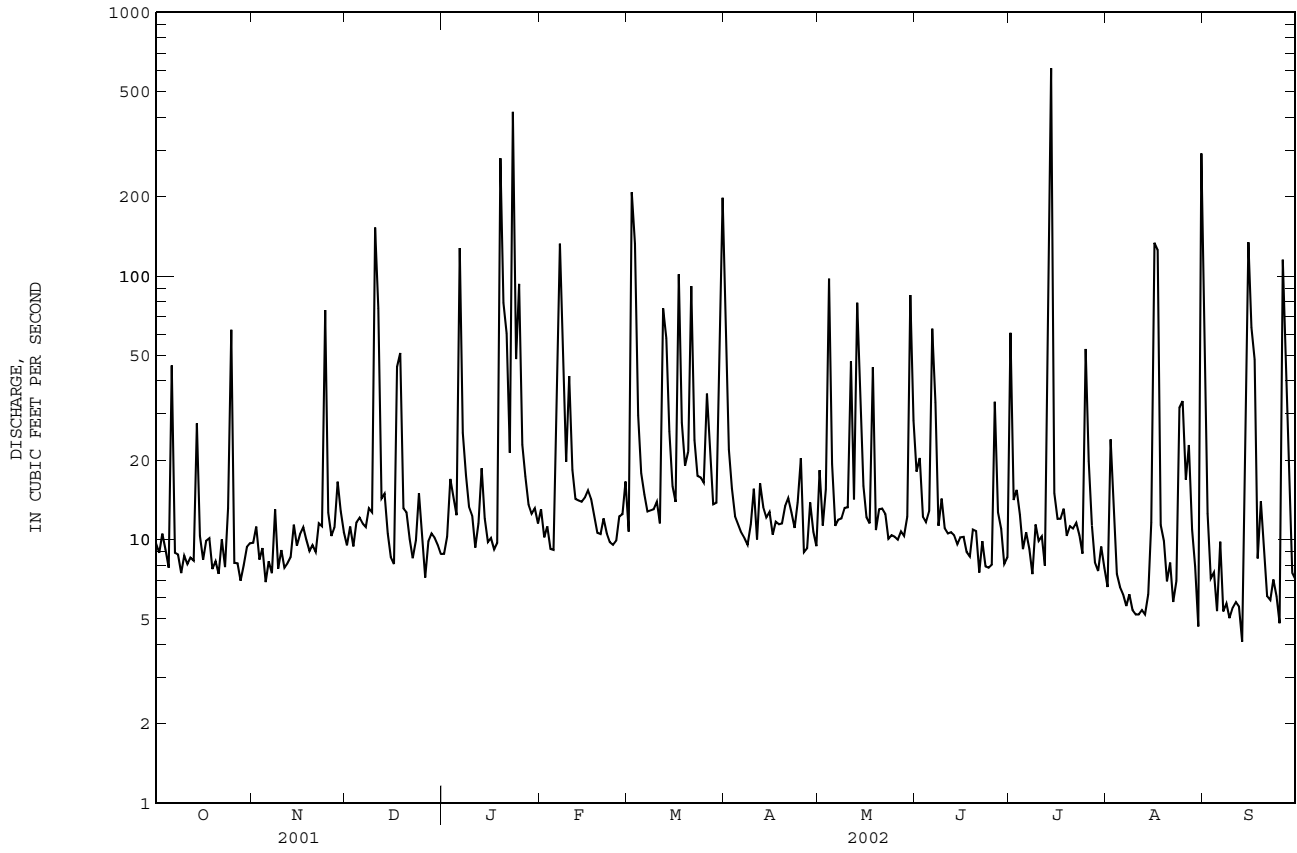
ANNUAL TOTAL	5021.4	4793.3		
ANNUAL MEAN	13.76	13.13		13.39
HIGHEST ANNUAL MEAN				13.6
LOWEST ANNUAL MEAN				13.2
HIGHEST DAILY MEAN	270	Mar 29	229	Jul 14
LOWEST DAILY MEAN	4.7	Aug 3	3.7	Sep 13
ANNUAL SEVEN-DAY MINIMUM	6.0	Aug 3	4.7	Sep 7
MAXIMUM PEAK FLOW			1290	Jul 14
MAXIMUM PEAK STAGE			6.86	Jul 14
INSTANTANEOUS LOW FLOW			1.8*	Aug 1
ANNUAL RUNOFF (CFSM)	1.24		1.18	1.21
ANNUAL RUNOFF (INCHES)	16.83		16.06	16.39
10 PERCENT EXCEEDS	18		21	20
50 PERCENT EXCEEDS	9.4		8.4	9.0
90 PERCENT EXCEEDS	6.7		5.5	6.2

* See REMARKS.

02146285 STEWART CREEK AT WEST MOREHEAD STREET AT CHARLOTTE, NC--Continued



02146300 IRWIN CREEK NEAR CHARLOTTE, NC--Continued



SANTEE RIVER BASIN

02146315 TAGGART CREEK AT WEST BOULEVARD NEAR CHARLOTTE, NC

LOCATION.--Lat 35°12'24", long 80°55'19", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, on right bank at northeast corner of intersection of Billy Graham Parkway and NC Highway 160 (West Blvd), 1.2 mi upstream of confluence with Irwin Creek, and 5.0 mi from city hall, Charlotte.

DRAINAGE AREA.--5.38 mi².

PERIOD OF RECORD.--July 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage 604.27 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. No flow for part of Aug. 8, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.34	0.20	0.25	0.22	1.1	1.0	8.1	1.8	3.2	9.8	0.19	2.5
2	0.33	0.45	0.18	0.23	0.73	35	2.5	0.51	1.6	0.97	0.84	0.86
3	0.34	0.33	0.17	1.3	0.71	18	1.8	1.3	0.76	0.20	0.34	0.44
4	0.32	0.23	0.18	0.75	0.70	3.9	1.3	14	0.48	0.15	0.06	0.25
5	0.33	0.20	0.19	0.40	0.71	2.7	1.1	1.2	0.44	0.12	0.03	0.27
6	3.5	0.24	0.20	18	5.7	1.9	1.0	0.56	8.0	0.29	0.05	0.29
7	0.17	0.23	0.20	2.3	20	1.6	0.96	0.45	2.1	0.23	0.04	0.31
8	0.08	0.25	0.22	0.93	6.0	1.5	0.95	0.36	0.49	0.06	0.01	0.35
9	0.07	0.26	0.22	0.61	2.1	1.8	0.94	0.32	0.36	0.06	0.04	0.32
10	0.08	0.28	28	0.54	5.8	1.6	1.4	0.67	0.32	0.07	0.37	0.36
11	0.21	0.29	5.9	0.55	1.8	1.1	0.85	7.6	0.30	0.11	0.48	0.34
12	0.60	0.30	0.95	0.97	1.4	12	1.7	0.56	0.29	0.11	0.47	0.29
13	0.14	0.28	0.76	1.7	1.2	4.5	1.1	6.7	0.27	15	0.47	0.28
14	1.2	0.33	0.35	0.68	1.0	2.1	0.82	1.2	0.28	34	0.20	22
15	0.24	0.33	0.24	0.46	1.0	1.7	1.1	0.42	0.33	1.4	3.8	26
16	0.11	0.40	0.20	0.44	1.0	1.6	0.85	0.33	0.35	1.3	17	6.0
17	0.17	0.40	8.3	0.46	0.99	13	0.81	0.30	0.34	0.34	8.8	4.9
18	0.13	0.40	3.6	0.48	0.95	3.2	1.00	3.8	0.35	0.27	1.0	1.0
19	0.16	0.36	0.45	48	1.1	2.0	0.85	0.44	0.38	0.23	0.52	0.65
20	0.17	0.38	0.28	6.6	1.2	2.9	0.90	0.28	0.41	0.21	0.38	0.72
21	0.19	0.34	0.22	7.6	1.1	12	0.85	0.27	0.43	0.19	0.19	0.73
22	0.21	0.38	0.51	2.1	0.98	2.7	0.61	0.24	0.54	0.19	0.31	0.80
23	0.26	1.4	0.65	62	0.98	2.0	0.58	0.23	0.69	0.22	0.28	0.93
24	0.19	9.3	1.2	5.5	0.99	1.7	0.67	0.21	0.65	0.90	2.2	0.80
25	6.7	0.47	0.67	13	0.99	1.6	1.8	0.22	0.30	0.73	4.3	0.87
26	0.23	0.29	0.60	2.5	1.0	3.7	0.56	0.21	4.6	1.7	4.4	15
27	0.18	0.25	0.38	1.4	1.0	2.1	0.57	0.18	0.84	0.35	2.7	3.6
28	0.16	0.20	0.21	1.2	1.1	1.5	0.63	0.18	0.34	0.12	0.39	1.3
29	0.16	0.24	0.22	1.0	---	1.5	0.62	0.27	0.14	0.07	0.36	0.63
30	0.18	0.41	0.22	1.0	---	5.0	0.59	13	0.12	0.18	0.38	0.64
31	0.19	---	0.22	1.0	---	30	---	1.9	---	0.15	46	---
TOTAL	17.34	19.42	55.94	183.92	63.33	176.9	37.51	59.71	29.70	69.72	96.60	93.43
MEAN	0.559	0.647	1.805	5.933	2.262	5.706	1.250	1.926	0.990	2.249	3.116	3.114
MAX	6.7	9.3	28	62	20	35	8.1	14	8.0	34	46	26
MIN	0.07	0.20	0.17	0.22	0.70	1.0	0.56	0.18	0.12	0.06	0.01	0.25
CFSM	0.10	0.12	0.34	1.10	0.42	1.06	0.23	0.36	0.18	0.42	0.58	0.58
IN.	0.12	0.13	0.39	1.27	0.44	1.22	0.26	0.41	0.21	0.48	0.67	0.65

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2002, BY WATER YEAR (WY)

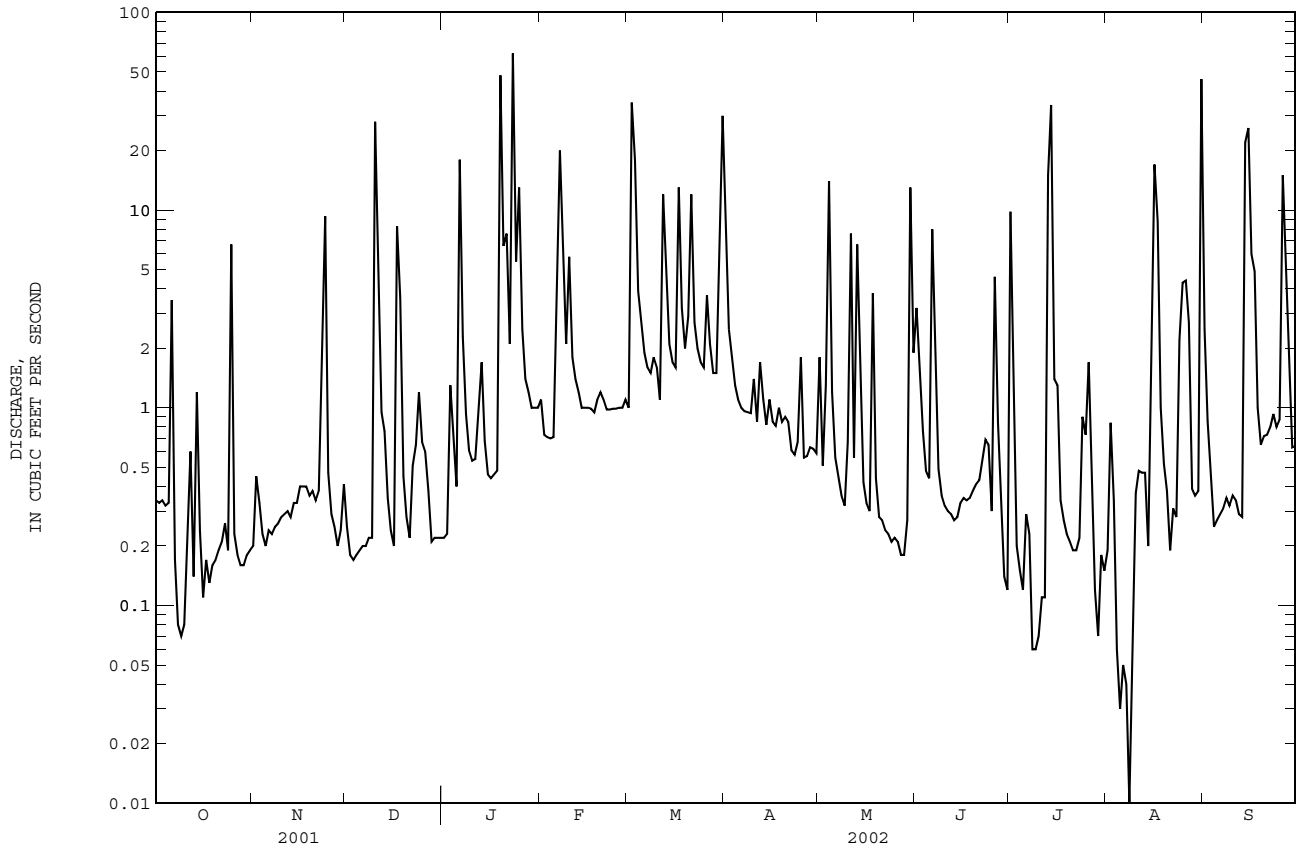
	1998	1999	2000	2001	2002
MEAN	2.300	1.668	2.287	5.149	3.930
MAX	7.05	2.25	3.74	6.97	5.72
(WY)	2000	2001	1999	1999	2000
MIN	0.35	0.65	1.48	2.13	2.26
(WY)	2001	2002	2001	2001	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1998 - 2002

ANNUAL TOTAL	828.09	903.52		
ANNUAL MEAN	2.269	2.475		
HIGHEST ANNUAL MEAN			2.991	
LOWEST ANNUAL MEAN			3.85	2000
HIGHEST DAILY MEAN	101	Mar 29	2.35	2001
LOWEST DAILY MEAN	0.03	Aug 21	101	Mar 29 2001
ANNUAL SEVEN-DAY MINIMUM	0.10	Aug 20	0.01	Aug 8 2002
MAXIMUM PEAK FLOW			0.08	Aug 3 2002
MAXIMUM PEAK STAGE			287	Jul 13 1998
INSTANTANEOUS LOW FLOW			4.77	Jul 13 1998
ANNUAL RUNOFF (CFSM)	0.42		0.00*	Aug 8 2002
ANNUAL RUNOFF (INCHES)	5.73		0.56	
10 PERCENT EXCEEDS	4.3		6.25	7.55
50 PERCENT EXCEEDS	0.70		5.7	6.3
90 PERCENT EXCEEDS	0.17		0.58	0.87
			0.18	0.19

* See REMARKS.

02146315 TAGGART CREEK AT WEST BOULEVARD NEAR CHARLOTTE, NC--Continued



SANTÉE RIVER BASIN

02146348 COFFEY CREEK NEAR CHARLOTTE, NC

LOCATION.--Lat 35°08'45", long 80°55'37", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103 on left bank at culvert on State Highway 49, 1.2 mi upstream from mouth, and 7.5 mi southwest of Charlotte.

DRAINAGE AREA.--9.14 mi².

PERIOD OF RECORD.-- October 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 565.72 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--Records fair. Maximum discharge for period of record and current water year from rating curve extended above 468 ft³/s on basis of culvert computation of peak flow. Minimum discharge for period of record also occurred July 13, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.44	1.1	1.4	1.1	1.7	1.0	27	3.1	2.4	0.61	0.71	12
2	0.44	1.3	1.1	1.1	1.3	58	7.4	1.1	1.7	1.8	1.6	2.2
3	0.41	1.8	1.2	2.1	1.2	48	5.7	2.1	0.89	0.36	1.6	1.3
4	0.38	1.3	1.1	3.1	1.2	12	4.1	24	0.60	0.30	0.57	0.84
5	0.35	1.2	1.0	2.0	1.1	6.0	3.0	4.1	0.45	0.18	0.59	0.62
6	7.4	1.2	1.0	35	1.8	3.9	2.5	1.8	9.2	0.14	0.62	0.52
7	1.1	1.5	1.1	7.4	36	3.1	2.1	1.3	15	0.13	0.50	0.44
8	0.54	1.3	1.0	3.0	23	2.6	1.9	1.1	1.5	0.14	0.50	0.43
9	0.44	1.1	0.91	2.2	4.1	2.5	1.9	1.2	0.83	0.12	0.38	0.41
10	0.40	1.00	32	1.9	9.6	2.5	3.0	1.4	0.61	0.14	0.25	0.42
11	0.41	0.99	33	2.0	4.5	1.9	1.9	9.7	0.50	0.18	0.14	0.40
12	0.86	0.98	4.6	1.5	2.6	18	2.4	1.7	0.45	0.11	0.14	0.38
13	0.45	1.1	3.2	3.8	2.0	9.7	3.0	11	0.38	8.1	0.21	0.70
14	1.9	1.1	2.5	1.8	1.7	4.2	1.8	5.7	0.37	79	0.06	20
15	1.2	1.1	2.0	1.4	1.6	3.0	1.6	1.5	0.36	7.1	0.49	59
16	0.48	1.2	1.6	1.3	1.5	2.5	1.4	1.3	0.33	12	20	24
17	0.49	1.2	4.9	1.1	1.4	22	1.3	1.7	0.37	1.4	14	3.0
18	0.53	1.1	18	1.3	1.2	7.6	1.2	8.4	0.42	0.79	3.4	1.7
19	0.59	1.3	2.5	78	1.2	4.2	1.1	2.4	0.43	0.60	0.62	1.2
20	0.65	1.4	1.8	40	1.3	3.9	0.99	1.2	0.42	0.40	0.40	0.91
21	0.63	1.2	1.3	16	1.7	21	0.97	0.94	0.37	0.33	0.34	0.85
22	0.66	1.1	1.2	5.4	1.5	5.6	0.92	0.81	0.36	0.36	0.23	0.98
23	0.65	1.7	1.2	108	1.2	3.6	0.84	0.70	0.37	0.30	0.16	0.89
24	0.67	17	2.3	15	1.1	2.9	0.84	0.67	0.31	0.30	3.9	0.88
25	9.9	2.6	1.3	33	1.0	2.6	2.2	0.72	0.31	0.83	8.8	0.55
26	1.9	1.6	1.1	5.6	1.2	4.3	0.94	0.59	7.0	1.5	8.8	25
27	1.2	1.3	1.1	3.2	1.2	4.3	0.78	0.54	1.9	0.62	7.2	9.7
28	1.2	1.1	1.6	2.3	1.1	2.4	0.81	0.59	0.53	0.23	1.7	3.6
29	1.3	1.1	1.0	2.0	---	2.0	0.89	0.64	0.27	0.74	1.0	1.4
30	1.2	1.2	0.94	1.7	---	5.7	0.90	47	0.21	0.78	0.83	1.2
31	1.2	---	1.1	1.6	---	36	---	13	---	0.79	78	---
TOTAL	39.97	54.17	130.05	384.9	110.0	307.0	85.38	152.00	48.84	120.38	157.74	175.52
MEAN	1.289	1.806	4.195	12.42	3.929	9.903	2.846	4.903	1.628	3.883	5.088	5.851
MAX	9.9	17	33	108	36	58	27	47	15	79	78	59
MIN	0.35	0.98	0.91	1.1	1.0	1.0	0.78	0.54	0.21	0.11	0.06	0.38
CFSM	0.14	0.20	0.46	1.36	0.43	1.08	0.31	0.54	0.18	0.42	0.56	0.64
IN.	0.16	0.22	0.53	1.57	0.45	1.25	0.35	0.62	0.20	0.49	0.64	0.71

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

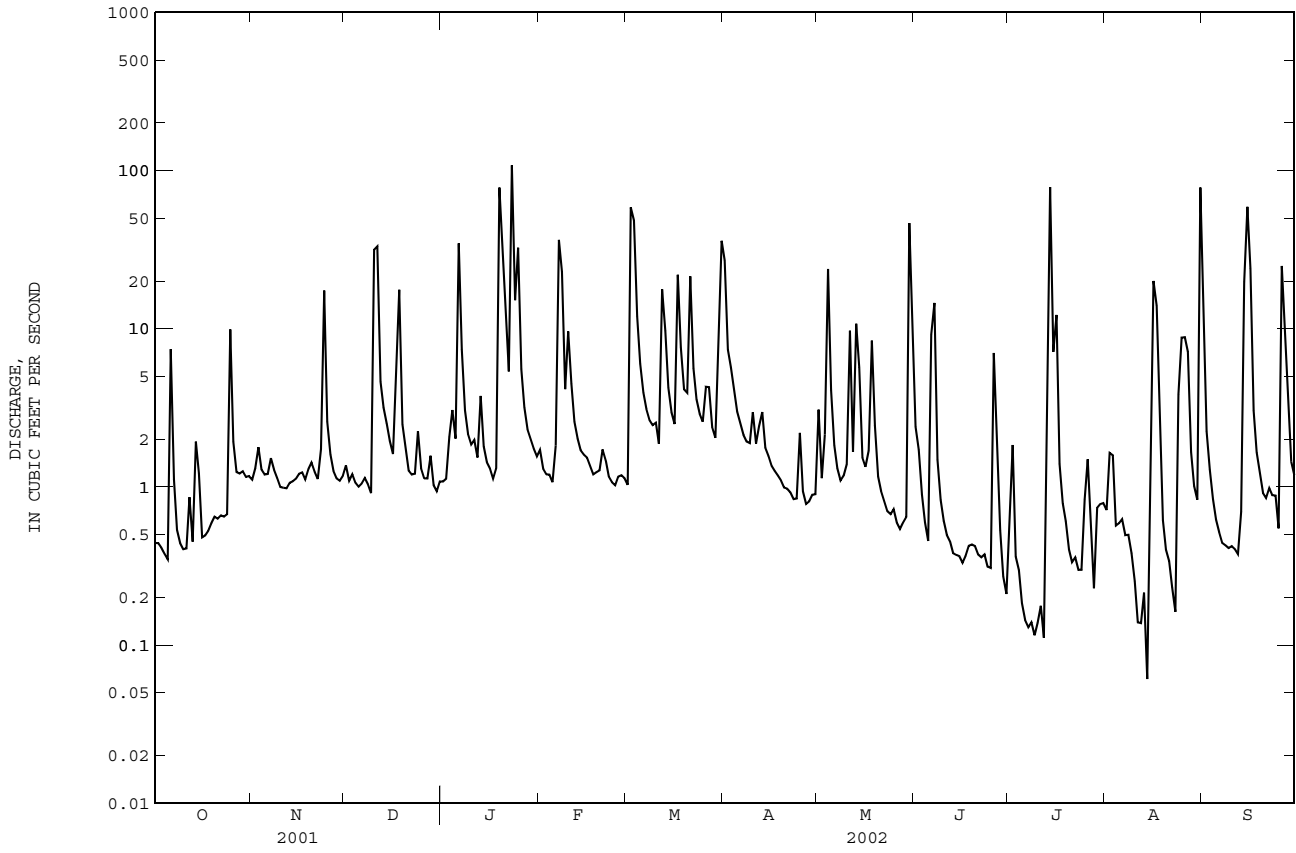
	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
MEAN	4.718	2.847	3.841	10.44	8.584	12.04	8.187	3.767	3.279	3.401	2.885	7.069
MAX	15.0	3.95	4.35	12.4	14.4	21.2	17.1	4.90	5.08	4.37	5.09	11.8
(WY)	2000	2001	2000	2002	2000	2001	2000	2002	1999	2000	2002	2000
MIN	0.88	1.81	2.74	5.48	3.93	5.17	2.85	2.97	1.63	2.51	0.44	4.01
(WY)	2001	2002	2001	2001	2002	1999	2002	2000	2002	1999	2001	1999

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1999 - 2002

ANNUAL TOTAL	1828.92	1765.95		
ANNUAL MEAN	5.011	4.838		5.907
HIGHEST ANNUAL MEAN				8.75
LOWEST ANNUAL MEAN				4.84
HIGHEST DAILY MEAN	190	Mar 29	108	Jan 23
LOWEST DAILY MEAN	0.05	Aug 28	0.06	Aug 14
ANNUAL SEVEN-DAY MINIMUM	0.09	Aug 23	0.14	Jul 6
MAXIMUM PEAK FLOW			315	Jul 14
MAXIMUM PEAK STAGE			7.94	Jul 14
INSTANTANEOUS LOW FLOW			0.02	Jul 13
ANNUAL RUNOFF (CFSM)	0.55		0.53	
ANNUAL RUNOFF (INCHES)	7.44		7.19	
10 PERCENT EXCEEDS	9.9		10	
50 PERCENT EXCEEDS	1.5		1.2	
90 PERCENT EXCEEDS	0.32		0.38	

* See REMARKS.

02146348 COFFEY CREEK NEAR CHARLOTTE, NC--Continued



SANTEE RIVER BASIN

0214635212 CRN28

LOCATION.--Lat 35°06'57", long 80°54'49", Mecklenburg County, Hydrologic Unit 03050103, unnamed tributary to Sugar Creek at Crompton Street, Charlotte, NC.

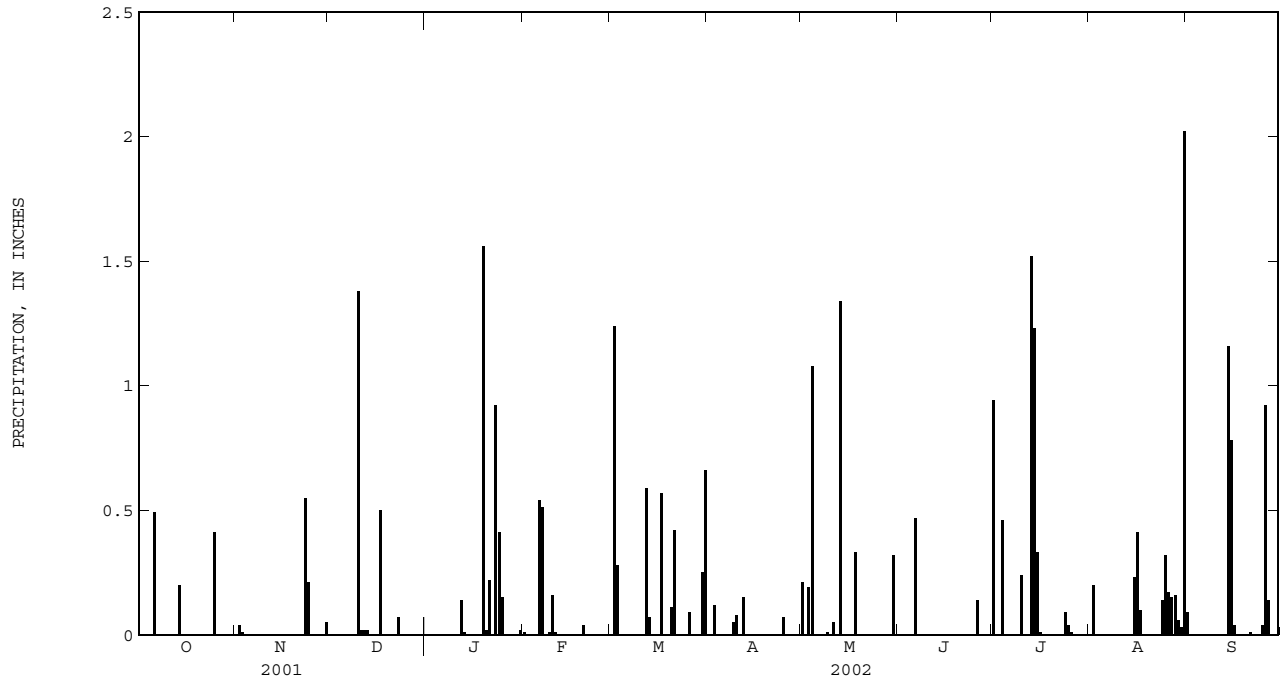
PERIOD OF RECORD.--April 1995 to current year. Records for period April 1995 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.21	0.00	0.94	0.00	0.09
2	0.00	0.04	0.00	0.00	0.00	1.24	0.00	0.00	0.00	0.00	0.20	0.00
3	0.00	0.01	0.00	---	0.00	0.28	0.12	0.19	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	1.08	0.00	0.46	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.49	0.00	0.00	---	0.54	0.00	0.00	0.00	0.47	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.51	0.00	0.00	0.00	0.00	0.01	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.01	0.00	0.05	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.38	0.00	0.16	0.00	0.08	0.00	0.00	0.24	0.00	0.00
11	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.05	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.14	0.00	0.59	0.15	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.02	0.01	0.00	0.07	0.00	1.34	0.00	1.52	0.00	0.00
14	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	1.16
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.23	0.78
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.41	0.04
17	0.00	0.00	0.50	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.10	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.02	0.04	0.11	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.22	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.01
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.55	0.07	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.21	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.09	0.14	0.00
25	0.41	0.00	0.00	0.15	0.00	0.00	0.07	0.00	0.00	0.04	0.32	0.04
26	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.14	0.01	0.17	0.92
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.14
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.06	0.00
30	0.00	0.05	0.00	0.00	---	0.25	0.00	0.32	0.00	0.00	0.03	0.03
31	0.00	---	0.00	0.02	---	0.66	---	0.00	---	0.00	2.02	---
TOTAL	1.10	0.86	2.01	---	1.28	4.28	0.47	3.53	0.61	4.87	3.99	3.21





Gaging station at Cataloochee Creek near Cataloochee, North Carolina.

02146381 SUGAR CREEK AT NC 51 NEAR PINEVILLE, NC

LOCATION.--Lat 35°05'27", long 80°53'58", North American Datum of 1983, 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, Pineville.

DRAINAGE AREA.--65.3 mi².

PERIOD OF RECORD.-- Occasional discharge measurements, water years 1978-94. October 1994 to current year.

GAGE.--Water-stage recorder. Datum of gage is 520.95 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--No estimated daily discharges. Records good. A daily average of 18.4 ft³/s of treated effluent from Irwin Creek wastewater treatment plant was discharged into the stream above the gage. Maximum discharge for period of record from rating curve extended above 9,710 ft³/s. Minimum discharge for period of record also occurred Aug. 31, 2001. Minimum discharge for current water year also occurred Sept. 9, 13.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	29	29	31	40	31	267	37	38	39	24	134
2	25	31	28	31	34	315	70	32	41	97	28	47
3	28	32	27	36	33	392	56	35	29	31	57	32
4	25	28	28	48	33	96	47	191	27	40	26	29
5	24	27	30	39	32	56	38	67	27	27	25	26
6	88	28	31	220	37	47	35	36	34	24	24	28
7	37	28	30	86	240	40	34	31	158	23	23	23
8	26	31	29	45	175	36	32	30	35	24	23	22
9	25	29	28	36	58	35	33	29	30	24	23	21
10	25	28	145	33	78	35	39	29	29	24	21	21
11	26	28	346	30	60	32	32	74	27	25	22	20
12	26	26	55	29	41	112	33	34	27	24	21	21
13	25	28	43	42	39	118	41	94	26	29	22	20
14	37	28	37	31	37	59	31	143	25	1360	22	32
15	45	31	31	30	36	39	30	37	24	104	25	303
16	29	29	29	28	36	33	30	32	26	93	110	246
17	30	30	36	27	35	159	29	29	23	48	242	79
18	28	29	152	27	33	85	28	76	24	45	65	33
19	29	30	43	377	33	46	27	38	25	37	35	29
20	27	29	39	480	32	44	28	28	26	32	32	32
21	25	29	35	127	33	173	28	29	23	32	31	25
22	27	30	32	72	31	68	27	30	23	29	31	24
23	29	29	32	828	31	44	26	26	24	31	29	24
24	30	140	39	150	29	39	26	25	22	28	30	25
25	109	42	33	243	29	37	35	25	25	38	78	22
26	37	32	30	78	31	38	28	24	44	78	75	154
27	29	30	31	56	31	67	24	24	46	36	67	118
28	29	32	34	46	34	36	26	25	27	27	34	51
29	29	34	32	43	---	32	25	26	24	25	31	27
30	30	29	31	40	---	54	24	112	21	27	25	26
31	30	---	31	39	---	242	---	175	---	26	638	---
TOTAL	1035	1006	1576	3428	1391	2640	1229	1623	980	2527	1939	1694
MEAN	33.39	33.53	50.84	110.6	49.68	85.16	40.97	52.35	32.67	81.52	62.55	56.47
MAX	109	140	346	828	240	392	267	191	158	1360	638	303
MIN	24	26	27	27	29	31	24	24	21	23	21	20
CFSM	0.51	0.51	0.78	1.69	0.76	1.30	0.63	0.80	0.50	1.25	0.96	0.86
IN.	0.59	0.57	0.90	1.95	0.79	1.50	0.70	0.92	0.56	1.44	1.10	0.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2002, BY WATER YEAR (WY)

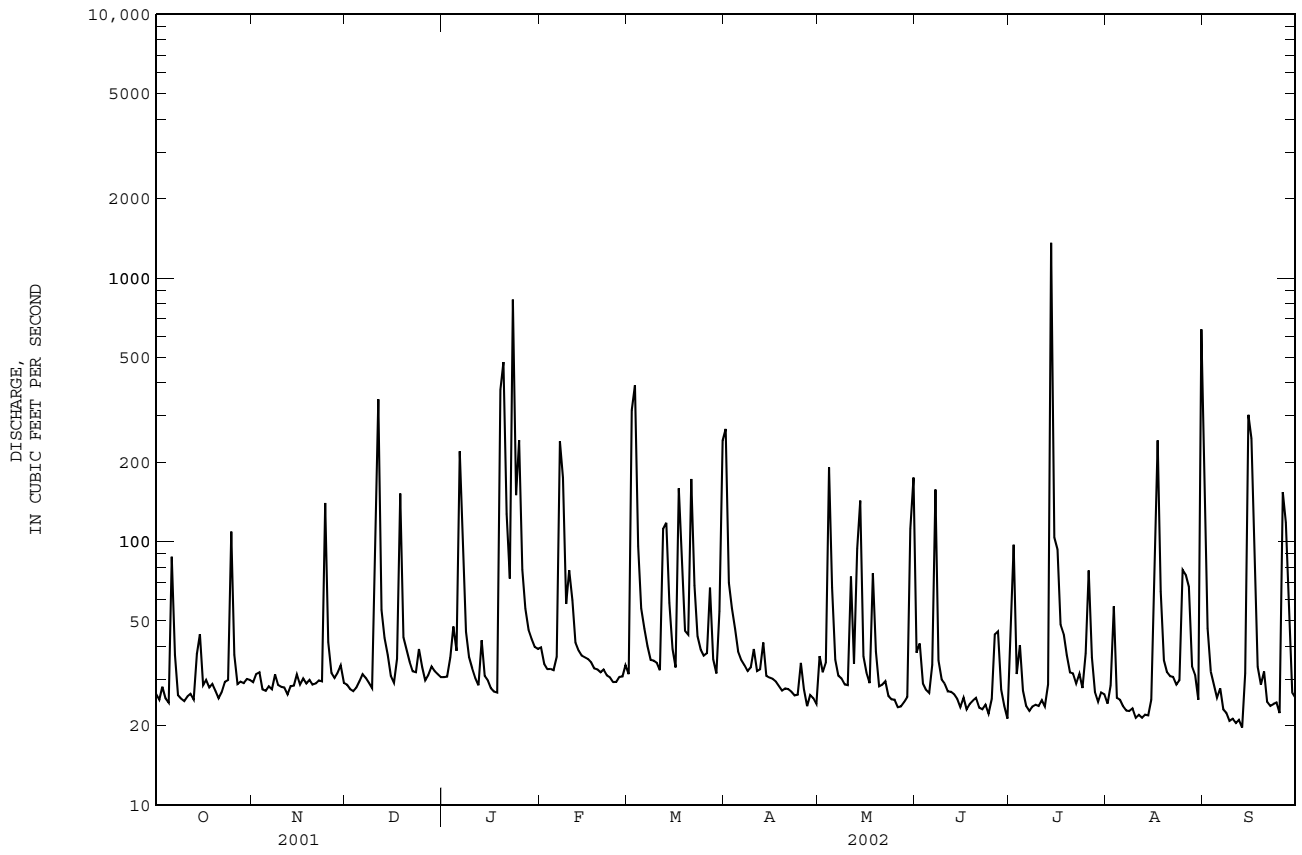
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
MEAN	78.06	69.85	68.19	128.6	125.6	114.7	102.5	60.63	68.55	99.52	66.67	71.67
MAX	154	182	132	237	232	165	196	99.9	118	315	171	99.2
(WY)	1996	1996	1998	1998	1995	2001	1998	1995	1997	1997	1995	1995
MIN	25.7	33.5	40.6	50.4	49.7	55.7	41.0	34.2	32.7	43.0	24.8	51.5
(WY)	2001	2002	2001	2001	2002	1999	2002	2000	2002	2001	2001	1997

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1995 - 2002

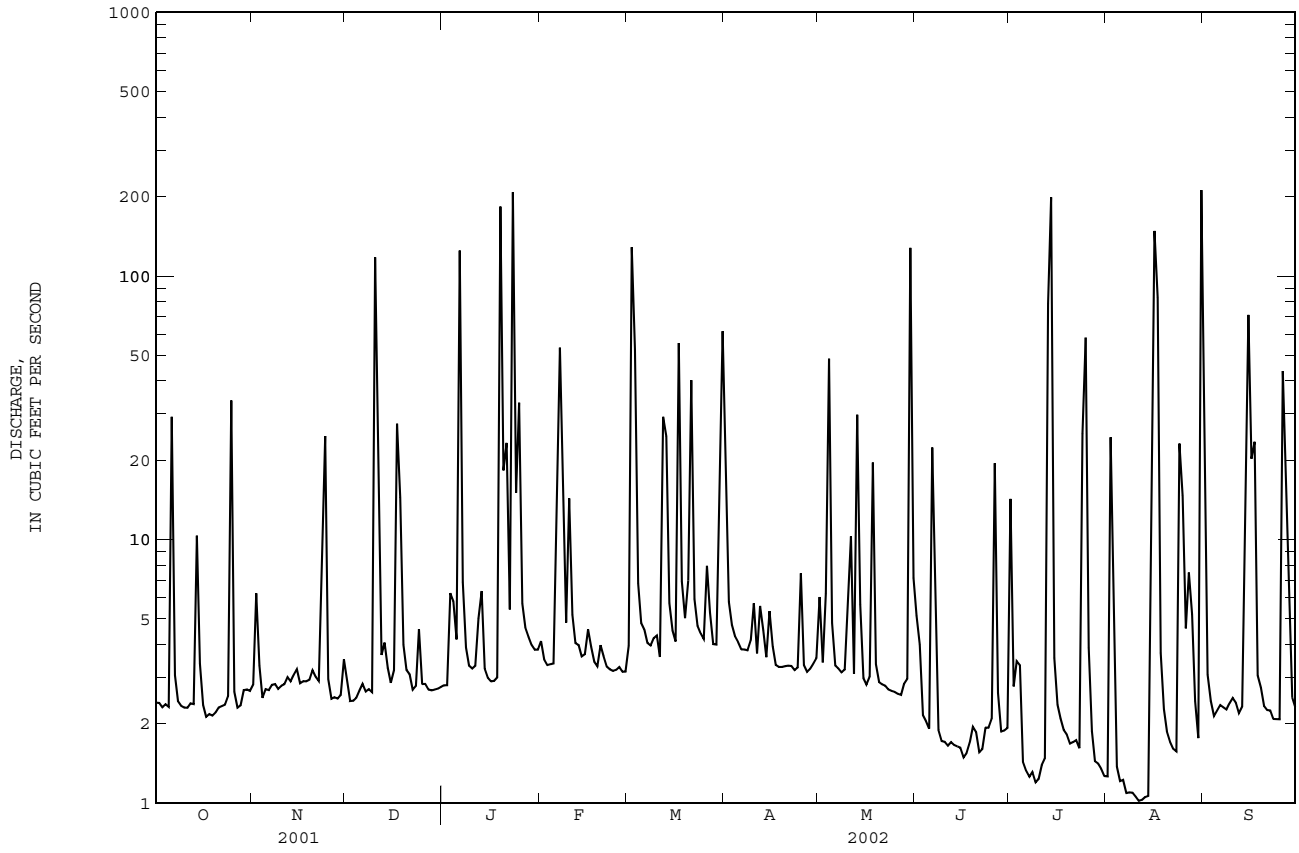
ANNUAL TOTAL	21007	21068	
ANNUAL MEAN	57.55	57.72	
HIGHEST ANNUAL MEAN			120 1998
LOWEST ANNUAL MEAN			57.3 2001
HIGHEST DAILY MEAN	1130 Mar 30	1360 Jul 14	4790 Jul 23 1997
LOWEST DAILY MEAN	18 Aug 1	20 Sep 11	18 Aug 1 2001
ANNUAL SEVEN-DAY MINIMUM	22 Aug 21	21 Sep 7	21 Sep 7 2002
MAXIMUM PEAK FLOW		2230 Jul 14	9890* Jul 23 1997
MAXIMUM PEAK STAGE		10.53 Jul 14	18.68 Jul 23 1997
INSTANTANEOUS LOW FLOW		16* Aug 14	15* Aug 10 1997
ANNUAL RUNOFF (CFSM)	0.88	0.88	1.34
ANNUAL RUNOFF (INCHES)	11.97	12.00	18.25
10 PERCENT EXCEEDS	98	106	150
50 PERCENT EXCEEDS	32	31	43
90 PERCENT EXCEEDS	25	24	26

* See REMARKS.

02146381 SUGAR CREEK AT NC 51 NEAR PINEVILLE, NC--Continued



02146409 LITTLE SUGAR CREEK AT MEDICAL CENTER DRIVE AT CHARLOTTE, NC--Continued



02146409 LITTLE SUGAR CREEK AT MEDICAL CENTER DRIVE AT CHARLOTTE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1999 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1999 to current year.

pH: April 1999 to September 2002.

WATER TEMPERATURE: April 1999 to current year.

DISSOLVED OXYGEN: April 1999 to September 2002.

DISSOLVED OXYGEN, PERCENT SATURATION: April 1999 to September 2002.

INSTRUMENTATION.-- Water-quality monitor with radio telemetry.

REMARKS.--Station operated in cooperation with Mecklenburg County Department of Environmental Protection to characterize water-quality conditions in Little Sugar Creek basin. Dissolved oxygen, percent saturation, computed using barometric pressure of 740 mm Hg.

EXTREMES FOR PERIOD OF DAILY RECORD.--Extremes listed below may have been exceeded during periods of missing record.

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	6620, January 3, 2002	26, October 10, 1999, April 13, 15, 2000
pH, standard units	10.6, March 16, 2000	5.9, April 23, 1999
WATER TEMPERATURE, °C	31.4, July 31, 1999	1.5, December 31, 2000, January 3, 2001
DISSOLVED OXYGEN, mg/L	≥ 20.0, September 3, 1999	2.2, August 18, 2000
DISSOLVED OXYGEN, PERCENT SATURATION,%	184, May 20, 2000	24, September 5, 1999

EXTREMES FOR CURRENT YEAR.--Extremes listed below may have been exceeded during periods of missing record.

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	6620, January 3	28, August 16
pH, standard units	8.8, June 20, 21, 23	6.4, December 10
WATER TEMPERATURE, °C	30.3, July 24	2.2, January 6
DISSOLVED OXYGEN, mg/L	12.7, March 1	3.0, May 10
DISSOLVED OXYGEN, PERCENT SATURATION,%	141, June 14	35, May 10

SANTEE RIVER BASIN

02146409 LITTLE SUGAR CREEK AT MEDICAL CENTER DRIVE AT CHARLOTTE, NC--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN												
													OCTOBER			NOVEMBER			DECEMBER			JANUARY		
													MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	295	283	287	279	260	267	336	253	279	283	264	278												
2	296	272	286	280	186	251	283	271	279	275	261	270												
3	295	285	289	230	202	212	296	277	284	6620	270	3040												
4	293	274	285	250	230	243	292	286	289	2590	1190	1740												
5	---	---	---	265	250	256	292	279	285	1740	924	1120												
6	291	73	153	273	263	267	292	268	280	1420	128	495												
7	215	150	189	268	261	264	282	269	277	354	210	279												
8	252	215	233	267	243	260	288	280	284	395	354	369												
9	262	224	244	264	256	262	287	272	282	391	358	375												
10	276	258	266	269	257	263	292	53	193	371	360	365												
11	283	267	274	266	257	261	170	62	120	368	356	362												
12	279	258	271	262	247	254	214	170	193	370	289	346												
13	272	260	267	266	233	256	235	187	218	613	278	324												
14	270	101	214	272	255	263	---	---	---	306	279	291												
15	209	154	175	269	261	265	262	255	259	319	304	313												
16	234	190	215	285	257	270	280	255	263	320	314	317												
17	267	218	245	---	---	---	268	68	231	329	314	320												
18	268	259	265	294	272	284	208	95	141	325	291	312												
19	278	268	273	286	276	283	245	206	220	315	56	195												
20	279	274	276	288	272	284	286	245	262	210	78	156												
21	282	267	277	291	272	283	308	277	292	233	121	175												
22	289	257	274	289	282	286	307	267	281	234	153	200												
23	292	267	280	288	92	273	274	245	269	236	51	113												
24	283	274	280	173	66	136	256	206	236	269	105	208												
25	275	63	146	220	173	199	247	239	242	202	113	149												
26	242	171	202	245	220	237	251	234	242	265	202	239												
27	247	227	234	263	245	255	284	250	266	285	264	276												
28	253	245	249	268	260	264	281	263	273	293	285	288												
29	263	249	256	277	266	271	307	268	280	---	---	---												
30	264	257	261	278	247	265	288	255	268	---	---	---												
31	262	258	260	---	---	---	270	262	267	---	---	---												
MONTH	---	---	---	---	---	---	---	---	---	---	---	---												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN												
													FEBRUARY			MARCH			APRIL			MAY		
													MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	280	147	241	180	71	127	293	190	249												
2	---	---	---	273	52	170	231	180	212	280	271	274												
3	---	---	---	154	48	103	254	231	243	289	172	249												
4	---	---	---	225	154	199	263	252	257	259	72	130												
5	---	---	---	251	225	241	261	258	260	217	127	174												
6	345	112	282	264	229	251	270	260	265	260	217	236												
7	138	81	108	279	255	267	---	---	---	277	238	264												
8	196	112	151	284	274	278	281	262	270	284	276	280												
9	250	196	230	309	279	289	285	265	271	294	279	285												
10	262	127	198	285	264	273	282	218	246	295	186	247												
11	231	154	203	275	269	273	269	255	261	236	106	179												
12	262	230	247	275	106	184	274	180	247	241	193	220												
13	297	239	264	151	100	124	256	237	246	266	64	213												
14	287	264	279	234	151	199	266	253	258	198	106	157												
15	287	178	279	260	234	245	288	223	264	253	198	229												
16	294	174	256	274	258	263	270	220	252	286	253	269												
17	292	242	273	275	74	159	288	269	279	304	167	293												
18	280	241	267	227	134	188	289	281	285	189	99	143												
19	282	267	273	258	227	243	294	282	287	226	161	200												
20	304	265	282	271	204	246	300	281	288	268	226	248												
21	306	278	288	209	95	132	325	281	292	292	266	278												
22	285	274	280	239	171	211	293	267	285	295	275	284												
23	282	272	277	272	239	254	296	283	289	304	289	298												
24	279	268	271	272	260	266	292	279	286	312	298	305												
25	281	266	273	276	271	273	290	217	261	307	299	302												
26	277	257	267	276	162	251	285	247	273	372	300	322												
27	279	267	273	236	197	209	290	284	287	315	295	305												
28	273	250	268	267	233	250	299	287	292	319	290	301												
29	---	---	---	261	255	258	303	291	298	297	287	291												
30	---	---	---	260	109	184	301	274	291	288	48	224												
31	---	---	---	168	50	121	---	---	---	206	100	159												
MONTH	---	---	---	309	48	221	---	---	---	372	48	245												

02146409 LITTLE SUGAR CREEK AT MEDICAL CENTER DRIVE AT CHARLOTTE, NC--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	8.0	7.3	7.5	7.0	6.7	6.9	7.6	7.1	7.3
2	---	---	---	7.6	7.0	7.3	7.3	7.0	7.1	7.7	7.3	7.5
3	---	---	---	7.2	6.8	7.0	7.5	7.2	7.3	7.4	7.1	7.3
4	---	---	---	7.2	7.1	7.2	7.6	7.3	7.4	7.4	7.1	7.2
5	---	---	---	7.2	7.1	7.1	7.7	7.4	7.5	7.5	7.2	7.3
6	7.5	7.2	7.4	7.1	7.0	7.1	7.8	7.4	7.6	7.5	7.3	7.4
7	7.6	7.0	7.2	7.2	6.9	7.0	---	---	---	7.6	7.3	7.5
8	7.2	7.0	7.2	7.3	7.1	7.1	8.0	7.5	7.7	7.6	7.3	7.4
9	7.4	7.2	7.3	7.4	7.1	7.2	7.9	7.5	7.6	7.3	7.1	7.2
10	7.4	7.0	7.2	7.3	7.0	7.1	7.6	7.2	7.4	7.2	6.8	7.0
11	7.3	7.0	7.2	7.5	7.0	7.2	7.9	7.3	7.6	7.0	6.5	6.8
12	7.3	7.1	7.2	7.2	6.8	7.1	7.5	7.1	7.4	7.0	6.8	6.9
13	7.4	7.2	7.3	8.3	6.8	7.1	7.5	7.2	7.3	7.1	6.6	6.9
14	7.4	7.2	7.2	7.4	7.1	7.2	7.6	7.2	7.4	6.9	6.6	6.8
15	7.4	7.2	7.3	7.6	7.3	7.4	8.0	7.2	7.4	7.1	6.9	7.0
16	7.3	7.1	7.2	7.7	7.3	7.4	7.4	7.1	7.2	7.1	6.9	7.0
17	7.4	7.0	7.2	7.4	6.9	7.1	7.5	7.1	7.2	7.1	6.8	7.0
18	7.4	7.0	7.2	7.4	7.1	7.2	7.4	7.1	7.2	6.8	6.6	6.6
19	7.5	7.1	7.3	7.5	7.3	7.4	7.7	7.2	7.4	6.9	6.6	6.7
20	7.5	7.1	7.3	7.4	7.1	7.3	7.8	7.3	7.5	7.1	6.6	6.9
21	7.6	7.1	7.3	7.2	7.0	7.1	7.8	7.3	7.5	7.3	7.0	7.2
22	7.8	7.2	7.4	7.4	7.2	7.3	7.8	7.3	7.5	7.3	7.1	7.2
23	7.9	7.3	7.5	7.6	7.3	7.4	8.0	7.3	7.6	7.4	7.1	7.2
24	7.9	7.3	7.5	7.6	7.3	7.4	7.9	7.4	7.7	7.6	7.1	7.3
25	7.9	7.3	7.5	7.7	7.4	7.5	---	---	---	7.8	7.1	7.3
26	8.1	7.2	7.6	7.8	7.0	7.4	---	---	---	7.8	7.1	7.4
27	8.0	7.3	7.6	7.2	7.0	7.1	7.6	7.2	7.4	7.9	7.1	7.4
28	7.9	7.3	7.6	7.4	7.0	7.2	7.8	7.2	7.5	7.9	7.1	7.4
29	---	---	---	7.6	7.2	7.3	8.0	7.4	7.6	8.0	7.1	7.5
30	---	---	---	7.2	6.7	7.0	8.0	7.4	7.6	8.2	6.7	7.3
31	---	---	---	7.5	6.7	6.9	---	---	---	7.2	6.7	7.0
MONTH	---	---	---	8.3	6.7	7.2	---	---	---	8.2	6.5	7.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.4	7.1	7.3	8.1	7.0	7.5	8.5	7.7	8.1	7.7	7.3	7.6
2	7.3	7.2	7.3	7.5	7.1	7.3	8.3	6.9	7.7	7.8	7.7	7.7
3	7.6	7.3	7.4	7.6	7.3	7.4	7.8	7.3	7.6	8.0	7.7	7.8
4	7.9	7.4	7.6	7.5	7.2	7.4	8.1	7.8	7.9	8.0	7.3	7.7
5	8.0	7.5	7.7	7.7	7.3	7.5	8.2	7.9	8.0	7.6	7.2	7.4
6	8.0	6.9	7.6	8.0	7.4	7.6	8.2	7.8	8.0	7.7	7.3	7.5
7	7.3	7.1	7.2	8.0	7.4	7.7	8.0	7.6	7.7	7.9	7.3	7.6
8	7.4	7.2	7.3	8.1	7.5	7.7	8.0	7.6	7.7	7.9	7.5	7.7
9	7.6	7.2	7.3	8.3	7.6	7.9	8.0	7.6	7.8	8.1	7.3	7.8
10	7.6	7.1	7.3	8.4	7.6	7.9	8.2	7.6	7.9	8.2	7.5	7.9
11	7.7	7.0	7.3	7.9	7.7	7.8	8.4	7.7	8.0	8.3	7.6	8.0
12	8.0	7.2	7.5	8.3	7.5	7.8	8.4	7.8	8.1	8.5	7.6	8.0
13	8.2	7.3	7.7	8.1	6.7	7.6	8.7	7.8	8.2	8.5	7.6	8.1
14	8.2	7.4	7.7	7.5	6.7	6.9	8.7	8.2	8.4	8.4	7.0	7.6
15	8.4	7.4	7.8	7.2	7.0	7.1	8.4	7.0	8.0	8.1	6.8	7.2
16	8.5	7.4	7.9	7.2	7.0	7.1	8.2	7.0	7.4	7.2	6.8	7.0
17	8.7	7.5	8.0	7.4	7.1	7.3	8.5	6.9	7.4	7.2	6.5	6.9
18	8.6	7.6	8.1	7.9	7.2	7.5	7.6	7.0	7.4	7.5	7.2	7.4
19	8.6	7.5	8.0	8.2	7.3	7.7	7.5	7.3	7.4	7.6	7.5	7.6
20	8.8	7.6	8.2	8.3	7.5	7.8	7.7	7.4	7.5	7.8	7.5	7.6
21	8.8	7.7	8.2	8.7	7.6	8.1	7.8	7.5	7.6	8.0	7.5	7.7
22	8.7	7.7	8.1	8.5	7.6	8.0	7.9	7.6	7.8	8.0	7.4	7.7
23	8.8	7.7	8.1	8.3	7.4	7.9	8.2	7.1	7.9	7.8	7.4	7.6
24	8.7	7.7	8.2	8.5	7.1	7.7	8.2	7.1	7.8	8.1	7.4	7.7
25	8.6	7.7	8.1	7.5	6.9	7.0	7.6	7.2	7.4	7.9	7.5	7.6
26	8.0	6.9	7.2	7.3	7.0	7.2	7.8	7.4	7.6	7.6	6.9	7.1
27	7.4	7.0	7.3	7.6	7.2	7.5	7.8	7.3	7.7	7.3	7.1	7.2
28	7.6	7.3	7.5	7.8	7.5	7.6	8.0	7.6	7.8	7.4	7.2	7.3
29	7.8	7.4	7.6	7.9	7.6	7.7	7.7	7.3	7.5	7.5	7.3	7.4
30	7.9	7.5	7.6	8.0	7.6	7.8	7.5	7.3	7.4	7.5	7.4	7.4
31	---	---	---	8.3	7.6	7.9	7.8	7.0	7.3	---	---	---
MONTH	8.8	6.9	7.7	8.7	6.7	7.6	8.7	6.9	7.7	8.5	6.5	7.6

SANTEE RIVER BASIN

02146409 LITTLE SUGAR CREEK AT MEDICAL CENTER DRIVE AT CHARLOTTE, NC--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	18.1	15.4	16.8	15.9	12.8	14.3	17.4	15.9	16.5	7.0	5.2	6.0
2	19.2	16.3	17.9	18.2	14.7	16.3	16.1	14.3	14.8	5.9	4.0	4.8
3	19.8	17.3	18.8	18.9	16.8	17.8	14.3	12.3	13.1	5.1	2.9	3.7
4	20.1	17.8	19.1	18.1	15.2	16.1	12.7	10.9	12.0	5.8	2.3	3.9
5	---	---	---	15.6	13.5	14.4	13.8	11.0	12.4	6.1	3.0	4.5
6	21.0	17.5	19.8	14.0	11.9	12.9	14.9	12.4	13.7	5.4	2.2	4.1
7	17.5	15.4	16.4	13.8	11.1	12.6	15.8	13.8	14.8	6.0	4.0	4.9
8	16.3	14.0	15.1	14.0	11.8	13.1	16.4	15.0	15.8	5.7	3.8	4.8
9	15.4	13.9	14.8	14.2	12.3	13.4	16.3	13.7	14.9	7.1	3.8	5.4
10	17.3	14.1	15.6	14.1	11.6	13.0	13.7	8.6	11.2	9.7	6.1	7.7
11	18.8	16.5	17.6	14.0	12.2	13.3	11.6	8.6	10.2	10.8	9.2	9.9
12	19.6	17.9	18.8	13.8	11.8	12.7	12.6	11.6	12.1	9.5	7.2	8.2
13	19.9	18.3	19.2	12.5	10.4	11.5	14.0	12.6	13.4	9.2	6.8	8.0
14	21.7	19.3	20.1	13.1	10.5	11.7	---	---	---	7.8	6.1	6.9
15	19.7	17.6	18.8	13.0	11.7	12.5	15.5	13.3	14.1	8.8	6.5	7.7
16	18.4	16.1	17.1	13.6	11.4	12.6	13.3	11.1	12.0	8.4	6.5	7.3
17	16.1	13.9	14.7	---	---	---	14.4	11.8	12.7	8.8	5.8	7.2
18	14.6	12.9	13.9	14.2	12.7	13.5	13.8	12.5	13.3	10.0	8.3	9.1
19	15.3	12.6	14.1	14.4	12.6	13.7	12.9	10.9	11.9	9.6	4.7	6.8
20	16.6	14.2	15.5	14.3	12.6	13.5	11.8	9.9	10.6	7.3	5.1	6.1
21	18.0	15.1	16.6	12.6	10.3	11.1	9.9	7.9	9.0	8.0	6.6	7.4
22	19.2	16.8	18.1	11.0	9.2	10.3	9.3	7.6	8.5	8.8	6.1	7.5
23	19.8	18.0	19.0	14.6	10.2	11.5	11.6	7.8	9.1	9.0	6.8	7.8
24	20.6	18.2	19.4	15.3	13.7	14.6	12.4	9.6	11.2	12.6	9.0	10.7
25	20.4	17.5	19.4	17.0	15.3	16.3	9.6	7.5	8.3	12.6	9.4	11.2
26	17.5	14.5	15.7	17.3	15.8	16.6	8.5	7.2	7.9	9.7	7.3	8.6
27	14.5	11.5	12.5	17.4	15.7	16.7	7.3	5.4	6.3	10.7	7.3	8.9
28	11.8	10.1	11.1	17.3	15.9	16.8	8.1	5.6	6.7	12.2	9.9	10.8
29	12.6	10.3	11.5	17.8	16.1	17.0	9.3	7.5	8.4	---	---	---
30	13.6	10.9	12.3	17.8	17.2	17.5	8.7	6.6	7.5	---	---	---
31	14.1	11.9	13.1	---	---	---	7.4	6.2	6.7	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	9.8	5.1	7.3	17.6	13.9	15.6	21.4	17.7	19.7
2	---	---	---	9.1	7.2	8.3	18.5	14.3	16.4	22.9	20.0	21.3
3	---	---	---	10.7	8.7	9.6	20.7	16.3	18.1	22.5	19.8	21.1
4	---	---	---	9.7	7.0	8.1	17.2	13.2	15.1	19.8	15.5	16.5
5	---	---	---	9.2	5.3	7.2	16.1	12.4	14.2	19.7	14.9	17.0
6	8.5	5.9	7.0	11.3	6.6	8.8	15.1	12.1	13.6	21.2	16.5	18.8
7	8.2	5.6	6.9	12.7	8.3	10.3	---	---	---	23.4	18.4	20.8
8	9.6	6.5	8.1	14.4	9.8	11.9	17.3	12.8	14.9	24.3	20.7	22.5
9	10.8	7.5	9.1	15.8	12.7	14.1	17.5	15.4	16.4	24.7	21.7	23.2
10	10.7	9.5	10.1	15.0	12.0	13.5	19.6	16.5	17.8	25.0	21.3	23.1
11	11.0	9.3	10.2	12.7	9.3	11.1	19.9	16.5	18.1	23.2	20.1	21.0
12	10.6	7.5	9.0	11.7	10.6	11.2	18.5	16.8	17.2	23.6	19.4	21.4
13	10.7	8.1	9.3	12.0	11.1	11.5	19.0	16.6	17.7	23.5	21.2	22.3
14	10.3	7.6	9.0	15.9	11.3	13.3	20.4	17.0	18.7	21.5	18.2	19.7
15	11.1	7.7	9.3	18.0	14.2	15.9	22.4	18.3	20.2	21.0	16.8	18.9
16	12.5	9.7	11.0	18.5	15.4	16.9	23.4	19.6	21.5	22.0	17.6	19.8
17	11.0	9.0	9.9	17.6	13.2	15.5	23.8	19.9	21.9	23.1	19.2	21.1
18	9.7	6.7	8.3	14.0	11.8	12.9	24.2	20.2	22.2	22.7	17.6	20.7
19	10.4	6.6	8.4	14.6	13.1	13.8	24.1	20.7	22.5	18.2	15.2	16.8
20	12.4	9.3	10.8	15.2	13.4	14.2	24.1	21.0	22.6	17.9	14.7	16.4
21	14.0	11.9	12.9	15.2	13.2	14.1	24.6	21.1	22.9	17.4	15.4	16.3
22	12.9	10.4	11.6	13.7	9.7	11.5	23.4	20.4	21.8	17.5	14.1	15.9
23	11.2	8.9	9.9	12.8	8.7	10.7	20.4	17.2	18.8	19.2	14.6	16.9
24	11.2	7.8	9.5	14.6	9.8	12.1	19.8	16.3	18.1	21.3	16.1	18.7
25	12.1	7.9	10.0	17.6	12.4	14.7	21.8	18.1	19.7	22.6	18.4	20.6
26	12.7	9.7	11.2	18.4	15.3	16.7	18.6	16.1	17.1	23.1	19.6	21.6
27	11.6	7.0	8.6	17.8	14.6	16.4	19.4	16.0	17.6	23.3	20.8	22.3
28	8.1	4.6	6.4	14.9	11.3	13.1	21.4	18.3	19.8	23.4	20.6	22.2
29	---	---	---	16.9	12.4	14.5	21.5	19.2	20.4	23.8	20.9	22.6
30	---	---	---	16.5	15.1	15.8	20.0	16.8	18.7	23.6	21.7	22.6
31	---	---	---	17.8	14.9	16.3	---	---	---	25.5	21.8	23.5
MONTH	---	---	---	18.5	5.1	12.6	---	---	---	25.5	14.1	20.2



Control at Conetoe Creek near Bethel, North Carolina.

SANTEE RIVER BASIN

0214642825 BRIAR CREEK NEAR CHARLOTTE, NC

LOCATION.--Lat 35°14'10", long 80°46'16", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, 400 ft upstream from bridge on Shamrock Drive, and 4 mi northwest of city hall in Charlotte.

DRAINAGE AREA.--5.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1998 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 672.00 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--Records poor. Maximum discharge for period of record and current water year from rating curve extended above 76 ft³/s by step-backwater analysis. No flow occurred most years.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.61	0.82	0.20	0.17	1.1	0.93	8.1	0.96	0.78	0.00	0.00	e4.0
2	0.40	7.0	0.17	0.30	0.64	35	2.2	0.65	0.73	0.38	4.4	e0.40
3	0.18	1.1	0.17	1.4	0.69	18	1.8	1.4	0.51	4.4	0.49	0.13
4	0.05	0.64	0.18	1.2	0.67	2.3	1.5	12	0.31	0.75	0.00	0.09
5	0.01	0.61	0.18	0.53	0.70	0.97	1.5	1.3	0.27	0.01	0.00	0.12
6	7.9	0.33	0.07	25	4.7	0.70	1.5	0.83	1.8	0.00	0.00	0.12
7	0.35	0.00	0.07	3.6	17	0.63	1.5	0.69	1.8	0.00	0.00	0.04
8	0.16	0.00	0.14	1.7	5.2	0.48	1.4	0.69	0.17	0.00	0.00	0.02
9	0.09	0.00	0.17	1.1	1.5	0.57	1.5	0.63	0.19	0.00	0.00	0.00
10	0.27	0.01	26	0.93	3.7	0.58	2.2	1.4	0.28	0.88	0.00	0.00
11	0.38	0.02	5.0	0.95	1.4	0.43	1.2	2.2	0.25	0.23	0.00	0.00
12	0.30	0.03	0.37	0.88	1.1	7.9	1.5	0.63	0.19	0.00	0.00	0.00
13	0.29	0.07	0.39	1.7	0.97	7.9	1.4	6.4	0.14	1.2	0.00	0.00
14	1.9	0.09	0.23	0.45	0.93	1.4	1.2	1.5	0.11	21	0.00	0.79
15	0.31	0.07	0.11	0.33	0.94	0.87	1.5	0.61	0.07	0.61	0.50	19
16	0.01	0.02	0.08	0.31	1.00	0.69	1.2	0.59	0.05	0.18	25	6.1
17	0.02	0.02	4.7	0.33	1.0	18	1.1	0.60	0.17	0.07	47	0.38
18	0.01	0.02	3.0	0.38	0.98	4.1	1.0	5.3	0.48	0.05	0.69	0.07
19	0.02	0.02	0.13	57	0.95	2.7	0.99	0.74	0.41	0.03	0.01	0.07
20	0.08	0.07	0.08	9.2	1.3	3.4	0.94	0.69	0.05	0.01	0.00	0.05
21	0.08	0.11	0.08	9.1	1.2	16	0.92	0.69	0.00	0.12	0.00	0.02
22	0.08	0.10	0.08	2.1	1.1	3.5	0.84	0.69	0.00	0.01	0.00	0.01
23	0.08	0.22	0.09	83	1.0	2.6	0.77	0.72	0.00	0.00	0.00	0.01
24	0.41	2.8	0.33	5.8	0.93	2.2	0.86	0.71	0.00	8.1	9.9	0.00
25	9.2	0.03	0.08	13	0.94	2.0	1.7	0.58	0.00	13	2.9	0.00
26	0.32	0.03	0.23	1.9	1.1	2.6	0.69	0.48	2.1	0.88	0.41	7.6
27	0.30	0.07	0.08	1.2	1.00	2.0	0.73	0.52	0.30	0.02	2.0	3.0
28	0.31	0.13	0.09	0.97	0.93	1.5	0.81	0.56	0.04	0.00	5.6	0.44
29	0.53	0.15	0.09	0.85	---	1.7	0.67	0.66	0.00	0.00	0.09	0.02
30	0.70	0.27	0.10	0.73	---	4.3	0.69	15	0.00	0.00	0.00	0.01
31	0.60	---	0.16	0.76	---	11	---	2.3	---	0.00	76	---
TOTAL	25.95	14.85	42.85	226.87	54.67	156.95	43.91	62.72	11.20	51.93	174.99	42.49
MEAN	0.837	0.495	1.382	7.318	1.952	5.063	1.464	2.023	0.373	1.675	5.645	1.416
MAX	9.2	7.0	26	83	17	35	8.1	15	2.1	21	76	19
MIN	0.01	0.00	0.07	0.17	0.64	0.43	0.67	0.48	0.00	0.00	0.00	0.00
CFSM	0.16	0.10	0.27	1.41	0.38	0.97	0.28	0.39	0.07	0.32	1.09	0.27
IN.	0.19	0.11	0.31	1.62	0.39	1.12	0.31	0.45	0.08	0.37	1.25	0.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2002, BY WATER YEAR (WY)

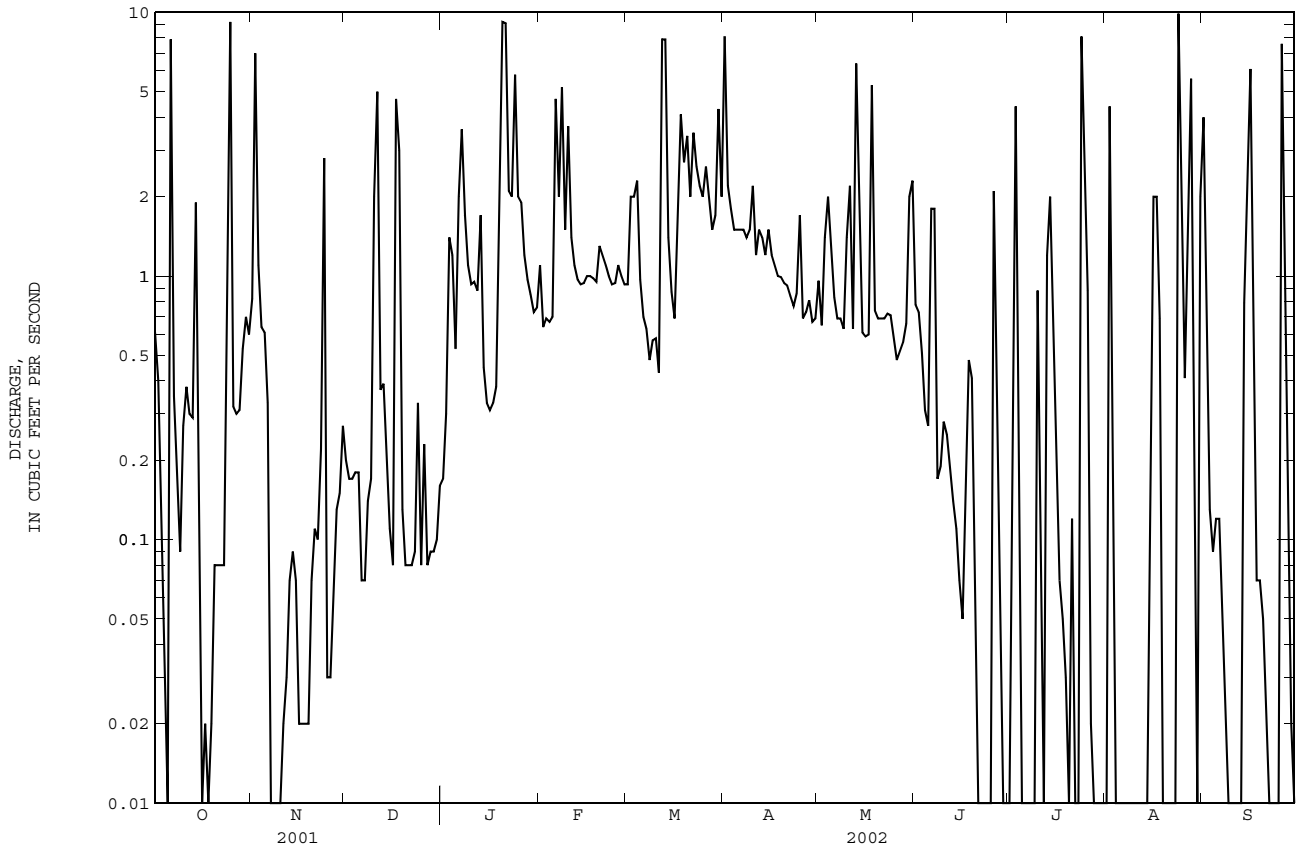
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
MEAN	3.655	2.079	3.057	10.23	5.567	7.563	10.18	3.376	3.219	4.281	4.539	9.287			
MAX	11.8	2.85	5.84	21.6	8.61	14.4	30.5	7.38	5.69	8.16	8.04	27.3			
(WY)	2000	2000	1999	1999	2000	2001	1998	2000	2001	2001	1998	2000			
MIN	0.50	0.49	1.38	4.74	1.95	2.85	1.46	1.99	0.37	1.68	0.36	1.42			
(WY)	2001	2002	2002	2001	2002	1999	2002	1999	2002	2002	2001	2002			

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1998 - 2002

ANNUAL TOTAL	1660.45	909.38		
ANNUAL MEAN	4.549	2.491		
HIGHEST ANNUAL MEAN			8.10	2000
LOWEST ANNUAL MEAN			2.49	2002
HIGHEST DAILY MEAN	210	Jul 4	83	Jan 23
LOWEST DAILY MEAN	0.00	Aug 9	0.00	Nov 7
ANNUAL SEVEN-DAY MINIMUM	0.01	Aug 5	0.00	Aug 4
MAXIMUM PEAK FLOW			1060	Aug 17
MAXIMUM PEAK STAGE			3.81	Aug 17
INSTANTANEOUS LOW FLOW			0.00*	Nov 7
ANNUAL RUNOFF (CFSM)	0.87		0.48	
ANNUAL RUNOFF (INCHES)	11.88		6.51	13.49
10 PERCENT EXCEEDS	7.1		5.1	7.9
50 PERCENT EXCEEDS	0.83		0.57	1.2
90 PERCENT EXCEEDS	0.02		0.00	0.09

e Estimated.

0214642825 BRIAR CREEK NEAR CHARLOTTE, NC--Continued



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1999 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1999 to current year.

pH: April 1999 to September 2002.

WATER TEMPERATURE: April 1999 to current year.

DISSOLVED OXYGEN: April 1999 to September 2002.

DISSOLVED OXYGEN, PERCENT SATURATION: April 1999 to September 2002.

INSTRUMENTATION.-- Water-quality monitor with radio telemetry.

REMARKS.--Station operated in cooperation with Mecklenburg County Department of Environmental Protection to characterize water-quality conditions in Briar Creek basin. Dissolved oxygen, percent saturation, computed using barometric pressure of 740 mm Hg. Water-quality data deleted during periods of zero flow, Oct. 5, 16, Nov. 6-10, June 21-26, 28-30, July 1-3, 5-13, 21-24, 27-31, Aug. 1-15, 19-24, 30-31, Sept. 8-14, 23-25.

EXTREMES FOR PERIOD OF DAILY RECORD.--Extremes listed below may have been exceeded during periods of missing record.

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	1600, January 4, 2002	15, August 2, 2002
pH, standard units	9.3, August 8, 1999	5.7, April 27, 1999, August 2, 2002
WATER TEMPERATURE, °C	35.2, July 21, 2002	0.2, January 28, 2000, January 3-4, 2001
DISSOLVED OXYGEN, mg/L	17.3, February 23, 2002	0.1, November 15, 2001
DISSOLVED OXYGEN, PERCENT SATURATION,%	200, April 25, 1999	0, November 15, 2001

EXTREMES FOR CURRENT YEAR.--Extremes listed below may have been exceeded during periods of missing record.

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	1600, January 4	15, August 2
pH, standard units	9.1, February 23, 26	5.7, August 2
WATER TEMPERATURE, °C	35.2, July 21	0.4, January 3
DISSOLVED OXYGEN, mg/L	17.3, February 23	0.1, November 15
DISSOLVED OXYGEN, PERCENT SATURATION,%	163, February 21	0, November 15

SANTEE RIVER BASIN

0214642825 BRIAR CREEK NEAR CHARLOTTE, NC--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN												
													OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	109	101	104	141	133	136	146	141	143	137	135	136												
2	113	109	111	144	87	120	147	142	144	135	131	134												
3	114	112	113	107	93	99	142	139	140	1190	124	272												
4	115	113	114	119	107	115	140	136	137	1600	603	834												
5	---	---	---	132	119	125	138	135	137	1090	702	940												
6	118	66	82	---	---	---	139	136	138	702	129	353												
7	88	76	83	---	---	---	140	138	139	214	185	206												
8	94	88	91	---	---	---	141	139	140	215	204	210												
9	99	94	96	---	---	---	142	140	141	210	203	205												
10	106	99	102	150	143	148	140	41	112	214	210	212												
11	113	106	108	147	144	146	89	47	73	210	192	200												
12	118	113	115	149	146	147	109	89	100	192	154	166												
13	124	118	120	154	149	151	120	109	114	335	165	230												
14	137	104	123	165	154	159	127	120	124	359	239	300												
15	116	102	108	168	162	165	131	126	128	239	208	225												
16	---	---	---	184	168	171	131	128	129	208	187	197												
17	121	118	120	184	174	181	146	74	127	187	177	182												
18	123	121	122	177	173	175	124	84	105	177	170	174												
19	126	123	124	175	173	174	134	124	131	170	55	125												
20	132	126	129	175	174	174	132	130	131	131	67	106												
21	137	132	134	174	173	174	131	128	130	138	91	115												
22	138	136	137	174	172	173	131	128	129	138	110	130												
23	140	138	139	174	157	173	132	129	130	139	42	83												
24	147	139	142	167	109	119	137	123	129	139	105	125												
25	147	60	92	132	116	124	140	133	137	128	77	103												
26	113	92	101	138	132	136	133	125	128	143	128	137												
27	119	111	115	140	138	139	134	131	132	148	143	147												
28	120	115	117	141	140	140	136	132	134	156	148	153												
29	126	117	121	144	140	142	137	133	134	159	155	157												
30	130	126	127	144	142	143	135	133	134	155	151	154												
31	134	129	131	---	---	---	136	133	134	154	151	153												
MONTH	---	---	---	---	---	---	147	41	129	1600	42	221												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN												
													FEBRUARY			MARCH			APRIL			MAY		
1	156	148	152	163	152	159	130	61	97	156	148	152												
2	153	148	151	160	52	120	152	130	141	158	139	154												
3	154	152	153	115	59	89	159	152	155	159	144	152												
4	155	152	154	147	115	132	162	154	159	153	64	95												
5	154	151	152	150	137	147	162	154	159	127	87	108												
6	155	99	148	153	150	152	162	154	159	143	97	134												
7	104	65	88	156	151	154	161	156	159	150	143	145												
8	130	90	115	156	152	154	164	156	160	153	144	149												
9	144	128	138	159	151	156	164	156	160	165	151	156												
10	270	124	144	163	152	157	163	153	158	156	125	148												
11	145	138	142	167	155	159	164	153	160	150	96	129												
12	150	145	148	173	76	124	163	151	159	144	130	135												
13	153	148	151	124	78	104	160	152	156	147	71	129												
14	155	151	153	150	124	138	164	158	161	124	79	103												
15	156	152	153	157	150	152	168	153	162	141	123	132												
16	159	154	156	164	156	160	166	156	162	149	125	144												
17	161	153	157	168	70	117	169	152	164	150	143	147												
18	166	154	160	144	104	129	171	158	164	148	87	110												
19	170	159	165	155	144	150	171	160	167	126	101	113												
20	165	156	161	158	152	156	170	158	165	---	---	---												
21	171	161	166	154	76	106	172	165	168	---	---	---												
22	173	163	166	150	123	140	173	161	167	144	139	141												
23	182	163	174	155	150	152	168	144	162	146	141	144												
24	175	167	171	158	155	156	163	151	160	148	143	146												
25	174	166	171	160	156	158	165	155	162	151	144	147												
26	173	164	169	164	150	158	163	151	157	152	144	148												
27	172	161	168	161	150	155	156	150	153	152	146	149												
28	180	158	169	159	150	155	157	150	154	153	147	149												
29	---	---	---	160	153	157	157	135	154	154	147	150												
30	---	---	---	161	124	142	157	150	154	158	50	124												
31	---	---	---	127	61	112	---	---	---	118	71	96												
MONTH	270	65	153	173	52	142	173	61	157	---	---	---												

SANTEE RIVER BASIN

0214642825 BRIAR CREEK NEAR CHARLOTTE, NC--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	136	108	127	---	---	---	55	50	53	---	---	---
2	143	123	134	---	---	---	77	15	51	---	---	---
3	146	140	143	---	---	---	---	---	---	93	89	92
4	148	125	143	101	87	93	---	---	---	90	85	88
5	149	124	146	---	---	---	---	---	---	87	84	86
6	154	109	149	---	---	---	---	---	---	85	80	82
7	114	97	104	---	---	---	---	---	---	80	76	78
8	126	114	120	---	---	---	---	---	---	---	---	---
9	136	126	131	---	---	---	---	---	---	---	---	---
10	142	136	138	---	---	---	---	---	---	---	---	---
11	144	138	142	---	---	---	---	---	---	---	---	---
12	146	140	143	---	---	---	---	---	---	---	---	---
13	149	143	145	---	---	---	---	---	---	---	---	---
14	151	143	148	83	50	67	---	---	---	---	---	---
15	155	144	149	92	80	83	---	---	---	81	43	53
16	153	145	148	92	84	88	85	26	74	80	44	63
17	151	146	149	98	83	88	72	27	60	96	79	86
18	154	149	151	93	81	87	---	---	---	100	94	97
19	170	152	166	---	---	---	---	---	---	100	92	96
20	---	---	---	---	---	---	---	---	---	101	98	100
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	77	47	68	100	62	71	---	---	---
26	---	---	---	83	67	77	90	80	85	---	---	---
27	123	114	118	84	79	82	136	80	89	87	73	79
28	---	---	---	84	72	78	---	---	---	101	80	92
29	---	---	---	76	64	71	---	---	---	---	---	---
30	---	---	---	68	56	62	---	---	---	---	---	---
31	---	---	---	59	52	56	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.1	6.9	7.0	7.0	6.8	6.9	7.2	7.0	7.1	7.5	7.3	7.4
2	7.3	7.0	7.1	7.0	6.8	6.9	7.2	7.1	7.2	7.5	7.3	7.4
3	7.3	7.2	7.2	6.8	6.7	6.7	7.3	7.1	7.2	7.5	7.3	7.4
4	7.4	7.2	7.3	6.8	6.7	6.8	7.3	7.2	7.2	7.3	7.1	7.2
5	---	---	---	6.8	6.8	6.8	7.3	7.2	7.2	7.3	7.1	7.2
6	7.1	6.7	6.8	---	---	---	7.3	7.1	7.2	7.3	6.9	7.1
7	6.8	6.7	6.7	---	---	---	7.2	7.0	7.1	7.1	7.0	7.1
8	6.8	6.7	6.8	---	---	---	7.2	7.0	7.1	7.2	7.1	7.2
9	6.9	6.8	6.8	---	---	---	7.2	7.0	7.1	7.3	7.2	7.2
10	7.0	6.9	6.9	6.5	6.4	6.5	7.2	6.7	7.0	7.3	7.2	7.2
11	7.1	6.9	7.0	6.6	6.4	6.5	6.9	6.8	6.8	7.4	7.2	7.3
12	7.1	7.0	7.0	6.5	6.5	6.5	7.0	6.9	7.0	7.4	7.2	7.3
13	7.1	7.0	7.0	6.5	6.3	6.4	7.1	6.9	7.0	7.3	7.2	7.2
14	7.1	6.9	7.0	6.4	6.3	6.3	7.0	6.9	6.9	7.3	7.2	7.2
15	6.9	6.8	6.8	6.6	6.3	6.5	7.0	6.9	7.0	7.3	7.2	7.3
16	---	---	---	6.8	6.6	6.7	7.1	7.0	7.0	7.5	7.2	7.3
17	7.1	6.9	7.0	6.8	6.7	6.7	7.1	6.8	7.0	7.5	7.3	7.4
18	7.1	7.0	7.0	6.8	6.7	6.8	6.9	6.7	6.8	7.5	7.2	7.3
19	7.1	7.0	7.0	6.9	6.8	6.8	7.1	6.9	7.0	7.4	6.7	7.1
20	7.0	7.0	7.0	6.9	6.8	6.9	7.2	7.0	7.1	7.0	6.8	6.9
21	7.0	7.0	7.0	7.0	6.8	6.9	7.2	7.1	7.1	7.0	6.9	7.0
22	7.0	7.0	7.0	7.0	6.9	7.0	7.2	7.1	7.2	7.0	6.9	7.0
23	7.1	7.0	7.0	7.1	7.0	7.0	7.2	7.0	7.1	7.1	6.7	6.9
24	7.0	6.9	7.0	7.1	6.7	6.8	7.2	7.0	7.1	7.1	7.0	7.0
25	7.1	6.7	6.8	6.9	6.8	6.8	7.2	7.1	7.1	7.0	6.9	7.0
26	6.9	6.8	6.8	6.9	6.8	6.9	7.2	7.0	7.0	7.0	6.9	6.9
27	6.9	6.8	6.8	7.0	6.9	6.9	7.2	7.0	7.1	7.0	6.9	7.0
28	6.9	6.8	6.9	7.1	6.9	7.0	7.2	7.1	7.2	7.0	6.9	6.9
29	6.9	6.6	6.8	7.1	7.0	7.1	7.2	7.1	7.2	7.0	6.9	6.9
30	6.8	6.6	6.7	7.1	7.0	7.1	7.2	7.0	7.1	7.1	6.9	7.0
31	6.9	6.7	6.8	---	---	---	7.5	7.1	7.3	7.2	7.0	7.1
MONTH	---	---	---	---	---	---	7.5	6.7	7.1	7.5	6.7	7.1

SANTEE RIVER BASIN

0214642825 BRIAR CREEK NEAR CHARLOTTE, NC--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	19.3	13.7	16.6	15.1	10.2	12.6	18.6	14.5	15.9	6.5	2.7	4.5
2	21.2	14.5	17.6	16.5	12.3	14.3	15.9	11.9	13.7	3.6	1.3	2.2
3	22.2	15.6	18.7	19.5	14.9	16.7	14.3	9.5	11.6	1.4	0.4	0.9
4	22.4	16.4	19.2	18.5	13.9	15.9	13.6	7.3	10.3	3.9	0.5	1.9
5	---	---	---	16.3	11.9	13.8	14.6	7.8	10.9	5.1	0.6	2.5
6	19.7	16.3	18.6	---	---	---	15.9	9.7	12.6	4.0	2.0	2.9
7	18.1	13.8	15.7	---	---	---	16.8	11.4	13.8	5.9	2.5	4.0
8	16.6	11.9	14.3	---	---	---	17.1	13.0	14.9	6.1	1.6	3.6
9	16.7	11.3	13.9	---	---	---	14.8	12.1	13.5	7.2	1.6	4.1
10	17.0	12.0	14.4	16.5	8.9	12.4	12.1	8.6	10.1	10.2	4.2	6.8
11	18.2	13.6	15.7	15.7	9.3	12.2	11.5	8.7	10.1	12.3	7.8	9.4
12	18.9	15.9	17.3	14.3	9.2	11.3	11.7	10.7	11.2	7.8	4.6	6.5
13	20.6	16.1	18.3	12.9	7.7	10	13.1	11.5	12.2	9.6	4.9	6.8
14	20.3	17.9	18.6	12.5	7.8	9.8	15.8	12.8	14.2	6.2	3.4	4.9
15	20.6	16.1	18.2	15.2	8.7	11.1	15.2	11.1	13.1	9.9	3.9	6.4
16	---	---	---	16.4	7.9	11.6	12.7	8.7	10.4	7.4	3.5	5.5
17	17.7	12.5	14.9	16.8	9.7	12.7	13.5	9.7	11.4	8.8	3.2	5.8
18	16.9	11.3	14.0	15.8	10.0	12.4	14.9	10.5	12.7	11.3	6.7	8.3
19	17.8	11.1	14.2	16.7	10.6	13.2	12.2	8.0	9.9	7.8	4.7	5.9
20	19.3	12.9	15.7	14.2	11.1	12.6	11.2	6.8	8.7	8.0	4.2	5.9
21	20.4	13.9	16.8	12.9	8.1	10.2	9.5	4.2	6.6	7.9	5.6	6.5
22	21.8	15.9	18.5	12.2	6.5	9.4	8.8	3.6	5.9	9.3	3.8	6.5
23	23.2	17.4	19.8	12.8	7.7	10.2	10.1	4.5	6.9	8.6	6.5	7.5
24	22.0	17.8	19.7	14.6	11.0	13.2	12.4	7.2	10.0	11.4	8.6	10.2
25	20.7	16.7	18.9	18.0	14.1	16.0	8.1	4.2	6.3	11.1	7.4	10.1
26	18.1	13.6	15.5	19.7	14.4	16.3	8.7	4.1	5.9	10.1	4.8	7.3
27	13.6	10.4	12.0	18.8	13.8	16.0	6.6	1.8	4.1	11.1	4.9	7.9
28	14.1	8.2	10.8	18.8	14.0	16.2	7.4	2.4	4.7	13.3	8.6	10.4
29	14.7	7.9	10.9	18.8	14.4	16.4	10.0	5.0	6.9	14.9	8.7	11.6
30	14.5	8.4	11.2	17.1	16.2	16.7	7.9	3.9	5.7	17.1	10.9	13.7
31	14.6	8.9	11.7	---	---	---	5.8	3.2	4.6	16.9	12.6	14.5
MONTH	---	---	---	---	---	---	18.6	1.8	10.0	17.1	0.4	6.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	17.1	13.9	15.6	10.7	2.4	6.5	21.2	13.1	16.2	23.2	17.2	20.0
2	13.9	8.4	11.3	8.6	5.9	7.2	22.2	12.0	16.6	25.6	19.4	21.9
3	8.4	6.6	7.6	10.8	8.0	9.2	24.6	15.1	18.9	22.4	18.7	20.7
4	10.3	5.2	7.4	10.7	5.5	7.6	19.8	12.3	15.5	18.7	14.4	15.9
5	7.4	2.5	5.1	10.8	2.5	6.4	19.7	10.2	14.2	22.9	13.7	17.1
6	6.6	4.7	5.7	12.8	4.3	8.2	18.6	10.2	13.7	24.6	14.8	19.0
7	7.4	5.5	6.4	14.9	6.2	10.1	18.9	8.8	13.2	27.0	17.4	21.6
8	11.1	5.2	7.9	16.6	7.6	11.8	20.4	11.2	15.3	27.2	19.9	23.3
9	11.9	5.1	8.3	17.0	11.8	14.1	18.2	14.8	16.6	28.0	21.2	24.1
10	10.3	8.3	9.3	17.0	10.9	13.6	22.6	15.8	18.0	24.9	20.7	22.7
11	12.5	7.6	9.7	14.8	7.2	10.7	23.7	15.6	18.9	22.2	19.1	20.6
12	11.4	4.8	7.9	10.8	9.6	10.2	17.9	16.0	16.5	26.5	18.6	21.9
13	11.1	5.8	8.3	11.9	10.4	11.0	20.4	15.6	17.8	25.8	20.4	22.4
14	11.5	5.5	8.1	18.4	10.0	13.7	22.8	15.7	19.1	24.2	17.0	19.8
15	12.2	5.5	8.6	21.0	12.8	16.3	25.0	17.6	20.7	24.0	14.8	18.9
16	14.2	8.0	10.5	20.3	14.2	17.1	27.9	17.9	22.2	25.2	15.9	20.1
17	11.1	6.8	8.8	17.2	12.0	14.6	28.2	19.2	23.0	26.6	18.2	21.8
18	10.9	4.0	7.1	14.7	10.7	12.3	28.5	19.4	23.1	22.2	16.2	19.9
19	11.1	4.2	7.5	15.0	11.6	13.2	27.8	20.1	23.5	20.8	13.7	16.5
20	12.2	8.4	10.4	15.8	12.4	13.9	27.3	20.5	23.2	---	---	---
21	16.6	10.8	13.0	15.2	12.3	13.7	28.5	20.3	23.8	---	---	---
22	12.8	8.5	10.9	15.3	8.3	11.3	25.4	19.6	22.4	20.3	11.9	15.4
23	11.3	7.7	9.4	15.4	6.0	10.2	23.9	16.3	19.5	22.0	12.2	16.5
24	13.1	5.5	8.9	17.5	7.5	12.0	21.6	14.5	17.9	24.6	14.3	18.8
25	13.8	5.7	9.5	20.6	10.8	15.2	24.4	17.1	20.0	26.0	17.1	20.9
26	14.8	8.2	10.9	19.7	14.3	16.7	19.0	14.8	16.9	26.8	18.4	22.2
27	11.0	5.5	8.5	21.5	13.6	16.7	21.7	14.9	17.6	27.3	19.9	22.9
28	9.6	3.1	5.9	17.8	9.8	13.2	23.4	17.7	20.1	27.1	19.3	22.8
29	---	---	---	20.1	10.7	14.6	26.6	18.9	21.8	27.1	20.3	23.4
30	---	---	---	17.3	14.3	15.7	23.5	15.9	19.2	25.6	21.4	22.9
31	---	---	---	17.8	14.4	15.9	---	---	---	28.4	21.1	24.0
MONTH	17.1	2.5	8.9	21.5	2.4	12.4	28.5	8.8	18.8	---	---	---



USGS hydrographer making a wading discharge measurement below dam at Cullasaja River near Highlands, North Carolina.

SANTEE RIVER BASIN

0214645022 BRIAR CREEK ABOVE COLONY ROAD AT CHARLOTTE, NC

LOCATION.--Lat 35°10'31", long 80°49'51", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, on left bank on upstream side of third footbridge 900 feet upstream of Colony Road at Charlotte. Located within Myers Park Country Club.

DRAINAGE AREA.--19.0 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 598.02 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum gage height for period of record 15.41 ft, from floodmarks. Maximum discharge for period of record from slope-area measurement of peak flow.

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	2.1	2.7	2.6	7.9	3.3	37	7.2	3.0	2.3	0.38	15
2	1.7	26	2.1	2.6	4.6	138	6.7	4.7	e3.0	1.2	12	2.8
3	1.5	3.1	1.9	5.6	4.4	75	6.1	9.1	e2.6	0.97	5.4	1.8
4	1.4	1.1	2.0	6.9	4.6	13	5.0	56	e2.0	3.5	0.72	1.4
5	e1.4	1.3	1.9	4.3	4.8	7.7	4.7	6.2	1.8	0.94	0.46	1.1
6	e40	2.3	1.9	103	15	6.8	4.6	3.4	16	0.71	0.43	1.0
7	e2.0	2.8	2.0	9.9	72	6.1	4.5	3.0	13	0.60	0.30	0.93
8	e1.8	3.1	2.1	4.2	24	5.7	4.5	2.8	1.9	0.58	0.29	0.89
9	e1.6	1.5	2.1	3.3	6.9	5.6	4.7	2.8	1.6	0.64	0.34	0.85
10	1.5	1.2	108	3.2	15	5.7	8.9	4.4	1.6	0.59	0.37	0.80
11	1.5	1.1	36	3.0	6.6	4.9	4.7	8.8	1.7	1.1	0.33	0.82
12	2.1	0.80	3.8	4.0	4.9	38	6.2	2.9	1.5	1.1	0.28	0.75
13	3.8	1.0	4.9	8.1	4.6	31	6.2	38	1.4	39	0.23	0.74
14	8.2	1.5	3.7	3.2	4.0	9.2	4.9	8.9	1.4	127	0.18	8.6
15	3.1	1.6	2.7	3.0	3.8	6.6	5.4	3.1	1.4	2.9	17	79
16	1.7	1.6	2.4	2.8	3.6	6.3	5.3	2.3	1.2	1.4	51	34
17	1.3	1.5	18	2.7	3.3	65	4.8	2.3	1.2	1.0	197	7.1
18	1.5	1.5	24	2.7	3.1	11	4.6	17	1.2	0.83	8.4	1.8
19	1.8	1.7	3.4	208	3.1	7.2	4.3	3.0	1.2	0.77	1.8	1.5
20	1.8	2.0	2.8	44	3.7	9.4	4.1	2.2	1.2	0.69	1.2	1.3
21	1.7	2.0	2.6	31	3.9	61	4.3	2.2	1.1	0.79	0.73	1.1
22	1.8	1.8	3.1	7.4	3.1	10	3.9	2.3	1.1	0.79	0.64	1.1
23	1.8	2.3	2.6	240	3.1	6.9	3.7	2.3	1.1	1.1	e0.60	0.99
24	1.9	24	4.6	22	3.0	6.1	3.7	2.5	1.2	33	9.4	0.96
25	39	2.9	2.7	60	2.9	5.6	7.1	2.4	1.2	55	13	e0.95
26	2.1	2.2	2.8	9.1	3.0	8.1	3.3	2.3	16	4.3	4.5	e40
27	1.5	2.4	2.9	6.7	3.2	7.0	3.3	2.2	3.0	0.90	8.5	10
28	1.5	3.8	3.0	6.2	3.3	4.9	3.6	2.2	1.2	0.62	11	4.4
29	1.7	2.0	2.7	5.5	---	4.8	3.9	2.3	1.1	0.54	2.1	1.6
30	2.5	2.5	2.6	5.1	---	13	3.9	106	2.9	0.43	0.98	1.3
31	2.0	---	2.7	5.8	---	41	---	12	---	0.38	325	---
TOTAL	138.9	104.70	260.7	825.9	225.4	623.9	177.9	326.8	89.8	285.67	674.56	224.58
MEAN	4.481	3.490	8.410	26.64	8.050	20.13	5.930	10.54	2.993	9.215	21.76	7.486
MAX	40	26	108	240	72	138	37	106	16	127	325	79
MIN	1.3	0.80	1.9	2.6	2.9	3.3	3.3	2.2	1.1	0.38	0.18	0.74
CFSM	0.24	0.18	0.44	1.40	0.42	1.06	0.31	0.55	0.16	0.49	1.15	0.39
IN.	0.27	0.20	0.51	1.62	0.44	1.22	0.35	0.64	0.18	0.56	1.32	0.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2002, BY WATER YEAR (WY)

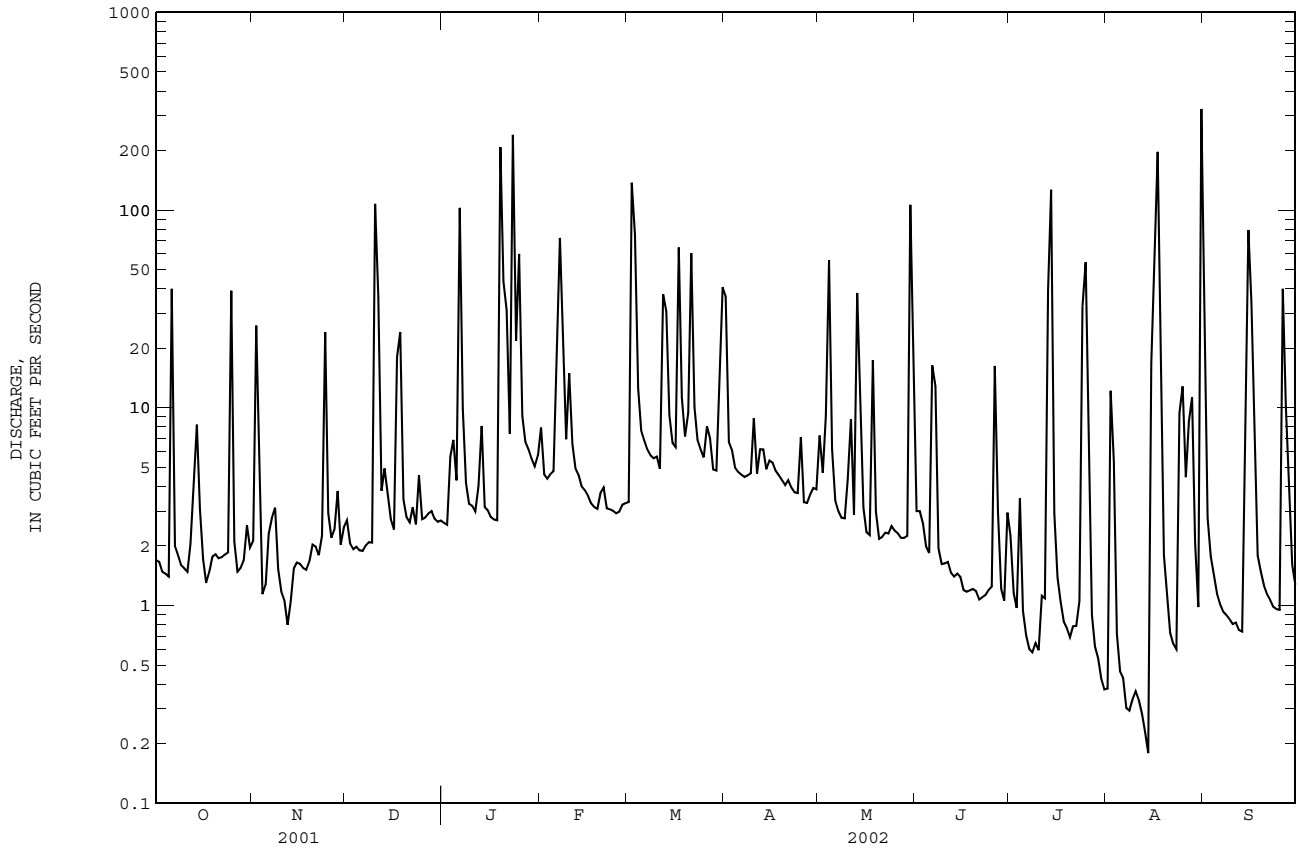
	1996	1997	1998	1999	2000	2001	2002
MEAN	14.03	10.71	14.03	32.16	26.80	27.19	29.87
MAX	31.0	19.4	31.5	65.2	46.9	38.7	72.2
(WY)	2000	1998	1998	1998	2001	1998	1996
MIN	2.29	3.49	5.83	9.18	8.05	11.5	5.93
(WY)	2001	2002	2001	2001	2002	1999	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1996 - 2002

ANNUAL TOTAL	4378.68	3958.81	
ANNUAL MEAN	12.00	10.85	19.64
HIGHEST ANNUAL MEAN			30.8
LOWEST ANNUAL MEAN			10.8
HIGHEST DAILY MEAN	366	Mar 29	325
LOWEST DAILY MEAN	0.77	Aug 23	0.18
ANNUAL SEVEN-DAY MINIMUM	0.93	Aug 21	0.29
MAXIMUM PEAK FLOW			1350
MAXIMUM PEAK STAGE			8.63
INSTANTANEOUS LOW FLOW			0.12
ANNUAL RUNOFF (CFSM)	0.63		0.57
ANNUAL RUNOFF (INCHES)	8.57		7.75
10 PERCENT EXCEEDS	23		23
50 PERCENT EXCEEDS	3.6		3.0
90 PERCENT EXCEEDS	1.3		0.90

e Estimated.
* See REMARKS.

0214645022 BRIAR CREEK ABOVE COLONY ROAD AT CHARLOTTE, NC--Continued



0214645022 BRIAR CREEK ABOVE COLONY RD AT CHARLOTTE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1999 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1999 to current year.

pH: April 1999 to current September 2002.

WATER TEMPERATURE: April 1999 to current year.

DISSOLVED OXYGEN: April 1999 to September 2002.

DISSOLVED OXYGEN, PERCENT SATURATION: April 1999 to September 2002.

INSTRUMENTATION.-- Water-quality monitor with radio telemetry.

REMARKS.--Station operated in cooperation with Mecklenburg County Department of Environmental Protection to characterize water-quality conditions in Briar Creek basin. Dissolved oxygen, percent saturation, computed using barometric pressure of 740 mm Hg.

EXTREMES FOR PERIOD OF DAILY RECORD.--Extremes listed below may have been exceeded during periods of missing record.

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	1520, January 5, 2002	27, September 23, 2000
pH, standard units	9.6, October 8, 1999	6.0, June 27, 1999
WATER TEMPERATURE, °C	35.0, July 31, 1999	-0.2, December 26, 31, 2000, January 3, 4, 2001, January 4, 2002
DISSOLVED OXYGEN, mg/L	15.4, February 3, 2001, January 5, 2002	2.7, April 13, 14, 2001
DISSOLVED OXYGEN, PERCENT SATURATION,%	191, May 30, 2002	24, September 5, 1999

EXTREMES FOR CURRENT YEAR.--Extremes listed below may have been exceeded during periods of missing record.

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	1520, January 5	31, August 17
pH, standard units	9.2, May 27, August 23	6.2, September 17
WATER TEMPERATURE, °C	33.8, July 29, 30	-0.2, January 4
DISSOLVED OXYGEN, mg/L	15.4, January 3	3.1, July 6, 7
DISSOLVED OXYGEN, PERCENT SATURATION,%	191, May 30	40, July 6, 7

SANTEE RIVER BASIN

0214645022 BRIAR CREEK ABOVE COLONY RD AT CHARLOTTE, NC--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	158	114	127	207	152	169	174	161	167	130	76	99
2	---	---	---	244	169	190	236	73	155	135	112	125
3	---	---	---	192	169	180	87	74	81	152	135	144
4	---	---	---	186	135	157	98	87	92	163	152	159
5	183	172	178	155	136	143	111	90	96	169	163	167
6	---	---	---	169	155	162	---	---	---	178	168	174
7	---	---	---	178	169	173	---	---	---	180	173	177
8	---	---	---	292	177	189	---	---	---	190	177	183
9	---	---	---	272	197	224	---	---	---	197	186	191
10	174	151	163	204	190	196	---	---	---	201	189	195
11	258	165	177	223	195	202	---	---	---	204	187	198
12	217	175	188	244	201	218	---	---	---	204	192	199
13	201	182	192	211	71	187	---	---	---	224	198	204
14	213	187	200	108	46	72	211	187	199	208	92	192
15	211	182	197	120	80	102	245	62	190	92	53	67
16	212	176	194	150	120	131	104	32	82	83	47	65
17	205	186	195	168	140	154	91	31	65	105	81	88
18	223	193	208	163	155	158	100	54	86	126	102	116
19	343	198	218	174	160	164	130	100	114	141	126	135
20	812	343	608	183	171	176	222	124	137	152	141	148
21	1080	812	987	187	175	182	153	141	146	160	152	157
22	923	767	822	---	---	---	165	153	159	167	159	165
23	966	797	834	---	---	---	---	---	---	---	---	---
24	1030	756	944	243	64	169	232	78	164	---	---	---
25	756	471	584	95	46	78	113	75	93	---	---	---
26	471	86	266	105	37	70	108	77	97	---	---	---
27	167	129	151	132	105	120	122	82	96	103	84	93
28	217	167	184	156	132	140	133	77	106	116	90	103
29	202	191	196	180	150	161	99	78	88	132	116	125
30	212	162	199	171	158	162	120	99	110	145	132	139
31	---	---	---	176	161	168	123	37	76	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

PH, WATER, WHOLE, FIELD STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	7.7	7.4	7.5	7.3	7.2	7.2	7.7	7.4	7.5
2	---	---	---	7.4	6.9	7.2	7.4	7.2	7.3	7.6	7.4	7.5
3	8.5	7.3	7.7	7.1	7.0	7.1	7.4	7.3	7.3	7.6	7.4	7.5
4	8.6	7.3	7.7	7.3	7.1	7.2	7.6	7.3	7.5	7.4	7.2	7.3
5	---	---	---	7.2	7.1	7.2	7.6	7.4	7.5	7.4	7.2	7.3
6	---	---	---	7.3	7.2	7.2	7.6	7.4	7.5	7.2	6.7	7.0
7	---	---	---	7.3	7.1	7.2	7.8	7.4	7.5	7.0	6.8	7.0
8	---	---	---	7.4	7.2	7.3	7.9	7.4	7.6	7.2	6.9	7.0
9	---	---	---	7.4	7.1	7.2	7.8	7.3	7.5	7.1	7.0	7.0
10	7.8	7.2	7.4	7.5	7.2	7.3	7.5	6.7	7.2	7.1	7.0	7.1
11	8.0	7.1	7.4	7.6	7.2	7.3	6.9	6.7	6.8	7.1	7.0	7.0
12	8.0	7.1	7.4	7.5	7.2	7.3	6.9	6.8	6.9	7.1	6.9	7.0
13	8.1	7.0	7.4	7.5	7.2	7.3	7.0	6.8	6.9	7.0	6.8	6.9
14	7.4	6.8	7.1	7.6	7.2	7.3	6.8	6.8	6.8	7.0	6.8	6.9
15	7.1	6.7	6.9	7.5	7.1	7.3	7.0	6.8	6.9	7.2	6.8	7.0
16	7.4	6.9	7.1	7.5	7.1	7.3	7.1	6.9	7.0	---	---	---
17	7.5	7.0	7.2	7.4	7.0	7.2	7.2	6.7	7.0	---	---	---
18	7.5	7.1	7.2	7.4	7.0	7.1	6.7	6.6	6.7	---	---	---
19	7.7	7.1	7.3	7.4	7.0	7.1	6.9	6.7	6.8	---	---	---
20	7.9	7.2	7.4	7.5	7.0	7.2	7.1	6.9	7.0	---	---	---
21	8.2	7.2	7.6	7.5	7.2	7.3	7.2	7.0	7.1	7.1	6.9	7.0
22	8.2	7.3	7.6	7.5	7.2	7.3	7.2	7.0	7.1	7.1	7.0	7.0
23	8.2	7.3	7.6	7.5	7.1	7.3	7.2	7.1	7.2	7.1	6.7	6.9
24	8.2	7.3	7.6	7.2	6.8	6.8	7.2	7.0	7.1	7.1	6.9	7.0
25	8.0	6.9	7.1	6.9	6.8	6.9	7.2	7.1	7.2	7.2	6.9	7.0
26	7.3	7.1	7.2	7.0	6.9	7.0	7.3	7.1	7.2	---	---	---
27	7.4	7.2	7.3	7.3	7.0	7.2	7.4	7.2	7.3	---	---	---
28	7.6	7.4	7.5	7.3	7.1	7.2	7.4	7.3	7.3	---	---	---
29	7.7	7.5	7.5	7.4	7.1	7.3	7.4	7.3	7.3	---	---	---
30	7.7	7.4	7.5	7.3	7.2	7.3	7.4	7.3	7.4	---	---	---
31	7.7	7.4	7.5	---	---	---	7.6	7.3	7.5	---	---	---
MONTH	---	---	---	7.7	6.8	7.2	7.9	6.6	7.2	---	---	---

SANTEE RIVER BASIN

0214645022 BRIAR CREEK ABOVE COLONY RD AT CHARLOTTE, NC--Continued

PH, WATER, WHOLE, FIELD STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	7.8	7.2	7.4	6.9	6.7	6.8	7.5	7.0	7.2
2	---	---	---	7.2	6.4	6.9	7.1	6.9	7.0	8.2	7.0	7.3
3	---	---	---	6.7	6.5	6.6	---	---	---	7.2	6.8	7.0
4	---	---	---	---	---	---	---	---	---	6.9	6.6	6.8
5	---	---	---	7.6	7.3	7.5	---	---	---	6.9	6.6	6.8
6	7.6	7.3	7.5	7.6	7.3	7.5	---	---	---	7.1	6.8	6.9
7	7.3	7.2	7.3	7.7	7.4	7.5	---	---	---	7.3	6.6	6.9
8	7.4	7.2	7.3	8.0	7.4	7.6	---	---	---	7.7	6.6	7.0
9	7.5	7.3	7.4	8.5	7.3	7.7	---	---	---	7.8	6.7	7.1
10	7.5	7.4	7.4	8.8	7.4	7.9	---	---	---	7.7	6.7	7.0
11	7.6	7.4	7.5	8.8	7.4	7.9	---	---	---	7.1	6.6	6.8
12	7.6	7.5	7.5	7.5	7.0	7.3	7.3	6.9	7.1	7.7	6.8	7.1
13	7.7	7.5	7.6	7.2	7.0	7.1	7.7	6.9	7.2	8.3	6.6	7.3
14	7.8	7.6	7.7	7.5	7.1	7.3	7.8	7.0	7.3	7.0	6.8	6.9
15	7.8	7.6	7.7	7.8	7.2	7.4	7.8	7.1	7.3	7.4	6.9	7.1
16	7.9	7.6	7.7	8.2	7.2	7.5	8.0	7.0	7.4	7.6	7.0	7.2
17	8.0	7.6	7.8	7.3	6.9	7.1	8.0	7.1	7.4	8.2	7.0	7.4
18	7.9	7.6	7.8	7.1	6.9	7.0	8.1	7.1	7.5	7.0	6.8	6.9
19	8.1	7.6	7.8	7.4	7.1	7.2	8.4	7.2	7.7	7.2	6.8	7.0
20	8.0	7.5	7.7	7.4	7.2	7.3	8.4	7.3	7.7	7.5	6.8	7.1
21	8.4	7.4	7.8	7.2	7.0	7.1	8.6	7.3	7.8	7.9	6.9	7.2
22	8.3	7.4	7.8	7.2	7.0	7.1	8.6	7.3	7.8	8.4	7.0	7.5
23	8.4	7.5	7.8	7.3	7.1	7.2	8.8	7.4	7.9	8.7	7.1	7.7
24	8.2	7.5	7.8	7.4	7.2	7.3	8.8	7.4	7.9	8.9	7.2	7.9
25	8.1	7.4	7.7	7.6	7.2	7.4	7.7	7.2	7.4	9.0	7.2	8.0
26	8.3	7.4	7.8	7.8	7.1	7.4	8.0	7.2	7.5	9.1	7.2	8.1
27	8.0	7.4	7.6	7.3	7.0	7.1	8.6	7.2	7.7	9.2	7.3	8.2
28	7.8	7.2	7.5	7.3	7.0	7.2	8.6	7.2	7.7	9.1	7.3	8.1
29	---	---	---	7.8	7.2	7.4	8.7	7.2	7.8	9.0	7.3	8.0
30	---	---	---	7.3	7.1	7.2	8.9	7.2	7.9	9.0	6.7	7.6
31	---	---	---	7.2	6.8	7.0	---	---	---	7.1	6.8	6.9
MONTH	---	---	---	---	---	---	---	---	---	9.2	6.6	7.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.3	7.0	7.1	8.2	7.0	7.3	8.6	7.0	7.6	7.1	6.8	7.0
2	---	---	---	8.4	6.9	7.4	8.4	6.7	7.4	7.3	7.1	7.2
3	---	---	---	8.4	6.9	7.4	7.0	6.6	6.8	7.5	6.9	7.2
4	---	---	---	8.0	6.9	7.3	7.8	6.8	7.1	8.1	7.0	7.3
5	8.4	7.0	7.5	8.2	6.8	7.3	8.5	6.8	7.4	8.6	7.1	7.6
6	8.3	6.4	7.4	8.0	6.8	7.3	8.6	6.9	7.6	8.8	7.2	7.8
7	7.0	6.4	6.7	7.8	7.0	7.3	8.5	6.9	7.5	9.0	7.2	8.0
8	7.7	6.7	7.1	7.9	7.0	7.3	8.5	7.0	7.5	9.0	7.4	8.0
9	8.5	6.8	7.4	8.2	7.1	7.5	8.6	7.0	7.6	9.1	7.4	8.0
10	8.6	7.0	7.6	8.0	7.2	7.5	8.7	7.0	7.6	9.1	7.3	8.0
11	8.5	7.1	7.7	8.0	7.2	7.5	8.8	7.0	7.7	8.8	7.2	7.8
12	8.4	7.1	7.6	8.3	7.2	7.6	8.8	7.0	7.7	8.8	7.2	7.8
13	8.7	7.1	7.8	8.2	6.8	7.5	8.8	7.0	7.7	8.7	7.1	7.7
14	8.8	7.2	7.8	6.8	6.5	6.6	8.6	7.0	7.6	7.9	6.8	7.3
15	9.0	7.3	8.1	7.0	6.7	6.9	8.4	6.4	7.2	6.8	6.6	6.6
16	9.1	7.3	8.1	7.2	6.8	7.0	7.5	6.4	6.7	6.7	6.5	6.6
17	9.1	7.4	8.1	8.0	7.0	7.3	7.0	6.4	6.8	6.6	6.2	6.4
18	9.1	7.4	8.1	8.6	7.1	7.7	7.1	6.6	6.9	7.0	6.3	6.7
19	9.0	7.4	8.1	8.8	7.2	7.8	7.2	7.0	7.1	7.7	6.7	7.1
20	8.7	7.2	7.8	8.7	7.2	7.7	7.5	6.9	7.2	8.2	6.8	7.3
21	8.4	7.1	7.6	8.7	7.2	7.8	8.5	6.9	7.5	8.2	7.1	7.5
22	8.2	7.1	7.5	8.7	7.2	7.7	9.0	7.0	7.8	8.3	7.1	7.5
23	8.2	7.1	7.5	8.5	7.2	7.6	---	---	---	8.4	7.1	7.6
24	8.2	7.1	7.5	8.5	6.6	7.4	9.0	6.8	7.8	8.6	7.1	7.7
25	8.4	7.1	7.7	7.0	6.4	6.7	7.4	6.8	7.2	---	---	---
26	7.6	6.9	7.2	7.2	6.5	7.0	7.7	7.2	7.5	---	---	---
27	7.3	6.9	7.1	7.7	7.2	7.4	8.1	7.4	7.7	7.2	7.0	7.1
28	7.6	7.0	7.2	8.6	7.4	7.8	7.8	7.1	7.5	7.3	6.9	7.0
29	8.2	7.1	7.5	8.9	7.3	7.9	7.4	7.0	7.2	7.4	6.9	7.1
30	8.4	7.0	7.4	8.8	7.2	7.8	7.3	7.0	7.1	7.6	6.9	7.1
31	---	---	---	8.8	7.1	7.8	7.6	6.7	7.0	---	---	---
MONTH	---	---	---	8.9	6.4	7.4	---	---	---	---	---	---

SANTEE RIVER BASIN

0214645022 BRIAR CREEK ABOVE COLONY RD AT CHARLOTTE, NC--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	31.8	22.3	26.6	32.2	24.5	27.6	31.7	25.7	28.2	23.6	20.5	21.8
2	---	---	---	32.5	24.3	28.1	30.5	24.9	27.4	27.4	20.8	23.7
3	---	---	---	33.2	25.0	28.6	31.8	23.5	27.3	28.6	21.6	25.0
4	---	---	---	32.2	24.7	27.9	31.9	24.1	27.9	29.4	22.8	26.3
5	33.0	24.8	28.6	33.4	24.1	28.8	32.9	24.7	28.5	29.0	24.3	26.6
6	29.6	24.4	26.9	32.9	25.8	29.1	32.4	25.1	28.3	27.7	21.9	25.0
7	29.6	23.5	26.0	31.7	24.4	27.8	29.7	22.1	25.6	27.4	22.0	24.6
8	29.1	20.4	24.5	32.0	23.1	27.4	29.3	20.5	24.7	27.7	21.0	24.3
9	29.8	19.8	24.8	32.0	23.8	27.7	29.3	20.8	25.0	27.7	21.6	24.3
10	30.7	20.5	25.6	31.8	25.1	28.0	30.5	21.4	25.7	28.0	21.3	24.3
11	31.2	21.5	26.4	26.6	22.6	24.9	30.9	21.8	26.2	28.2	21.5	24.7
12	31.5	22.5	27.1	26.5	21.6	23.7	30.8	23.0	26.8	26.6	21.0	23.6
13	31.8	23.4	27.6	27.1	21.8	24.5	31.1	23.3	26.8	26.4	20.5	23.4
14	30.2	24.3	26.7	26.5	23.8	25.1	29.5	23.4	26.2	25.2	23.1	23.9
15	30.1	22.6	26.3	29.7	23.7	26.5	30.0	24.4	26.5	23.6	22.4	23.0
16	29.5	20.9	25.4	32.2	24.4	28.1	29.9	24.4	26.6	27.0	22.8	24.4
17	28.9	22.2	25.3	31.8	24.6	28.1	29.4	24.2	26.1	26.6	23.2	24.8
18	27.9	21.7	24.8	32.1	25.3	28.7	31.5	24.5	27.7	25.4	23.2	24.3
19	29.9	21.9	25.9	33.0	25.6	29.3	30.2	25.1	27.4	25.9	22.6	24.2
20	30.6	22.7	26.4	31.9	25.8	28.5	30.8	24.3	27.5	26.0	23.3	24.5
21	29.3	21.5	25.4	33.0	25.1	28.9	31.5	24.8	28.1	27.5	22.5	24.8
22	27.3	22.0	24.7	33.0	25.4	28.8	32.3	25.7	28.7	27.2	23.4	24.9
23	30.6	23.0	26.4	31.5	25.5	27.9	---	---	---	25.9	22.3	24.0
24	31.6	23.7	27.3	31.7	25.1	27.5	33.1	25.9	28.9	24.7	20.8	22.4
25	31.2	24.6	27.6	28.3	25.1	26.3	30.1	25.2	27.0	---	---	---
26	27.7	25.0	26.0	31.9	25.0	28.2	28.6	24.9	26.3	---	---	---
27	31.3	24.0	27.3	32.8	25.8	29.3	25.2	23.5	24.3	24.3	20.9	22.7
28	30.1	24.1	26.9	33.6	26.4	30.0	23.5	21.7	22.4	24.5	21.6	22.9
29	32.2	24.5	28.0	33.8	26.6	30.1	23.9	21.2	22.4	24.6	21.1	22.8
30	31.9	24.5	27.6	33.8	26.5	30.1	22.8	21.4	22.0	24.8	20.1	22.4
31	---	---	---	33.2	26.2	29.3	21.4	20.8	21.1	---	---	---
MONTH	---	---	---	33.8	21.6	27.9	---	---	---	---	---	---

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	10.6	7.4	8.7	10.3	7.7	9.0	7.6	6.0	6.7	13.8	11.6	12.9
2	11.5	7.4	8.9	8.7	6.1	7.3	8.7	6.5	7.6	14.7	12.8	13.7
3	11.8	7.2	8.9	6.3	5.3	5.9	9.5	7.6	8.5	15.4	14.2	14.7
4	12.2	7.0	8.9	7.2	5.6	6.4	10.1	8.4	9.2	14.6	12.8	13.8
5	---	---	---	8.0	6.5	7.2	10.3	8.4	9.3	14.0	12.4	13.4
6	---	---	---	8.8	7.1	8.0	10.3	8.2	9.0	13.5	12.2	12.7
7	---	---	---	9.2	7.5	8.3	10.6	7.7	8.9	13.1	11.9	12.6
8	---	---	---	9.0	7.4	8.2	10.4	7.4	8.5	13.6	12.0	12.9
9	---	---	---	9.3	7.6	8.2	10.4	7.2	8.6	13.8	11.2	12.6
10	10.9	7.6	9.0	9.6	7.7	8.4	9.7	8.2	8.8	12.1	9.8	11.1
11	11.0	7.2	8.7	9.7	7.6	8.4	9.7	8.7	9.2	10.3	9.4	9.9
12	11.7	6.9	8.7	10.1	7.9	8.7	8.9	8.3	8.7	11.4	9.7	10.6
13	11.7	7.1	8.7	10.5	8.4	9.2	8.7	7.9	8.3	10.3	9.3	9.9
14	8.9	6.4	7.2	10.4	8.4	9.2	8.1	7.3	7.7	11.4	9.9	10.8
15	8.6	6.3	7.2	10.1	8.3	9.0	8.8	7.4	8.1	11.5	9.8	10.6
16	9.5	6.6	7.8	10.3	8.0	9.0	9.8	8.2	8.9	---	---	---
17	10.4	7.2	8.6	10.2	7.7	8.5	9.6	8.0	8.7	---	---	---
18	10.9	8.2	9.2	10.2	7.6	8.5	8.4	7.7	8.0	---	---	---
19	11.4	8.0	9.3	10.0	7.4	8.3	9.4	8.4	8.8	---	---	---
20	11.3	7.7	9.0	9.6	7.3	8.1	10.0	8.7	9.4	---	---	---
21	11.9	7.7	9.1	10.0	8.0	9.0	10.8	9.5	10.2	10.9	9.2	10.0
22	11.4	7.3	8.7	10.6	8.8	9.4	11.4	9.7	10.6	11.2	9.8	10.5
23	11.2	7.1	8.4	10.6	7.4	9.0	11.3	9.4	10.6	---	---	---
24	10.9	6.8	8.2	7.8	6.0	6.8	10.3	9.2	9.7	---	---	---
25	8.6	6.0	6.6	6.3	5.5	5.8	11.5	9.6	10.7	---	---	---
26	8.0	6.7	7.5	7.0	5.7	6.2	12.0	10.5	11.3	---	---	---
27	9.4	7.5	8.6	7.6	5.9	6.4	12.9	11.4	12.2	---	---	---
28	---	---	---	7.5	5.9	6.6	13.1	11.4	12.3	---	---	---
29	---	---	---	7.7	6.2	6.8	12.5	10.9	11.6	---	---	---
30	10.3	8.6	9.4	6.7	5.9	6.2	12.8	10.9	12.0	---	---	---
31	10.5	8.5	9.4	---	---	---	13.2	11.6	12.3	---	---	---
MONTH	---	---	---	10.6	5.3	7.9	13.2	6.0	9.5	---	---	---



Flow over dam at Cullasaja River near Highlands, North Carolina.

SANTEE RIVER BASIN

02146470 LITTLE HOPE CREEK AT SENECA PLACE AT CHARLOTTE, NC

LOCATION.--Lat 35°09'52", long 80°51'11", North American Datum of 1983, 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 mi², 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 597.32 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--Records poor. No flow occurred periodically in 1986, 1987, 1988, 2001, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.10	0.09	0.60	0.44	0.60	0.32	1.9	1.6	0.38	10	0.00	1.2
2	0.11	0.38	0.80	0.32	0.56	20	0.63	0.64	0.42	0.58	6.5	0.24
3	0.10	0.19	0.80	1.9	0.60	8.7	1.5	2.2	0.28	0.17	0.42	0.14
4	0.10	0.18	0.20	1.2	0.58	1.2	0.61	12	0.27	0.13	0.04	0.10
5	0.08	0.17	0.27	0.46	0.60	0.87	1.5	0.95	0.24	0.15	0.00	0.10
6	5.7	0.40	0.21	14	4.6	0.76	0.50	0.70	8.5	0.09	0.00	0.06
7	0.11	0.22	0.21	0.83	6.9	0.72	0.48	0.64	1.4	0.04	0.00	0.12
8	0.05	0.24	0.22	0.49	1.1	0.65	0.56	0.61	0.32	0.00	0.00	0.03
9	0.04	0.25	0.22	0.41	0.54	0.65	0.61	0.58	0.27	0.00	0.00	0.02
10	0.06	2.5	19	0.53	2.3	0.62	0.92	0.71	0.21	0.00	0.00	0.01
11	0.07	1.1	2.0	0.38	0.55	0.59	0.60	1.8	0.27	0.00	0.00	0.02
12	0.08	0.24	0.39	0.83	0.45	5.0	1.2	0.55	0.31	0.04	0.00	0.04
13	0.09	0.25	0.54	0.92	0.44	2.5	0.60	12	0.17	13	0.00	0.00
14	1.2	0.26	0.36	0.41	0.40	0.83	0.53	1.00	0.16	58	0.00	6.6
15	0.16	3.0	0.29	0.40	0.40	0.72	0.53	0.61	0.18	0.38	2.1	13
16	0.07	0.31	0.31	0.41	0.40	0.70	0.49	0.51	0.14	0.25	14	1.8
17	0.04	0.26	4.8	0.43	0.37	8.3	0.48	0.49	0.12	0.17	6.3	0.26
18	0.05	2.3	1.4	0.41	0.36	1.0	0.46	3.7	0.15	0.13	0.47	0.15
19	0.08	0.31	0.33	33	0.36	0.85	0.45	0.52	0.15	0.15	0.12	0.15
20	0.10	6.2	0.30	2.8	0.51	1.4	0.44	0.47	0.08	0.12	0.09	0.14
21	0.09	1.0	0.38	4.9	0.37	7.8	0.43	0.45	0.03	0.12	0.00	0.13
22	0.09	1.3	0.31	0.81	0.36	1.0	0.42	0.45	0.00	0.10	0.10	0.12
23	0.10	0.30	0.30	29	0.34	0.90	0.45	0.44	0.04	0.16	0.11	0.11
24	0.08	0.26	0.55	4.2	0.35	0.86	0.46	0.44	0.0	0.43	1.2	0.12
25	6.0	0.26	0.28	8.4	0.33	0.93	0.79	0.42	0.04	6.2	2.7	0.13
26	0.11	13	0.29	1.1	0.32	1.6	0.39	0.40	2.5	0.42	0.27	10
27	0.11	1.2	0.29	0.85	0.33	0.80	0.40	0.38	0.37	0.12	1.6	1.4
28	0.11	0.38	0.30	0.74	0.35	0.72	0.51	0.34	0.11	0.08	0.67	0.34
29	0.12	0.42	0.32	0.64	---	0.72	0.57	0.31	0.08	0.05	0.16	0.16
30	0.12	0.33	0.33	0.59	---	2.3	0.53	37	0.32	0.01	0.10	0.14
31	0.12	---	0.32	0.64	---	7.8	---	0.97	---	0.00	37	---
TOTAL	15.44	37.30	36.92	112.44	25.37	81.81	19.94	83.88	17.51	91.09	73.95	36.83
MEAN	0.498	1.243	1.191	3.627	0.906	2.639	0.665	2.706	0.584	2.938	2.385	1.228
MAX	6.0	13	19	33	6.9	20	1.9	37	8.5	58	37	13
MIN	0.04	0.09	0.20	0.32	0.32	0.32	0.39	0.31	0.00	0.00	0.00	0.00
CFSM	0.19	0.47	0.45	1.38	0.34	1.00	0.25	1.03	0.22	1.12	0.91	0.47
IN.	0.22	0.53	0.52	1.59	0.36	1.16	0.28	1.19	0.25	1.29	1.05	0.52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2002,[®] BY WATER YEAR (WY)

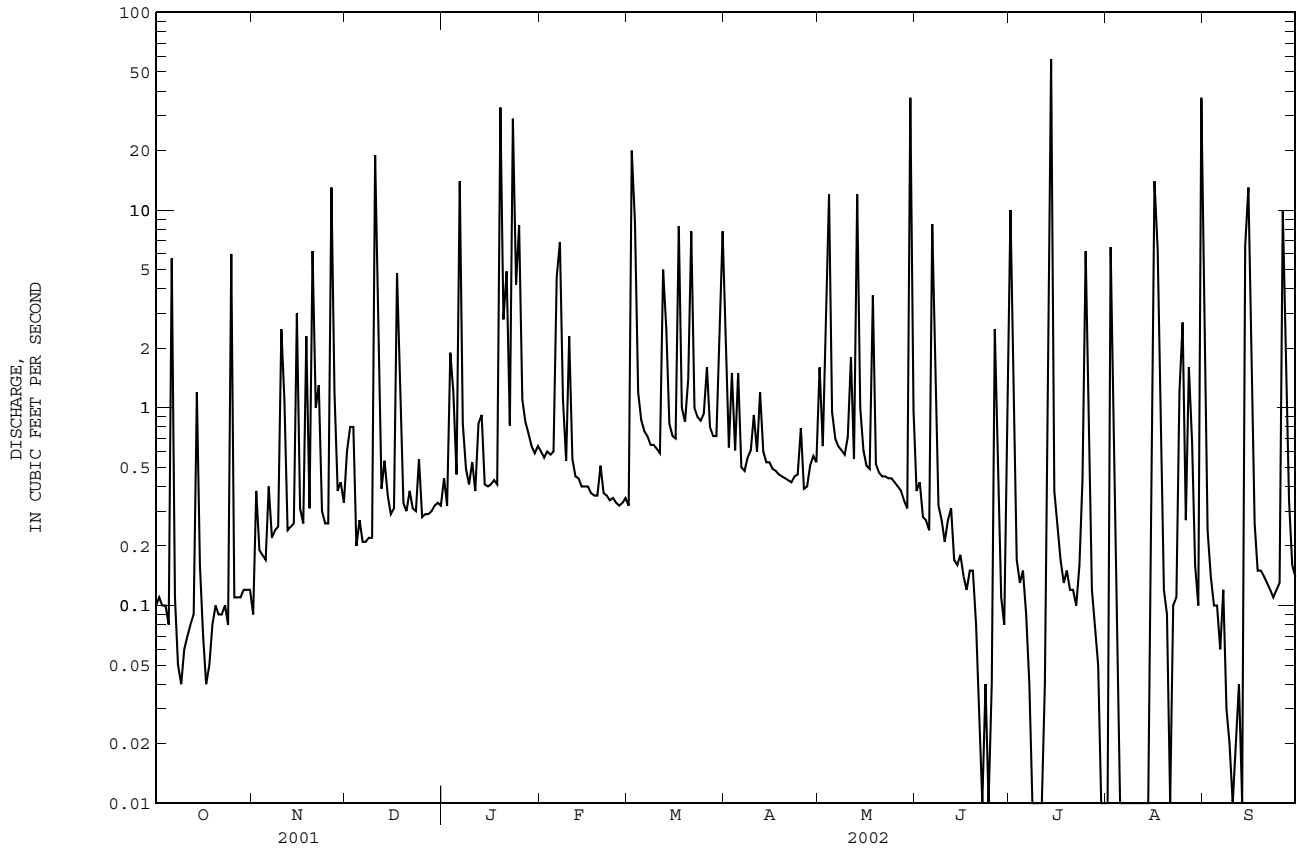
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	2.222	2.776	2.836	4.319	5.162	4.357	3.154	2.599	2.348	2.923	2.586	2.330								
MAX	5.05	10.5	10.5	9.46	8.96	9.04	9.13	6.65	7.18	13.8	9.12	8.17								
(WY)	1990	1986	1984	1998	1990	1984	1998	1990	1985	1997	1995	1989								
MIN	0.26	0.95	1.09	1.24	0.91	1.03	0.66	0.88	0.22	0.31	0.19	0.34								
(WY)	2001	1985	2001	2001	2002	1985	2002	1987	1986	1986	1987	1983								

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1983 - 2002 [®]
ANNUAL TOTAL	612.55	632.48	
ANNUAL MEAN	1.678	1.733	3.122
HIGHEST ANNUAL MEAN			4.87 1984
LOWEST ANNUAL MEAN			1.66 2001
HIGHEST DAILY MEAN	58 Mar 29	58 Jul 14	282 Jul 23 1997
LOWEST DAILY MEAN	0.00 Aug 7	0.00 Jun 22	0.00 Jul 14 1986
ANNUAL SEVEN-DAY MINIMUM	0.00 Aug 19	0.00 Aug 5	0.00 Jul 14 1986
MAXIMUM PEAK FLOW		749 May 30	1700 Jul 23 1997
MAXIMUM PEAK STAGE		6.60 May 30	8.50 Jul 23 1997
INSTANTANEOUS LOW FLOW		0.00* Jun 22	0.00* Jul 14 1986
ANNUAL RUNOFF (CFSM)	0.64	0.66	1.19
ANNUAL RUNOFF (INCHES)	8.66	8.95	16.13
10 PERCENT EXCEEDS	4.0	3.3	5.7
50 PERCENT EXCEEDS	0.49	0.40	0.88
90 PERCENT EXCEEDS	0.08	0.05	0.23

[®] See PERIOD OF RECORD.

* See REMARKS.

02146470 LITTLE HOPE CREEK AT SENECA PLACE AT CHARLOTTE, NC--Continued



SANTEE RIVER BASIN

02146507 LITTLE SUGAR CREEK AT ARCHDALE DRIVE AT CHARLOTTE, NC

LOCATION.--Lat 35°08'53", long 80°51'28", North American Datum of 1983, 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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 563.69, North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. A daily average of 21.2 ft³/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 and current water year affected by regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 22, 1975, reached a stage of about 12.7 ft, from floodmarks, discharge, 7,360 ft³/s.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	30	34	33	40	33	156	59	28	80	28	64
2	30	63	31	34	33	449	57	48	30	30	86	28
3	30	38	30	45	32	248	61	61	25	23	45	27
4	30	29	31	51	28	54	52	226	23	30	24	33
5	31	30	30	42	28	42	51	43	23	22	23	35
6	129	31	32	412	53	38	48	33	89	21	23	37
7	36	36	28	60	243	36	48	32	68	20	23	21
8	31	31	27	40	85	35	48	32	25	21	21	20
9	31	31	25	35	38	34	49	32	23	22	21	21
10	30	30	373	35	67	35	61	34	24	21	20	22
11	31	29	161	34	42	34	51	54	24	22	21	22
12	30	30	39	35	35	129	57	30	22	22	20	21
13	28	31	42	52	36	113	56	177	21	189	21	21
14	49	29	39	34	34	50	49	55	22	764	22	68
15	37	30	35	34	34	42	51	30	21	35	37	269
16	29	29	35	33	35	38	51	32	21	25	243	136
17	28	29	81	34	33	222	49	30	22	25	507	68
18	28	29	115	33	32	53	48	87	22	24	46	27
19	28	29	38	658	32	41	48	32	22	24	27	26
20	28	30	36	170	34	47	47	27	23	23	25	24
21	29	30	36	116	35	198	46	28	22	22	23	23
22	29	29	34	50	29	54	42	29	22	24	24	23
23	30	30	34	743	31	46	39	30	22	25	26	23
24	29	127	41	84	31	44	39	28	23	93	56	23
25	151	34	33	211	31	43	50	27	23	199	67	23
26	31	32	31	48	31	50	46	27	93	42	38	152
27	28	32	33	40	30	51	46	27	31	26	48	52
28	28	34	34	38	30	42	46	27	23	23	45	36
29	29	31	32	35	---	43	46	28	24	23	28	25
30	32	34	32	35	---	73	46	434	29	23	23	23
31	30	---	32	34	---	191	---	67	---	23	969	---
TOTAL	1170	1057	1634	3338	1242	2608	1584	1906	890	1966	2630	1393
MEAN	37.74	35.23	52.71	107.7	44.36	84.13	52.80	61.48	29.67	63.42	84.84	46.43
MAX	151	127	373	743	243	449	156	434	93	764	969	269
MIN	28	29	25	33	28	33	39	27	21	20	20	20
CFSM	0.89	0.83	1.24	2.53	1.04	1.97	1.24	1.44	0.70	1.49	1.99	1.09
IN.	1.02	0.92	1.43	2.91	1.08	2.28	1.38	1.66	0.78	1.72	2.30	1.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2002, BY WATER YEAR (WY)

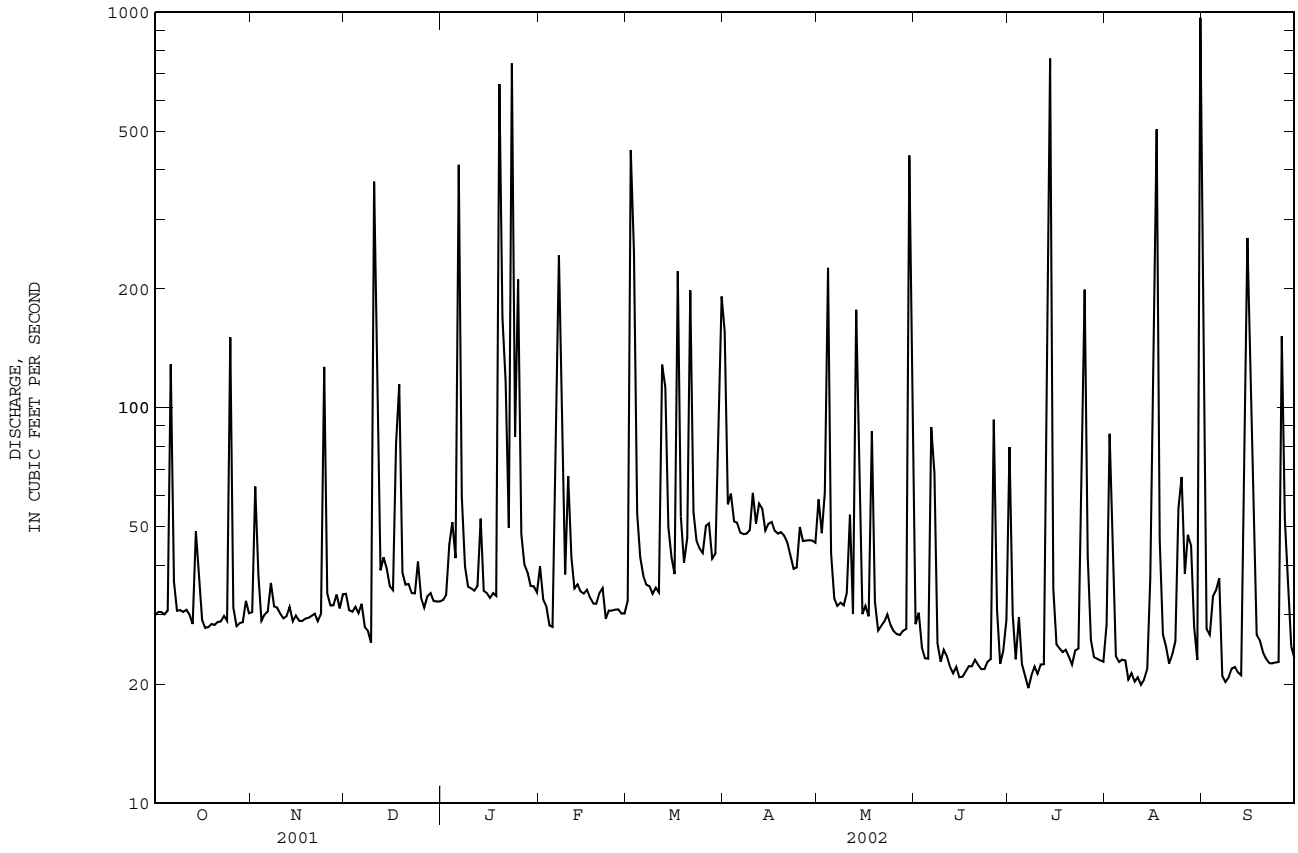
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	69.67	69.52	67.38	109.6	110.5	117.4	83.25	68.56	69.51	70.07	73.16	64.59													
MAX	258	197	164	207	194	245	205	119	152	310	227	147													
(WY)	1991	1986	1984	1978	1979	1993	1998	1985	1992	1997	1995	1979													
MIN	25.1	22.6	32.8	31.6	44.4	40.0	30.8	33.8	20.5	27.2	29.5	21.7													
(WY)	2001	1982	1981	1981	2002	1985	1981	1986	1986	1986	1987	1986													

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1978 - 2002

ANNUAL TOTAL	21506	21418	
ANNUAL MEAN	58.92	58.68	80.99
HIGHEST ANNUAL MEAN			110
LOWEST ANNUAL MEAN			51.7
HIGHEST DAILY MEAN	1100	Mar 29	969
LOWEST DAILY MEAN	24	Jul 16	20
ANNUAL SEVEN-DAY MINIMUM	27	Aug 24	21
MAXIMUM PEAK FLOW			3770
MAXIMUM PEAK STAGE			8.98
INSTANTANEOUS LOW FLOW			2.1*
ANNUAL RUNOFF (CFSM)	1.38		1.38
ANNUAL RUNOFF (INCHES)	18.78		18.70
10 PERCENT EXCEEDS	101		88
50 PERCENT EXCEEDS	34		33
90 PERCENT EXCEEDS	28		23

* See REMARKS.

02146507 LITTLE SUGAR CREEK AT ARCHDALE DRIVE AT CHARLOTTE, NC--Continued



02146507 LITTLE SUGAR CREEK AT ARCHDALE DRIVE AT CHARLOTTE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1999 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1999 to current year.

pH: April 1999 to September 2002.

WATER TEMPERATURE: April 1999 to current year.

DISSOLVED OXYGEN: April 1999 to September 2002.

DISSOLVED OXYGEN, PERCENT SATURATION: April 1999 to September 2002.

INSTRUMENTATION.-- Water-quality monitor with radio telemetry.

REMARKS.--Station operated in cooperation with Mecklenburg County Department of Environmental Protection to characterize water-quality conditions in Little Sugar Creek basin. Dissolved oxygen, percent saturation, computed using barometric pressure of 740 mm Hg.

EXTREMES FOR PERIOD OF DAILY RECORD.--Extremes listed below may have been exceeded during periods of missing record.

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	2560, April 24, 2000	27, September 24, 2001
pH, standard units	11.8, April 24, 2000	5.9, April 27, 1999
WATER TEMPERATURE, °C	32.0, July 30, 2002	2.5, January 30, 2000
DISSOLVED OXYGEN, mg/L	13.0, June 23, 1999	1.5, May 30, 2002
DISSOLVED OXYGEN, PERCENT SATURATION,%	159, June 26, 2000, July 16, 2001	18, May 30, 2002

EXTREMES FOR CURRENT YEAR.--Extremes listed below may have been exceeded during periods of missing record.

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	2190, January 4	28, August 17
pH, standard units	8.7, February 22	6.5, November 25, 26
WATER TEMPERATURE, °C	32.0, July 30	3.0, January 6
DISSOLVED OXYGEN, mg/L	12.7, March 1	1.5, May 30
DISSOLVED OXYGEN, PERCENT SATURATION,%	141, April 19	18, May 30

SANTEE RIVER BASIN

02146507 LITTLE SUGAR CREEK AT ARCHDALE DRIVE AT CHARLOTTE, NC--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	484	401	458	593	469	564	560	468	521	419	375	398
2	501	440	475	596	218	437	521	429	488	434	362	403
3	591	468	524	496	339	430	508	431	480	870	406	460
4	598	499	553	557	456	497	522	425	478	2190	870	1470
5	602	522	562	537	448	510	606	487	560	1140	893	975
6	593	170	309	544	448	513	600	520	570	---	---	---
7	465	348	412	572	488	540	591	271	524	---	---	---
8	495	403	460	581	480	543	583	462	543	---	---	---
9	511	417	479	608	523	573	593	517	570	---	---	---
10	540	464	500	588	499	555	---	---	---	---	---	---
11	553	495	527	553	463	510	---	---	---	---	---	---
12	544	456	507	516	445	493	---	---	---	---	---	---
13	504	432	484	587	475	534	536	396	460	---	---	---
14	489	248	391	564	428	542	583	369	526	---	---	---
15	436	277	365	629	454	581	588	460	556	---	---	---
16	528	395	478	639	484	602	560	439	502	569	447	530
17	535	437	513	652	530	594	504	166	436	584	516	558
18	569	455	532	570	487	544	461	123	308	593	504	553
19	617	469	556	543	466	512	520	417	481	593	36	346
20	633	538	585	544	468	520	554	452	513	271	47	185
21	618	547	590	577	492	543	568	479	537	315	152	236
22	625	537	599	584	491	552	565	474	520	437	234	347
23	612	523	582	536	302	453	522	414	485	451	29	172
24	591	524	567	334	156	234	469	290	396	305	153	255
25	616	194	339	416	291	365	447	315	388	286	113	198
26	579	420	495	541	336	465	405	302	372	392	277	342
27	564	412	532	570	440	531	423	358	392	409	334	386
28	533	462	501	554	422	513	462	337	420	432	339	392
29	528	430	492	564	417	516	480	409	453	482	388	450
30	596	480	547	529	422	497	464	376	424	497	415	472
31	574	435	540	---	---	---	403	361	386	485	371	453
MONTH	633	170	499	652	156	509	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	479	353	434	528	455	500	303	115	211	528	343	429
2	477	389	447	520	69	326	416	244	356	538	326	470
3	452	380	423	235	99	161	431	242	388	535	306	418
4	469	343	413	362	234	287	454	307	416	435	121	219
5	500	321	457	452	345	394	506	302	446	366	198	295
6	515	191	429	484	320	429	503	357	455	500	320	413
7	193	112	155	442	351	416	448	386	419	532	403	485
8	324	138	232	439	335	415	452	345	414	518	386	469
9	372	274	336	458	379	430	503	371	460	529	420	482
10	376	204	285	439	353	415	508	346	444	519	417	472
11	378	218	320	452	363	427	536	456	507	452	270	371
12	391	221	361	462	150	324	538	382	485	467	386	432
13	397	344	372	318	194	248	489	331	447	---	---	---
14	486	397	447	419	287	371	478	378	454	---	---	---
15	500	413	467	457	366	423	474	332	444	---	---	---
16	462	374	428	466	345	438	505	351	470	632	412	570
17	416	352	389	460	138	268	523	385	486	624	438	546
18	443	318	403	317	184	259	508	382	481	535	197	325
19	462	348	441	366	248	336	513	387	489	480	296	413
20	495	401	453	378	267	336	503	411	485	534	381	468
21	507	362	473	307	122	200	494	410	459	569	426	521
22	498	363	455	384	202	328	492	384	452	585	454	547
23	484	392	451	415	335	391	523	424	485	621	507	577
24	463	369	437	425	346	397	525	424	494	604	515	557
25	477	384	442	431	351	402	506	334	418	543	477	517
26	495	410	471	443	313	402	553	410	504	516	445	482
27	533	438	505	430	329	385	553	463	527	488	354	463
28	521	464	501	445	372	415	518	424	483	---	---	---
29	---	---	---	422	344	400	537	368	483	---	---	---
30	---	---	---	414	264	326	544	387	516	---	---	---
31	---	---	---	300	115	218	---	---	---	---	---	---
MONTH	533	112	408	528	69	357	553	115	453	---	---	---

SANTEE RIVER BASIN

02146507 LITTLE SUGAR CREEK AT ARCHDALE DRIVE AT CHARLOTTE, NC--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	497	372	448	519	194	414	599	339	530	---	---	---
2	494	323	430	478	297	398	587	171	440	---	---	---
3	540	399	495	588	453	509	508	241	398	---	---	---
4	589	462	541	586	307	442	547	468	519	591	197	421
5	579	510	549	482	400	451	594	479	543	647	219	458
6	589	133	484	499	426	478	635	491	582	613	241	449
7	539	155	368	509	445	482	594	490	561	602	528	566
8	569	424	530	574	429	512	654	525	615	592	507	556
9	592	491	556	581	498	551	648	487	620	631	507	573
10	628	443	581	584	454	544	688	582	645	658	547	631
11	694	454	615	598	467	556	661	535	619	627	553	592
12	699	494	644	640	495	593	690	553	627	660	548	616
13	626	545	598	---	---	---	792	621	715	693	593	655
14	698	504	649	---	---	---	804	652	753	661	133	554
15	699	569	631	---	---	---	724	196	587	295	96	184
16	607	508	570	---	---	---	416	35	266	399	101	240
17	623	482	553	570	482	540	308	28	162	449	125	336
18	651	546	614	605	532	577	487	148	345	489	346	454
19	638	550	608	587	521	560	515	381	462	540	342	496
20	609	549	586	588	514	560	611	403	524	555	404	521
21	641	555	596	584	512	546	638	464	595	582	482	551
22	670	576	636	555	449	520	639	472	595	550	455	520
23	653	601	626	586	386	538	608	358	525	568	444	514
24	640	553	622	596	170	499	571	191	479	655	524	612
25	647	547	625	477	127	286	418	160	286	660	569	619
26	626	177	394	462	258	380	458	172	336	657	145	302
27	543	320	456	582	416	510	482	205	343	366	264	311
28	562	447	532	611	509	579	529	190	372	478	283	394
29	568	402	524	590	507	552	545	353	453	549	425	497
30	546	296	462	594	496	569	577	484	538	578	406	536
31	---	---	---	611	563	595	---	---	---	---	---	---
MONTH	699	133	551	---	---	---	---	---	---	---	---	---

PH, WATER, WHOLE, FIELD STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.7	7.2	7.3	7.9	7.5	7.6	7.5	7.3	7.4	7.1	6.8	6.9
2	7.9	7.2	7.4	7.7	7.3	7.5	7.4	7.2	7.3	7.1	6.8	7.0
3	7.8	7.3	7.5	7.6	7.3	7.5	7.5	7.2	7.4	7.3	7.0	7.2
4	8.0	7.3	7.5	7.7	7.5	7.6	7.6	7.2	7.3	7.2	7.0	7.1
5	8.0	7.3	7.5	7.7	7.4	7.6	7.6	7.3	7.4	7.4	7.1	7.3
6	7.4	7.0	7.1	7.8	7.4	7.6	7.8	7.4	7.5	7.3	6.9	7.1
7	7.3	7.2	7.3	7.7	7.5	7.6	8.0	7.5	7.6	7.2	6.9	7.1
8	7.4	7.2	7.3	8.0	7.5	7.8	7.8	7.5	7.6	7.4	7.2	7.3
9	7.6	7.2	7.4	7.9	7.6	7.7	7.8	7.5	7.6	7.5	7.3	7.4
10	7.6	7.2	7.4	7.8	7.5	7.6	7.6	7.1	7.4	7.5	7.4	7.4
11	7.6	7.2	7.4	7.7	7.3	7.5	7.3	7.0	7.2	7.5	7.4	7.4
12	7.7	7.3	7.5	7.7	7.2	7.4	7.4	7.2	7.3	7.5	7.3	7.4
13	7.7	7.3	7.5	7.5	7.2	7.4	7.6	7.3	7.5	7.4	7.1	7.3
14	7.6	7.1	7.3	7.7	7.2	7.4	7.7	7.5	7.6	7.3	7.1	7.2
15	7.6	7.1	7.3	7.5	7.2	7.3	7.9	7.6	7.7	7.8	7.3	7.5
16	7.7	7.3	7.5	7.5	7.1	7.3	8.0	7.8	7.9	7.9	7.7	7.8
17	7.8	7.4	7.6	7.5	7.0	7.2	7.9	7.4	7.8	7.9	7.6	7.8
18	7.7	7.4	7.5	7.5	7.0	7.1	7.8	7.4	7.7	8.0	7.7	7.8
19	8.0	7.4	7.7	7.3	7.0	7.1	7.9	7.7	7.8	7.9	7.4	7.7
20	8.1	7.7	7.9	7.4	7.0	7.2	7.8	7.6	7.7	7.6	7.3	7.5
21	8.0	7.7	7.8	7.5	7.1	7.3	7.8	7.6	7.7	7.8	7.4	7.7
22	8.0	7.6	7.8	7.5	7.0	7.2	7.8	7.5	7.7	7.8	7.5	7.7
23	8.0	7.6	7.7	7.4	6.7	7.0	7.6	7.2	7.4	7.5	7.1	7.3
24	8.0	7.4	7.6	7.0	6.6	6.7	7.6	6.7	7.3	7.5	7.2	7.3
25	7.7	7.4	7.5	6.8	6.5	6.7	7.5	6.6	7.2	7.5	7.3	7.4
26	7.6	7.4	7.6	7.0	6.5	6.8	7.5	6.7	7.0	7.6	7.4	7.5
27	7.6	7.4	7.5	7.3	7.0	7.1	7.1	6.7	6.9	7.5	7.3	7.4
28	7.6	7.4	7.5	7.4	7.1	7.3	7.2	6.7	6.9	7.6	7.3	7.5
29	7.6	7.4	7.4	7.5	7.2	7.3	7.1	6.7	6.9	7.6	7.4	7.6
30	7.7	7.3	7.5	7.4	7.2	7.3	7.0	6.6	6.8	7.8	7.6	7.7
31	7.8	7.4	7.5	---	---	---	7.0	6.6	6.8	7.8	7.6	7.7
MONTH	8.1	7.0	7.5	8.0	6.5	7.3	8.0	6.6	7.4	8.0	6.8	7.4

SANTEE RIVER BASIN

02146507 LITTLE SUGAR CREEK AT ARCHDALE DRIVE AT CHARLOTTE, NC--Continued

PH, WATER, WHOLE, FIELD STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.8	7.6	7.7	8.2	7.5	7.7	7.5	7.3	7.4	7.6	7.2	7.4
2	7.7	7.4	7.6	7.6	6.7	7.3	7.6	7.4	7.5	7.6	7.1	7.3
3	7.6	7.4	7.4	7.0	6.6	6.8	7.9	7.4	7.6	7.4	7.1	7.3
4	7.7	7.3	7.5	7.2	6.8	7.0	7.8	7.4	7.6	7.3	7.0	7.1
5	7.8	7.5	7.6	7.3	7.1	7.2	7.9	7.4	7.6	7.0	6.8	6.9
6	7.9	7.5	7.7	7.5	7.1	7.2	8.1	7.4	7.6	7.1	6.8	7.0
7	7.7	7.5	7.6	7.5	7.0	7.2	8.0	7.2	7.4	7.6	7.0	7.3
8	7.6	7.5	7.6	7.6	6.9	7.2	8.2	7.2	7.5	7.6	7.2	7.3
9	7.7	7.3	7.5	7.7	7.1	7.3	8.2	7.4	7.7	7.7	7.2	7.4
10	7.6	7.2	7.4	8.1	7.1	7.3	8.0	7.5	7.7	7.9	7.4	7.6
11	7.5	7.2	7.3	8.0	7.0	7.4	8.3	7.5	7.8	7.7	7.4	7.5
12	7.8	7.3	7.4	7.9	7.2	7.5	8.0	7.7	7.8	7.6	7.2	7.4
13	7.6	7.3	7.4	7.7	7.1	7.4	8.1	7.5	7.7	7.8	7.1	7.4
14	7.5	7.3	7.4	7.7	7.2	7.3	8.0	7.3	7.6	7.6	7.2	7.3
15	7.6	7.2	7.4	8.0	7.2	7.4	8.2	7.3	7.6	7.7	7.3	7.5
16	7.5	7.1	7.2	8.1	7.3	7.6	8.3	7.4	7.6	7.6	7.3	7.4
17	7.6	7.0	7.2	7.7	7.2	7.4	8.2	7.3	7.6	7.8	7.4	7.5
18	7.6	6.9	7.2	7.8	7.3	7.5	8.2	7.4	7.6	7.4	7.2	7.4
19	8.2	7.4	7.7	7.9	7.5	7.7	8.1	7.3	7.6	7.6	7.4	7.5
20	8.0	7.5	7.7	8.0	7.6	7.8	8.1	7.2	7.5	7.8	7.4	7.5
21	8.2	7.5	7.8	7.6	7.5	7.6	8.5	7.2	7.6	7.9	7.4	7.6
22	8.7	7.6	7.9	7.9	7.6	7.8	8.4	7.1	7.7	7.8	7.5	7.6
23	8.2	7.5	7.8	8.0	7.8	7.8	8.6	7.5	7.8	7.8	7.4	7.6
24	8.2	7.4	7.6	8.0	7.7	7.8	8.3	7.4	7.8	7.8	7.3	7.6
25	8.1	7.3	7.6	8.0	7.6	7.8	7.8	7.3	7.5	7.7	7.1	7.4
26	8.6	7.4	7.7	8.1	7.6	7.8	7.9	7.4	7.6	7.7	7.0	7.3
27	8.4	7.6	7.9	7.9	7.6	7.7	8.0	7.3	7.6	7.6	7.0	7.2
28	8.2	7.5	7.8	8.1	7.6	7.8	7.7	7.1	7.4	---	---	---
29	---	---	---	8.0	7.5	7.7	7.9	7.1	7.4	---	---	---
30	---	---	---	7.8	7.5	7.6	8.1	7.3	7.6	8.0	6.9	7.5
31	---	---	---	7.6	7.4	7.5	---	---	---	7.2	6.9	7.1
MONTH	8.7	6.9	7.6	8.2	6.6	7.5	8.6	7.1	7.6	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.4	7.2	7.2	7.3	6.8	7.1	8.0	7.4	7.6	7.2	7.0	7.1
2	7.4	7.2	7.3	7.1	6.8	7.0	7.8	7.0	7.4	7.1	6.9	7.0
3	7.7	7.2	7.4	7.4	6.8	7.0	7.4	7.0	7.2	7.4	6.9	7.1
4	8.0	7.3	7.5	7.5	6.8	7.1	7.5	7.2	7.3	7.6	7.3	7.5
5	8.1	7.4	7.6	7.2	6.7	7.0	7.7	7.2	7.3	7.8	7.5	7.6
6	8.1	7.0	7.6	7.3	6.8	7.0	8.0	7.3	7.5	7.8	7.5	7.6
7	7.5	7.0	7.3	7.3	6.8	7.0	8.0	7.4	7.6	7.8	7.5	7.6
8	7.6	7.3	7.4	7.5	6.9	7.1	8.1	7.5	7.7	7.8	7.4	7.6
9	7.7	7.3	7.5	7.7	7.2	7.4	8.0	7.5	7.7	7.9	7.5	7.6
10	7.8	7.3	7.5	7.5	7.3	7.4	7.9	7.3	7.5	8.0	7.6	7.7
11	8.1	7.4	7.6	7.6	7.4	7.5	7.8	7.1	7.4	7.9	7.5	7.7
12	8.0	7.3	7.5	7.8	7.4	7.6	7.6	7.1	7.2	8.0	7.5	7.7
13	8.0	7.3	7.5	7.8	7.1	7.5	7.7	7.1	7.3	8.0	7.6	7.7
14	7.9	7.3	7.5	7.2	6.9	7.1	7.6	7.1	7.3	7.7	7.2	7.6
15	8.2	7.0	7.5	7.4	7.2	7.3	7.9	7.1	7.3	7.4	7.0	7.2
16	7.6	6.8	7.1	7.6	7.3	7.4	7.3	6.9	7.1	7.4	6.8	7.1
17	7.6	6.8	7.1	7.6	7.3	7.5	7.2	6.7	7.0	7.6	7.2	7.4
18	7.9	7.0	7.4	7.8	7.5	7.6	7.3	6.9	7.2	7.7	7.4	7.5
19	7.8	7.3	7.5	7.9	7.4	7.6	7.6	7.2	7.4	7.9	7.0	7.6
20	7.8	7.2	7.5	7.9	7.4	7.6	7.7	7.3	7.5	8.0	7.2	7.7
21	7.7	7.2	7.4	7.8	7.3	7.5	7.7	7.3	7.5	8.0	7.3	7.7
22	7.7	7.3	7.5	7.8	7.3	7.4	7.9	7.3	7.6	7.8	7.4	7.5
23	7.7	7.3	7.5	7.7	7.2	7.4	7.8	7.3	7.5	7.8	7.4	7.6
24	7.7	7.3	7.5	7.8	7.0	7.5	7.7	6.9	7.4	8.0	7.5	7.7
25	8.0	7.3	7.6	7.4	6.8	7.2	7.3	6.8	7.0	7.8	7.5	7.6
26	7.5	7.2	7.4	7.4	7.1	7.3	7.3	6.9	7.1	7.6	7.4	7.5
27	7.6	7.4	7.5	7.5	7.3	7.4	7.4	7.1	7.3	7.4	7.2	7.3
28	7.7	7.2	7.5	7.8	7.5	7.6	7.4	7.3	7.4	7.4	7.2	7.3
29	7.6	7.1	7.3	7.8	7.4	7.5	7.5	7.3	7.4	7.4	7.3	7.3
30	7.5	7.0	7.2	8.1	7.4	7.6	7.5	7.3	7.4	7.6	7.3	7.4
31	---	---	---	8.2	7.4	7.7	7.4	6.8	7.1	---	---	---
MONTH	8.2	6.8	7.4	8.2	6.7	7.4	8.1	6.7	7.4	8.0	6.8	7.5

SANTEE RIVER BASIN

02146507 LITTLE SUGAR CREEK AT ARCHDALE DRIVE AT CHARLOTTE, NC--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	24.9	20.4	23.2	22.5	17.6	20.9	21.8	19.2	20.6	15.3	11.3	13.5
2	25.9	21.7	23.8	22.1	16.9	19.9	21.2	18.1	19.8	13.6	10.1	12.7
3	26.0	22.4	24.3	22.7	19.4	21.2	20.5	16.8	19.1	12.9	6.8	10.3
4	26.2	22.7	24.5	22.5	19.9	21.3	20.1	16.0	18.7	11.4	5.7	8.8
5	26.0	23.1	24.6	21.8	18.9	20.4	20.7	15.9	18.8	12.9	6.4	10.6
6	24.8	20.0	21.6	21.4	18.0	19.9	21.1	17.5	19.5	12.0	3.0	7.7
7	23.6	19.4	21.6	22.1	17.5	20.0	21.7	15.3	19.7	10.9	5.1	8.8
8	23.7	19.9	22.1	20.9	17.6	19.5	21.3	19.0	20.2	12.4	6.3	10.8
9	23.8	19.5	22.0	21.6	18.4	20.1	20.1	18.6	19.4	13.7	9.5	12.1
10	24.1	20.5	22.5	21.3	18.0	19.9	18.8	9.4	15.5	15.3	9.4	13.6
11	24.6	21.7	23.4	21.4	18.1	19.9	15.9	9.9	12.8	16.3	11.5	14.8
12	24.7	22.6	23.8	21.0	17.5	19.6	18.6	15.2	16.7	14.8	11.2	13.6
13	24.9	22.0	23.8	21.2	17.0	19.0	18.5	16.1	17.6	13.5	8.5	11.5
14	24.1	21.3	22.8	20.6	14.4	19.2	20.0	16.3	18.9	13.8	9.6	12.7
15	23.9	20.1	22.1	20.7	15.8	19.5	20.0	17.1	18.9	15.4	10.9	13.6
16	24.3	20.6	22.6	21.0	15.7	19.6	18.8	15.7	17.8	14.8	10.7	13.7
17	23.6	19.0	22.0	21.4	18.3	20.0	19.4	14.5	17.8	15.5	11.5	14.0
18	23.6	18.2	21.7	21.1	18.2	19.7	17.4	13.2	16.0	16.2	13.2	14.8
19	23.2	18.4	21.6	21.2	17.9	19.8	18.1	14.8	16.9	15.2	5.3	10.4
20	23.8	20.1	21.9	20.8	18.2	19.8	17.8	15.0	16.6	10.4	6.0	8.3
21	24.0	20.6	22.5	20.1	16.8	18.7	17.5	14.0	16.1	11.4	7.6	9.4
22	24.7	21.2	23.2	20.1	16.1	18.3	17.0	13.1	15.3	13.1	7.6	11.2
23	25.2	22.3	23.7	19.7	15.0	18.1	16.8	12.5	15.6	13.1	7.2	9.1
24	25.3	22.2	24.0	18.5	13.9	16.1	16.7	11.7	15.2	13.1	9.9	11.9
25	24.3	19.4	21.3	20.6	17.9	19.4	16.4	11.1	14.7	12.6	11.1	12.0
26	22.9	19.4	21.4	21.4	18.1	20.2	16.5	10.4	14.2	13.2	9.3	11.5
27	21.7	16.8	20.5	22.0	18.6	20.8	16.1	11.4	13.8	13.9	9.5	12.2
28	21.9	18.2	20.0	21.8	18.3	20.6	15.3	8.9	13.8	15.5	12.1	14.1
29	21.8	16.7	19.8	22.2	18.8	21.2	16.6	12.5	14.8	16.6	12.6	15.0
30	22.0	17.5	20.0	21.7	19.9	21.1	15.9	11.2	14.3	18.1	14.9	16.5
31	22.0	16.1	20.4	---	---	---	15.1	12.0	13.9	18.4	15.9	17.1
MONTH	26.2	16.1	22.3	22.7	13.9	19.8	21.8	8.9	16.9	18.4	3.0	12.1
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.6	16.7	17.7	15.8	11.0	13.5	19.7	14.8	17.2	22.9	19.9	21.9
2	17.2	13.6	15.6	13.9	8.7	11.3	20.4	14.7	18.2	25.2	21.4	23.5
3	14.7	12.4	13.8	12.0	9.2	10.6	22.3	17.5	19.8	23.7	21.9	22.7
4	14.1	10.4	12.9	12.6	9.4	11.0	20.1	15.4	18.3	21.9	16.8	18.2
5	13.9	6.4	12.2	13.8	8.8	11.6	20.0	14.1	17.8	22.1	16.7	19.5
6	13.5	7.4	11.4	15.2	8.1	12.8	19.6	15.1	17.6	23.6	18.8	21.5
7	8.9	6.4	7.8	16.4	10.2	14.1	19.3	14.4	17.1	25.2	20.5	23.1
8	12.7	6.9	10.1	17.4	11.4	15.3	19.9	15.4	18.0	26.1	22.8	24.3
9	13.9	8.9	12.2	18.0	15.0	16.7	19.9	17.5	19.0	26.3	23.4	24.7
10	13.4	10.2	12.1	17.7	14.3	16.1	21.6	17.9	19.6	25.8	23.1	24.5
11	14.8	10.2	13.2	17.0	12.0	14.9	22.5	18.8	20.6	23.9	21.4	22.8
12	15.0	10.4	13.1	15.2	11.6	13.5	20.4	18.6	19.5	25.2	21.8	23.4
13	15.0	11.8	13.5	14.1	12.2	13.2	21.0	18.0	19.7	25.6	22.3	23.6
14	15.5	11.8	13.7	18.0	12.9	15.8	22.1	18.8	20.5	23.7	20.0	22.0
15	15.9	11.9	14.1	20.0	16.1	18.0	23.4	19.4	21.5	24.8	19.8	22.5
16	16.6	12.0	14.6	20.0	16.6	18.5	24.7	20.3	22.4	25.2	19.8	23.2
17	15.4	11.9	13.7	18.6	14.6	16.5	24.8	21.3	22.9	25.9	21.3	24.0
18	15.0	8.9	13.0	16.5	13.0	15.0	25.2	21.5	23.3	24.2	20.4	22.1
19	15.3	9.2	13.5	17.2	13.6	16.0	25.3	21.9	23.5	23.1	18.1	21.0
20	16.0	12.7	14.8	17.5	14.6	16.3	25.2	22.4	23.5	23.6	18.4	21.4
21	18.0	13.3	16.1	16.6	14.3	15.3	25.6	22.0	23.5	22.5	19.2	21.2
22	16.8	12.2	15.2	16.6	11.2	14.6	24.5	21.7	23.0	23.3	18.2	21.3
23	15.7	12.7	14.7	16.7	11.3	14.6	23.8	19.6	21.7	24.3	19.3	22.1
24	16.3	11.5	14.3	17.9	12.4	15.5	23.3	18.6	21.2	25.1	20.0	22.8
25	16.4	11.4	14.5	19.5	14.5	17.3	23.3	19.7	21.6	25.5	21.3	23.4
26	17.4	12.7	15.4	19.8	16.7	18.4	22.1	18.7	20.9	25.6	21.7	23.6
27	15.9	12.3	14.4	20.6	16.7	18.5	23.0	19.4	21.3	25.9	21.8	23.9
28	15.3	10.9	13.3	18.6	14.9	16.9	23.5	20.8	22.1	---	---	---
29	---	---	---	19.7	15.1	17.4	24.5	20.7	22.6	---	---	---
30	---	---	---	18.0	16.5	17.4	23.9	19.0	22.0	25.8	22.4	24.3
31	---	---	---	18.6	16.1	17.3	---	---	---	26.2	22.6	24.4
MONTH	18.6	6.4	13.6	20.6	8.1	15.3	25.6	14.1	20.7	---	---	---

SANTEE RIVER BASIN

02146507 LITTLE SUGAR CREEK AT ARCHDALE DRIVE AT CHARLOTTE, NC--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	27.7	23.9	25.6	29.1	25.0	27.1	31.0	27.7	29.4	24.4	21.8	23.1
2	27.6	24.4	26.0	29.5	25.5	27.4	30.7	26.5	28.8	26.9	23.1	25.3
3	28.2	24.9	26.2	30.1	26.4	27.9	30.4	25.8	28.1	28.4	24.4	26.6
4	28.8	25.0	26.6	29.6	26.1	27.6	30.8	27.2	28.9	29.5	25.1	27.5
5	28.8	25.6	27.0	29.4	26.1	27.8	31.1	27.6	29.3	29.5	26.5	27.9
6	28.0	24.8	26.5	29.6	27.0	28.0	31.3	28.1	29.6	28.9	25.5	27.2
7	27.1	24.4	25.7	29.1	26.4	27.6	30.5	26.8	28.8	29.0	26.0	27.4
8	27.3	23.6	25.4	29.3	25.5	27.6	30.6	26.2	28.7	29.0	25.6	27.2
9	27.5	23.4	25.4	29.9	26.3	28.1	30.7	25.3	28.6	29.0	25.5	27.4
10	27.7	22.8	25.7	29.8	27.0	28.5	30.9	26.9	29.0	29.3	25.4	27.6
11	28.3	23.6	26.4	28.2	27.0	27.7	30.4	26.9	28.7	29.4	25.9	27.7
12	28.7	24.3	26.8	27.9	25.4	27.2	30.5	27.0	28.9	28.8	26.0	27.4
13	28.8	25.5	27.1	28.6	24.8	27.3	30.7	27.2	29.1	28.6	26.0	27.4
14	28.4	25.7	27.0	26.7	24.1	25.5	30.3	27.8	29.1	27.9	23.9	27.0
15	28.8	25.2	26.8	28.6	25.3	27.0	30.4	26.2	28.6	25.1	23.4	24.1
16	27.7	23.9	26.0	30.4	26.4	28.2	29.4	25.0	27.3	26.8	23.6	25.2
17	27.6	24.3	26.1	30.2	27.0	28.5	28.5	24.7	26.5	27.3	24.1	26.1
18	27.6	24.8	26.4	30.5	27.6	28.9	29.6	25.9	27.8	27.5	25.6	26.9
19	28.4	25.2	26.9	30.9	27.7	29.1	30.5	27.0	28.6	28.1	24.8	27.0
20	28.7	25.7	27.0	30.5	27.8	28.9	30.7	26.7	28.9	27.9	25.7	27.3
21	28.2	25.4	26.8	30.8	27.5	29.1	31.0	27.1	29.4	28.8	25.8	27.4
22	27.8	25.4	26.7	30.8	27.2	29.0	31.2	27.6	29.6	28.7	26.0	27.3
23	28.2	25.8	27.0	30.6	27.0	28.8	31.4	28.1	29.7	28.0	25.6	26.9
24	28.7	25.4	27.2	30.9	26.7	28.9	31.7	28.0	29.6	27.7	25.0	26.6
25	29.2	26.1	27.8	29.0	26.1	27.3	30.3	26.9	28.1	26.6	25.4	26.1
26	27.5	25.8	26.7	30.3	26.2	28.4	29.0	26.2	27.7	26.1	20.7	22.5
27	29.4	25.4	27.5	31.2	27.8	29.5	27.5	25.1	26.5	25.5	22.9	24.4
28	28.8	26.1	27.6	31.4	28.2	29.8	27.1	23.9	25.7	26.4	23.7	25.2
29	29.0	26.2	27.6	31.4	28.4	29.8	27.6	25.0	26.4	26.9	24.7	25.9
30	29.1	25.5	27.2	32.0	28.3	30.0	27.3	26.2	26.9	27.5	23.6	26.0
31	---	---	---	31.7	28.6	29.9	26.8	21.1	23.1	---	---	---
MONTH	29.4	22.8	26.6	32.0	24.1	28.3	31.7	21.1	28.2	29.5	20.7	26.4

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.9	6.6	7.3	8.3	6.4	7.0	7.8	6.5	7.0	9.9	8.2	8.7
2	9.1	6.3	7.2	8.1	5.8	6.7	8.1	6.8	7.3	9.4	8.4	8.8
3	8.9	6.2	7.1	6.8	5.6	6.1	8.6	7.1	7.6	10.3	8.4	9.3
4	9.3	6.1	7.1	7.9	6.0	6.8	8.8	7.5	7.9	9.9	8.8	9.3
5	8.9	6.1	7.0	8.0	6.6	7.1	9.0	7.4	8.0	9.3	8.0	8.7
6	---	---	---	8.3	7.0	7.4	8.8	7.2	7.8	---	---	---
7	---	---	---	8.1	6.9	7.3	10.2	7.2	7.9	---	---	---
8	---	---	---	8.6	6.9	7.4	9.5	7.0	7.8	---	---	---
9	---	---	---	8.6	6.8	7.4	9.2	7.1	7.8	---	---	---
10	9.4	7.2	7.9	8.5	6.8	7.4	---	---	---	---	---	---
11	9.3	7.0	7.8	8.6	6.7	7.3	---	---	---	---	---	---
12	9.7	7.0	7.9	8.9	6.8	7.4	---	---	---	---	---	---
13	9.5	7.2	8.0	8.5	7.0	7.5	8.0	7.4	7.7	---	---	---
14	8.6	6.6	7.2	9.3	6.8	7.5	7.6	7.1	7.4	---	---	---
15	8.5	6.7	7.3	8.8	6.7	7.4	7.8	7.0	7.4	---	---	---
16	8.5	6.6	7.2	9.0	6.8	7.5	8.4	7.4	7.7	10.2	8.5	9.1
17	8.9	6.7	7.3	9.6	6.8	7.5	8.2	7.3	7.7	10.4	8.6	9.1
18	8.2	6.4	7.0	9.3	6.8	7.5	7.9	7.3	7.6	10.5	8.4	9.0
19	8.4	6.5	7.1	8.8	6.6	7.3	8.1	7.4	7.7	11.1	8.3	9.3
20	9.1	6.7	7.4	8.3	6.4	7.0	8.3	7.6	7.9	10.2	3.3	6.5
21	9.2	6.8	7.6	8.4	6.5	7.0	8.7	7.8	8.2	9.8	7.7	8.7
22	9.4	6.8	7.6	8.4	6.6	7.2	9.2	8.1	8.5	9.8	8.2	9.1
23	9.2	6.7	7.6	9.6	6.9	7.7	9.0	8.0	8.5	10.8	8.3	9.7
24	9.6	6.8	7.5	8.2	6.4	7.0	9.1	7.7	8.3	8.7	3.8	6.6
25	7.6	6.1	6.5	7.0	5.9	6.5	9.1	7.7	8.3	---	---	---
26	7.3	6.4	6.8	7.5	6.4	6.9	9.9	8.1	8.5	---	---	---
27	7.9	6.7	7.2	7.7	6.4	6.9	9.4	8.1	8.5	---	---	---
28	8.2	7.0	7.4	8.2	6.6	7.2	9.0	7.9	8.4	---	---	---
29	8.3	7.0	7.4	7.9	6.6	7.1	9.3	7.8	8.2	---	---	---
30	8.2	6.8	7.3	7.2	6.2	6.8	9.6	7.8	8.4	---	---	---
31	8.2	6.5	7.1	---	---	---	9.6	8.2	8.6	---	---	---
MONTH	---	---	---	9.6	5.6	7.2	---	---	---	---	---	---

02146507 LITTLE SUGAR CREEK AT ARCHDALE DRIVE AT CHARLOTTE, NC--Continued

OXYGEN DISSOLVED (% OF SATURATION), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	109	76	88	97	71	81	91	74	80	97	80	86
2	113	76	88	91	65	76	93	74	82	93	81	85
3	113	74	87	81	63	71	97	76	85	92	81	85
4	117	74	87	93	70	79	98	80	87	90	78	83
5	111	74	87	94	73	82	101	81	88	87	76	81
6	---	---	---	96	77	84	100	79	87	---	---	---
7	---	---	---	94	77	83	112	79	89	---	---	---
8	---	---	---	97	74	83	109	78	89	---	---	---
9	---	---	---	100	75	84	104	79	87	---	---	---
10	114	83	94	99	75	83	---	---	---	---	---	---
11	115	82	95	98	73	83	---	---	---	---	---	---
12	119	84	97	101	74	84	---	---	---	---	---	---
13	118	86	98	97	75	83	87	80	83	---	---	---
14	104	77	87	104	74	84	86	78	82	---	---	---
15	103	76	86	100	72	83	88	77	82	---	---	---
16	104	77	86	104	73	85	92	79	84	102	83	91
17	107	76	87	109	75	85	92	76	83	104	84	91
18	99	72	83	105	74	85	83	74	79	108	84	92
19	100	72	83	102	73	83	88	77	82	91	69	85
20	109	77	87	95	70	79	90	79	83	85	30	57
21	112	78	90	93	69	78	92	80	85	85	70	78
22	116	80	92	93	70	78	95	83	87	95	71	85
23	114	80	92	103	75	84	95	84	88	94	76	87
24	120	81	92	82	69	73	93	76	85	80	37	63
25	87	71	76	80	64	74	95	78	85	---	---	---
26	88	72	80	87	70	79	96	80	85	---	---	---
27	90	73	82	90	70	79	93	80	84	---	---	---
28	94	78	84	96	72	83	92	78	84	---	---	---
29	96	77	84	93	73	83	96	78	84	---	---	---
30	96	76	83	84	70	78	97	78	85	---	---	---
31	96	73	81	---	---	---	95	80	86	---	---	---
MONTH	---	---	---	109	63	81	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	129	83	100	84	69	75	98	66	81
2	---	---	---	---	---	---	99	70	83	111	56	82
3	---	---	---	---	---	---	110	74	88	89	58	76
4	---	---	---	---	---	---	100	71	83	83	70	78
5	---	---	---	101	89	94	105	72	84	90	71	80
6	---	---	---	104	87	93	107	71	85	94	69	79
7	86	82	84	104	84	92	116	71	88	106	64	82
8	92	83	87	108	80	91	116	70	88	113	70	86
9	98	84	89	112	78	90	111	66	82	111	59	80
10	91	85	87	115	76	92	102	63	77	97	54	71
11	98	82	89	121	77	94	114	60	83	83	55	65
12	105	85	91	92	77	84	93	67	79	89	54	68
13	104	86	93	86	83	85	106	70	85	---	---	---
14	108	87	95	103	82	90	118	72	90	---	---	---
15	113	88	97	113	83	93	125	68	92	---	---	---
16	116	89	99	113	79	93	130	68	94	106	76	90
17	117	84	100	86	79	83	133	69	95	114	72	89
18	121	91	102	97	82	88	139	71	98	79	69	75
19	128	88	102	104	82	90	141	65	97	98	72	83
20	118	85	96	104	81	89	135	65	95	103	74	87
21	126	78	95	87	72	81	139	66	95	104	73	86
22	129	73	93	85	70	76	130	63	92	109	74	87
23	120	77	94	89	71	78	135	66	92	106	68	84
24	123	77	93	93	70	79	126	66	91	111	66	83
25	122	75	92	96	69	81	107	55	77	111	63	83
26	123	72	89	103	70	82	102	51	77	112	63	85
27	119	74	92	94	62	75	115	68	87	114	60	85
28	122	81	96	100	66	79	109	60	84	---	---	---
29	---	---	---	107	68	82	116	60	85	---	---	---
30	---	---	---	88	68	78	121	60	88	---	---	---
31	---	---	---	90	62	78	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	141	51	87	---	---	---



Gaging station at Brasstown Creek at Brasstown, North Carolina.

SANTEE RIVER BASIN

02146530 LITTLE SUGAR CREEK AT HIGHWAY 51 AT PINEVILLE, NC

LOCATION.--Lat 35°05'07", long 80°52'56", North American Datum of 1983, 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 mi².

PERIOD OF RECORD.--Occasional discharge measurements, water years 1966-97. June 1997 to current year.

GAGE.--Water-stage recorder. Datum of gage is 531.94 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--Records good. A daily average of 21.2 ft³/s of treated effluent from Little Sugar Creek wastewater treatment plant was discharged into the stream 5.2 mi upstream from the gage. Maximum gage height for period of record from floodmarks. Maximum discharge for period of record from rating curve extended above 10,100 ft³/s.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	25	27	27	41	28	180	38	40	113	28	118
2	28	53	25	28	32	386	37	30	39	52	59	40
3	28	36	24	34	30	313	38	41	32	25	78	33
4	28	24	25	44	28	63	33	232	30	32	25	46
5	28	24	24	34	27	43	30	47	29	25	24	43
6	131	25	25	403	34	37	29	28	50	23	24	45
7	34	28	23	76	276	34	28	26	125	22	24	26
8	26	26	23	40	117	33	28	26	32	22	22	26
9	25	25	21	34	39	32	29	26	28	23	23	25
10	25	25	254	33	66	32	37	26	28	23	22	26
11	25	24	259	32	43	31	31	43	29	24	23	26
12	24	25	39	31	33	123	34	26	27	24	22	26
13	23	26	37	49	32	119	37	180	26	96	22	25
14	36	23	35	31	31	44	30	93	26	919	22	36
15	33	25	31	30	31	34	30	29	25	59	24	284
16	23	24	30	29	31	30	33	28	25	34	120	216
17	22	24	40	29	30	207	31	26	26	30	546	74
18	22	25	154	30	29	57	31	82	26	28	95	30
19	22	25	34	540	29	34	31	31	26	28	37	29
20	22	25	30	281	30	36	30	24	26	27	31	27
21	22	25	29	129	33	208	28	24	26	25	27	26
22	23	24	28	55	27	49	27	26	25	26	26	25
23	23	25	28	706	28	37	24	26	25	27	28	25
24	22	129	33	103	28	35	25	24	26	42	39	25
25	144	29	28	252	28	33	31	23	26	214	81	25
26	28	26	26	54	28	38	29	23	103	73	54	164
27	24	26	27	42	28	43	28	23	43	29	52	67
28	25	26	28	39	28	30	28	24	27	26	51	44
29	25	25	27	36	---	30	28	24	27	25	33	27
30	26	26	27	34	---	51	28	397	30	25	25	26
31	27	---	27	33	---	146	---	152	---	25	927	---
TOTAL	1022	898	1468	3318	1237	2416	1063	1848	1053	2166	2614	1655
MEAN	32.97	29.93	47.35	107.0	44.18	77.94	35.43	59.61	35.10	69.87	84.32	55.17
MAX	144	129	259	706	276	386	180	397	125	919	927	284
MIN	22	23	21	27	27	28	24	23	25	22	22	25
CFSM	0.67	0.61	0.96	2.18	0.90	1.58	0.72	1.21	0.71	1.42	1.71	1.12
IN.	0.77	0.68	1.11	2.51	0.94	1.83	0.80	1.40	0.80	1.64	1.98	1.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)

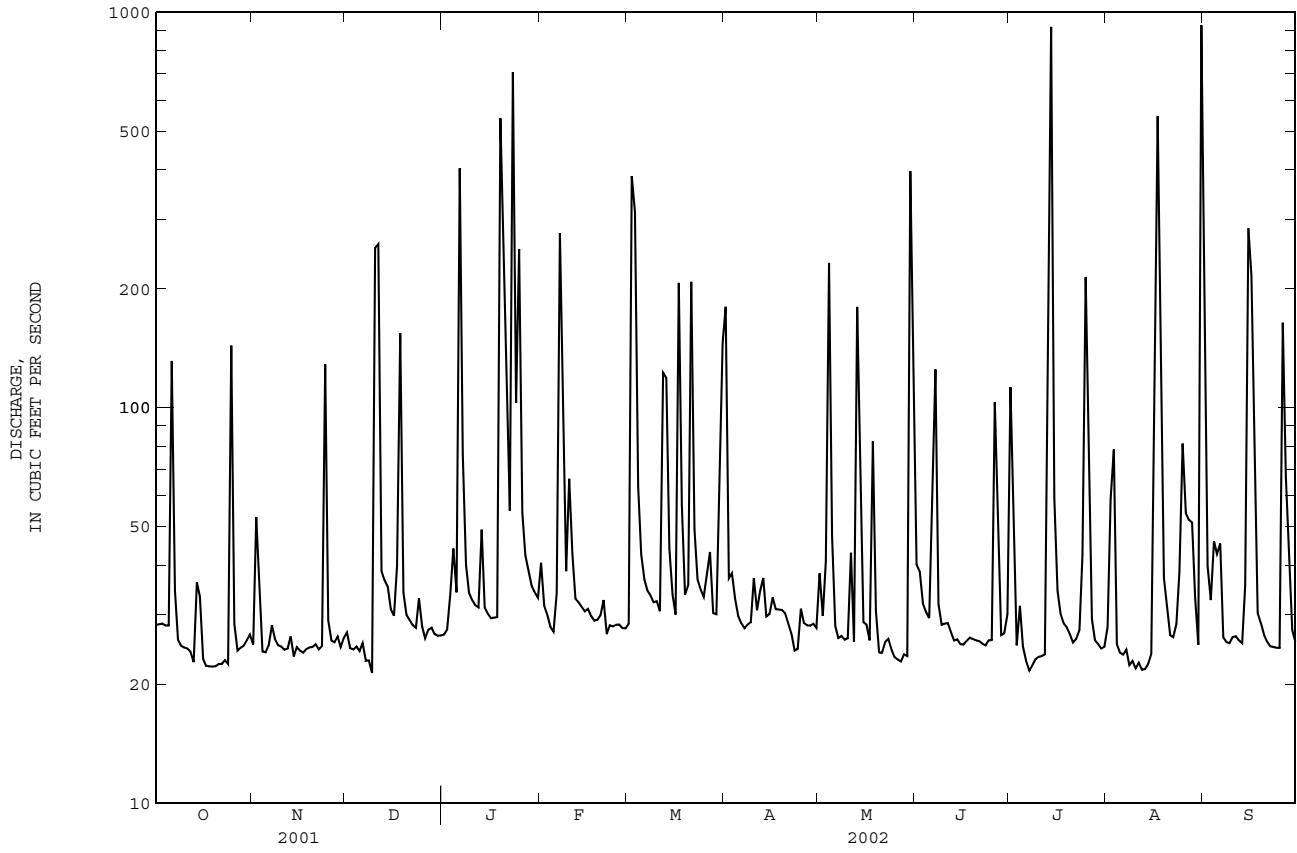
	MEAN	62.00	55.56	68.68	131.0	92.55	98.90	98.79	54.56	66.47	122.2	60.63	79.47
MAX	115	95.0	130	236	167	140	209	209	69.4	90.6	336	84.4	127
(WY)	2000	1998	1998	1998	1998	2001	1998	1998	1997	1997	1997	2000	2000
MIN	32.6	28.1	45.5	53.0	44.2	55.5	35.4	40.1	35.1	57.1	36.3	55.2	
(WY)	2002	2002	2002	2001	2002	1999	2002	1999	2002	2001	2001	2002	

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1997 - 2002

ANNUAL TOTAL	22047	20758	
ANNUAL MEAN	60.40	56.87	79.27
HIGHEST ANNUAL MEAN			123 1998
LOWEST ANNUAL MEAN			56.6 2002
HIGHEST DAILY MEAN	999	Mar 29	927 Aug 31
LOWEST DAILY MEAN	21	Dec 9	21 Dec 9
ANNUAL SEVEN-DAY MINIMUM	22	Oct 16	22 Oct 16
MAXIMUM PEAK FLOW			2860 Aug 31
MAXIMUM PEAK STAGE			12.37 Aug 31
INSTANTANEOUS LOW FLOW			10 Aug 15
ANNUAL RUNOFF (CFSM)	1.23	1.16	1.61
ANNUAL RUNOFF (INCHES)	16.67	15.70	21.89
10 PERCENT EXCEEDS	108	115	155
50 PERCENT EXCEEDS	35	29	38
90 PERCENT EXCEEDS	25	24	27

* See REMARKS.

02146530 LITTLE SUGAR CREEK AT HIGHWAY 51 AT PINEVILLE, NC--Continued



SANTEE RIVER BASIN

0214655255 MCALPINE CREEK AT STATE ROAD 3150 NEAR IDLEWILD, NC

LOCATION.--Lat 35°10'33", long 80°43'09", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, on left bank at upstream side of culvert on State Road 3120 (Idlewild Road), 1.5 mi above Irvins Creek, and 1.6 mi southeast of Idlewild.

DRAINAGE AREA.--7.52 mi².

PERIOD OF RECORD.--June 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is 613.19 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--Records poor. No flow also occurred July 11, Aug. 13-14, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.19	0.80	0.93	1.3	3.0	1.4	21	0.97	0.64	0.55	0.38	14
2	0.24	0.88	0.77	1.5	1.5	28	5.0	0.83	0.56	0.83	1.0	3.3
3	0.16	0.84	0.79	2.7	1.2	25	3.5	1.7	0.51	0.27	1.2	1.8
4	0.37	0.78	0.73	3.0	1.2	6.7	2.7	7.5	0.57	0.28	0.15	1.1
5	0.09	0.86	0.78	1.3	1.1	3.5	2.1	2.6	0.58	0.88	0.19	0.76
6	2.3	0.76	0.75	19	2.3	2.8	1.9	1.3	3.2	0.76	0.23	0.66
7	0.62	0.66	0.78	6.1	20	2.5	1.8	1.0	1.6	0.30	0.16	0.55
8	0.24	0.66	0.83	2.1	11	2.1	1.7	0.96	0.46	0.04	0.10	0.43
9	0.13	0.74	0.80	1.2	4.1	2.0	2.1	0.89	0.36	0.01	0.02	0.41
10	0.10	0.88	16	1.1	3.5	2.4	2.7	0.95	0.31	0.00	0.02	0.38
11	0.11	1.0	12	0.91	3.1	1.9	1.8	1.4	0.30	0.00	0.01	0.26
12	0.27	1.1	2.5	0.74	2.7	5.8	1.7	0.94	0.31	0.01	0.01	0.17
13	0.24	1.0	1.6	1.6	2.3	7.9	1.8	9.7	0.29	0.06	0.00	0.13
14	3.2	0.81	1.2	0.92	2.1	4.2	1.5	3.6	0.16	7.5	0.00	0.41
15	1.5	0.67	1.0	0.79	2.1	3.0	1.4	1.6	0.20	2.0	0.04	17
16	0.52	0.63	0.88	0.69	2.0	3.0	1.4	1.2	0.15	1.0	2.7	12
17	1.1	0.60	2.2	0.74	2.0	15	1.2	1.0	0.18	0.69	15	2.3
18	0.69	0.71	5.5	0.68	1.9	7.1	1.1	3.0	0.24	0.34	3.1	1.5
19	0.38	0.75	1.6	44	1.7	4.0	1.1	1.3	1.6	0.18	1.5	1.1
20	0.42	0.84	0.96	21	1.9	4.3	1.0	1.1	0.12	0.09	1.1	0.90
21	0.45	0.71	0.75	9.4	2.0	14	0.97	0.93	0.06	0.12	0.77	0.69
22	0.52	0.52	0.70	3.9	1.8	5.9	0.94	0.90	0.03	0.14	0.72	0.57
23	0.46	0.49	0.72	61	1.8	3.6	0.90	1.00	0.06	0.07	1.0	0.51
24	0.57	2.0	1.1	9.2	1.7	3.1	0.87	0.94	0.04	3.3	1.2	0.47
25	7.2	0.83	0.93	20	1.6	2.8	1.1	0.85	0.14	2.2	1.8	0.51
26	1.4	0.92	0.88	4.4	1.7	4.7	0.82	0.82	2.7	0.73	2.3	4.8
27	1.0	0.83	0.88	2.3	1.7	4.3	0.81	0.80	1.5	0.69	5.0	2.8
28	0.90	0.86	0.96	1.8	1.5	2.9	0.80	0.79	1.3	0.36	11	2.0
29	0.82	0.78	1.1	1.4	---	3.0	0.79	0.55	0.71	0.53	5.6	1.0
30	0.81	0.75	1.5	1.1	---	4.0	0.74	7.6	0.46	0.34	5.0	0.84
31	0.80	---	1.6	1.4	---	21	---	1.6	---	0.29	e136	---
TOTAL	27.80	24.66	63.72	227.27	84.5	201.9	67.24	60.32	19.34	24.56	197.30	73.35
MEAN	0.897	0.822	2.055	7.331	3.018	6.513	2.241	1.946	0.645	0.792	6.365	2.445
MAX	7.2	2.0	16	61	20	28	21	9.7	3.2	7.5	136	17
MIN	0.09	0.49	0.70	0.68	1.1	1.4	0.74	0.55	0.03	0.00	0.00	0.13
CFSM	0.12	0.11	0.27	0.97	0.40	0.87	0.30	0.26	0.09	0.11	0.85	0.33
IN.	0.14	0.12	0.32	1.12	0.42	1.00	0.33	0.30	0.10	0.12	0.98	0.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
MEAN	3.385	2.224	2.112	6.496	6.435	10.26	4.859	1.942	1.998	2.659	2.685	4.509
MAX	8.81	3.05	2.58	9.20	11.9	18.9	9.09	2.52	3.68	4.06	6.36	7.59
(WY)	2000	2001	2000	2000	2000	2001	2000	2001	2001	2000	2002	2000
MIN	0.45	0.82	1.70	2.96	3.02	5.35	2.24	1.36	0.64	0.79	0.63	2.44
(WY)	2001	2002	2001	2001	2002	2000	2002	2000	2002	2002	2001	2002

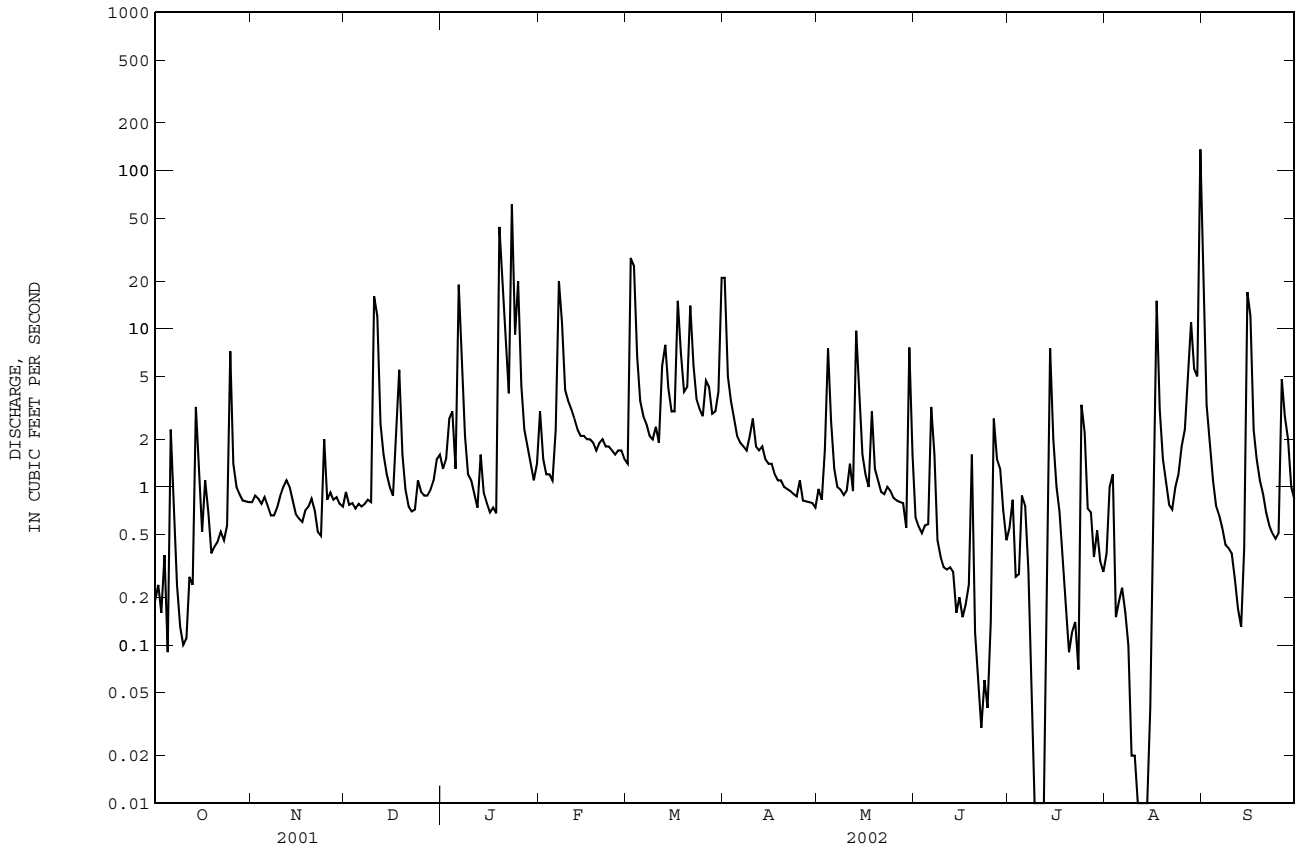
SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1999 - 2002

ANNUAL TOTAL	1365.93	1071.96	
ANNUAL MEAN	3.742	2.937	4.090
HIGHEST ANNUAL MEAN			5.47 2000
LOWEST ANNUAL MEAN			2.94 2002
HIGHEST DAILY MEAN	76 Mar 29	136 Aug 31	136 Aug 31 2002
LOWEST DAILY MEAN	0.01 Aug 29	0.00 Jul 10	0.00 Jul 10 2002
ANNUAL SEVEN-DAY MINIMUM	0.04 Sep 13	0.01 Aug 9	0.01 Aug 9 2002
MAXIMUM PEAK FLOW		NOT DETERMINED	NOT DETERMINED
MAXIMUM PEAK STAGE		6.34 Aug 31	6.34 Aug 31 2002
INSTANTANEOUS LOW FLOW		0.00* Jul 10	0.00* Jul 10 2002
ANNUAL RUNOFF (CFSM)	0.50	0.39	0.54
ANNUAL RUNOFF (INCHES)	6.76	5.30	7.39
10 PERCENT EXCEEDS	8.8	5.2	8.9
50 PERCENT EXCEEDS	1.3	1.0	1.4
90 PERCENT EXCEEDS	0.24	0.18	0.19

e Estimated.

* See REMARKS.

0214655255 MCALPINE CREEK AT STATE ROAD 3150 NEAR IDLEWILD, NC--Continued



SANTEE RIVER BASIN

02146562 CAMPBELL CREEK NEAR CHARLOTTE, NC

LOCATION.--Lat 35°11'12", long 80°44'12", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, on right bank upstream side culvert on Secondary Road 3150, 2.3 mi upstream from mouth, and 6.0 mi east of Charlotte.

DRAINAGE AREA.--5.6 mi².

PERIOD OF RECORD.--June 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is 663.92 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No flow also occurred Aug. 10-14, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.07	0.15	0.23	0.72	2.9	0.89	15	1.7	0.63	0.41	0.01	6.5
2	0.06	15	0.21	0.68	1.3	59	3.4	0.74	0.51	0.43	2.6	1.0
3	0.07	1.0	0.24	e1.6	1.1	24	2.6	2.5	0.36	0.21	0.61	0.43
4	0.07	0.23	0.20	e1.7	0.99	4.3	1.8	16	0.32	0.16	0.09	0.28
5	0.07	0.22	0.22	1.3	1.00	2.1	1.6	1.9	0.30	0.15	0.04	0.20
6	5.4	0.20	0.20	27	7.0	1.6	1.5	0.99	9.1	0.12	0.05	0.16
7	0.25	0.20	0.21	3.9	24	1.3	1.5	0.87	2.5	0.14	0.01	0.15
8	0.13	0.23	0.22	1.5	8.9	1.2	1.4	0.74	0.47	0.14	0.00	0.12
9	0.08	0.20	0.23	1.1	2.7	1.2	1.8	0.65	0.34	0.14	0.01	0.11
10	0.11	0.22	38	0.94	4.7	1.1	3.4	1.3	0.30	0.15	0.00	0.11
11	0.11	0.21	11	0.80	2.2	0.99	1.4	2.0	0.25	0.16	0.00	0.10
12	0.13	0.21	1.4	1.5	1.5	11	1.9	0.72	0.22	0.11	0.00	0.08
13	0.11	0.21	1.4	2.2	1.3	10	1.5	15	0.23	2.3	0.00	0.13
14	3.3	0.21	0.90	0.89	1.2	2.8	1.3	2.1	0.24	18	0.00	4.0
15	0.27	0.19	0.62	0.77	1.1	1.7	1.5	0.72	0.20	1.2	1.3	30
16	0.13	0.22	0.56	0.72	1.1	2.5	1.3	0.58	0.16	0.33	14	8.6
17	0.17	0.21	6.1	0.77	0.99	18	1.1	0.55	0.16	0.20	32	0.80
18	0.17	0.19	5.7	0.73	0.95	4.2	1.0	5.0	1.0	0.17	2.2	0.40
19	0.18	0.20	0.95	80	0.95	2.2	0.99	0.73	0.50	0.13	1.6	0.30
20	0.18	0.21	0.72	14	1.3	3.6	0.97	0.53	0.22	0.21	0.21	0.22
21	0.18	0.23	0.58	12	1.2	19	0.92	0.48	0.24	0.13	0.04	0.19
22	0.18	0.20	0.55	3.2	1.1	3.5	0.88	0.43	0.17	0.09	0.01	0.32
23	0.19	0.40	0.56	87	1.1	2.0	0.83	0.41	0.19	0.09	0.01	0.18
24	0.19	3.1	1.9	10	1.0	1.6	0.82	0.44	0.19	6.7	0.31	0.16
25	21	0.15	0.61	21	0.97	1.5	2.0	0.44	1.8	1.3	3.0	0.16
26	0.43	0.21	0.55	3.7	0.98	5.1	0.83	0.36	8.3	0.28	0.60	9.2
27	0.29	0.23	0.58	2.2	0.92	2.3	0.79	0.32	1.3	0.12	2.9	3.8
28	0.28	0.21	0.61	1.6	0.89	1.4	0.83	0.30	0.68	0.07	7.1	0.75
29	0.24	0.20	0.69	1.4	---	1.3	0.79	0.29	0.34	0.06	0.53	0.29
30	0.25	0.18	0.77	1.2	---	4.4	0.74	37	0.23	0.04	0.18	0.22
31	0.31	---	0.77	3.4	---	21	---	2.5	---	0.01	159	---
TOTAL	34.60	24.82	77.48	289.52	75.34	216.78	56.39	98.29	31.45	33.75	228.41	68.96
MEAN	1.116	0.827	2.499	9.339	2.691	6.993	1.880	3.171	1.048	1.089	7.368	2.299
MAX	21	15	38	87	24	59	15	37	9.1	18	159	30
MIN	0.06	0.15	0.20	0.68	0.89	0.89	0.74	0.29	0.16	0.01	0.00	0.08
CFSM	0.20	0.15	0.45	1.67	0.48	1.25	0.34	0.57	0.19	0.19	1.32	0.41
IN.	0.23	0.16	0.51	1.92	0.50	1.44	0.37	0.65	0.21	0.22	1.52	0.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
MEAN	4.043	2.446	2.287	6.847	5.168	7.751	4.234	3.149	2.191	3.564	3.872	6.884
MAX	10.5	3.44	2.50	9.34	8.77	10.9	8.31	3.34	3.69	6.14	7.37	14.1
(WY)	2000	2001	2002	2002	2000	2001	2000	2000	2001	2000	2002	2000
MIN	0.54	0.83	1.90	2.88	2.69	5.35	1.88	2.94	1.05	1.09	0.98	2.30
(WY)	2001	2002	2001	2001	2002	2000	2002	2001	2002	2002	2001	2002

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

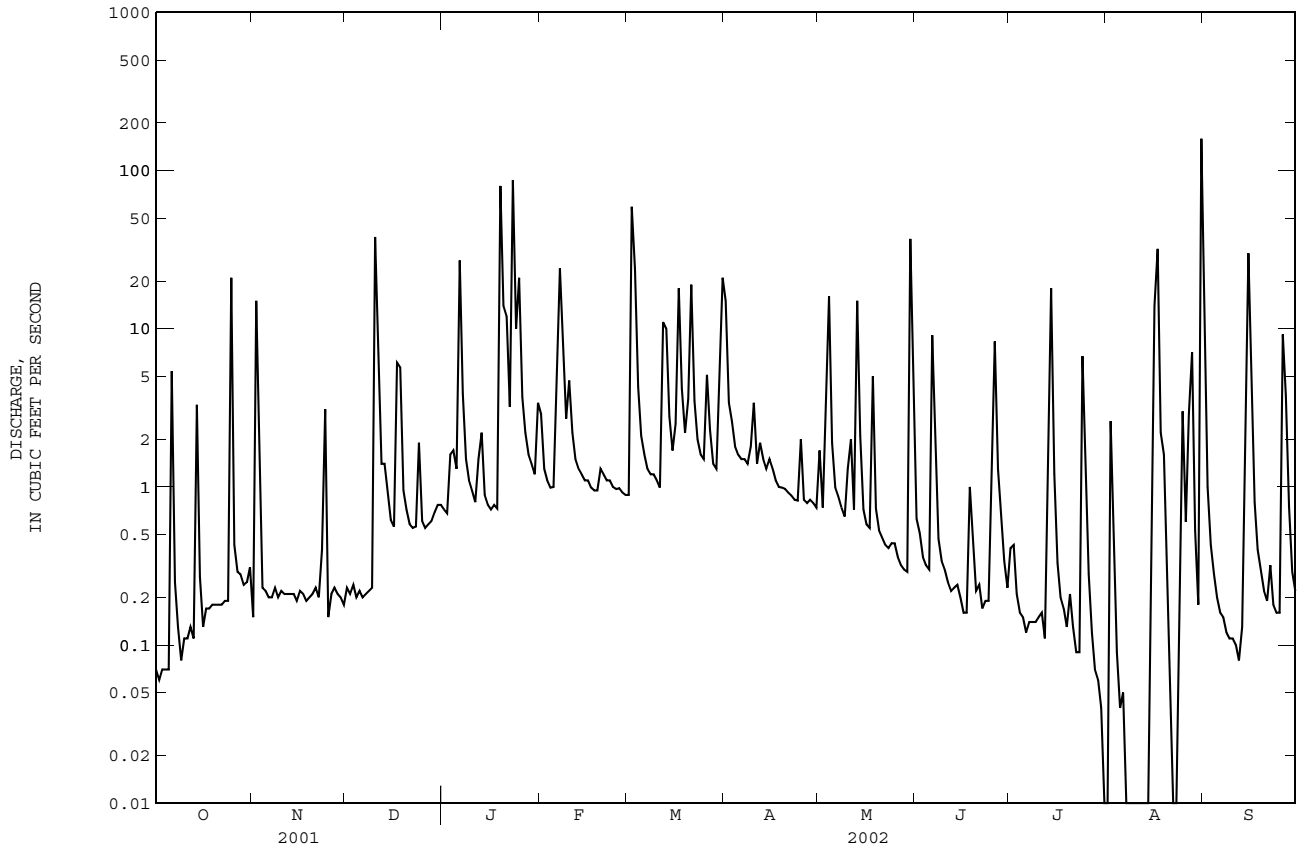
FOR 2002 WATER YEAR

WATER YEARS 1999 - 2002

ANNUAL TOTAL	1240.02	1235.79
ANNUAL MEAN	3.397	3.386
HIGHEST ANNUAL MEAN		4.463
LOWEST ANNUAL MEAN		6.49
HIGHEST DAILY MEAN		3.39
LOWEST DAILY MEAN	87 Mar 29	159 Aug 31
ANNUAL SEVEN-DAY MINIMUM	0.05 Aug 26	0.00 Aug 8
MAXIMUM PEAK FLOW	0.07 Sep 29	564 Aug 31
MAXIMUM PEAK STAGE		4.88 Aug 31
INSTANTANEOUS LOW FLOW		0.00* Aug 8
ANNUAL RUNOFF (CFSM)	0.61	0.60
ANNUAL RUNOFF (INCHES)	8.24	8.21
10 PERCENT EXCEEDS	6.3	6.6
50 PERCENT EXCEEDS	0.89	0.72
90 PERCENT EXCEEDS	0.16	0.12

e Estimated.
* See REMARKS.

02146562 CAMPBELL CREEK NEAR CHARLOTTE, NC--Continued



SANTEE RIVER BASIN

0214657975 IRVINS CREEK AT SR3168 NEAR CHARLOTTE, NC

LOCATION.--Lat 35°09'31", long 80°42'48", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, on right bank at downstream side of bridge on Secondary Road 3168, 4.0 mi southwest of Mint Hill.

DRAINAGE AREA.--8.37 mi².

PERIOD OF RECORD.--June 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is 612.56 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--Records fair except those above 500 ft³/s, which are poor. Maximum discharge for current water year and period of record from rating curve extended above 500 ft³/s by step-backwater analysis. No flow also occurred Aug. 14-15, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.10	0.12	0.18	0.24	2.4	1.1	24	1.7	0.76	0.09	0.02	5.5
2	0.12	0.16	0.13	0.28	1.5	30	4.3	0.88	0.53	0.14	0.06	1.4
3	0.11	0.11	0.10	0.58	1.3	24	3.5	1.4	0.43	0.07	0.23	0.56
4	0.11	0.09	0.10	0.81	1.3	5.6	2.8	4.7	0.37	0.05	0.07	0.35
5	0.14	0.07	0.12	0.87	1.3	3.0	2.2	1.5	0.33	0.05	0.03	0.27
6	0.87	0.09	0.11	14	1.7	2.3	2.3	0.95	2.8	0.04	0.02	0.22
7	0.67	0.08	0.11	3.2	15	2.1	1.8	0.80	2.1	0.03	0.01	0.19
8	0.25	0.06	0.12	1.4	12	1.9	1.8	0.70	0.56	0.03	0.01	0.17
9	0.19	0.06	0.12	1.1	3.4	1.8	1.8	0.63	0.39	0.03	0.01	0.30
10	0.62	0.06	8.3	0.99	2.5	1.7	2.3	0.58	0.35	0.02	0.01	0.21
11	0.23	0.07	5.9	0.76	2.1	1.5	1.9	0.87	0.33	0.02	0.01	0.11
12	0.23	0.06	0.69	0.72	1.8	2.9	1.8	0.58	0.29	0.02	0.01	0.09
13	0.33	0.06	0.46	1.0	1.6	5.3	1.8	11	0.27	0.04	0.00	0.07
14	1.8	0.07	0.55	0.72	1.4	3.0	1.7	2.3	0.24	0.58	0.00	0.19
15	0.58	0.07	0.46	0.60	1.3	2.2	1.5	0.81	0.24	0.40	0.00	8.3
16	0.15	0.07	0.26	0.58	1.2	1.9	1.4	0.63	0.21	0.12	1.6	9.0
17	0.10	0.07	0.49	0.54	1.2	10	1.3	0.54	0.19	0.06	7.7	0.79
18	0.12	0.06	2.4	0.55	1.1	4.7	1.2	1.7	0.16	0.03	0.82	0.49
19	0.16	0.06	0.50	34	1.1	2.8	1.1	0.64	0.19	0.03	0.12	0.43
20	0.20	0.06	0.83	14	1.1	2.9	1.1	0.51	0.18	0.02	0.05	0.46
21	0.26	0.06	0.24	4.9	1.1	15	1.1	0.49	0.14	0.02	0.03	0.41
22	0.30	0.06	0.19	3.0	1.1	4.8	1.0	0.48	0.13	0.02	0.02	0.39
23	0.23	0.07	0.21	65	1.1	2.9	0.91	0.44	0.15	0.05	0.03	0.40
24	0.25	0.76	0.33	7.4	1.0	2.3	0.89	0.43	0.16	0.06	0.02	0.57
25	2.5	0.43	0.28	24	1.1	2.1	0.98	0.40	0.50	0.12	0.03	0.35
26	0.31	0.22	0.22	4.4	1.1	2.3	0.86	0.37	0.46	0.09	0.17	1.7
27	0.13	0.15	0.22	2.5	1.1	2.5	0.86	0.36	0.29	0.04	0.11	1.3
28	0.10	0.12	0.21	1.9	1.1	1.9	0.90	0.36	0.16	0.12	0.24	1.4
29	0.10	0.13	0.23	1.7	---	1.8	0.84	0.34	0.14	0.09	0.07	0.60
30	0.11	0.18	0.23	1.5	---	2.1	0.71	13	0.11	0.03	0.04	0.47
31	0.11	---	0.23	1.6	---	14	---	2.0	---	0.02	139	---
TOTAL	11.48	3.73	24.52	194.84	65.0	162.4	70.65	52.09	13.16	2.53	150.54	36.69
MEAN	0.370	0.124	0.791	6.285	2.321	5.239	2.355	1.680	0.439	0.082	4.856	1.223
MAX	2.5	0.76	8.3	65	15	30	24	13	2.8	0.58	139	9.0
MIN	0.10	0.06	0.10	0.24	1.0	1.1	0.71	0.34	0.11	0.02	0.00	0.07
CFSM	0.04	0.01	0.09	0.75	0.28	0.63	0.28	0.20	0.05	0.01	0.58	0.15
IN.	0.05	0.02	0.11	0.87	0.29	0.72	0.31	0.23	0.06	0.01	0.67	0.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

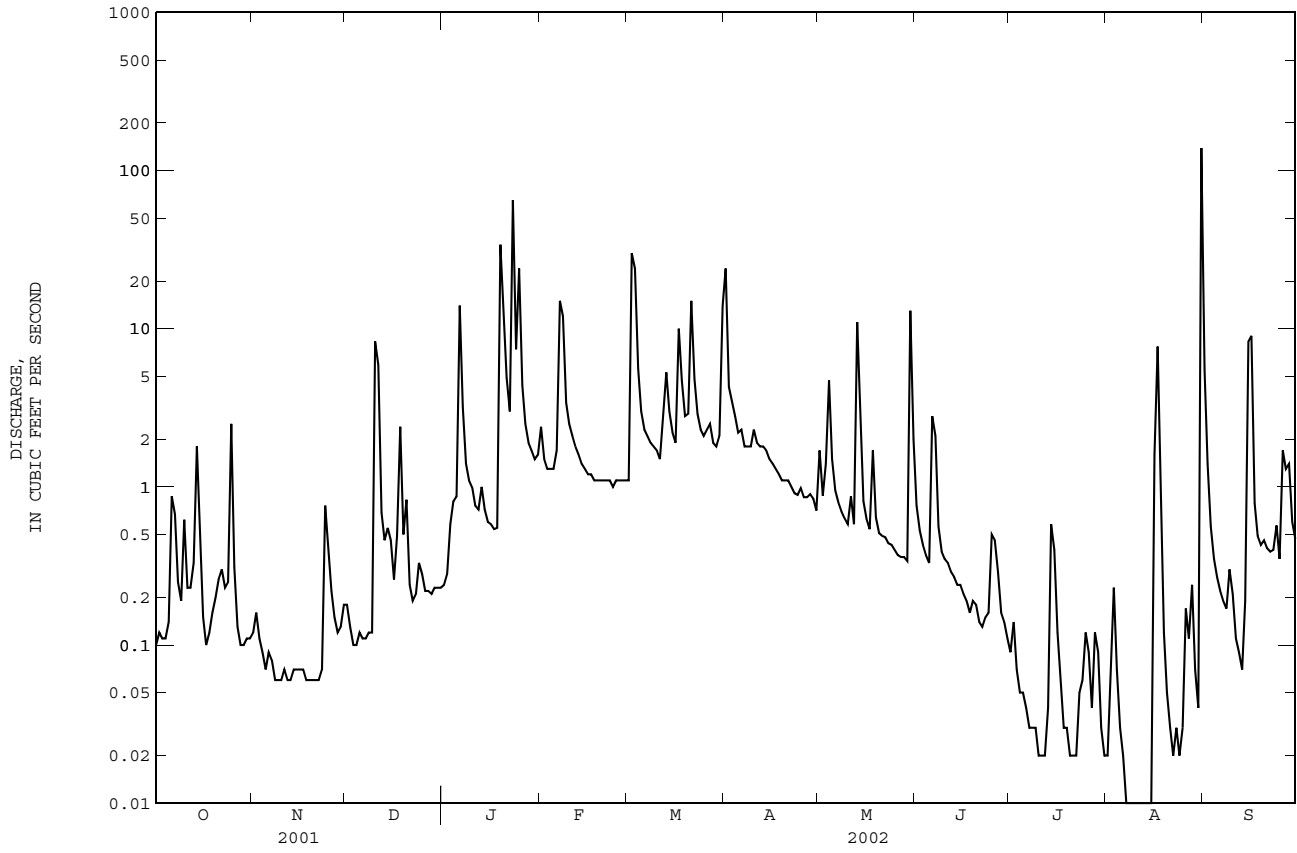
	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
MEAN	3.663	1.148	1.347	5.427	6.109	7.272	3.617	1.952	1.470	1.291	1.677	2.856
MAX	10.1	1.88	2.27	7.87	12.8	11.2	5.87	2.39	2.15	2.64	4.86	6.58
(WY)	2000	2000	2000	2000	2000	2001	2000	2001	2000	1999	2002	2000
MIN	0.37	0.12	0.79	2.13	2.32	5.24	2.35	1.68	0.44	0.082	0.21	1.22
(WY)	2002	2002	2002	2001	2002	2002	2002	2002	2002	2002	2001	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1999 - 2002

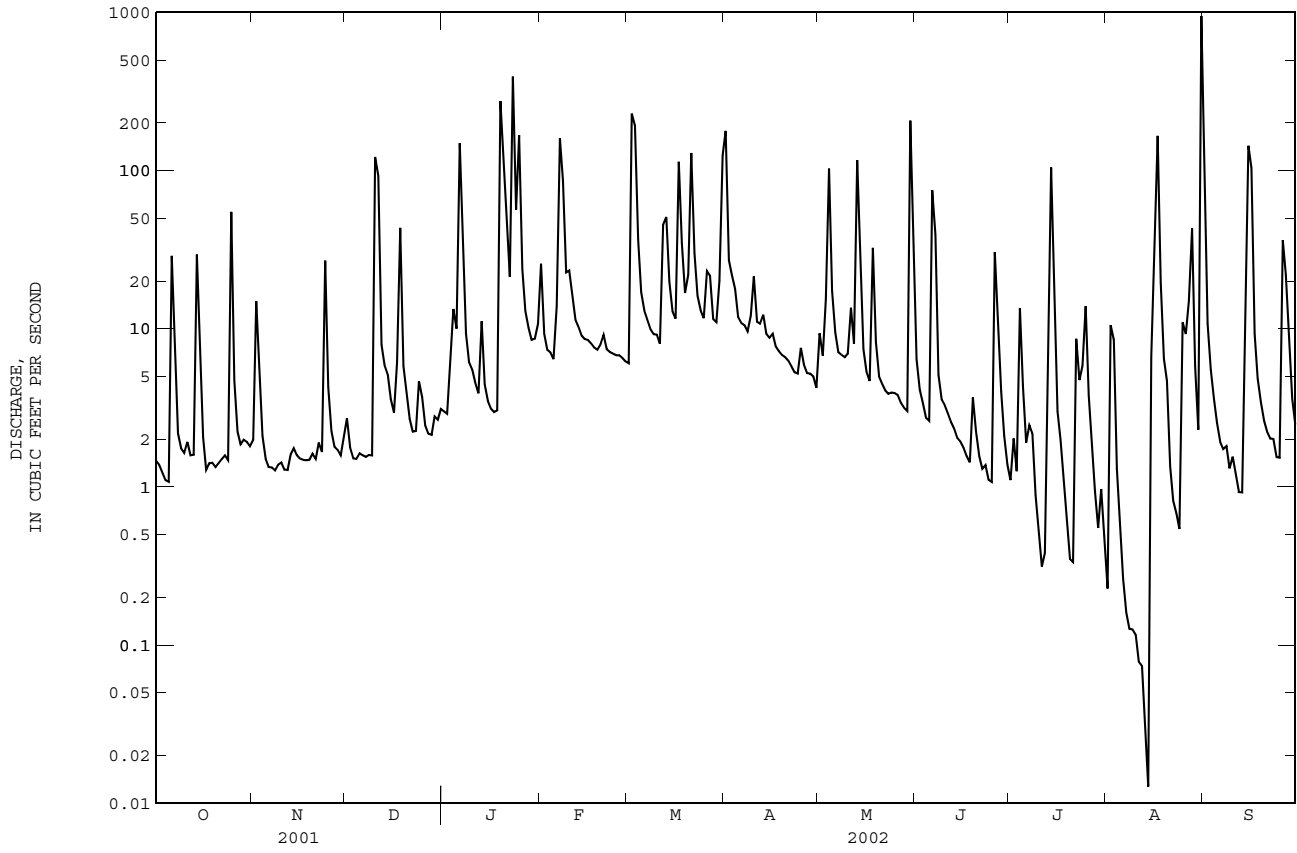
ANNUAL TOTAL	796.27	787.63	
ANNUAL MEAN	2.182	2.158	3.134
HIGHEST ANNUAL MEAN			4.92
LOWEST ANNUAL MEAN			2.16
HIGHEST DAILY MEAN	94	Mar 29	139
LOWEST DAILY MEAN	0.02	Aug 27	0.00
ANNUAL SEVEN-DAY MINIMUM	0.02	Aug 24	0.01
MAXIMUM PEAK FLOW			904*
MAXIMUM PEAK STAGE			7.35
INSTANTANEOUS LOW FLOW			0.00*
ANNUAL RUNOFF (CFSM)	0.26	0.26	0.37
ANNUAL RUNOFF (INCHES)	3.54	3.50	5.09
10 PERCENT EXCEEDS	3.7	3.0	5.5
50 PERCENT EXCEEDS	0.83	0.46	1.0
90 PERCENT EXCEEDS	0.07	0.05	0.10

* See REMARKS.

0214657975 IRVINS CREEK AT SR3168 NEAR CHARLOTTE, NC--Continued



02146600 MCALPINE CREEK AT SARDIS ROAD NEAR CHARLOTTE, NC--Continued



SANTEE RIVER BASIN

02146600 MCALPINE CREEK AT SARDIS ROAD NEAR CHARLOTTE, NC--Continued

PRECIPITATION RECORDS

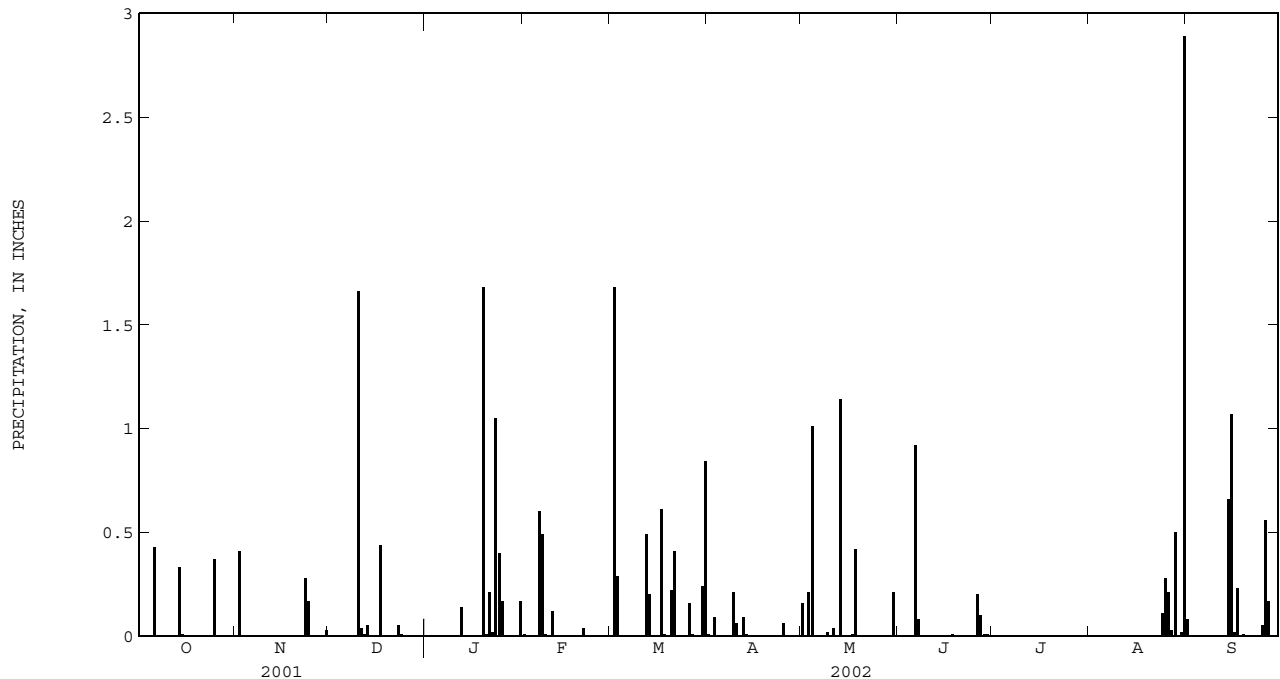
PERIOD OF RECORD.--November 1992 to current year. Records for period November 1992 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.16	0.00	0.00	---	0.08
2	0.00	0.41	0.00	---	0.00	1.68	0.00	0.00	0.00	---	---	0.00
3	0.00	0.00	0.00	---	0.00	0.29	0.09	0.21	0.00	---	---	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	1.01	0.00	---	---	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	---	---	0.00
6	0.43	0.00	0.00	---	0.60	0.00	0.00	0.00	0.92	---	---	0.00
7	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.08	---	---	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	---	---	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.02	0.00	---	---	0.00
10	0.00	0.00	1.66	0.00	0.12	0.00	0.06	0.00	0.00	---	---	0.00
11	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.04	0.00	---	---	0.00
12	0.00	0.00	0.01	0.14	0.00	0.49	0.09	0.00	0.00	---	---	0.00
13	0.00	0.00	0.05	0.00	0.00	0.20	0.01	1.14	0.00	---	---	0.00
14	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	0.66
15	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	1.07
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	0.02
17	0.00	0.00	0.44	0.00	0.00	0.61	0.00	0.01	0.00	---	---	0.23
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.42	0.01	---	---	0.00
19	0.00	0.00	0.00	1.68	0.00	0.00	0.00	0.00	0.00	---	---	0.01
20	0.00	0.00	0.00	0.01	0.04	0.22	0.00	0.00	0.00	---	---	0.00
21	0.00	0.00	0.00	0.21	0.00	0.41	0.00	0.00	0.00	---	---	0.00
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	---	---	0.00
23	0.00	0.28	0.05	1.05	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
24	0.00	0.17	0.01	0.40	0.00	0.00	0.00	0.00	0.00	---	0.11	0.00
25	0.37	0.00	0.00	0.17	0.00	0.00	0.06	0.00	0.00	---	0.28	0.05
26	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.20	---	0.21	0.56
27	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.10	---	0.03	0.17
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	---	0.50	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.01	---	0.00	0.00
30	0.00	0.03	0.00	0.00	---	0.24	0.00	0.21	0.00	---	0.02	0.00
31	0.00	---	0.00	0.17	---	0.84	---	0.00	---	---	2.89	---
TOTAL	1.14	0.89	2.26	---	1.27	5.16	0.53	3.22	1.33	---	---	2.85





Gaging station at Watauga River near Sugar Grove, North Carolina.

SANTEE RIVER BASIN

02146670 FOUR MILE CREEK NEAR PINEVILLE, NC

LOCATION.--Lat 35°04'37", long 80°49'21", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, on left bank on downstream side of bridge at Elm Lane W. (Secondary Road 3649), 0.5 mi south of State Highway 51, 1.25 mi upstream of McAlpine Creek, and 4.5 mi east of U.S. Highway 521 at Pineville.

DRAINAGE AREA.--17.8 mi².

PERIOD OF RECORD.-- July 1997 to current year.

GAGE.--Water-stage recorder. Datum of gage is 528.69 ft above North American Vertical Datum of 1988 (City of Charlotte bench mark). Radio telemetry at station.

REMARKS.--Records poor. Maximum discharge for period of record and current water year from rating curve extended above 885 ft³/s.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	1.7	1.7	e1.6	9.9	4.0	105	1.3	2.0	e0.60	0.24	33
2	2.0	5.0	1.3	e1.6	7.3	109	27	1.2	0.70	e1.0	0.32	e5.0
3	1.0	5.9	1.0	e3.0	7.3	110	18	2.7	0.44	e0.60	1.6	e3.0
4	0.86	1.6	0.92	6.5	8.0	32	15	55	0.28	26	0.49	e1.6
5	1.4	1.1	0.89	4.6	7.8	16	12	16	0.21	11	e0.30	e1.2
6	33	1.2	0.90	87	9.4	12	13	3.5	8.0	1.2	e0.20	e0.80
7	18	1.2	0.94	31	96	9.9	15	1.3	24	0.64	e0.10	e0.70
8	3.7	1.1	0.98	8.7	65	8.0	11	0.74	2.5	0.56	e0.09	e0.70
9	1.8	1.0	0.97	e3.6	21	7.6	5.7	0.69	e2.0	0.43	e0.09	e0.50
10	2.7	1.2	40	e3.6	19	7.2	11	0.53	e1.6	0.26	e0.08	e0.70
11	2.9	1.0	78	e3.4	15	6.0	6.3	1.6	e1.4	0.25	e0.06	e0.50
12	1.1	0.96	e5.0	e3.0	11	18	5.0	1.4	e1.2	0.08	e0.05	e0.50
13	1.1	0.95	e4.0	e7.0	10	30	6.4	48	e1.2	e1.0	e0.03	e0.50
14	19	0.97	e3.0	e3.0	8.9	14	4.3	35	e1.0	105	e0.01	0.54
15	23	1.1	e2.6	e2.6	8.4	9.3	3.1	8.9	e1.0	16	e0.40	52
16	6.1	1.1	e2.4	e2.2	7.4	7.8	2.3	11	e0.98	1.2	3.1	59
17	1.7	0.99	3.7	e2.0	7.4	46	1.8	6.2	e0.96	0.38	32	0.94
18	1.3	0.90	39	e1.8	6.4	24	1.4	34	e0.90	0.30	e10	0.71
19	1.1	0.91	14	e200	6.0	13	1.2	15	e2.0	0.22	e4.0	0.77
20	1.3	0.95	7.0	84	6.5	13	1.3	5.6	e1.0	0.17	e3.6	0.79
21	1.1	1.1	2.6	17	7.4	78	1.3	3.2	e0.90	0.19	e1.0	0.74
22	1.1	1.2	1.2	5.3	6.4	23	0.92	2.9	e0.80	0.21	e0.60	0.83
23	1.2	1.1	0.95	162	6.0	12	0.57	4.1	e1.0	0.15	e0.40	0.82
24	1.0	24	2.6	28	5.4	9.4	0.50	2.8	e0.80	0.18	e0.30	0.86
25	5.2	10	2.7	110	5.3	7.9	0.66	e2.4	e0.70	0.85	e4.0	0.86
26	6.5	3.2	e1.8	16	5.2	11	0.62	e2.2	e10	2.4	e3.0	4.2
27	1.9	1.5	e1.6	9.9	4.7	16	0.48	e2.2	e2.0	1.8	e4.0	4.7
28	1.00	1.2	e1.4	7.4	4.3	7.6	0.47	e2.0	e1.0	0.45	11	4.5
29	1.2	1.3	e1.6	4.8	---	6.8	0.50	e2.0	e0.70	0.31	0.63	1.3
30	1.1	1.3	e1.4	4.9	---	11	0.45	19	e0.60	0.27	0.15	1.1
31	1.5	---	e1.6	2.4	---	44	---	20	---	0.28	357	---
TOTAL	147.76	76.73	227.75	827.9	382.4	723.5	272.27	312.46	71.87	173.98	438.84	183.36
MEAN	4.766	2.558	7.347	26.71	13.66	23.34	9.076	10.08	2.396	5.612	14.16	6.112
MAX	33	24	78	200	96	110	105	55	24	105	357	59
MIN	0.86	0.90	0.89	1.6	4.3	4.0	0.45	0.53	0.21	0.08	0.01	0.50
CFSM	0.27	0.14	0.41	1.50	0.77	1.31	0.51	0.57	0.13	0.32	0.80	0.34
IN.	0.31	0.16	0.48	1.73	0.80	1.51	0.57	0.65	0.15	0.36	0.92	0.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)

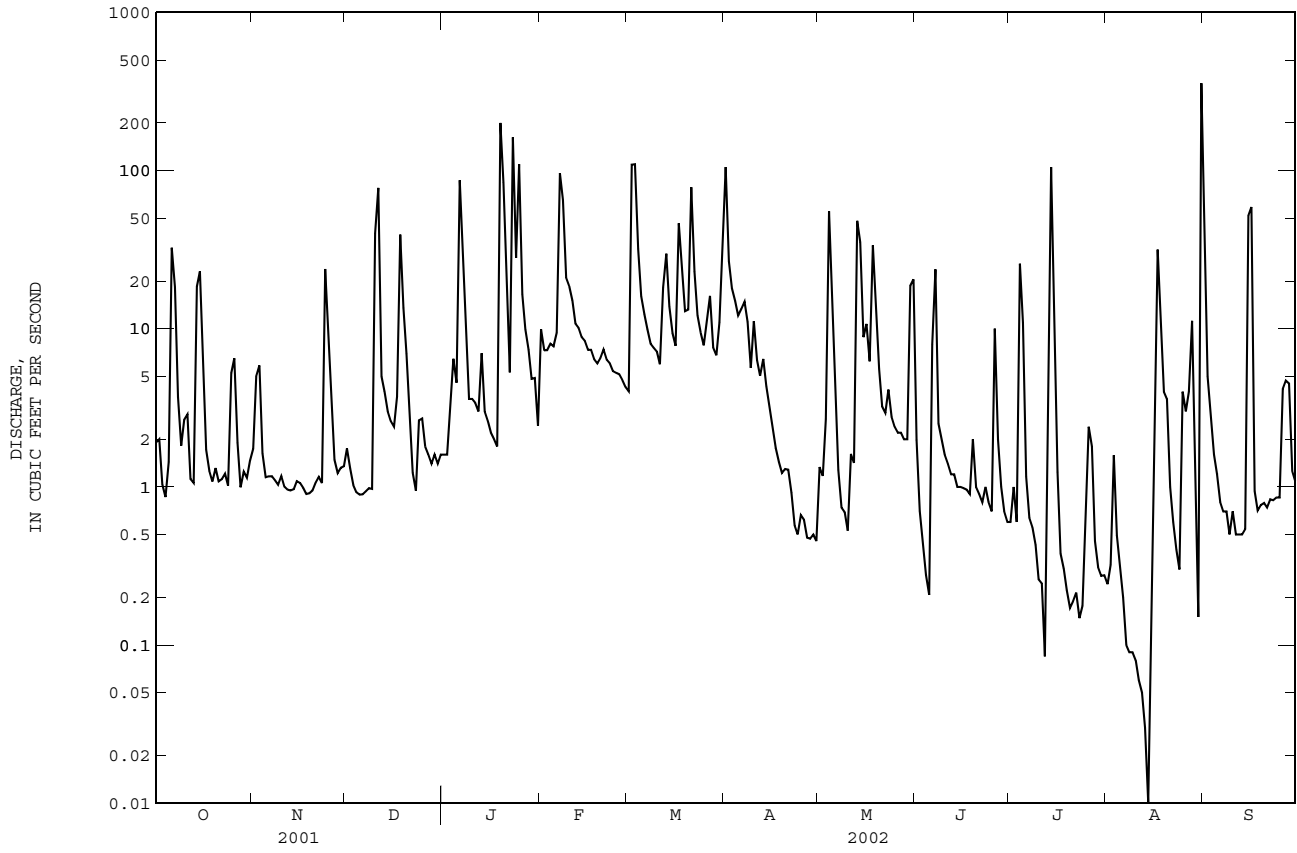
	1997	1998	1999	2000	2001	2002
MEAN	10.76	10.10	13.69	33.90	25.87	26.95
MAX	23.6	24.4	31.6	56.2	46.1	41.9
(WY)	1998	1998	1998	1998	1998	1998
MIN	0.98	2.56	5.94	13.7	12.9	10.8
(WY)	2001	2002	2000	2001	2001	1999

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1997 - 2002

ANNUAL TOTAL	3774.03	3838.82	
ANNUAL MEAN	10.34	10.52	16.52
HIGHEST ANNUAL MEAN			31.4
LOWEST ANNUAL MEAN			10.5
HIGHEST DAILY MEAN	229	Mar 29	602
LOWEST DAILY MEAN	0.13	Jul 18	0.01
ANNUAL SEVEN-DAY MINIMUM	0.19	Aug 5	0.06
MAXIMUM PEAK FLOW			896*
MAXIMUM PEAK STAGE			10.17
INSTANTANEOUS LOW FLOW			NOT DETERMINED
ANNUAL RUNOFF (CFSM)	0.58		0.59
ANNUAL RUNOFF (INCHES)	7.89		8.02
10 PERCENT EXCEEDS	24		23
50 PERCENT EXCEEDS	2.6		2.0
90 PERCENT EXCEEDS	0.37		0.46

e Estimated.
* See REMARKS.

02146670 FOUR MILE CREEK NEAR PINEVILLE, NC--Continued



SANTEE RIVER BASIN

02146700 MCMULLEN CREEK AT SHARON VIEW ROAD NEAR CHARLOTTE, NC

LOCATION.--Lat 35°08'27", long 80°49'12", North American Datum of 1983, 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 mi².

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 592.31 ft above North American Vertical Datum of 1988. 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 above NGVD of 1929. Radio telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minimum discharge for the current water year also occurred periodically in Oct., Nov., June, July, Aug. Maximum discharge for period of record from rating curve extended above 2,650 ft³/s on basis of computation of peak flow through culvert. No flow occurred periodically from 1962 to 1973.

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 ft³/s.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.31	0.43	0.61	e0.75	4.3	1.4	16	3.6	1.2	0.87	0.51	6.8
2	0.28	19	0.45	e0.80	1.7	56	3.4	1.4	0.94	0.69	6.3	1.9
3	0.26	1.6	0.40	e1.6	1.6	26	6.4	5.8	0.80	0.44	1.5	1.4
4	0.27	0.47	0.38	e2.3	1.5	4.2	3.2	31	0.65	1.1	0.53	1.2
5	0.27	0.39	0.54	e2.0	1.5	2.5	2.1	2.4	0.66	0.59	0.40	0.84
6	8.8	0.48	0.55	e48	8.9	2.2	1.9	1.3	25	0.34	0.36	0.64
7	0.94	0.29	0.49	e3.2	34	2.0	1.7	1.1	5.7	0.34	0.38	0.58
8	0.40	0.31	0.46	e1.3	10	1.8	1.6	1.0	1.2	0.31	0.32	0.65
9	0.35	0.42	0.47	e1.1	2.9	1.8	2.2	1.1	0.86	0.41	0.35	0.63
10	0.30	0.25	48	e1.0	5.6	1.8	3.9	1.2	0.73	0.43	0.31	0.58
11	0.32	0.37	8.5	1.2	2.5	1.6	1.8	2.0	0.63	0.48	0.32	0.51
12	0.34	0.45	1.2	2.0	1.9	18	2.8	1.1	0.59	0.52	0.32	0.46
13	0.36	0.44	1.3	3.3	1.8	11	2.4	33	0.66	33	0.31	0.41
14	4.6	0.36	1.1	1.2	1.7	2.9	1.6	3.2	0.66	81	0.34	8.6
15	1.2	0.39	0.61	1.1	1.7	2.2	1.7	1.1	0.63	1.6	1.1	33
16	0.44	0.42	0.49	0.95	1.7	2.0	1.6	0.94	0.83	0.88	18	9.2
17	0.31	0.39	10	0.98	1.6	24	1.6	0.96	0.98	0.72	27	5.4
18	0.32	0.38	6.4	1.0	1.4	3.9	1.5	8.6	0.86	0.72	2.8	0.96
19	0.48	0.42	e0.98	89	1.4	2.5	1.4	1.3	1.0	0.67	5.8	0.73
20	0.45	0.43	e0.87	13	1.7	5.0	1.4	0.87	1.4	0.62	1.5	0.67
21	0.47	0.39	e0.74	13	1.7	29	1.4	0.89	0.78	0.72	0.87	0.88
22	0.37	0.37	e0.66	3.0	1.5	3.9	1.3	0.95	0.43	2.8	0.45	0.63
23	0.38	1.6	e0.72	86	1.4	2.6	1.3	0.90	0.60	0.85	0.40	0.58
24	0.37	10	e1.2	12	1.4	2.3	1.2	0.96	0.35	16	1.5	0.73
25	19	0.96	e0.80	31	1.5	2.0	2.7	0.91	0.39	3.5	5.5	0.68
26	0.63	0.56	e0.62	3.7	1.4	9.1	1.3	0.91	18	1.8	2.0	9.8
27	0.43	0.50	e0.66	2.5	1.4	3.3	1.1	0.56	2.2	0.82	5.0	3.9
28	0.50	0.47	e0.68	2.1	1.4	2.1	1.5	0.47	0.69	0.55	25	1.5
29	0.74	0.46	e0.73	2.0	---	1.8	1.4	0.54	0.58	0.51	1.3	0.67
30	0.39	0.81	e0.70	1.8	---	5.8	1.4	41	0.73	0.49	0.91	0.48
31	0.92	---	e0.76	3.6	---	35	---	3.7	---	0.48	269	---
TOTAL	45.20	43.81	92.07	336.48	101.1	269.7	74.8	154.76	70.73	154.25	380.38	95.01
MEAN	1.458	1.460	2.970	10.85	3.611	8.700	2.493	4.992	2.358	4.976	12.27	3.167
MAX	19	19	48	89	34	56	16	41	25	81	269	33
MIN	0.26	0.25	0.38	0.75	1.4	1.4	1.1	0.47	0.35	0.31	0.31	0.41
CFSM	0.21	0.21	0.43	1.56	0.52	1.25	0.36	0.72	0.34	0.72	1.77	0.46
IN.	0.24	0.23	0.49	1.80	0.54	1.44	0.40	0.83	0.38	0.83	2.04	0.51

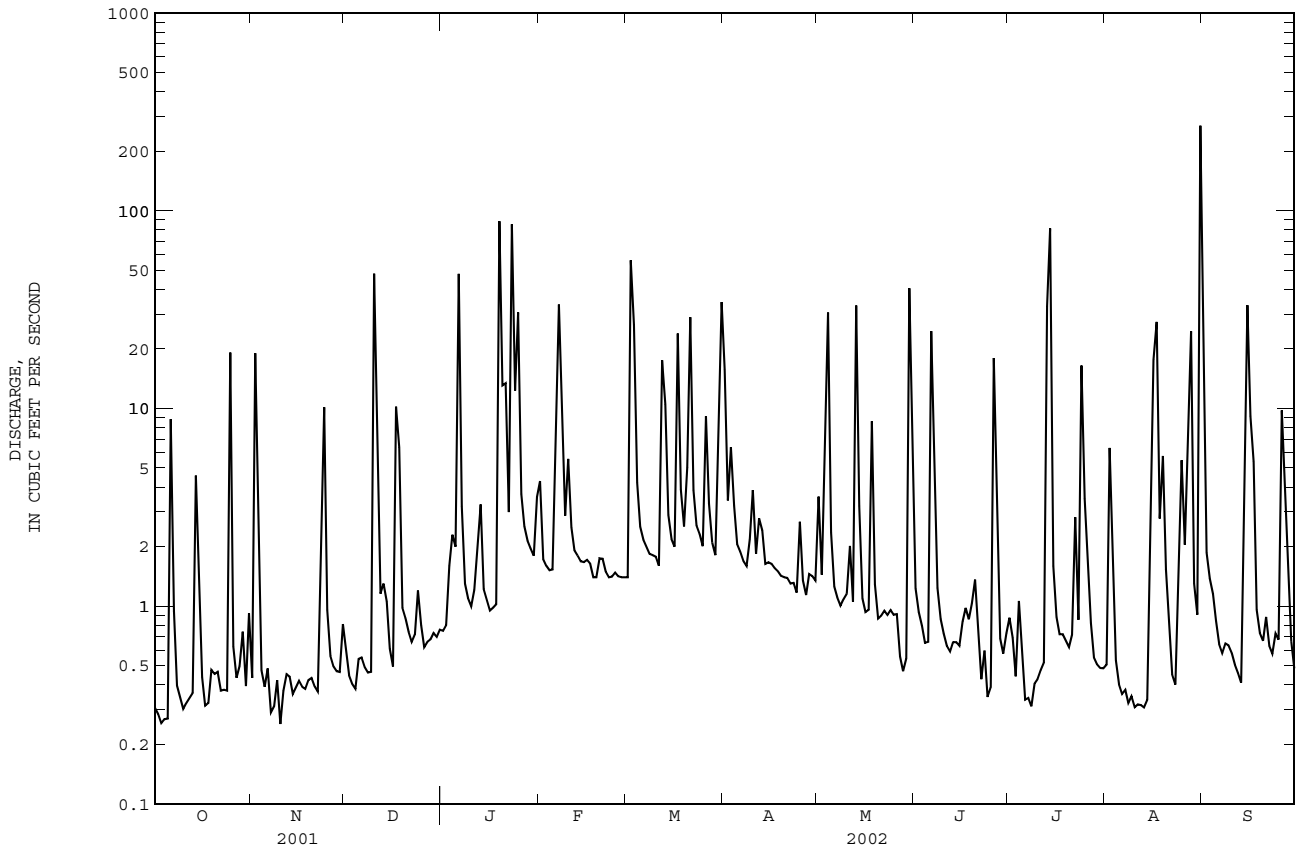
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2002, BY WATER YEAR (WY)

MEAN	6.093	5.638	7.449	12.56	13.12	14.78	7.670	6.269	6.452	6.349	5.915	5.632
MAX	30.4	21.3	24.3	33.5	28.1	38.8	25.1	31.3	27.3	27.7	32.1	23.8
(WY)	1991	1986	1977	1978	1979	1977	1998	1975	1992	1997	1995	1987
MIN	0.21	0.54	0.86	1.02	1.77	1.74	1.13	1.08	0.75	0.61	0.24	0.084
(WY)	1964	1970	1966	1981	1968	1985	1981	1962	1966	1963	1968	1970

02146700 MCMULLEN CREEK AT SHARON VIEW ROAD NEAR CHARLOTTE, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1962 - 2002	
ANNUAL TOTAL	1536.36		1818.29		8.156	
ANNUAL MEAN	4.209		4.982		13.8 1975	
HIGHEST ANNUAL MEAN					3.19 1970	
LOWEST ANNUAL MEAN					868 Aug 27 1995	
HIGHEST DAILY MEAN	141	Mar 29	269	Aug 31	0.00 Aug 31 1962	
LOWEST DAILY MEAN	0.25	Nov 10	0.25	Nov 10	0.01 Sep 19 1968	
ANNUAL SEVEN-DAY MINIMUM	0.29	Sep 29	0.32	Aug 8	3470* Aug 27 1995	
MAXIMUM PEAK FLOW			1250	Aug 31	11.03 Aug 27 1995	
MAXIMUM PEAK STAGE			7.25	Aug 31	0.00* Aug 31 1962	
INSTANTANEOUS LOW FLOW			0.25*	Oct 1		
ANNUAL RUNOFF (CFSM)	0.61		0.72		1.17	
ANNUAL RUNOFF (INCHES)	8.22		9.73		15.94	
10 PERCENT EXCEEDS	8.4		9.4		15	
50 PERCENT EXCEEDS	0.90		1.1		1.6	
90 PERCENT EXCEEDS	0.37		0.39		0.32	

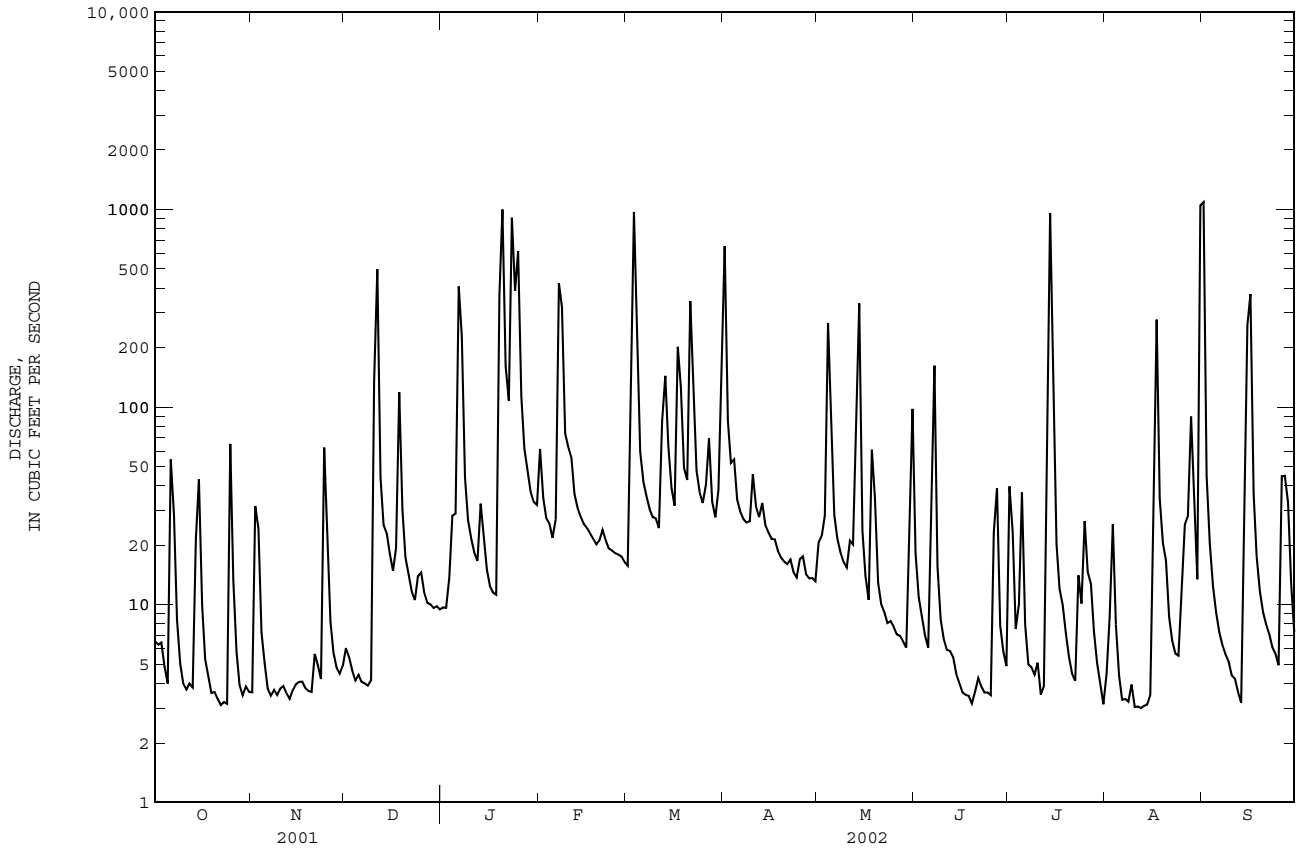
e Estimated.
 * See REMARKS.



02146750 MCALPINE CREEK BELOW MCMULLEN CREEK NEAR PINEVILLE, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1974 - 2002	
ANNUAL TOTAL	17954.9		19819.6		130.7	
ANNUAL MEAN	49.19		54.30		235	
HIGHEST ANNUAL MEAN					51.4	
LOWEST ANNUAL MEAN					1984	
HIGHEST DAILY MEAN	1370	Mar 21	1090	Sep 1	7740	Aug 27 1995
LOWEST DAILY MEAN	3.1	Oct 22	3.0	Aug 10	0.46	Sep 30 1983
ANNUAL SEVEN-DAY MINIMUM	3.5	Oct 18	3.2	Aug 8	0.76	Sep 28 1983
MAXIMUM PEAK FLOW			2790	Aug 31	12500*	Aug 27 1995
MAXIMUM PEAK STAGE			9.74	Aug 31	19.40*	Aug 27 1995
INSTANTANEOUS LOW FLOW			2.9*	Jul 10	0.45	Sep 30 1983
ANNUAL RUNOFF (CFSM)	0.53		0.59		1.41	
ANNUAL RUNOFF (INCHES)	7.23		7.98		19.21	
10 PERCENT EXCEEDS	83		92		259	
50 PERCENT EXCEEDS	18		15		32	
90 PERCENT EXCEEDS	4.1		3.7		8.4	

* See REMARKS.



SANTEE RIVER BASIN

02146750 MCALPINE CREEK BELOW MCMULLEN CREEK NEAR PINEVILLE, NC--Continued

PRECIPITATION RECORDS

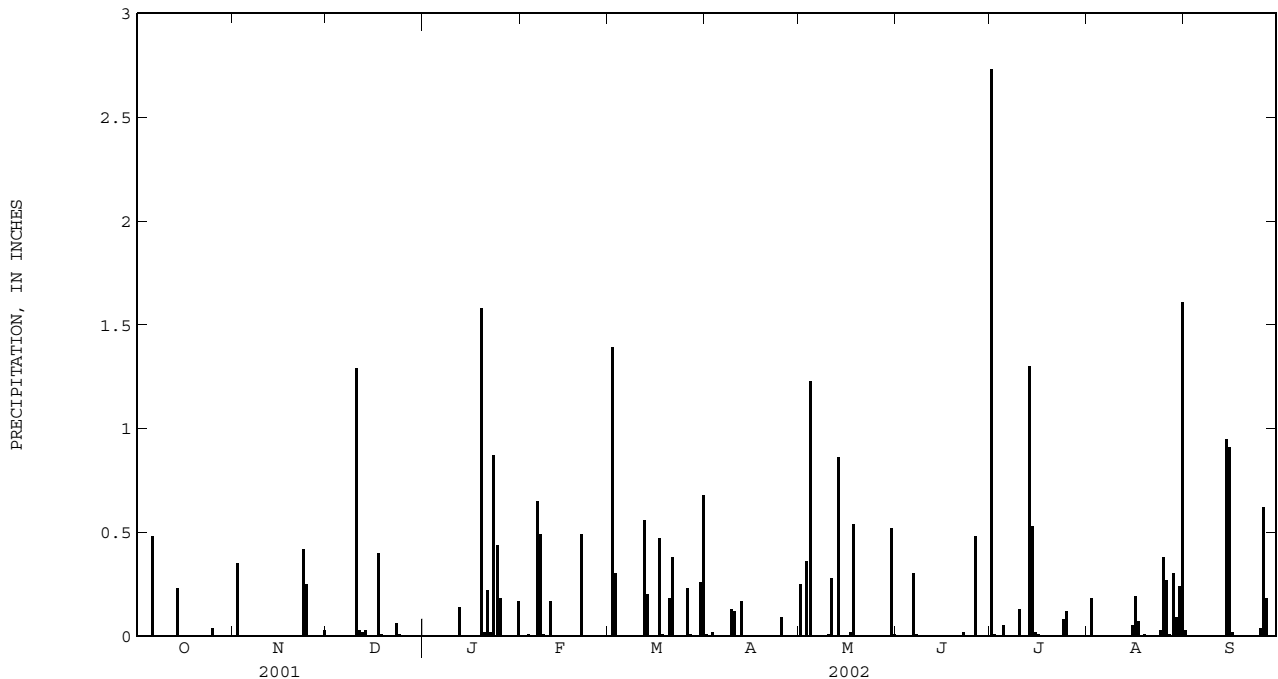
PERIOD OF RECORD.--May 1993 to current year. Records for period May 1993 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.25	0.00	2.73	0.00	0.03
2	0.00	0.35	0.00	0.00	0.00	1.39	0.00	0.00	0.00	0.01	0.18	0.00
3	0.00	0.00	0.00	---	0.01	0.30	0.02	0.36	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	1.23	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00
6	0.48	0.00	0.00	---	0.65	0.00	0.00	0.00	0.30	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.29	0.00	0.17	0.00	0.12	0.01	0.00	0.13	0.00	0.00
11	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.14	0.00	0.56	0.17	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.03	0.00	0.00	0.20	0.00	0.86	0.00	1.30	0.00	0.00
14	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.95
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.91
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.19	0.02
17	0.00	0.00	0.40	0.00	0.00	0.47	0.00	0.02	0.00	0.00	0.07	0.00
18	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.54	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.58	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
20	0.00	0.00	0.00	0.02	0.49	0.18	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.22	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
23	0.00	0.42	0.06	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.25	0.01	0.44	0.00	0.00	0.00	0.00	0.00	0.08	0.03	0.00
25	0.04	0.00	0.00	0.18	0.00	0.00	0.09	0.00	0.00	0.12	0.38	0.04
26	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.48	0.00	0.27	0.62
27	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.18
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.09	0.00
30	0.00	0.03	0.00	0.00	---	0.26	0.00	0.52	0.00	0.00	0.24	0.00
31	0.00	---	0.00	0.17	---	0.68	---	0.01	---	0.00	1.61	---
TOTAL	0.75	1.05	1.85	---	1.82	4.67	0.54	4.08	0.81	4.98	3.43	2.75





Beetree Creek near Swannanoa, North Carolina.

SANTEE RIVER BASIN

0214678175 STEELE CREEK AT SECONDARY ROAD 1441 NEAR PINEVILLE, NC

LOCATION.--Lat 35°06'18", long 80°57'13", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, on right bank on upstream side of culvert on Secondary Road 1441 (Carowinds Blvd.), and 4.5 mi west of Pineville.

DRAINAGE AREA.--6.73 mi².

PERIOD OF RECORD.-- May 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 562.23 ft above NGVD of 1929, from levels. Radio telemetry at station.

REMARKS.--Records fair, except those for estimated daily discharges, which are poor. Minimum discharge for period of record also occurred Aug. 17, 19, 20, 22, 23, 27, 28, 30, 2001. Minimum discharge for current water year also occurred Aug. 7, 8, 9, 10, 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.51	1.6	0.43	0.40	1.6	1.1	14	2.6	0.69	2.3	0.38	4.3
2	0.52	0.95	0.28	0.36	1.3	48	3.9	0.95	0.49	1.00	3.6	1.1
3	0.44	0.99	0.23	1.2	1.3	28	7.0	3.2	0.40	0.38	1.1	0.67
4	0.45	0.76	0.23	1.2	1.3	6.9	4.0	23	0.35	5.6	0.33	0.41
5	0.41	1.0	0.22	0.86	1.3	3.6	2.3	2.6	0.33	1.7	0.21	0.32
6	5.9	1.4	0.21	21	4.9	2.6	1.9	1.3	7.2	0.76	0.18	0.28
7	0.75	1.8	0.24	4.8	26	2.2	1.8	0.95	3.9	0.48	0.19	0.27
8	0.36	1.6	0.25	2.2	13	2.0	1.6	0.73	0.96	0.31	0.17	0.28
9	0.32	1.1	0.24	1.4	4.0	1.8	1.6	0.56	0.50	0.25	0.16	0.29
10	0.32	0.96	e20	1.2	8.0	1.8	2.5	0.49	0.34	2.2	0.16	0.29
11	0.30	0.87	e6.0	1.0	4.0	1.7	2.3	1.4	0.27	0.70	0.17	0.28
12	0.35	0.91	1.4	1.2	2.6	12	2.2	0.66	0.24	0.41	0.17	0.27
13	0.47	0.85	1.1	2.8	2.1	8.0	3.1	29	0.23	14	0.18	0.28
14	2.4	0.86	0.78	2.2	2.0	3.3	1.7	3.6	0.23	61	0.19	22
15	0.75	0.89	1.3	3.1	1.7	2.4	1.5	1.1	0.21	29	0.32	33
16	0.61	0.93	0.61	2.3	1.6	2.1	1.2	0.81	0.31	18	0.93	9.6
17	0.98	0.95	4.8	0.84	1.5	15	1.2	0.73	0.25	1.8	2.2	1.5
18	0.88	0.96	5.3	0.84	1.3	5.0	1.1	5.1	0.19	1.0	0.47	0.98
19	0.88	0.97	1.0	80	1.3	3.0	1.1	1.1	0.24	0.81	0.29	0.61
20	0.77	1.0	0.64	16	1.5	3.5	1.0	0.69	0.18	0.71	0.22	0.47
21	0.77	0.96	0.47	12	1.6	17	1.1	0.63	0.17	0.79	0.22	0.42
22	0.81	0.98	0.40	5.1	1.2	4.4	1.5	0.67	0.18	0.70	0.19	0.40
23	0.87	1.5	0.42	68	1.2	2.9	1.1	0.52	0.21	0.69	0.17	0.42
24	0.84	9.5	0.76	13	1.1	2.4	0.99	0.48	0.20	1.5	0.92	0.39
25	5.9	0.96	0.47	27	1.2	2.4	1.3	0.39	0.19	1.9	3.7	0.40
26	0.64	0.53	0.39	5.2	1.1	3.8	1.1	0.34	1.5	1.1	1.5	13
27	0.75	0.39	0.35	3.2	1.1	2.9	1.1	0.33	0.80	0.65	4.0	4.5
28	0.66	0.35	0.35	2.6	1.1	2.0	1.1	0.32	0.31	0.52	1.9	1.6
29	0.66	0.32	0.39	2.1	---	1.8	1.1	0.29	0.30	0.50	1.4	0.84
30	0.68	0.38	0.38	1.8	---	4.0	0.93	5.5	1.4	0.41	0.74	0.55
31	1.2	---	0.41	1.8	---	28	---	2.2	---	0.39	58	---
TOTAL	32.15	37.22	50.05	286.70	91.9	225.6	68.32	92.24	22.77	151.56	84.36	99.72
MEAN	1.037	1.241	1.615	9.248	3.282	7.277	2.277	2.975	0.759	4.889	2.721	3.324
MAX	5.9	9.5	20	80	26	48	14	29	7.2	61	58	33
MIN	0.30	0.32	0.21	0.36	1.1	1.1	0.93	0.29	0.17	0.25	0.16	0.27
CFSM	0.15	0.18	0.24	1.37	0.49	1.08	0.34	0.44	0.11	0.73	0.40	0.49
IN.	0.18	0.21	0.28	1.58	0.51	1.25	0.38	0.51	0.13	0.84	0.47	0.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2002, BY WATER YEAR (WY)

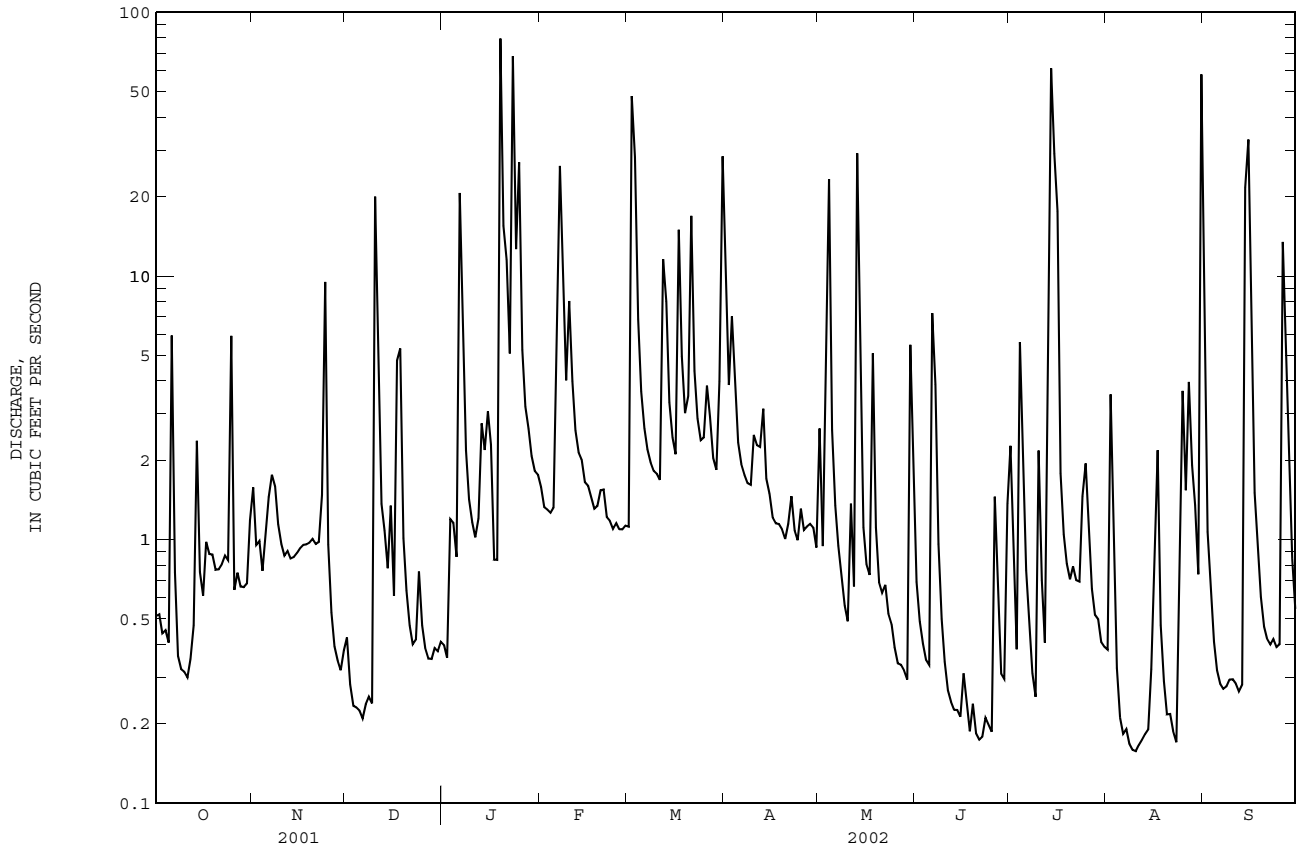
	1998	1999	2000	2001	2002
MEAN	4.705	1.934	2.484	8.822	6.781
MAX	15.4	2.74	4.66	14.2	12.8
(WY)	2000	2001	1999	1999	2000
MIN	0.81	1.24	1.61	2.83	3.28
(WY)	2001	2002	2002	2001	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1998 - 2002

ANNUAL TOTAL	1367.73	1242.59		
ANNUAL MEAN	3.747	3.404		
HIGHEST ANNUAL MEAN			4.448	
LOWEST ANNUAL MEAN			6.24	2000
HIGHEST DAILY MEAN	250	Mar 29	3.40	2002
LOWEST DAILY MEAN	0.05	Aug 20	515	Jul 27 1998
ANNUAL SEVEN-DAY MINIMUM	0.06	Aug 25	0.16	Aug 9
MAXIMUM PEAK FLOW			0.17	Aug 6
MAXIMUM PEAK STAGE			439	Jul 15
INSTANTANEOUS LOW FLOW			5.85	Jul 15
ANNUAL RUNOFF (CFSM)	0.56		0.14*	Jun 20
ANNUAL RUNOFF (INCHES)	7.56		0.04*	Aug 16 2001
10 PERCENT EXCEEDS	5.9		0.66	
50 PERCENT EXCEEDS	0.89		6.87	8.98
90 PERCENT EXCEEDS	0.26		5.9	7.5
			1.0	1.1
			0.27	0.34

e Estimated.
* See REMARKS.

0214678175 STEELE CREEK AT SECONDARY ROAD 1441 NEAR PINEVILLE, NC--Continued



SANTEE RIVER BASIN

02146900 TWELVE MILE CREEK NEAR WAXHAW, NC

LOCATION.--Lat 34°57'07", long 80°45'21", North American Datum of 1983, Union County, Hydrologic Unit 03050103, on left bank at downstream side of 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 mi².

WATER-DISCHARGE RECORDS

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 NGVD of 1929. Prior to Mar. 13, 1962, water-stage recorder at site 20 ft upstream, Mar. 13, 1962 to June 4, 1997, water-stage recorder at site 100 ft upstream at same datum. Satellite telemetry at station.

REMARKS.--Records poor. No flow also occurred Oct. 6, 1968, Oct. 7-15, 1970, Oct. 1-22, 1983 and Aug. 26, 2001. Minimum discharge for current water year also occurred July 22.

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	0.17	0.35	6.7	14	7.1	320	7.6	8.4	0.16	0.58	159
2	2.0	0.17	0.37	6.6	13	32	60	8.2	5.1	0.09	0.44	18
3	1.4	0.17	0.41	7.3	12	194	33	8.4	3.4	0.15	0.29	10
4	0.91	0.15	0.39	8.7	13	58	25	15	2.0	0.09	0.25	6.5
5	1.2	0.13	0.37	9.3	15	16	20	21	2.0	0.07	0.24	5.0
6	1.3	0.09	0.39	41	13	15	19	12	2.8	0.06	0.20	4.9
7	2.4	0.10	0.40	74	100	14	17	9.1	13	0.09	0.17	4.4
8	2.1	0.11	0.37	18	174	13	16	7.8	4.5	0.10	0.15	4.2
9	1.4	0.17	0.34	12	43	12	15	6.9	2.1	0.06	0.13	4.2
10	1.3	0.20	0.74	9.1	23	11	16	6.4	1.1	0.09	0.11	4.2
11	0.99	0.21	31	7.5	21	11	16	6.8	0.79	0.10	0.18	3.5
12	0.91	0.19	4.4	6.3	17	10	15	8.0	0.93	0.21	0.26	3.5
13	0.83	0.16	6.5	5.9	17	19	15	8.0	1.1	15	0.21	3.6
14	13	0.16	5.6	6.1	17	20	15	13	0.77	25	0.17	3.8
15	41	0.18	4.5	5.4	13	15	14	9.7	0.69	2.0	0.17	63
16	3.1	0.22	4.0	4.7	12	13	13	6.7	0.66	0.44	0.22	181
17	1.3	0.23	3.7	4.1	12	44	12	5.9	0.63	0.13	0.67	12
18	0.87	0.23	8.0	4.3	11	53	11	6.0	0.65	0.11	0.69	6.0
19	0.87	0.27	9.9	84	11	22	10	11	0.64	0.07	0.68	3.5
20	0.38	0.32	5.6	433	9.5	16	9.6	7.9	0.54	0.06	0.63	2.3
21	0.29	0.43	3.8	51	9.2	139	8.8	6.1	0.51	0.06	0.55	2.0
22	0.29	0.34	e3.6	42	9.1	58	8.2	5.4	0.50	0.07	0.46	1.7
23	0.27	0.39	e3.4	276	8.6	17	7.4	5.0	0.46	0.06	0.37	1.8
24	0.24	0.88	e3.0	95	8.2	17	6.7	4.5	0.40	0.06	0.30	1.7
25	0.23	1.4	e2.6	291	7.9	15	6.4	4.9	0.32	0.13	0.61	1.4
26	0.20	1.5	e2.4	64	7.5	14	7.1	5.7	0.31	0.63	1.5	1.8
27	0.17	0.89	e2.4	29	7.7	15	7.6	4.9	0.25	0.25	1.2	2.5
28	0.12	0.55	e5.0	21	7.3	14	6.1	4.2	0.19	0.21	2.1	3.0
29	0.16	0.42	6.1	17	---	12	6.8	3.6	0.08	0.24	1.5	1.9
30	0.18	0.39	6.2	16	---	12	6.9	16	0.28	0.42	0.93	1.3
31	0.18	---	6.6	15	---	19	---	28	---	0.50	291	---
TOTAL	81.49	10.82	132.43	1671.0	626.0	927.1	743.6	273.7	55.10	46.71	306.96	521.7
MEAN	2.629	0.361	4.272	53.90	22.36	29.91	24.79	8.829	1.837	1.507	9.902	17.39
MAX	41	1.5	31	433	174	194	320	28	13	25	291	181
MIN	0.12	0.09	0.34	4.1	7.3	7.1	6.1	3.6	0.08	0.06	0.11	1.3
CFSM	0.03	0.00	0.06	0.70	0.29	0.39	0.32	0.12	0.02	0.02	0.13	0.23
IN.	0.04	0.01	0.06	0.81	0.30	0.45	0.36	0.13	0.03	0.02	0.15	0.25

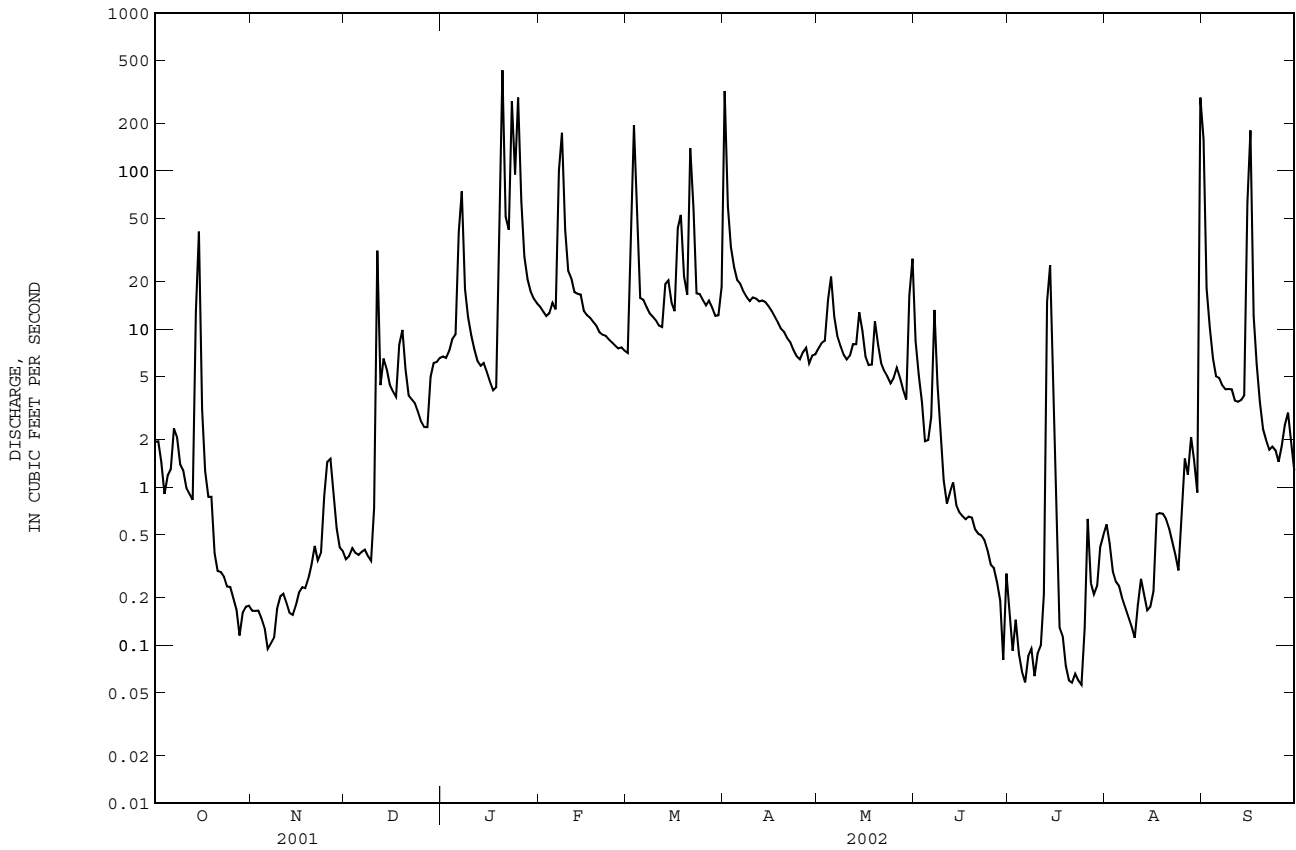
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2002, BY WATER YEAR (WY)

MEAN	49.52	35.03	62.03	130.8	155.8	158.5	89.75	42.40	31.36	34.49	41.12	29.67
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	0.39	0.36	4.27	11.5	22.4	25.8	12.9	4.45	1.26	1.51	0.34	0.15
(WY)	1984	2002	2002	1981	2002	1985	2001	2001	1986	2002	2001	1968

02146900 TWELVE MILE CREEK NEAR WAXHAW, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1961 - 2002	
ANNUAL TOTAL	5437.01		5396.61		71.35	
ANNUAL MEAN	14.90		14.79		150	
HIGHEST ANNUAL MEAN					14.8	
LOWEST ANNUAL MEAN					1991	
HIGHEST DAILY MEAN	711	Mar 21	433	Jan 20	6700	Aug 27 1995
LOWEST DAILY MEAN	0.00	Aug 26	0.06	Jul 6	0.00	Oct 6 1968
ANNUAL SEVEN-DAY MINIMUM	0.04	Sep 13	0.07	Jul 18	0.00	Oct 7 1970
MAXIMUM PEAK FLOW			974	Aug 31	9970	Aug 27 1995
MAXIMUM PEAK STAGE			9.18	Aug 31	21.94	Aug 27 1995
INSTANTANEOUS LOW FLOW			0.04*	Jul 9	0.00*	Oct 5 1968
ANNUAL RUNOFF (CFSM)	0.19		0.19		0.93	
ANNUAL RUNOFF (INCHES)	2.64		2.62		12.67	
10 PERCENT EXCEEDS	25		21		128	
50 PERCENT EXCEEDS	3.8		4.2		18	
90 PERCENT EXCEEDS	0.16		0.17		2.2	

e Estimated.
 * See REMARKS.



SANTEE RIVER BASIN

02146900 TWELVE MILE CREEK NEAR WAXHAW, NC--Continued

PRECIPITATION RECORDS

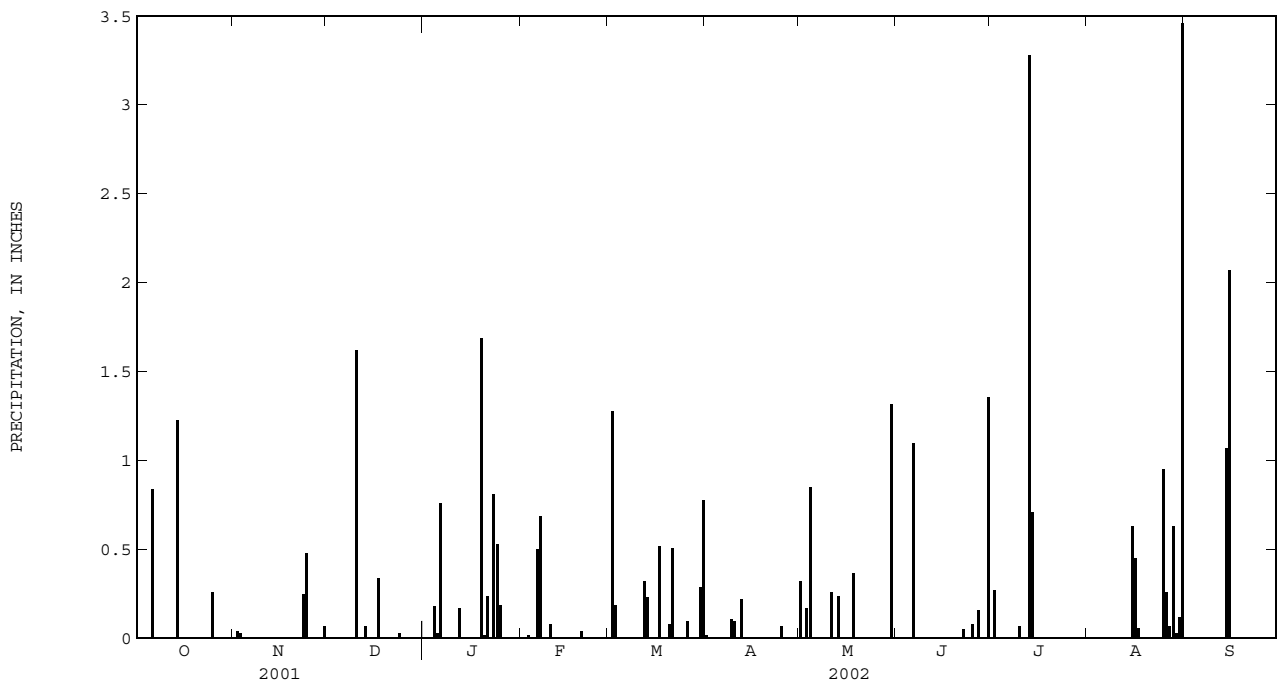
PERIOD OF RECORD.--October 2001 to September 2002.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record in poor.

PRECIPITATION ,RUNNING TOTAL, in INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

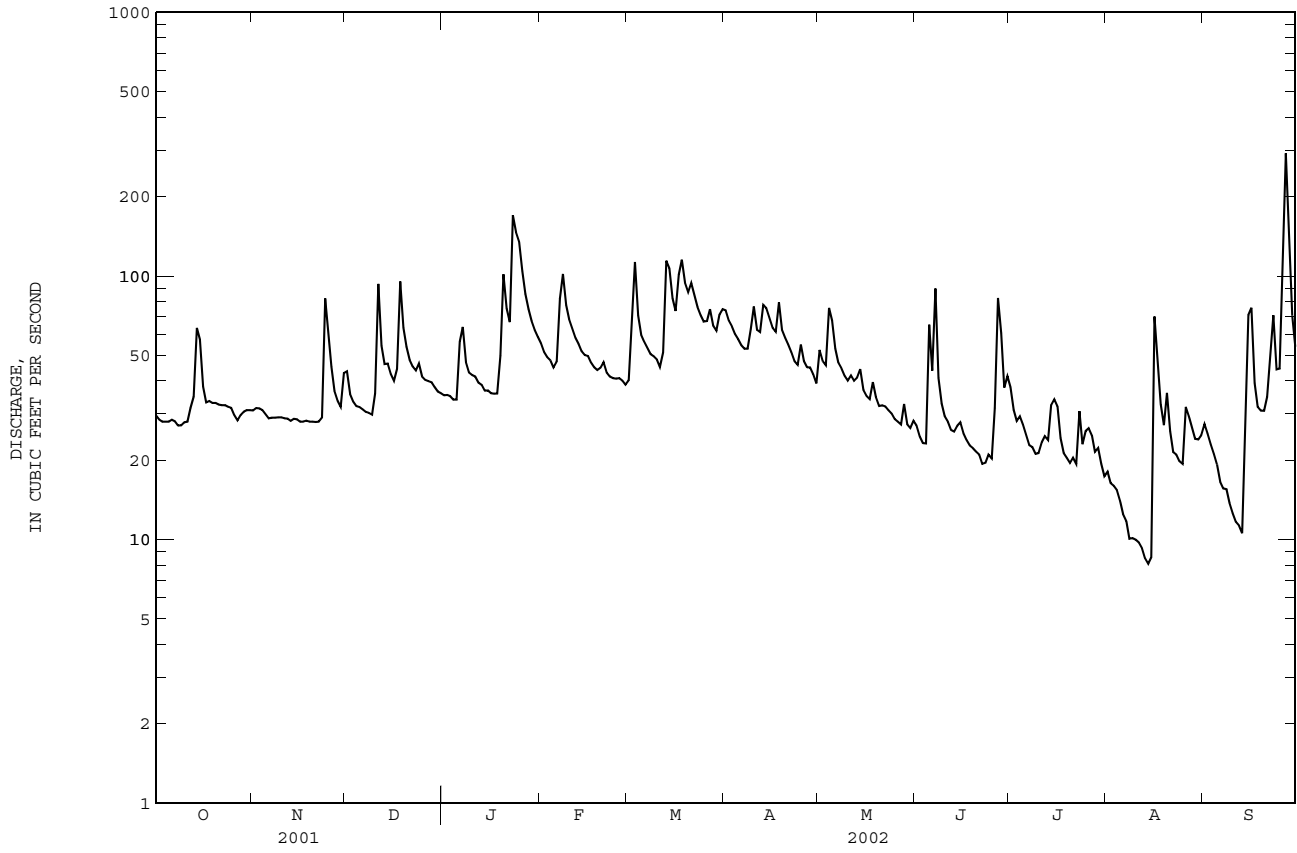
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.32	0.00	0.00	0.00	0.00
2	0.00	0.04	0.00	0.00	0.00	1.28	0.00	0.00	0.00	0.27	0.00	0.00
3	0.00	0.03	0.00	0.00	0.02	0.19	0.00	0.17	0.00	0.01	0.00	0.00
4	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.85	0.00	0.01	0.00	0.00
5	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.84	0.00	0.00	0.76	0.50	0.00	0.00	0.00	1.10	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.11	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.62	0.00	0.08	0.01	0.10	0.00	0.00	0.07	0.00	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.17	0.00	0.32	0.22	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.07	0.00	0.00	0.23	0.00	0.24	0.00	3.28	0.00	0.00
14	1.23	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.71	0.00	1.07
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.63	2.07
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.01
17	0.00	0.00	0.34	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.06	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.00	0.00	---
19	0.00	0.00	0.00	1.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---
20	0.00	0.00	0.00	0.02	0.04	0.08	0.00	0.00	0.00	0.00	0.00	---
21	0.00	0.00	0.00	0.24	0.00	0.51	0.00	0.00	0.00	0.00	0.00	---
22	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.05	0.00	0.00	---
23	0.00	0.25	0.00	0.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---
24	0.00	0.48	0.03	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---
25	0.26	0.00	0.00	0.19	0.00	0.00	0.07	0.00	0.08	0.00	0.95	---
26	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.01	0.00	0.26	---
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.07	---
28	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.63	---
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.03	---
30	0.00	0.07	0.00	0.00	---	0.29	0.00	1.32	1.36	0.00	0.12	---
31	0.00	---	0.00	0.00	---	0.78	---	0.00	---	0.00	3.46	---
TOTAL	2.33	0.87	2.08	4.62	1.34	4.34	0.53	3.53	2.77	---	6.66	---





Gaging station at Beetree Creek near Swannanoa, North Carolina.

02149000 COVE CREEK NEAR LAKE LURE, NC--Continued



SANTEE RIVER BASIN

02150495 SECOND BROAD RIVER NEAR LOGAN, NC

LOCATION.--Lat 35°24'15", long 81°52'20", Rutherford County, Hydrologic Unit 03050105, on right bank 30 ft downstream of bridge on Secondary Road 1538, 2.2 mi southeast of Logan, and 2.7 mi upstream from Catheys Creek.

DRAINAGE AREA.--86.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 840 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges and those above 600 ft³/s, which are poor. Maximum discharge for period of record from rating curve extended above 600 ft³/s by logarithmic plotting.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	33	39	37	71	49	83	54	36	26	13	16
2	41	33	35	36	65	68	79	52	30	22	13	15
3	39	33	33	37	62	129	75	49	28	21	13	14
4	37	33	33	35	60	89	69	65	28	27	12	13
5	35	31	33	35	56	76	66	62	43	23	11	12
6	36	31	33	49	58	71	64	52	39	20	10	10
7	35	31	33	56	97	68	61	49	93	19	9.7	9.6
8	33	31	34	45	141	65	60	52	45	18	9.2	9.2
9	33	31	33	44	111	63	63	47	36	17	8.9	8.6
10	33	31	41	43	96	62	74	44	32	16	8.7	7.9
11	33	31	87	41	86	57	65	51	30	17	8.4	7.3
12	34	31	61	40	77	63	65	46	28	17	8.0	6.6
13	35	31	52	39	72	114	83	51	27	17	7.6	6.8
14	54	31	51	38	67	128	85	55	28	65	7.2	10
15	59	31	47	38	64	104	78	44	28	36	7.4	30
16	40	31	43	37	63	92	72	41	26	28	41	53
17	35	31	46	37	60	121	89	39	24	21	25	26
18	35	30	95	37	57	156	88	41	23	19	21	21
19	35	31	72	50	56	125	71	39	25	18	18	21
20	35	30	59	102	57	112	65	37	22	16	16	20
21	35	30	51	88	59	111	62	37	21	16	15	20
22	35	30	48	81	55	100	58	38	20	15	14	24
23	34	31	47	252	53	91	55	37	20	17	13	44
24	34	67	49	250	52	85	52	35	20	16	12	26
25	34	50	44	229	51	82	56	35	19	25	12	25
26	32	41	42	169	e51	80	53	34	23	20	15	61
27	31	37	41	127	51	83	51	36	48	25	17	142
28	31	34	38	104	e50	73	50	41	38	19	16	91
29	32	33	38	92	---	70	49	34	28	18	16	50
30	33	36	36	81	---	80	46	33	25	15	16	38
31	33	---	37	74	---	85	---	33	---	14	16	---
TOTAL	1125	1015	1431	2423	1898	2752	1987	1363	933	663	430.1	838.0
MEAN	36.29	33.83	46.16	78.16	67.79	88.77	66.23	43.97	31.10	21.39	13.87	27.93
MAX	59	67	95	252	141	156	89	65	93	65	41	142
MIN	31	30	33	35	50	49	46	33	19	14	7.2	6.6
CFSM	0.42	0.39	0.54	0.91	0.79	1.03	0.77	0.51	0.36	0.25	0.16	0.32
IN.	0.49	0.44	0.62	1.05	0.82	1.19	0.86	0.59	0.40	0.29	0.19	0.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

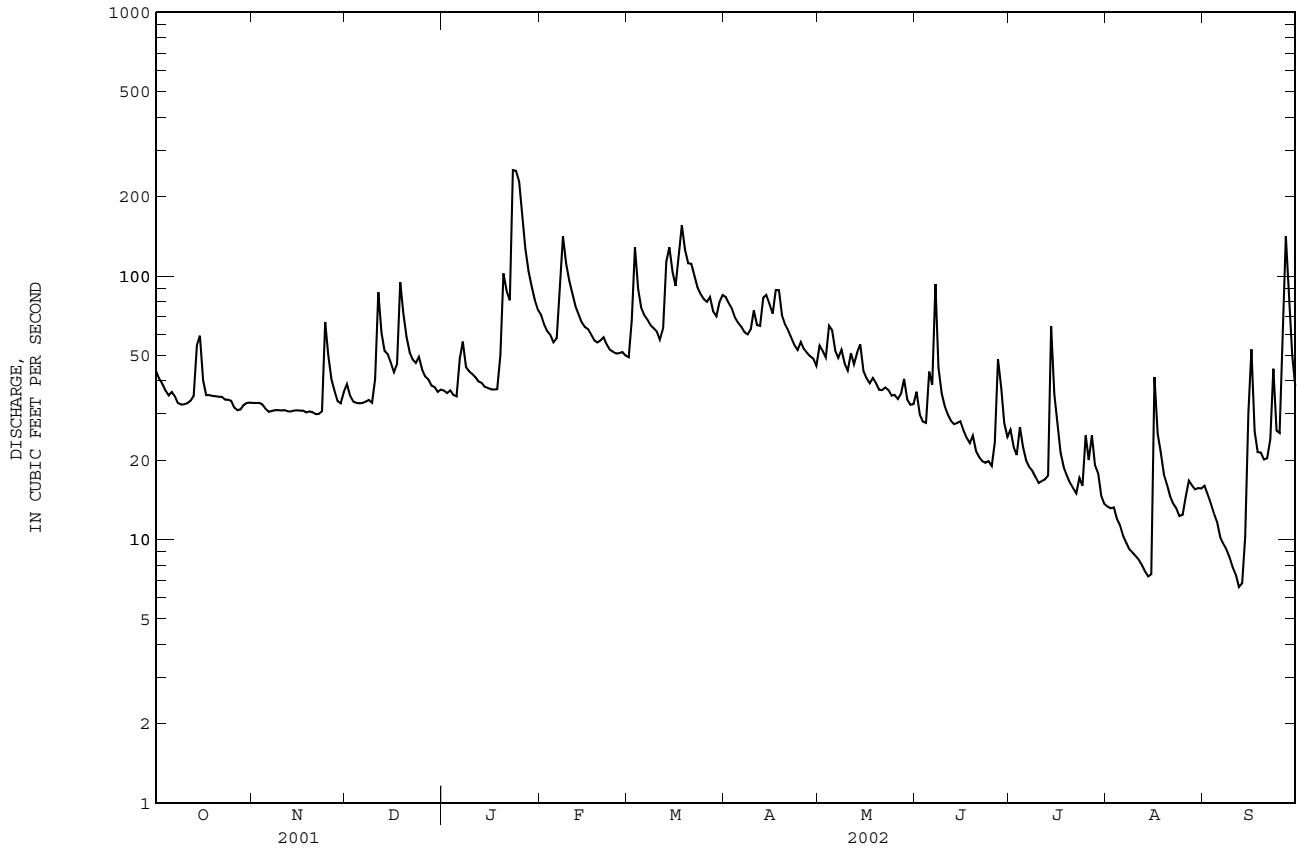
	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
MEAN	44.59	50.16	58.23	78.70	81.87	104.1	87.55	54.44	40.67	40.36	24.25	41.23
MAX	72.6	72.9	78.7	115	128	120	111	78.2	57.5	57.4	32.1	77.1
(WY)	1999	1999	1999	1999	1999	2000	2000	1999	1999	2001	1999	2001
MIN	25.5	33.8	46.2	50.8	57.7	88.8	66.2	34.4	31.1	21.4	13.9	27.9
(WY)	2001	2002	2002	2001	2001	2002	2002	2001	2002	2002	2002	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1999 - 2002

ANNUAL TOTAL	19393	16858.1	58.71
ANNUAL MEAN	53.13	46.19	75.9
HIGHEST ANNUAL MEAN			46.2
LOWEST ANNUAL MEAN			1030
HIGHEST DAILY MEAN	498	Sep 3	252
LOWEST DAILY MEAN	17	Aug 29	6.6
ANNUAL SEVEN-DAY MINIMUM	18	Aug 23	8.0
MAXIMUM PEAK FLOW			522
MAXIMUM PEAK STAGE			4.89
INSTANTANEOUS LOW FLOW			6.1
ANNUAL RUNOFF (CFSM)	0.62		0.54
ANNUAL RUNOFF (INCHES)	8.37		7.28
10 PERCENT EXCEEDS	87		85
50 PERCENT EXCEEDS	40		37
90 PERCENT EXCEEDS	27		15

e Estimated.
* See REMARKS.

02150495 SECOND BROAD RIVER NEAR LOGAN, NC--Continued



SANTEE RIVER BASIN

02150495 SECOND BROAD RIVER NEAR LOGAN, NC--Continued

PRECIPITATION RECORDS

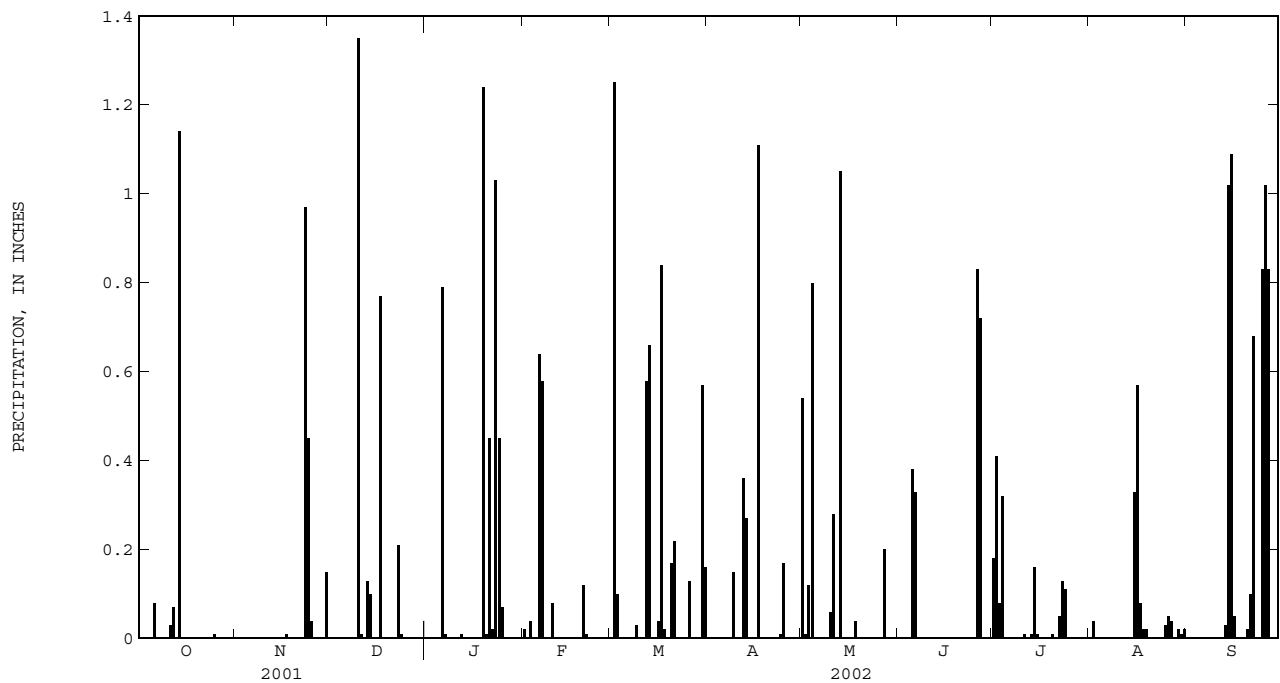
PERIOD OF RECORD.--November 2000 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Gage is operated in cooperation with North Carolina Department of Environment and Natural Resources. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.54	0.00	0.18	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.01	0.00	0.41	0.04	0.00
3	0.00	0.00	0.00	0.00	0.04	0.10	0.00	0.12	0.00	0.08	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.32	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.00
6	0.08	0.00	0.00	0.79	0.64	0.00	0.00	0.00	0.33	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.03	0.15	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.35	0.00	0.08	0.00	0.00	0.06	0.00	0.00	0.00	0.00
11	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.28	0.00	0.01	0.00	0.00
12	0.07	0.00	0.00	0.01	0.00	0.58	0.36	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.13	0.00	0.00	0.66	0.27	1.05	0.00	0.01	0.00	0.03
14	1.14	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	1.02
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.33	1.09
16	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.57	0.05
17	0.00	0.01	0.77	0.00	0.00	0.84	1.11	0.00	0.00	0.00	0.08	0.00
18	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.04	0.00	0.00	0.02	0.00
19	0.00	0.00	0.00	1.24	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
20	0.00	0.00	0.00	0.01	0.12	0.17	0.00	0.00	0.00	0.01	0.00	0.02
21	0.00	0.00	0.00	0.45	0.01	0.22	0.00	0.00	0.00	0.00	0.00	0.10
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.68
23	0.00	0.97	0.21	1.03	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00
24	0.00	0.45	0.01	0.45	0.00	0.00	0.01	0.00	0.00	0.11	0.00	0.00
25	0.01	0.04	0.00	0.07	0.00	0.00	0.17	0.00	0.00	0.00	0.03	0.83
26	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.83	0.00	0.05	1.02
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.72	0.00	0.04	0.83
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.02	0.00
30	0.00	0.15	0.00	0.00	---	0.57	0.00	0.00	0.00	0.00	0.01	0.00
31	0.00	---	0.00	0.00	---	0.16	---	0.00	---	0.00	0.02	---
TOTAL	1.33	1.62	2.58	4.08	1.49	4.77	2.07	3.10	2.26	1.48	1.23	5.67





Gaging station at Ivy River near Marshall, North Carolina.

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 mi².

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 NGVD of 1929 (Duke Power Company bench mark). Prior to July 20, 1934, at site 500 ft upstream at 640.92 ft. Satellite and telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. 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. Minimum discharge for current water year also occurred Aug. 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	347	378	411	524	797	725	903	691	703	362	226	150
2	453	428	423	398	996	844	1060	791	403	355	224	179
3	340	463	509	556	625	968	1000	776	356	349	190	156
4	321	331	383	558	573	910	864	1270	511	399	166	251
5	405	312	585	677	616	1090	960	757	511	332	191	149
6	452	427	578	451	878	1110	887	607	682	286	198	135
7	309	448	569	558	1050	885	600	920	778	331	204	127
8	293	382	508	773	1500	935	618	972	813	299	137	111
9	309	482	383	634	1240	918	935	761	532	297	108	113
10	494	340	393	638	807	599	897	812	476	282	94	107
11	434	319	998	634	745	559	983	821	472	295	94	93
12	341	324	670	709	923	661	993	477	448	314	148	91
13	426	332	724	455	970	1360	1260	484	437	380	134	83
14	395	278	719	415	949	1400	749	972	419	261	149	116
15	560	376	659	464	798	1210	704	888	415	350	112	271
16	496	426	453	434	910	1150	1010	771	438	381	170	567
17	484	495	441	542	606	868	905	777	367	372	252	478
18	451	337	822	565	556	1090	947	644	370	296	251	240
19	487	312	1040	803	794	1580	1130	445	377	272	302	314
20	549	357	841	939	642	1150	994	419	352	275	231	297
21	357	333	789	817	850	1210	601	605	345	279	202	350
22	301	489	780	1110	754	1250	577	579	349	259	183	232
23	334	343	484	1630	734	1170	777	579	327	257	113	246
24	465	760	491	2010	527	721	736	581	334	259	117	286
25	481	632	563	2240	590	750	779	666	316	310	119	385
26	449	553	433	2000	705	966	1350	402	305	277	254	659
27	443	591	622	1020	703	1050	770	383	357	248	184	1390
28	343	624	742	875	596	1020	547	431	485	260	160	1890
29	322	444	907	1290	---	1070	473	606	628	270	165	1100
30	312	623	454	1030	---	1220	532	546	460	265	159	734
31	313	---	415	951	---	788	---	590	---	270	175	---
TOTAL	12466	12939	18789	26700	22434	31227	25541	21023	13766	9442	5412	11300
MEAN	402.1	431.3	606.1	861.3	801.2	1007	851.4	678.2	458.9	304.6	174.6	376.7
MAX	560	760	1040	2240	1500	1580	1350	1270	813	399	302	1890
MIN	293	278	383	398	527	559	473	383	305	248	94	83
CFSM	0.46	0.49	0.69	0.98	0.92	1.15	0.97	0.78	0.52	0.35	0.20	0.43
IN.	0.53	0.55	0.80	1.14	0.95	1.33	1.09	0.89	0.59	0.40	0.23	0.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2002, BY WATER YEAR (WY)

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	1254	1212	1428	1746	1891	2083	1908	1524	1290	1084	1198	1046																																																																		
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	641	783	821	505	420	305	175	288																																																																		
(WY)	1955	1955	1956	1956	2001	1988	1986	2001	1988	2002	2002	1954																																																																		

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

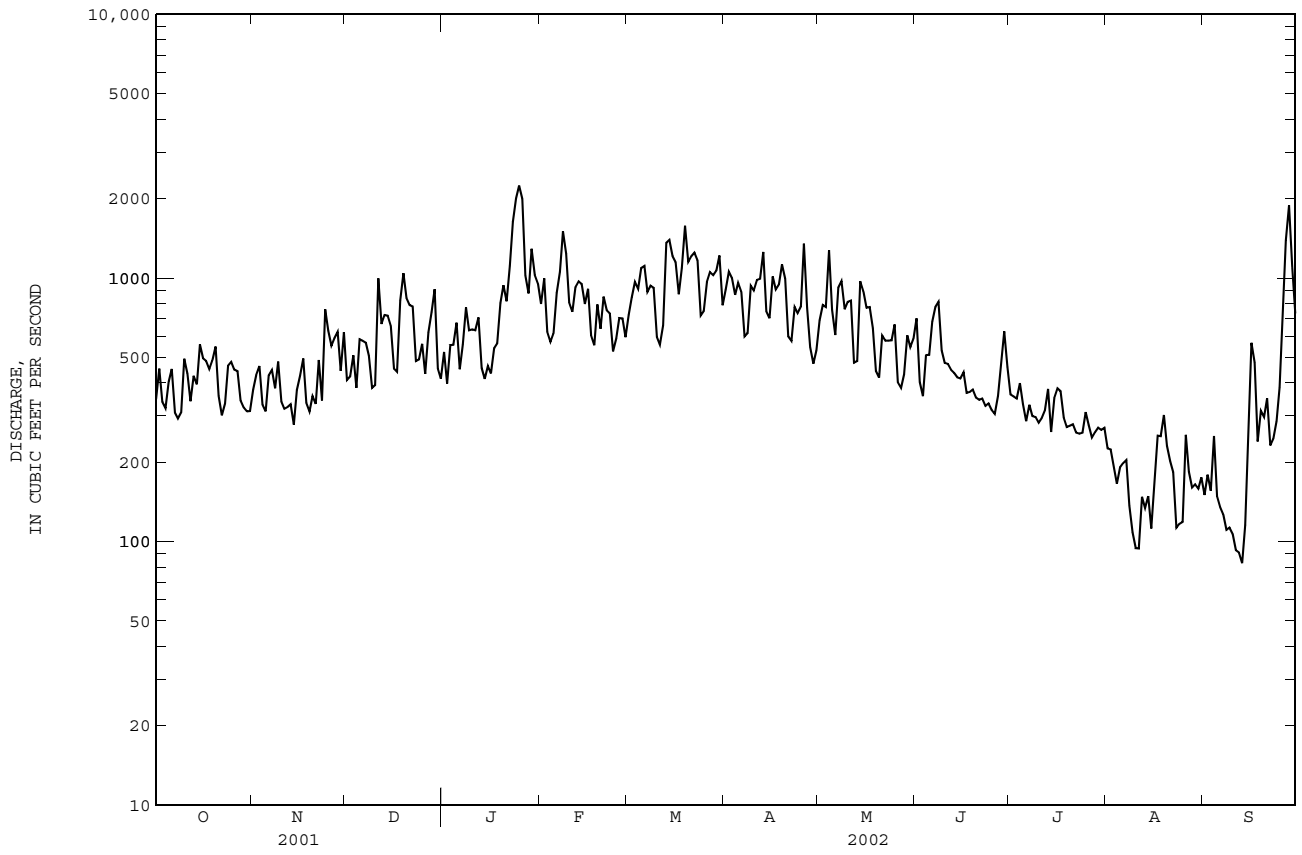
FOR 2002 WATER YEAR

WATER YEARS 1925 - 2002

ANNUAL TOTAL	224741	211039	
ANNUAL MEAN	615.7	578.2	1472
HIGHEST ANNUAL MEAN			2328
LOWEST ANNUAL MEAN			578
HIGHEST DAILY MEAN	5240	Mar 30	63900
LOWEST DAILY MEAN	263	Aug 21	83
ANNUAL SEVEN-DAY MINIMUM	310	Aug 21	102
MAXIMUM PEAK FLOW			2720
MAXIMUM PEAK STAGE			3.56
INSTANTANEOUS LOW FLOW			59*
ANNUAL RUNOFF (CFSM)	0.70		0.66
ANNUAL RUNOFF (INCHES)	9.55		8.97
10 PERCENT EXCEEDS	1020		1010
50 PERCENT EXCEEDS	487		489
90 PERCENT EXCEEDS	333		203

* See REMARKS.

02151500 BROAD RIVER NEAR BOILING SPRINGS, NC--Continued



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 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-5. March 1959 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 899.87 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records good except 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.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	16	19	18	42	32	48	28	18	12	6.2	10
2	16	17	17	e17	40	40	45	28	17	12	5.9	10
3	15	17	17	e17	39	89	43	28	17	11	6.0	9.5
4	15	16	16	e17	39	58	40	34	16	22	6.2	9.0
5	15	16	16	e18	37	46	39	33	e16	20	5.7	8.2
6	15	16	16	27	37	41	37	27	19	12	5.0	7.3
7	16	16	16	34	55	38	36	27	25	11	4.8	6.9
8	e15	16	16	24	89	36	36	30	20	10	4.6	6.7
9	14	16	16	22	67	35	37	25	17	9.9	4.3	6.5
10	15	16	20	21	64	34	41	24	16	9.7	4.3	6.1
11	15	16	52	21	59	32	36	24	16	9.2	4.1	5.5
12	16	16	30	20	52	36	35	24	15	9.6	4.0	5.0
13	17	16	24	19	48	98	43	25	15	9.8	4.0	4.8
14	41	15	24	19	45	101	44	29	14	16	4.0	6.3
15	34	15	22	19	43	70	40	23	14	18	3.9	30
16	20	16	21	18	41	59	38	22	13	12	18	37
17	17	15	22	18	40	86	36	21	13	10	17	17
18	17	15	53	18	38	113	54	21	13	9.4	11	13
19	17	15	35	25	37	82	39	21	12	8.7	9.5	12
20	17	15	27	64	37	69	35	20	12	8.1	9.9	12
21	17	15	23	49	39	70	33	20	12	10	8.8	12
22	16	15	22	44	37	63	31	20	11	9.8	7.8	14
23	16	15	21	241	35	57	28	20	11	18	7.4	21
24	16	39	23	186	34	52	27	19	12	12	7.2	15
25	16	26	21	168	34	48	29	19	12	11	7.2	14
26	15	20	20	107	33	47	28	19	14	11	21	32
27	15	18	19	71	33	49	27	19	17	10	12	183
28	16	17	19	58	32	43	27	31	15	9.5	11	62
29	16	17	19	50	---	41	26	21	13	8.6	10	31
30	16	18	19	46	---	45	25	19	12	7.7	9.9	24
31	16	---	18	44	---	49	---	19	---	6.6	10	---
TOTAL	538	516	703	1520	1226	1759	1083	740	447	354.6	250.7	630.8
MEAN	17.35	17.20	22.68	49.03	43.79	56.74	36.10	23.87	14.90	11.44	8.087	21.03
MAX	41	39	53	241	89	113	54	34	25	22	21	183
MIN	14	15	16	17	32	32	25	19	11	6.6	3.9	4.8
CFSM	0.29	0.28	0.37	0.81	0.72	0.94	0.60	0.39	0.25	0.19	0.13	0.35
IN.	0.33	0.32	0.43	0.93	0.75	1.08	0.67	0.46	0.27	0.22	0.15	0.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2002, BY WATER YEAR (WY)

	MEAN	72.65	66.68	81.52	103.6	120.4	136.4	122.4	94.49	76.34	60.04	64.85	53.12
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	17.4	17.2	22.7	30.9	37.8	44.6	36.1	18.3	14.9	11.4	8.09	21.0	
(WY)	2002	2002	2002	2001	2001	1988	2002	2001	2002	2002	2002	2002	

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

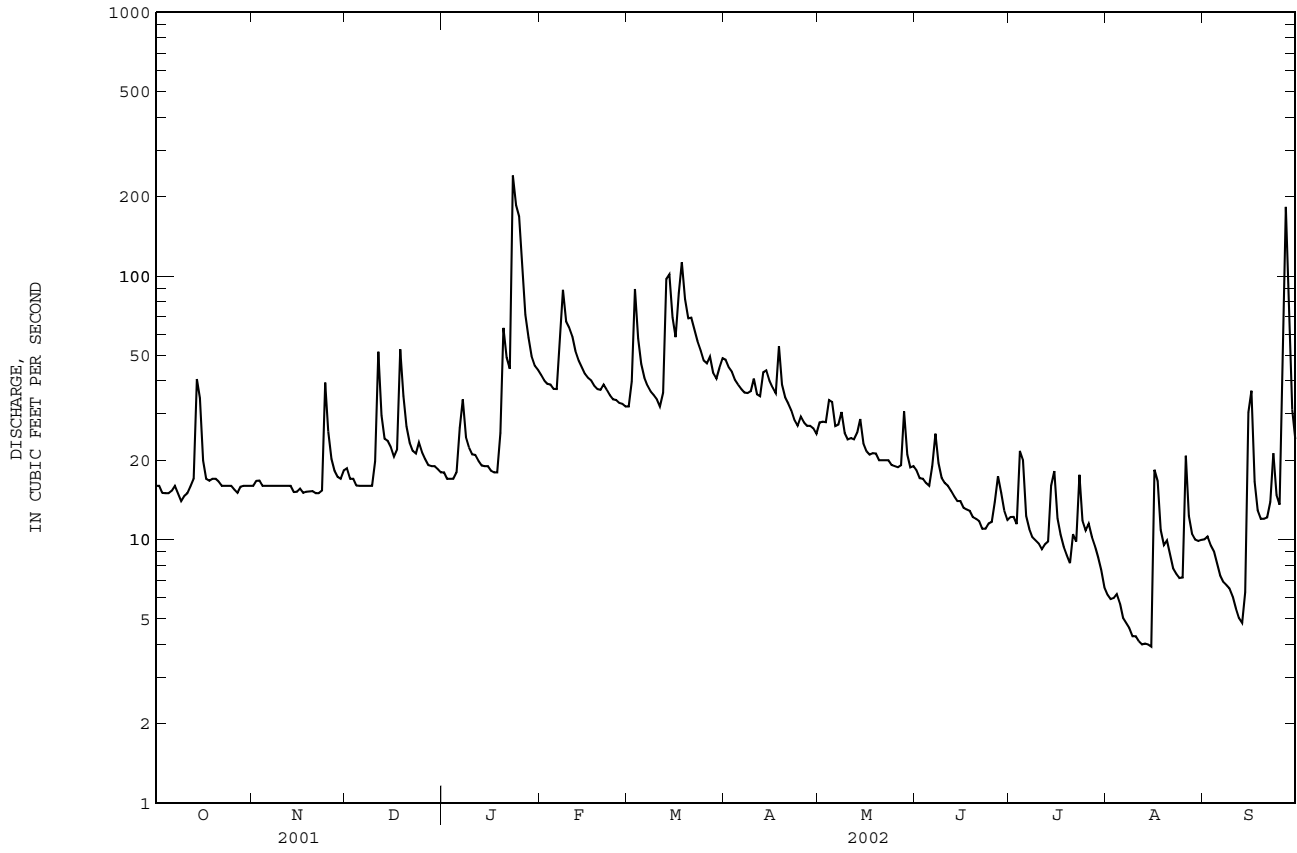
FOR 2002 WATER YEAR

WATER YEARS 1959 - 2002

ANNUAL TOTAL	10363	9768.1	
ANNUAL MEAN	28.39	26.76	87.58
HIGHEST ANNUAL MEAN			139
LOWEST ANNUAL MEAN			26.8
HIGHEST DAILY MEAN	388	Mar 30	241
LOWEST DAILY MEAN	11	Aug 23	3.9
ANNUAL SEVEN-DAY MINIMUM	11	Aug 23	4.1
MAXIMUM PEAK FLOW			519
MAXIMUM PEAK STAGE			3.03
INSTANTANEOUS LOW FLOW			3.6
ANNUAL RUNOFF (CFSM)	0.47		0.44
ANNUAL RUNOFF (INCHES)	6.37		6.01
10 PERCENT EXCEEDS	45		48
50 PERCENT EXCEEDS	20		19
90 PERCENT EXCEEDS	15		9.1

e Estimated.

02152100 FIRST BROAD RIVER NEAR CASAR, NC--Continued



SANTEE RIVER BASIN

351954080493445 CRN02

LOCATION.--Lat 35°19'54", long 80°49'35", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050101, Fire Station 28, Old Statesville Road, Charlotte, NC.

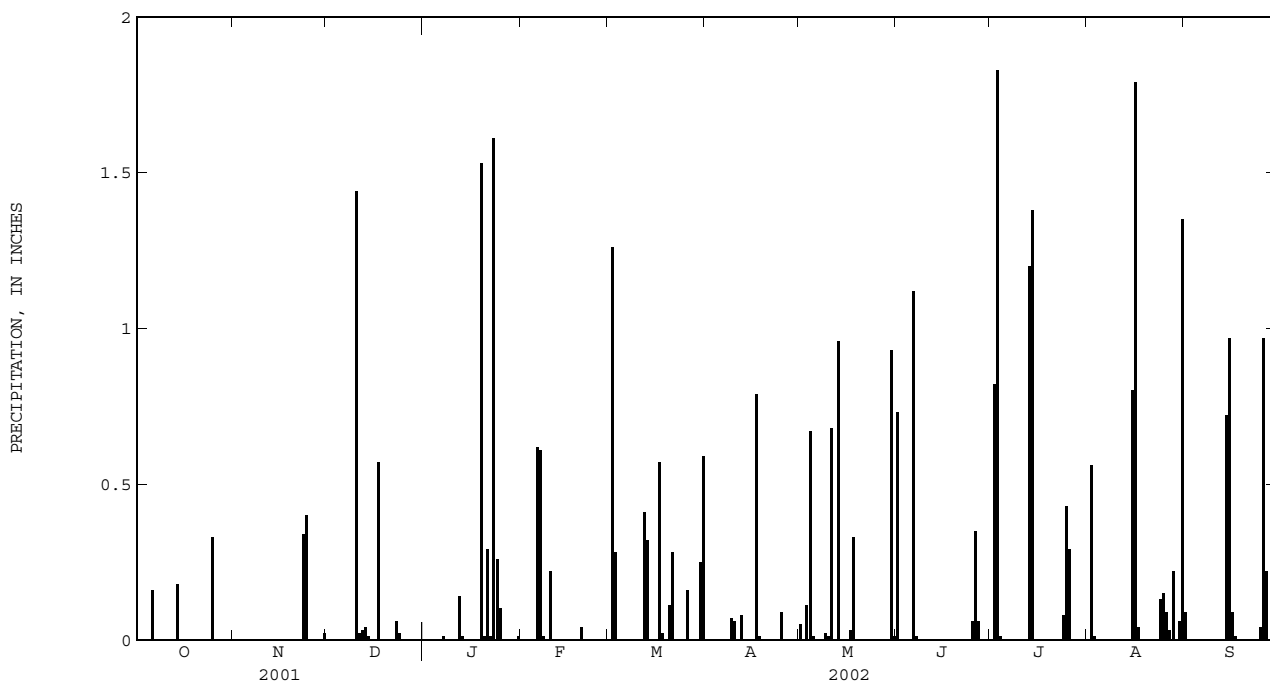
PERIOD OF RECORD.--October 1992 to current year. Records for period October 1992 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.73	0.00	0.00	0.09
2	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00	0.82	0.56	0.00
3	0.00	0.00	0.00	---	0.00	0.28	0.00	0.11	0.00	1.83	0.01	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.67	0.00	0.01	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
6	0.16	0.00	0.00	---	0.62	0.00	0.00	0.00	1.12	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.61	0.00	0.00	0.00	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.02	0.00	0.00	0.00	0.00
10	0.00	0.00	1.44	0.00	0.22	0.00	0.06	0.01	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.00
12	0.00	0.00	0.03	0.14	0.00	0.41	0.08	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.04	0.01	0.00	0.32	0.00	0.96	0.00	1.20	0.00	0.00
14	0.18	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.38	0.00	0.72
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.97
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.79	0.09
17	0.00	0.00	0.57	0.00	0.00	0.57	0.79	0.03	0.00	0.00	0.04	0.01
18	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.33	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.01	0.04	0.11	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.29	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.34	0.06	1.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.40	0.02	0.26	0.00	0.00	0.00	0.00	0.00	0.08	0.13	0.00
25	0.33	0.00	0.00	0.10	0.00	0.00	0.09	0.00	0.06	0.43	0.15	0.04
26	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.35	0.29	0.09	0.97
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.03	0.22
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.02	0.00	0.00	---	0.25	0.00	0.93	0.00	0.00	0.06	0.00
31	0.00	---	0.00	0.01	---	0.59	---	0.01	---	0.00	1.35	---
TOTAL	0.67	0.76	2.19	---	1.50	4.25	1.10	3.81	2.33	6.04	5.23	3.11



SANTEE RIVER BASIN

351132080562345 CRN04

LOCATION.--Lat 35°11'32", long 80°56'23", Mecklenburg County, Hydrologic Unit 03050103, Fire Station 30, Belle Oaks Road, Charlotte, NC.

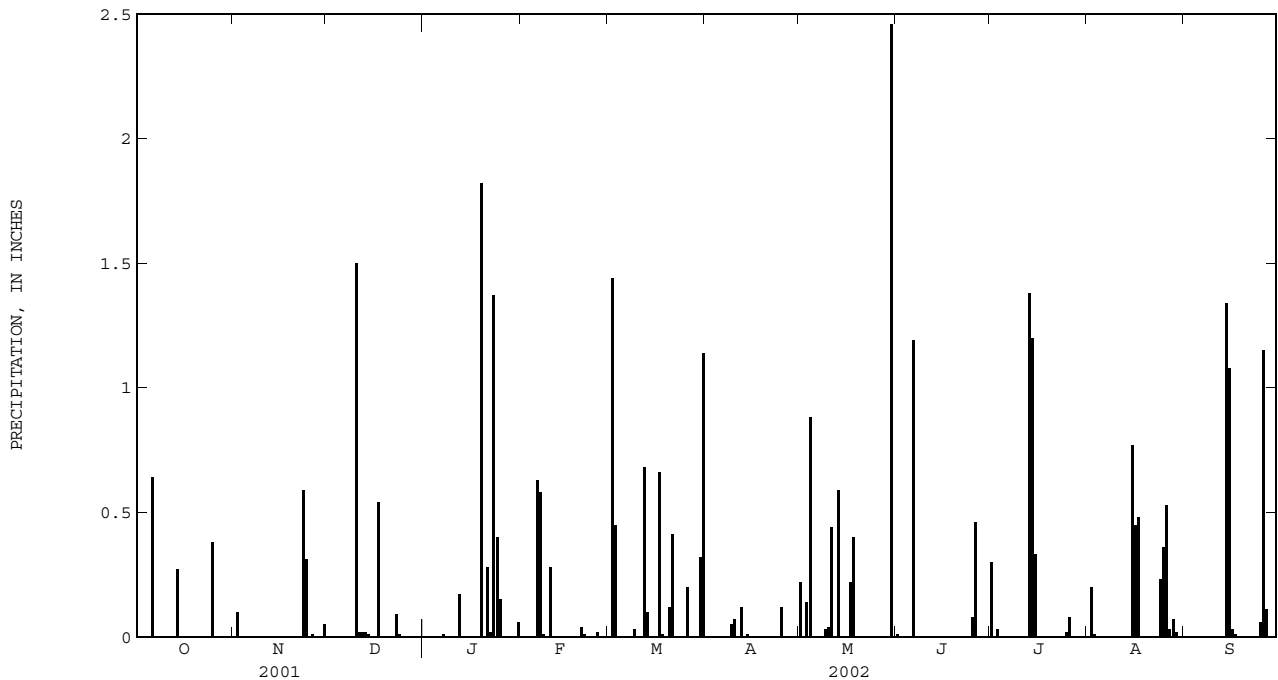
PERIOD OF RECORD.--October 1992 to current year. Records for period October 1992 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.01	0.30	0.00	---
2	0.00	0.10	0.00	0.00	0.00	1.44	0.00	0.00	0.00	0.00	0.20	---
3	0.00	0.00	0.00	---	0.00	0.45	0.00	0.14	0.00	0.03	0.01	---
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.88	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.64	0.00	0.00	---	0.63	0.00	0.00	0.00	1.19	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.03	0.05	0.03	0.00	0.00	0.00	0.00
10	0.00	0.00	1.50	0.00	0.28	0.00	0.07	0.04	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.17	0.00	0.68	0.12	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.02	0.00	0.00	0.10	0.00	0.59	0.00	1.38	0.00	0.00
14	0.27	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	1.20	0.00	1.34
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.77	1.08
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.03
17	0.00	0.00	0.54	0.00	0.00	0.66	0.00	0.22	0.00	0.00	0.48	0.01
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.40	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.04	0.12	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.28	0.01	0.41	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.59	0.09	1.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.31	0.01	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00
25	0.38	0.00	0.00	0.15	0.02	0.00	0.12	0.00	0.08	0.02	0.36	0.06
26	0.00	0.01	0.00	0.00	0.00	0.20	0.00	0.00	0.46	0.08	0.53	1.15
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.11
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.02	0.00
30	0.00	0.05	0.00	0.00	---	0.32	0.00	2.46	0.00	0.00	---	0.00
31	0.00	---	0.00	0.06	---	1.14	---	0.00	---	0.00	---	---
TOTAL	1.29	1.06	2.21	---	1.57	5.56	0.37	5.42	1.74	3.34	---	---



SANTEE RIVER BASIN

351642080533445 CRN05

LOCATION.--Lat 35°16'42", long 80°53'34", Mecklenburg County, Hydrologic Unit 03050103, CMUD Administration Building, Brookshire Boulevard, Charlotte, NC.

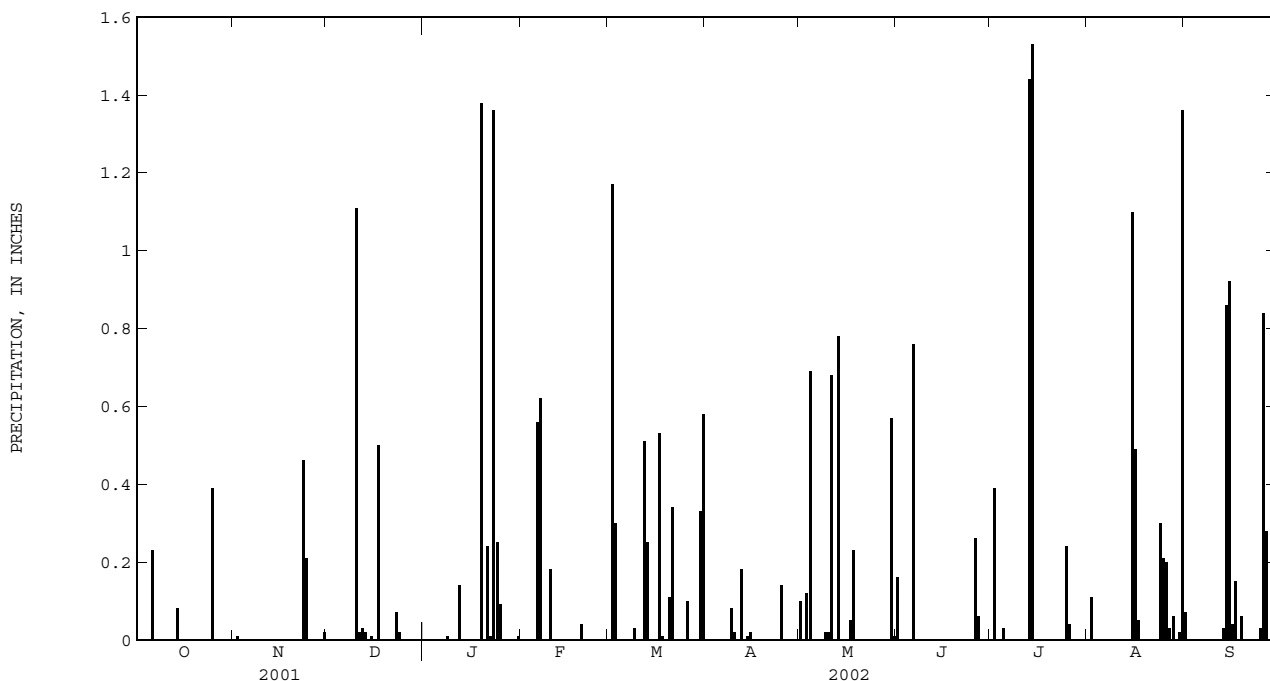
PERIOD OF RECORD.--October 1992 to current year. Records for period October 1992 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.16	0.00	0.00	0.07
2	0.00	0.01	0.00	0.00	0.00	1.17	0.00	0.00	0.00	0.39	0.11	0.00
3	0.00	0.00	0.00	---	0.00	0.30	0.00	0.12	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
6	0.23	0.00	0.00	---	0.56	0.00	0.00	0.00	0.76	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.03	0.08	0.02	0.00	0.00	0.00	0.00
10	0.00	0.00	1.11	0.00	0.18	0.00	0.02	0.02	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.00
12	0.00	0.00	0.03	0.14	0.00	0.51	0.18	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.02	0.00	0.00	0.25	0.00	0.78	0.00	1.44	0.00	0.03
14	0.08	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	1.53	0.00	0.86
15	0.00	0.00	0.01	0.00	0.00	0.00	0.02	0.00	0.00	0.00	1.10	0.92
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.04
17	0.00	0.00	0.50	0.00	0.00	0.53	0.00	0.05	0.00	0.00	0.05	0.15
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.23	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
20	0.00	0.00	0.00	0.00	0.04	0.11	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.24	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.46	0.07	1.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.21	0.02	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00
25	0.39	0.00	0.00	0.09	0.00	0.00	0.14	0.00	0.00	0.24	0.21	0.03
26	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.26	0.04	0.20	0.84
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.03	0.28
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.02	0.00	0.00	---	0.33	0.00	0.57	0.00	0.00	0.02	0.00
31	0.00	---	0.00	0.01	---	0.58	---	0.01	---	0.00	1.36	---
TOTAL	0.70	0.70	1.78	---	1.40	4.26	0.45	3.27	1.24	3.67	3.93	3.28



SANTEE RIVER BASIN

350351080454145 CRN07

LOCATION.--Lat 35°03'51", long 80°45'41", Mecklenburg County, Hydrologic Unit 03050103, Fire Station 9, McKee Road, Charlotte, NC.

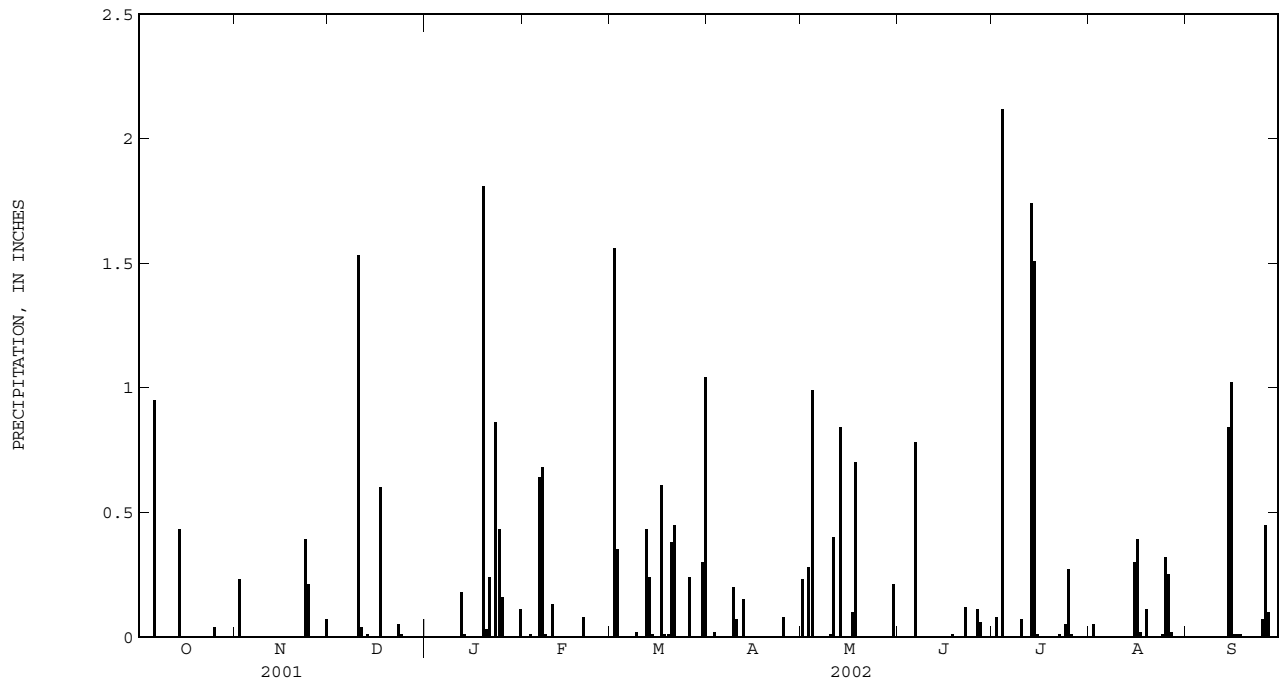
PERIOD OF RECORD.--October 1992 to current year. Records for period October 1992 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	---
2	0.00	0.23	0.00	0.00	0.00	1.56	0.00	0.00	0.00	0.08	0.05	---
3	0.00	0.00	0.00	---	0.01	0.35	0.02	0.28	0.00	0.00	0.00	---
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.99	0.00	2.12	0.00	---
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.95	0.00	0.00	---	0.64	0.00	0.00	0.00	0.78	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.02	0.20	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.53	0.00	0.13	0.00	0.07	0.01	0.00	0.07	0.00	0.00
11	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.18	0.00	0.43	0.15	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.01	0.01	0.00	0.24	0.00	0.84	0.00	1.74	0.00	0.00
14	0.43	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	1.51	0.00	0.84
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.30	1.02
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.01
17	0.00	0.00	0.60	0.00	0.00	0.61	0.00	0.10	0.00	0.00	0.02	0.01
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.70	0.01	0.00	0.00	0.01
19	0.00	0.00	0.00	1.81	0.00	0.01	0.00	0.00	0.00	0.00	0.11	0.00
20	0.00	0.00	0.00	0.03	0.08	0.38	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.24	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.01	0.00	0.00
23	0.00	0.39	0.05	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.21	0.01	0.43	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.00
25	0.04	0.00	0.00	0.16	0.00	0.00	0.08	0.00	0.00	0.27	0.32	0.07
26	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.11	0.01	0.25	0.45
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.02	0.10
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	---	0.00
30	0.00	0.07	0.00	0.00	---	0.30	0.00	0.21	0.00	0.00	---	0.00
31	0.00	---	0.00	0.11	---	1.04	---	0.00	---	0.00	---	---
TOTAL	1.42	0.90	2.24	---	1.55	5.65	0.52	3.76	1.08	5.87	---	---



SANTEE RIVER BASIN

350314080484945 CRN08

LOCATION.--Lat 35°03'22", long 80°48'51", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, St. Matthews Catholic Church, Ballantyne Commons Parkway, Charlotte, NC.

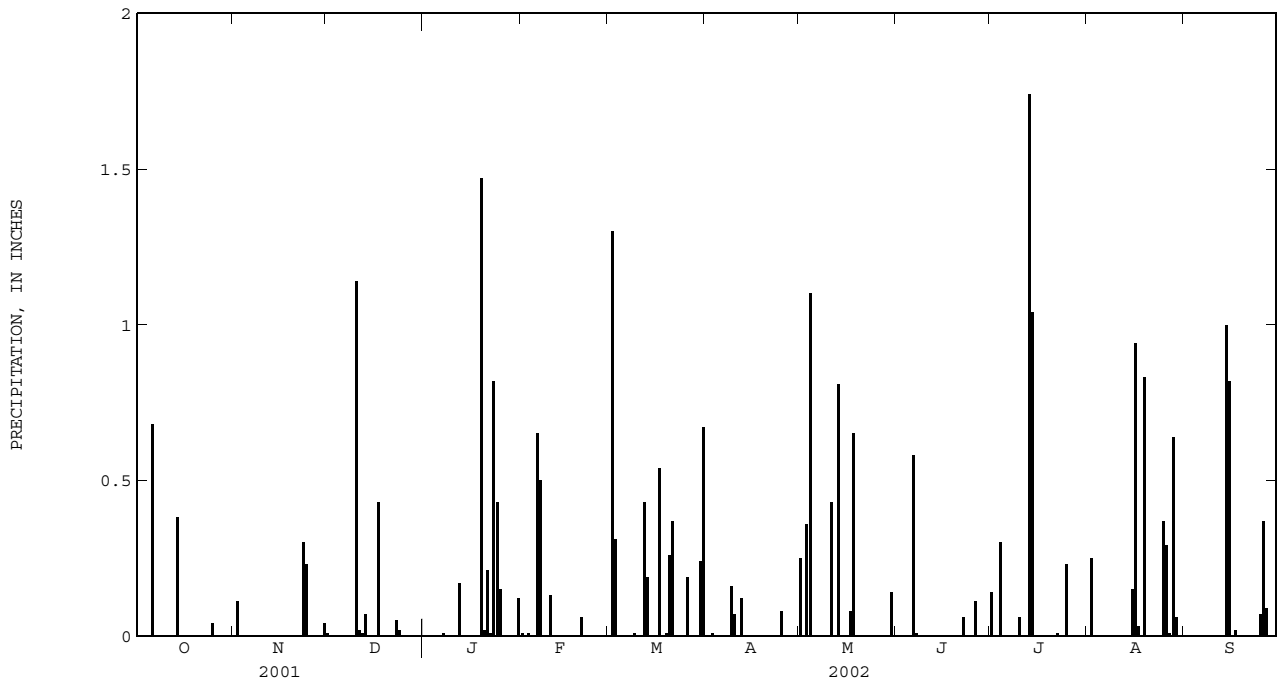
PERIOD OF RECORD.--October 1992 to current year. Records for period October 1992 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273. Records for October 1992 to August 4, 1994 at site McAlpine Creek Elementary School, Charlotte, NC (station 350458080493245).

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station. Prior to August 16, 2001, gage located on Elm Lane at intersection of Providence Road West, Charlotte.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.25	0.00	0.14	0.00	---
2	0.00	0.11	0.00	0.00	0.00	1.30	0.00	0.00	0.00	0.00	0.25	---
3	0.00	0.00	0.00	---	0.01	0.31	0.01	0.36	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	1.10	0.00	0.30	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.68	0.00	0.00	---	0.65	0.00	0.00	0.00	0.58	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.50	0.00	0.00	0.00	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.16	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.14	0.00	0.13	0.00	0.07	0.00	0.00	0.06	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00
12	0.00	0.00	0.01	0.17	0.00	0.43	0.12	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.07	0.00	0.00	0.19	0.00	0.81	0.00	1.74	0.00	0.00
14	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04	0.00	1.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.82
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.00
17	0.00	0.00	0.43	0.00	0.00	0.54	0.00	0.08	0.00	0.00	0.03	0.02
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.47	0.00	0.01	0.00	0.00	0.00	0.00	0.83	0.00
20	0.00	0.00	0.00	0.02	0.06	0.26	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.21	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.06	0.01	0.00	0.00
23	0.00	0.30	0.05	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.23	0.02	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.04	0.00	0.00	0.15	0.00	0.00	0.08	0.00	0.00	0.23	0.37	0.07
26	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.11	0.00	0.29	0.37
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.09
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.06	0.00
30	0.00	0.04	0.00	0.00	---	0.24	0.00	0.14	0.00	0.00	---	0.00
31	0.00	---	0.00	0.12	---	0.67	---	0.00	---	0.00	---	---
TOTAL	1.10	0.68	1.75	---	1.36	4.52	0.44	3.82	0.76	3.52	---	---



SANTEE RIVER BASIN

351414080463245 CRN09

LOCATION.--Lat 35°14'15", long 80°46'31", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Fire Station 15, Frontenac Road, Charlotte, NC.

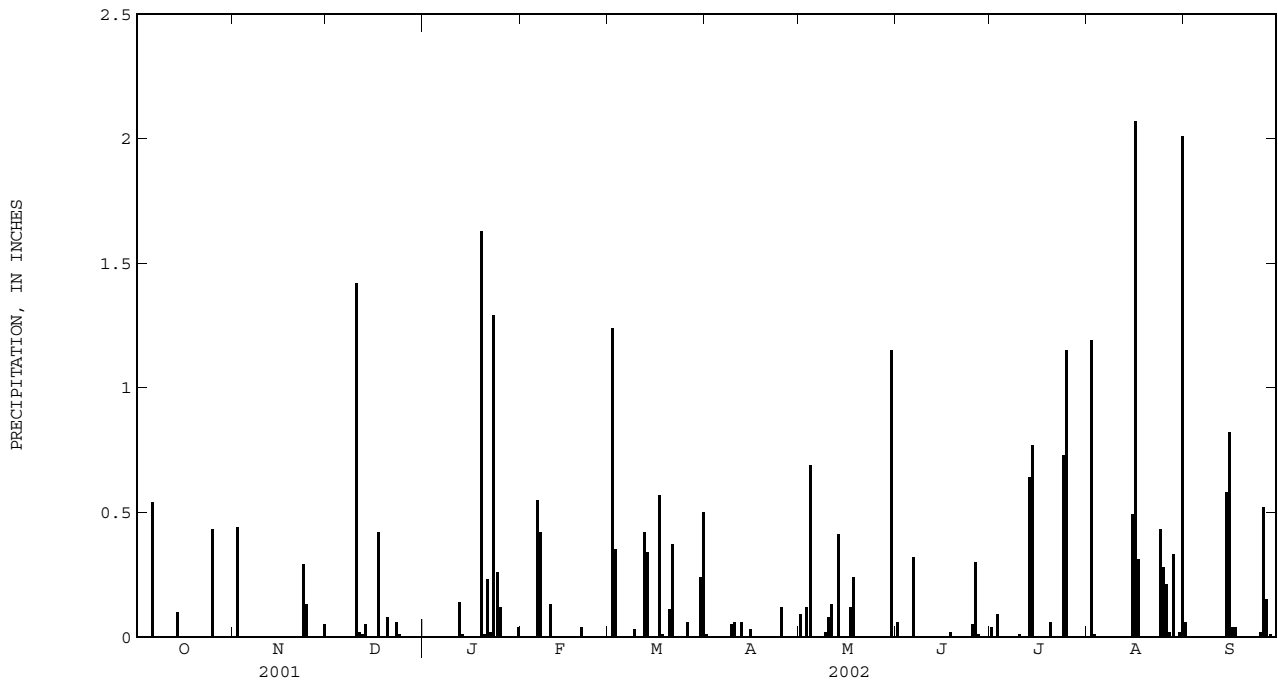
PERIOD OF RECORD.--November 1992 to current year. Records for period November 1992 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.09	0.06	0.04	0.00	0.06
2	0.00	0.44	0.00	0.00	0.00	1.24	0.00	0.00	0.00	0.00	1.19	0.00
3	0.00	0.00	0.00	---	0.00	0.35	0.00	0.12	0.00	0.09	0.01	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.54	0.00	0.00	---	0.55	0.00	0.00	0.00	0.32	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.42	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.03	0.05	0.02	0.00	0.00	0.00	0.00
10	0.00	0.00	1.42	0.00	0.13	0.00	0.06	0.08	0.00	0.01	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00
12	0.00	0.00	0.01	0.14	0.00	0.42	0.06	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.05	0.01	0.00	0.34	0.00	0.41	0.00	0.64	0.00	0.00
14	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.00	0.58
15	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.49	0.82
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.07	0.04
17	0.00	0.00	0.42	0.00	0.00	0.57	0.00	0.12	0.00	0.00	0.31	0.04
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.24	0.02	0.00	0.00	0.00
19	0.00	0.00	0.00	1.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.08	0.01	0.04	0.11	0.00	0.00	0.00	0.06	0.00	0.00
21	0.00	0.00	0.00	0.23	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.29	0.06	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.13	0.01	0.26	0.00	0.00	0.00	0.00	0.00	0.73	0.43	0.00
25	0.43	0.00	0.00	0.12	0.00	0.00	0.12	0.00	0.05	1.15	0.28	0.02
26	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.30	0.00	0.21	0.52
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.15
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.01
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.05	0.00	0.00	---	0.24	0.00	1.15	0.00	0.00	0.02	0.00
31	0.00	---	0.00	0.04	---	0.50	---	0.00	---	0.00	2.01	---
TOTAL	1.07	0.91	2.07	---	1.14	4.24	0.33	3.05	0.76	3.49	7.37	2.24



SANTEE RIVER BASIN

351331080525945 CRN11

LOCATION.--Lat 35°13'31", long 80°52'59", Mecklenburg County, Hydrologic Unit 03050103, Fire Station 10, Remount Road, Charlotte, NC.

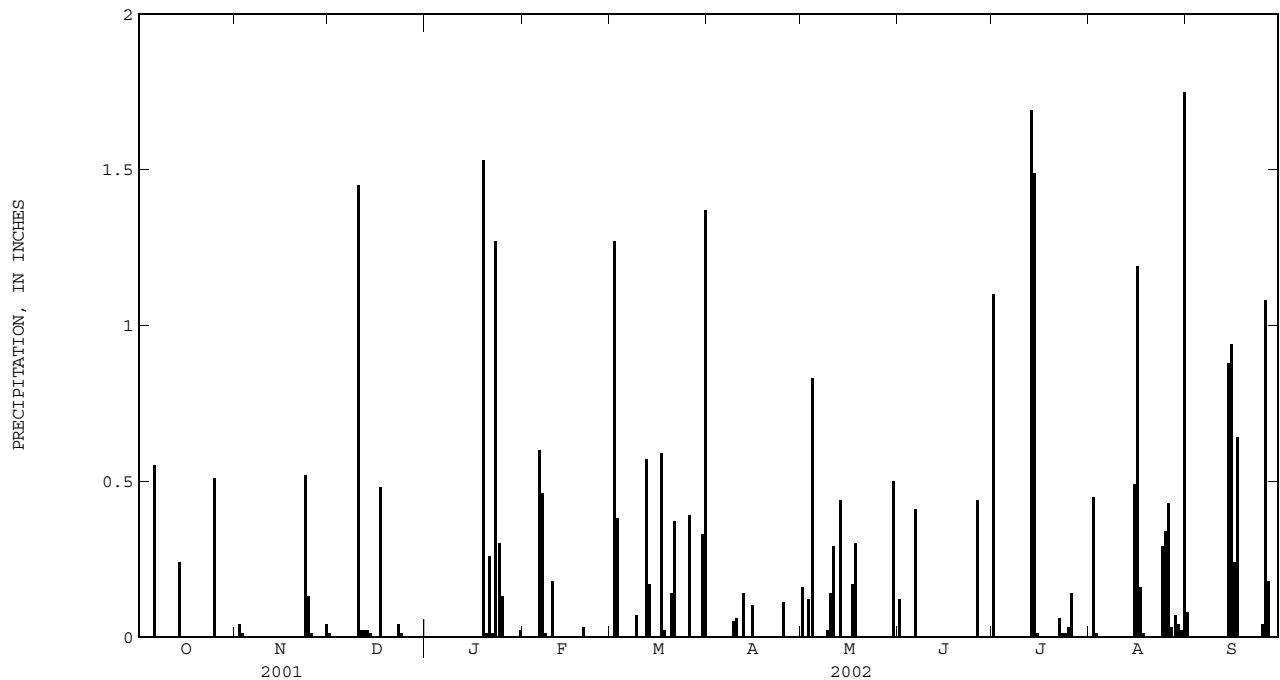
PERIOD OF RECORD.--November 1992 to current year. Records for period November 1992 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.16	0.12	1.10	0.00	0.08
2	0.00	0.04	0.00	0.00	0.00	1.27	0.00	0.00	0.00	0.00	0.45	0.00
3	0.00	0.01	0.00	---	0.00	0.38	0.00	0.12	0.00	0.00	0.01	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.83	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.55	0.00	0.00	---	0.60	0.00	0.00	0.00	0.41	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.07	0.05	0.02	0.00	0.00	0.00	0.00
10	0.00	0.00	1.45	0.00	0.18	0.00	0.06	0.14	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	---	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	---	0.00	0.57	0.14	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.02	0.00	0.00	0.17	0.00	0.44	0.00	1.69	0.00	0.00
14	0.24	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.49	0.00	0.88
15	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.01	0.49	0.94
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19	0.24
17	0.00	0.00	0.48	0.00	0.00	0.59	0.00	0.17	0.00	0.00	0.16	0.64
18	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.30	0.00	0.00	0.01	0.00
19	0.00	0.00	0.00	1.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.01	0.03	0.14	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.26	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
23	0.00	0.52	0.04	1.27	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
24	0.00	0.13	0.01	0.30	0.00	0.00	0.00	0.00	0.00	0.01	0.29	0.00
25	0.51	0.01	0.00	0.13	0.00	0.00	0.11	0.00	0.00	0.03	0.34	0.04
26	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.44	0.14	0.43	1.08
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.03	0.18
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.07	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.04	0.00
30	0.00	0.04	0.00	0.00	---	0.33	0.00	0.50	0.00	0.00	0.02	0.00
31	0.00	---	0.00	0.02	---	1.37	---	0.00	---	0.00	1.75	---
TOTAL	1.30	0.75	2.06	---	1.28	5.67	0.46	---	0.97	4.54	5.28	4.08



SANTEE RIVER BASIN

350823080505345 CRN12

LOCATION.--Lat 35°08'24", long 80°50'51", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Fire Station 16, Park South Drive, Charlotte, NC.

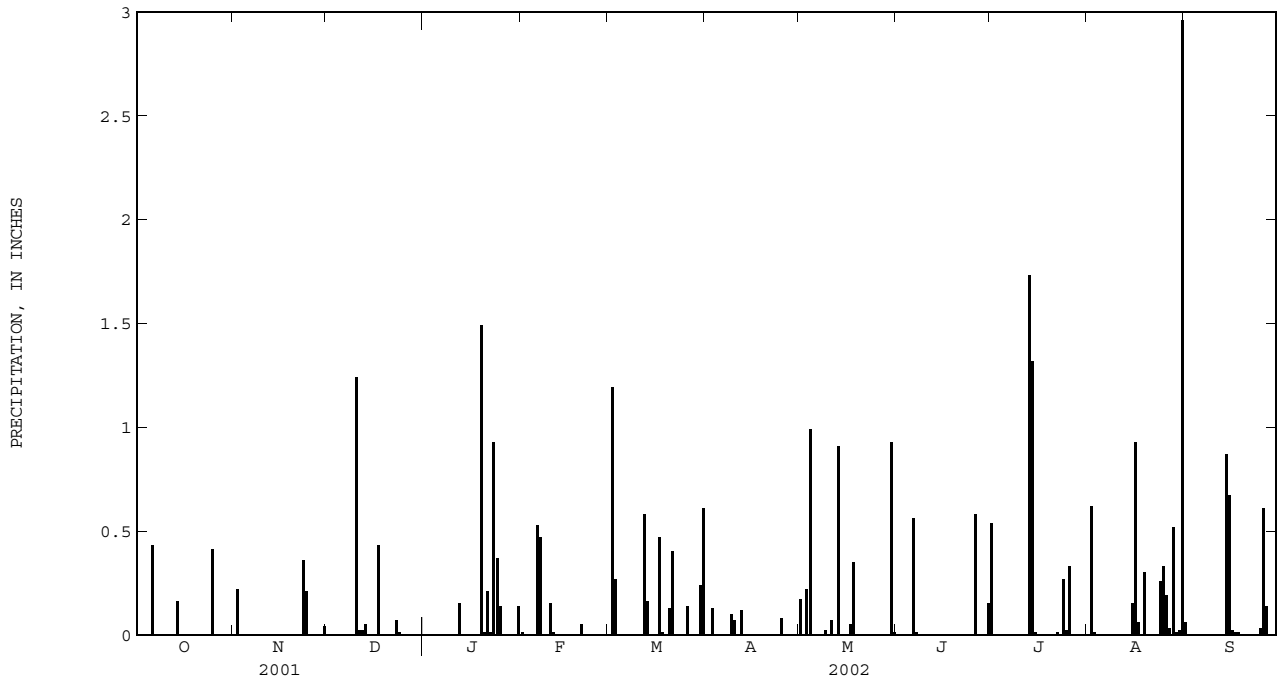
PERIOD OF RECORD.--March 1993 to current year. Records for period March 1993 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.17	0.00	0.54	0.00	0.06
2	0.00	0.22	0.00	0.00	0.00	1.19	0.00	0.00	0.00	0.00	0.62	0.00
3	0.00	0.00	0.00	---	0.00	0.27	0.13	0.22	0.00	0.00	0.01	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.43	0.00	0.00	---	0.53	0.00	0.00	0.00	0.56	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.02	0.00	0.00	0.00	0.00
10	0.00	0.00	1.24	0.00	0.15	0.00	0.07	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.07	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.15	0.00	0.58	0.12	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.05	0.00	0.00	0.16	0.00	0.91	0.00	1.73	0.00	0.00
14	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.87
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.15	0.67
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.02
17	0.00	0.00	0.43	0.00	0.00	0.47	0.00	0.05	0.00	0.00	0.06	0.01
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.35	0.00	0.00	0.00	0.01
19	0.00	0.00	0.00	1.49	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00
20	0.00	0.00	0.00	0.01	0.05	0.13	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.21	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
23	0.00	0.36	0.07	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.21	0.01	0.37	0.00	0.00	0.00	0.00	0.00	0.27	0.26	0.00
25	0.41	0.00	0.00	0.14	0.00	0.00	0.08	0.00	0.00	0.02	0.33	0.03
26	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.58	0.33	0.19	0.61
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.14
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
30	0.00	0.04	0.00	0.00	---	0.24	0.00	0.93	0.15	0.00	0.02	0.00
31	0.00	---	0.00	0.14	---	0.61	---	0.01	---	0.00	2.96	---
TOTAL	1.00	0.83	1.84	---	1.22	4.20	0.50	3.72	1.30	4.23	6.39	2.42



SANTEE RIVER BASIN

350947080524945 CRN13

LOCATION.--Lat 35°09'47", long 80°52'49", Mecklenburg County, Hydrologic Unit 03050103, U.S. Geological Survey Office, Tyvola Road, Charlotte, NC.

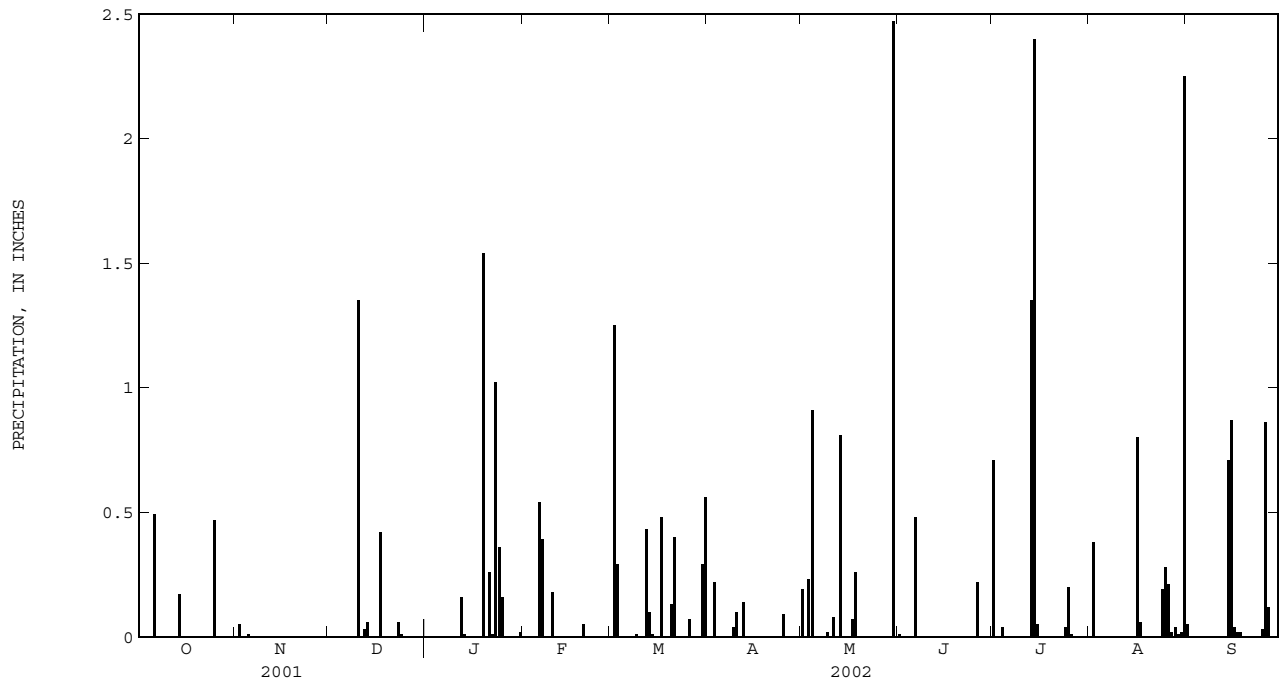
PERIOD OF RECORD.--May 1993 to current year. Records for period May 1993 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.01	0.71	0.00	0.05
2	0.00	0.05	0.00	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.38	0.00
3	0.00	0.00	0.00	---	0.00	0.29	0.22	0.23	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.91	0.00	0.04	0.00	0.00
5	0.00	0.01	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.49	0.00	0.00	---	0.54	0.00	0.00	0.00	0.48	0.00	0.00	0.00
7	0.00	---	0.00	0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	---	0.00	0.00	0.00	0.01	0.04	0.02	0.00	0.00	---	0.00
10	0.00	---	1.35	0.00	0.18	0.00	0.10	0.00	0.00	0.00	---	0.00
11	0.00	---	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	---	0.00
12	0.00	---	0.03	0.16	0.00	0.43	0.14	0.00	0.00	0.00	---	0.00
13	0.00	---	0.06	0.01	0.00	0.10	0.00	0.81	0.00	1.35	---	0.00
14	0.17	---	0.00	0.00	0.00	0.01	0.00	0.00	0.00	2.40	---	0.71
15	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	---	0.87
16	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.04
17	0.00	---	0.42	0.00	0.00	0.48	0.00	0.07	0.00	0.00	0.06	0.02
18	0.00	---	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.02
19	0.00	---	0.00	1.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	---	0.00	0.00	0.05	0.13	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	---	0.00	0.26	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	---	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	---	0.06	1.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	---	0.01	0.36	0.00	0.00	0.00	0.00	0.00	0.04	0.19	0.00
25	0.47	---	0.00	0.16	0.00	0.00	0.09	0.00	0.00	0.20	0.28	0.03
26	0.00	---	0.00	0.00	0.00	0.07	0.00	0.00	0.22	0.01	0.21	0.86
27	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.12
28	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
29	0.00	---	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
30	0.00	---	0.00	0.00	---	0.29	0.00	2.47	0.00	0.00	0.02	0.00
31	0.00	---	0.00	0.02	---	0.56	---	0.00	---	0.00	2.25	---
TOTAL	1.13	---	1.93	---	1.16	4.02	0.59	5.04	0.71	4.80	---	2.72



SANTEE RIVER BASIN

351553080562645 CRN14

LOCATION.--Lat 35°15'53", long 80°56'23", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050101, Fire Station 21, Little Rock Road, Charlotte, NC.

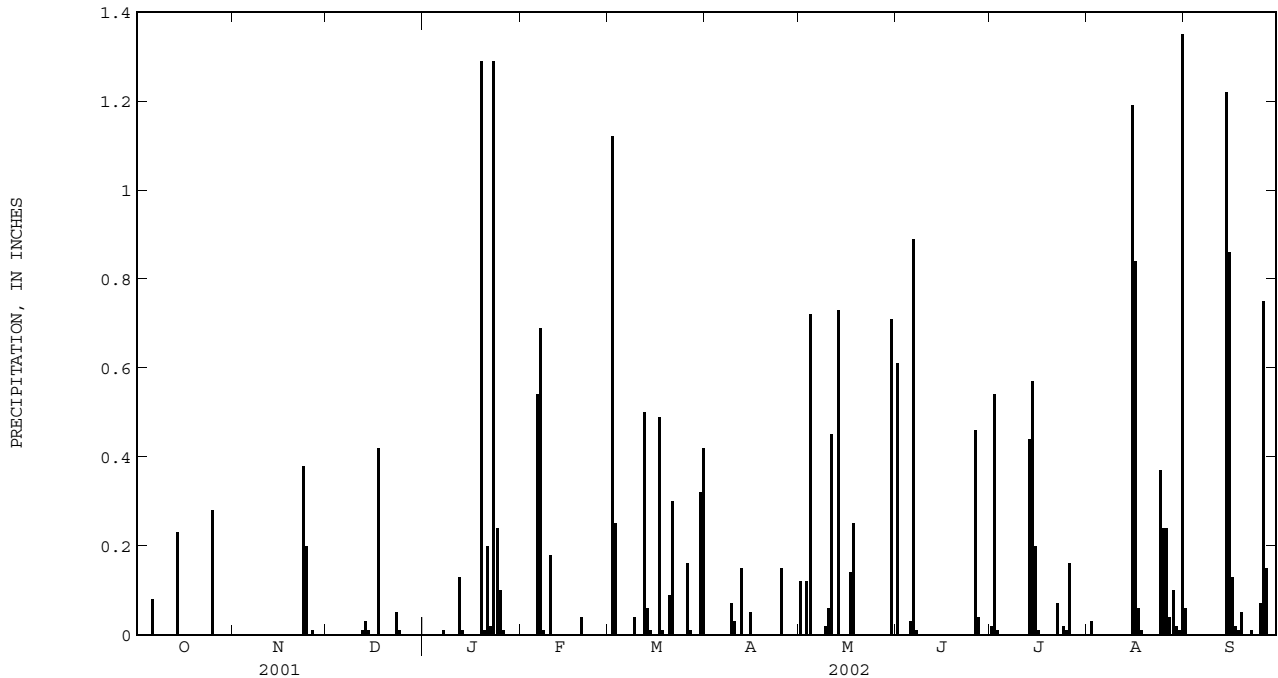
PERIOD OF RECORD.--March 1993 to current year. Records for period March 1993 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.61	0.02	0.00	0.06
2	0.00	0.00	0.00	0.00	0.00	1.12	0.00	0.00	0.00	0.54	0.03	0.00
3	0.00	0.00	0.00	---	0.00	0.25	0.00	0.12	0.00	0.01	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
6	0.08	0.00	0.00	---	0.54	0.00	0.00	0.00	0.89	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.69	0.00	0.00	0.00	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.04	0.07	0.02	0.00	0.00	0.00	0.00
10	0.00	0.00	---	0.00	0.18	0.00	0.03	0.06	0.00	0.00	0.00	0.00
11	0.00	0.00	---	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00
12	0.00	0.00	0.01	0.13	0.00	0.50	0.15	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.03	0.01	0.00	0.06	0.00	0.73	0.00	0.44	0.00	0.00
14	0.23	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.57	0.00	1.22
15	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.20	1.19	0.86
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.84	0.13
17	0.00	0.00	0.42	0.00	0.00	0.49	0.00	0.14	0.00	0.00	0.06	0.02
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.25	0.00	0.00	0.01	0.01
19	0.00	0.00	0.00	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
20	0.00	0.00	0.00	0.01	0.04	0.09	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.20	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.01
23	0.00	0.38	0.05	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.20	0.01	0.24	0.00	0.00	0.00	0.00	0.00	0.02	0.37	0.00
25	0.28	0.00	0.00	0.10	0.00	0.00	0.15	0.00	0.00	0.01	0.24	0.07
26	0.00	0.01	0.00	0.01	0.00	0.16	0.00	0.00	0.46	0.16	0.24	0.75
27	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.04	0.15
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.02	0.00
30	0.00	0.00	0.00	0.00	---	0.32	0.00	0.71	0.00	0.00	0.01	0.00
31	0.00	---	0.00	0.00	---	0.42	---	0.00	---	0.00	1.35	---
TOTAL	0.59	0.59	---	---	1.46	3.78	0.45	3.32	2.04	2.05	4.50	3.33



SANTEE RIVER BASIN

351320080502645 CRN15

LOCATION.--Lat 35°13'17", long 80°50'23", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Charlotte Mecklenburg Government Center, East Fourth Street, Charlotte, NC.

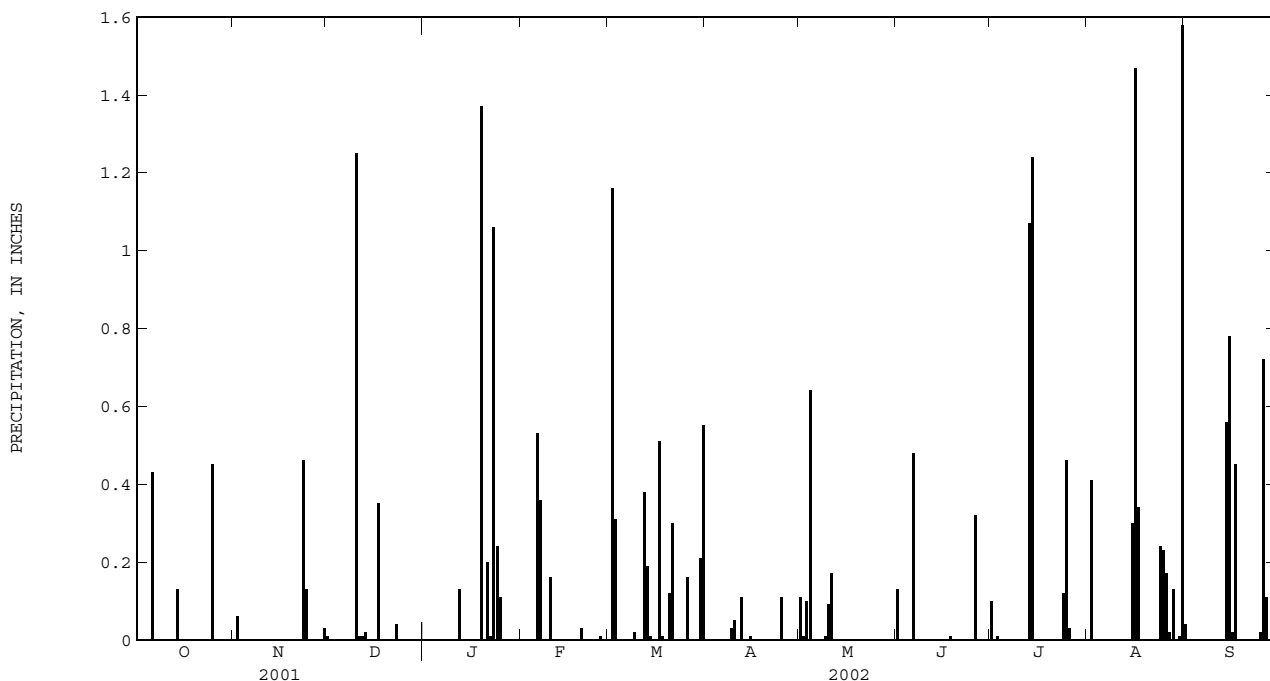
PERIOD OF RECORD.--March 1993 to current year. Records for period March 1993 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.11	0.13	0.10	0.00	0.04
2	0.00	0.06	0.00	0.00	0.00	1.16	0.00	0.01	0.00	0.00	0.41	0.00
3	0.00	0.00	0.00	---	0.00	0.31	0.00	0.10	0.00	0.01	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.43	0.00	0.00	---	0.53	0.00	0.00	0.00	0.48	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.25	0.00	0.16	0.00	0.05	0.09	0.00	0.00	0.00	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
12	0.00	0.00	0.01	0.13	0.00	0.38	0.11	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.02	0.00	0.00	0.19	0.00	0.00	0.00	1.07	0.00	0.00
14	0.13	0.00	0.00	0.00	0.00	0.01	0.00	---	0.00	1.24	0.00	0.56
15	0.00	0.00	0.00	0.00	0.00	0.00	0.01	---	0.00	0.00	0.30	0.78
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	1.47	0.02
17	0.00	0.00	0.35	0.00	0.00	0.51	0.00	---	0.00	0.00	0.34	0.45
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	---	0.01	0.00	0.00	0.00
19	0.00	0.00	0.00	1.37	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.03	0.12	0.00	---	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.20	0.00	0.30	0.00	---	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00
23	0.00	0.46	0.04	1.06	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00
24	0.00	0.13	0.00	0.24	0.00	0.00	0.00	---	0.00	0.12	0.24	0.00
25	0.45	0.00	0.00	0.11	0.00	0.00	0.11	---	0.00	0.46	0.23	0.02
26	0.00	0.00	0.00	0.00	0.01	0.16	0.00	---	0.32	0.03	0.17	0.72
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.02	0.11
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.13	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	---	0.00	0.00	0.00	0.00
30	0.00	0.03	0.00	0.00	---	0.21	0.00	---	0.00	0.00	0.01	0.00
31	0.00	---	0.00	0.00	---	0.55	---	0.00	---	0.00	1.58	---
TOTAL	1.01	0.68	1.69	---	1.09	3.93	0.31	---	0.94	3.03	4.90	2.70



SANTEE RIVER BASIN

475

351023080435745 CRN17

LOCATION.--Lat 35°10'25", long 80°43'50", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Piney Grove Elementary School, Eaglewind Drive, Charlotte, NC.

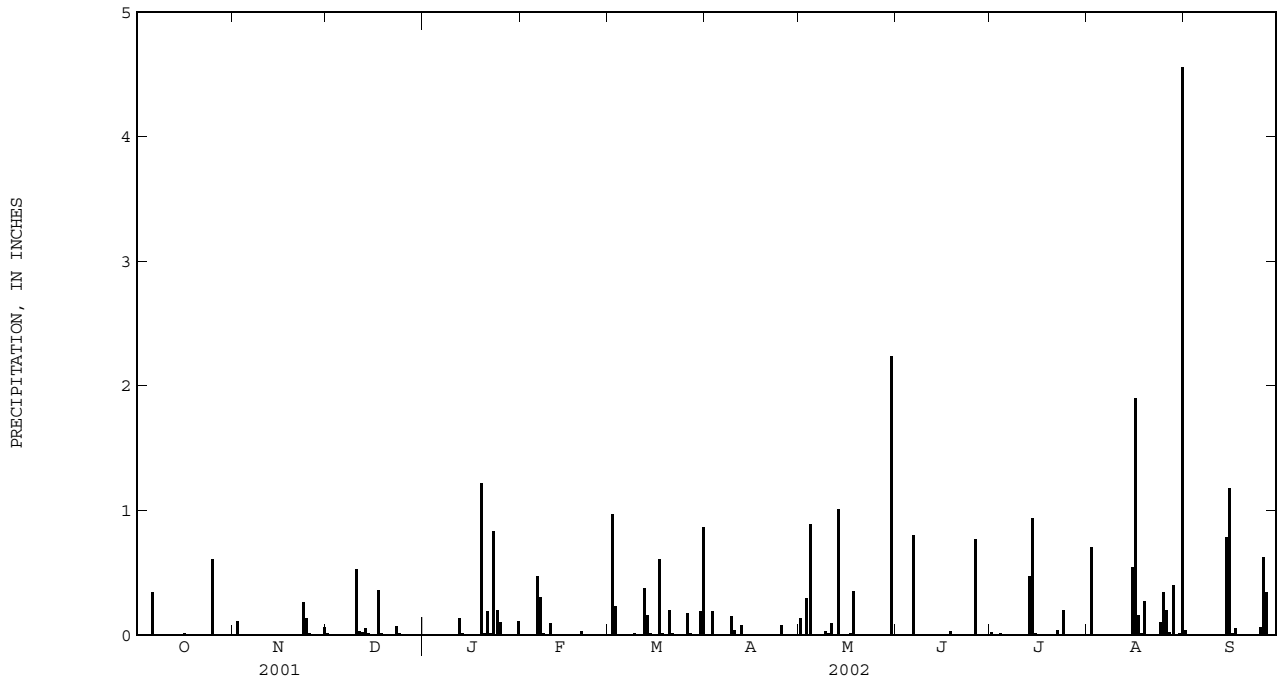
PERIOD OF RECORD.--March 1993 to current year. Records for period March 1993 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.13	0.00	0.02	0.00	0.04
2	0.00	0.11	0.00	0.00	0.00	0.97	0.00	0.00	0.00	0.00	0.70	0.00
3	0.00	0.00	0.00	---	0.00	0.23	0.19	0.29	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.89	0.00	0.01	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.34	0.00	0.00	---	0.47	0.00	0.00	0.00	0.80	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.15	0.03	0.00	0.00	0.00	0.00
10	0.00	0.00	0.53	0.00	0.09	0.00	0.04	0.01	0.00	0.00	0.00	0.00
11	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.13	0.00	0.37	0.08	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.05	0.01	0.00	0.16	0.00	1.01	0.00	0.47	0.00	0.00
14	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.94	0.00	0.78
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.54	1.18
16	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.90	0.01
17	0.00	0.00	0.36	0.00	0.00	0.61	0.00	0.01	0.00	0.00	0.16	0.05
18	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.35	0.03	0.00	0.01	0.00
19	0.00	0.00	0.00	1.22	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00
20	0.00	0.00	0.00	0.01	0.03	0.20	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.19	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
23	0.00	0.26	0.07	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.13	0.01	0.20	0.00	0.00	0.00	0.00	0.00	0.20	0.10	0.00
25	0.61	0.01	0.00	0.10	0.00	0.00	0.08	0.00	0.00	0.00	0.34	0.06
26	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.77	0.00	0.20	0.62
27	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.34
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.06	0.00	0.00	---	0.19	0.00	2.24	0.00	0.00	0.01	0.00
31	0.00	---	0.00	0.11	---	0.86	---	0.00	---	0.00	4.56	---
TOTAL	0.96	0.57	1.10	---	0.90	3.81	0.54	5.05	1.60	1.69	9.21	3.08



SANTEE RIVER BASIN

351132080504145 CRN19

LOCATION.--Lat 35°11'33", long 80°50'41", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Freedom Park, Cumberland Drive, Charlotte, NC.

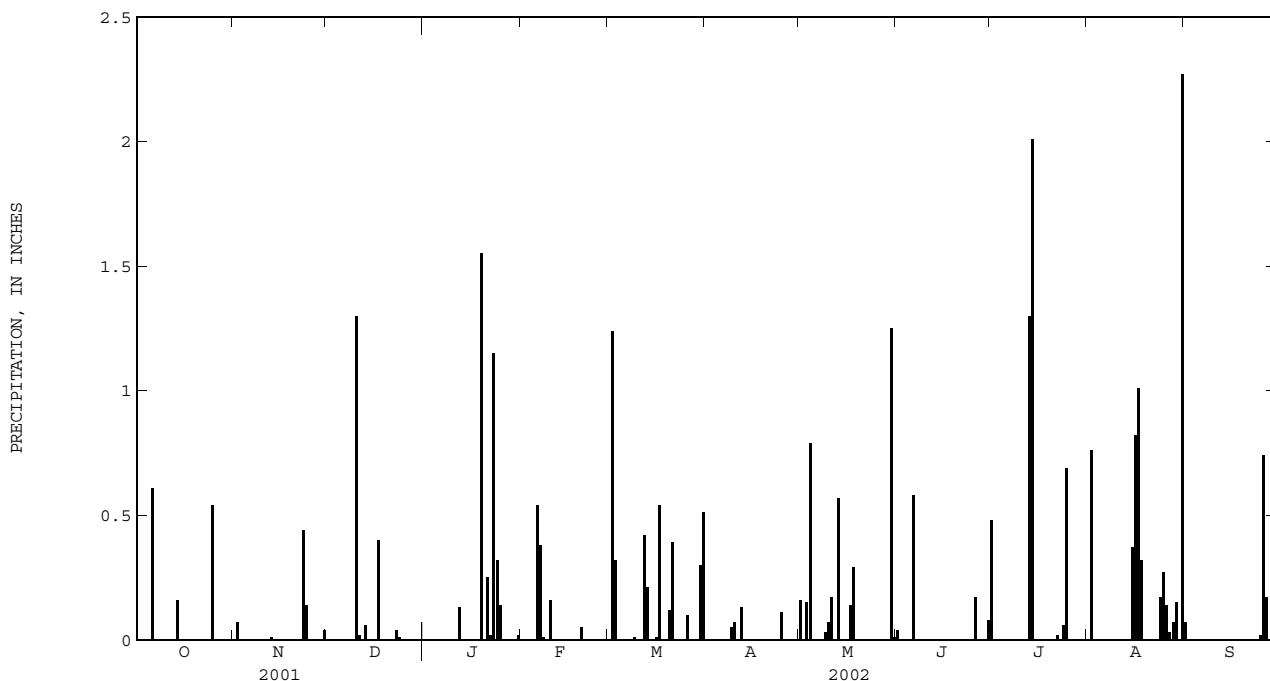
PERIOD OF RECORD.--September 1993 to current year. Records for period September 1993 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.04	0.48	0.00	0.07
2	0.00	0.07	0.00	0.00	0.00	1.24	0.00	0.00	0.00	0.00	0.76	0.00
3	0.00	0.00	0.00	---	0.00	0.32	0.00	0.15	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.79	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.61	0.00	0.00	---	0.54	0.00	0.00	0.00	0.58	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.03	0.00	0.00	0.00	0.00
10	0.00	0.00	1.30	0.00	0.16	0.00	0.07	0.07	0.00	0.00	0.00	---
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	---
12	0.00	0.00	0.00	0.13	0.00	0.42	0.13	0.00	0.00	0.00	0.00	---
13	0.00	0.01	0.06	0.00	0.00	0.21	0.00	0.57	0.00	1.30	0.00	---
14	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.01	0.00	---
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	---
16	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.82	---
17	0.00	0.00	0.40	0.00	0.00	0.54	0.00	0.14	0.00	0.00	1.01	---
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.32	---
19	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.05	0.12	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.25	0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
23	0.00	0.44	0.04	1.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.14	0.01	0.32	0.00	0.00	0.00	0.00	0.00	0.06	0.17	0.00
25	0.54	0.00	0.00	0.14	0.00	0.00	0.11	0.00	0.00	0.69	0.27	0.02
26	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.17	0.00	0.14	0.74
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.17
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.15	0.00
30	0.00	0.04	0.00	0.00	---	0.30	0.00	1.25	0.08	0.00	0.00	0.00
31	0.00	---	0.00	0.02	---	0.51	---	0.01	---	0.00	2.27	---
TOTAL	1.31	0.70	1.83	---	1.14	4.17	0.36	3.63	0.87	4.56	6.38	---



SANTEE RIVER BASIN

351032080475245 CRN20

LOCATION.--Lat 35°10'33", long 80°47'51", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Fire Station 14, North Sharon Amity Road, Charlotte, NC.

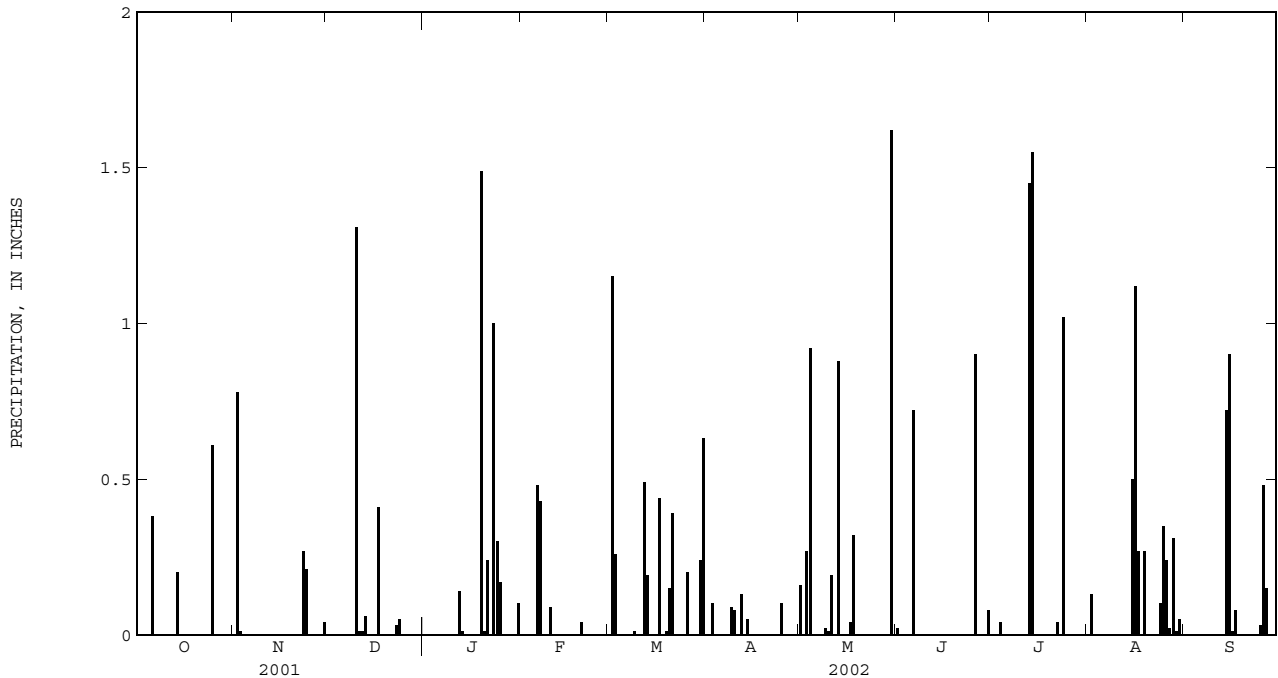
PERIOD OF RECORD.--September 1993 to current year. Records for period September 1993 to September 1998 published in USGS OFR 96-150, 98-67, and 99- 273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.02	0.00	0.00	---
2	0.00	0.78	0.00	0.00	0.00	1.15	0.00	0.00	0.00	0.00	0.13	---
3	0.00	0.01	0.00	---	0.00	0.26	0.10	0.27	0.00	0.00	0.00	---
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.92	0.00	0.04	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.38	0.00	0.00	---	0.48	0.00	0.00	0.00	0.72	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.09	0.02	0.00	0.00	0.00	0.00
10	0.00	0.00	1.31	0.00	0.09	0.00	0.08	0.01	0.00	0.00	0.00	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00
12	0.00	0.00	0.01	0.14	0.00	0.49	0.13	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.06	0.01	0.00	0.19	0.00	0.88	0.00	1.45	0.00	0.00
14	0.20	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	1.55	0.00	0.72
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.90
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	0.01
17	0.00	0.00	0.41	0.00	0.00	0.44	0.00	0.04	0.00	0.00	0.27	0.08
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.49	0.00	0.01	0.00	0.00	0.00	0.00	0.27	0.00
20	0.00	0.00	0.00	0.01	0.04	0.15	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.24	0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
23	0.00	0.27	0.03	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.21	0.05	0.30	0.00	0.00	0.00	0.00	0.00	1.02	0.10	0.00
25	0.61	0.00	0.00	0.17	0.00	0.00	0.10	0.00	0.00	0.00	0.35	0.03
26	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.90	0.00	0.24	0.48
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.15
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
30	0.00	0.04	0.00	0.00	---	0.24	0.00	1.62	0.08	0.00	0.05	0.00
31	0.00	---	0.00	0.10	---	0.63	---	0.00	---	0.00	---	---
TOTAL	1.19	1.31	1.88	---	1.04	4.16	0.55	4.43	1.72	4.10	---	---



SANTEE RIVER BASIN

350842080572801 CRN21

LOCATION.--Lat 35°09'13", long 80°57'21", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Kennedy Junior High School, Gallant Lane, Charlotte, NC.

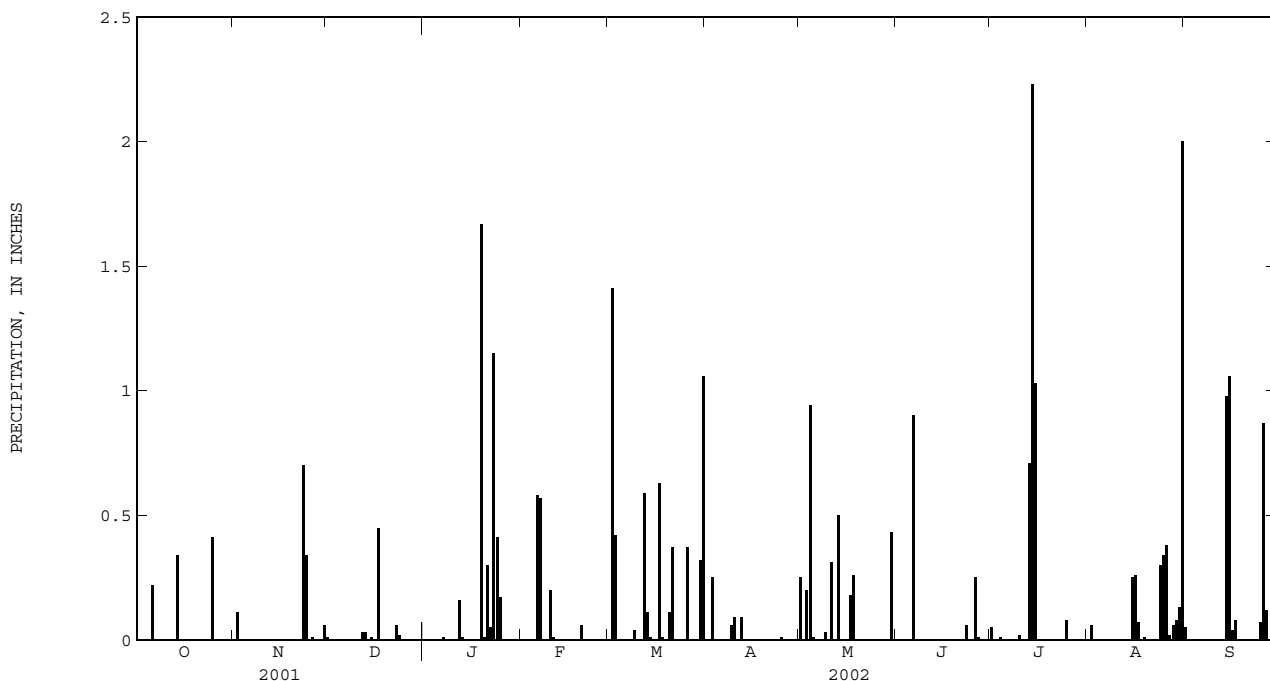
PERIOD OF RECORD.--September 1990 to current year. Records for period September 1990 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.25	0.00	0.05	0.00	0.05
2	0.00	0.11	0.00	0.00	0.00	1.41	0.00	0.00	0.00	0.00	0.06	0.00
3	0.00	0.00	0.00	---	0.00	0.42	0.25	0.20	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.94	0.00	0.01	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
6	0.22	0.00	0.00	---	0.58	0.00	0.00	0.00	0.90	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.04	0.06	0.03	0.00	0.00	0.00	0.00
10	0.00	0.00	---	0.00	0.20	0.00	0.09	0.00	0.00	0.02	0.00	0.00
11	0.00	0.00	---	0.00	0.01	0.00	0.00	0.31	0.00	0.00	0.00	0.00
12	0.00	0.00	0.03	0.16	0.00	0.59	0.09	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.03	0.01	0.00	0.11	0.00	0.50	0.00	0.71	0.00	0.00
14	0.34	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	2.23	0.00	0.98
15	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.03	0.25	1.06
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.04
17	0.00	0.00	0.45	0.00	0.00	0.63	0.00	0.18	0.00	0.00	0.07	0.08
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.26	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.67	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
20	0.00	0.00	0.00	0.01	0.06	0.11	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.30	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.70	0.06	1.15	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00
24	0.00	0.34	0.02	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00
25	0.41	0.00	0.00	0.17	0.00	0.00	0.01	0.00	0.00	0.08	0.34	0.07
26	0.00	0.01	0.00	0.00	0.00	0.37	0.00	0.00	0.25	0.00	0.38	0.87
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.12
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.08	0.00
30	0.00	0.06	0.00	0.00	---	0.32	0.00	0.43	0.00	0.00	0.13	0.00
31	0.00	---	0.00	0.00	---	1.06	---	0.00	---	0.00	2.00	---
TOTAL	0.97	1.22	---	---	1.42	5.45	0.50	3.11	1.22	4.13	3.96	3.27



350623080583801 CRN22

LOCATION.--Lat 35°06'54", long 80°58'18", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Lake Wylie Elementary School, Erwin Road, Charlotte, NC.

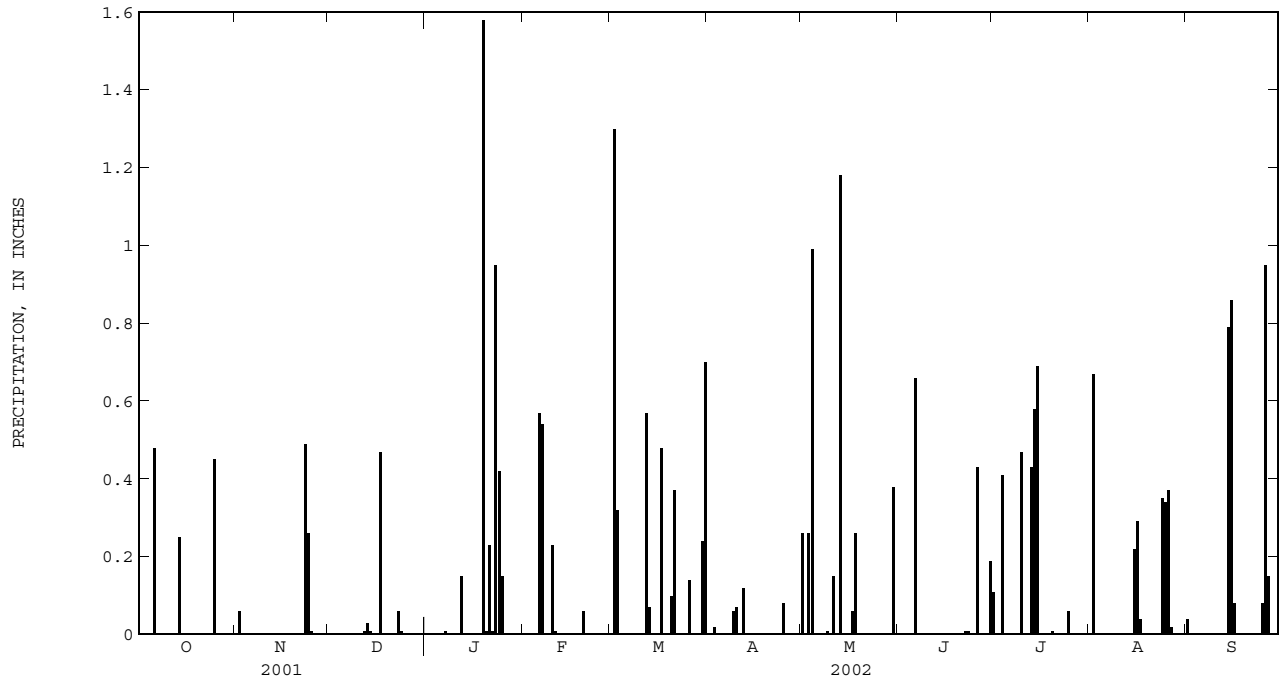
PERIOD OF RECORD.--September 1990 to current year. Records for period September 1990 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station. Prior to Aug. 23, 2000 gage located at private residence, Choate Circle, Charlotte, NC.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.11	0.00	0.04
2	0.00	0.06	0.00	0.00	0.00	1.30	0.00	0.00	0.00	0.00	0.67	0.00
3	0.00	0.00	0.00	---	0.00	0.32	0.02	0.26	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.99	0.00	0.41	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.48	0.00	0.00	---	0.57	0.00	0.00	0.00	0.66	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	---	0.00	0.23	0.00	0.07	0.00	0.00	0.47	0.00	0.00
11	0.00	0.00	---	0.00	0.01	0.00	0.00	0.15	0.00	0.00	0.00	0.00
12	0.00	0.00	0.01	0.15	0.00	0.57	0.12	0.00	0.15	0.00	0.00	0.00
13	0.00	0.00	0.03	0.00	0.00	0.07	0.00	1.18	0.00	0.43	0.00	0.00
14	0.25	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.00	0.79
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.22	0.86
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.08
17	0.00	0.00	0.47	0.00	0.00	0.48	0.00	0.06	0.00	0.00	0.04	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.01	0.06	0.10	0.00	0.00	0.00	0.01	0.00	0.00
21	0.00	0.00	0.00	0.23	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
23	0.00	0.49	0.06	0.95	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
24	0.00	0.26	0.01	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00
25	0.45	0.01	0.00	0.15	0.00	0.00	0.08	0.00	0.00	0.06	0.34	0.08
26	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.43	0.00	0.37	0.95
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.15
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	---	0.00
30	0.00	0.00	0.00	0.00	---	0.24	0.00	0.38	0.19	0.00	---	0.00
31	0.00	---	0.00	0.00	---	0.70	---	0.00	---	0.00	---	---
TOTAL	1.18	0.82	---	---	1.41	4.29	0.35	3.55	1.30	2.76	---	2.95



SANTEE RIVER BASIN

351604080470845 CRN27

LOCATION.--Lat 35°16'04", long 80°47'08", Mecklenburg County, Hydrologic Unit 03050103, Hidden Valley Elementary School, Snow White Lane, Charlotte, NC.

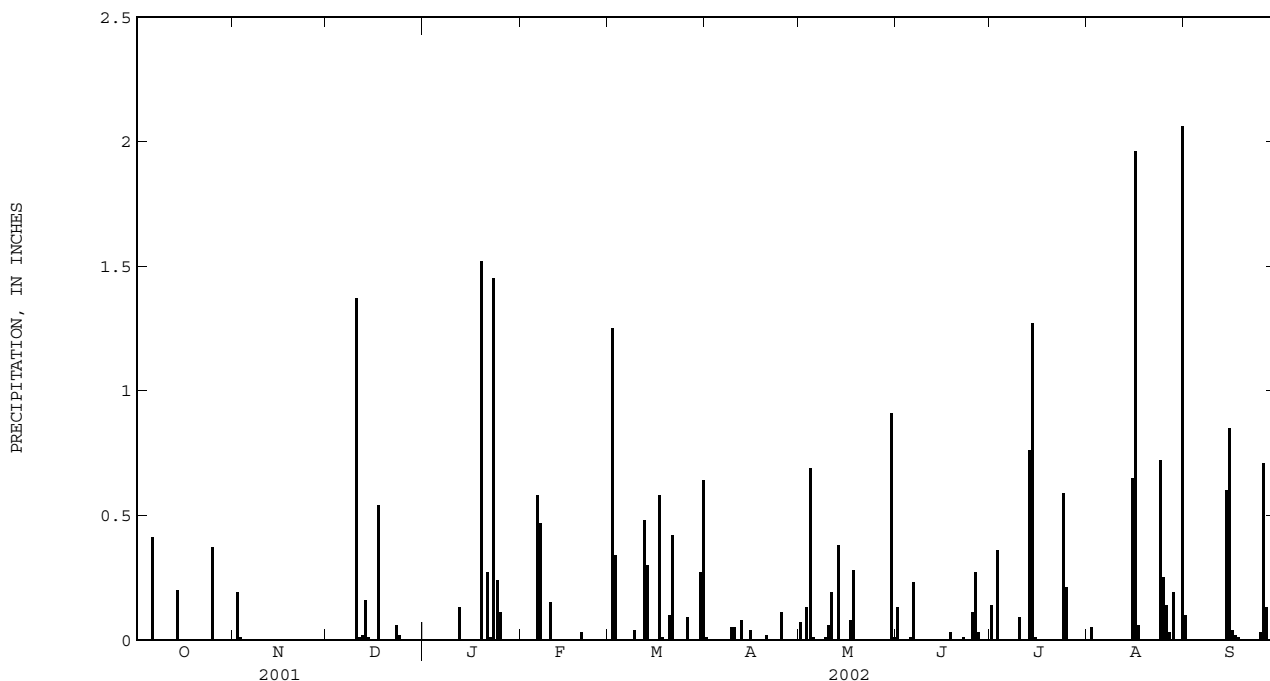
PERIOD OF RECORD.--October 1994 to current year. Records for period October 1994 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	---	0.00	0.00	0.00	0.01	0.07	0.13	0.14	0.00	0.10
2	0.00	0.19	---	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.05	0.00
3	0.00	0.01	---	---	0.00	0.34	0.00	0.13	0.00	0.36	0.00	0.00
4	0.00	0.00	---	---	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.00
5	0.00	0.00	---	---	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00
6	0.41	0.00	---	---	0.58	0.00	0.00	0.00	0.23	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.04	0.05	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.37	0.00	0.15	0.00	0.05	0.06	0.00	0.09	0.00	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.13	0.00	0.48	0.08	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.16	0.00	0.00	0.30	0.00	0.38	0.00	0.76	0.00	0.00
14	0.20	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.60
15	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.01	0.65	0.85
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.96	0.04
17	0.00	0.00	0.54	0.00	0.00	0.58	0.00	0.08	0.00	0.00	0.06	0.02
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.28	0.03	0.00	0.00	0.01
19	0.00	0.00	0.00	1.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.03	0.10	0.02	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.27	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
23	0.00	---	0.06	1.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	---	0.02	0.24	0.00	0.00	0.00	0.00	0.00	0.59	0.72	0.00
25	0.37	---	0.00	0.11	0.00	0.00	0.11	0.00	0.11	0.21	0.25	0.03
26	0.00	---	0.00	0.00	0.00	0.09	0.00	0.00	0.27	0.00	0.14	0.71
27	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.03	0.13
28	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00
29	0.00	---	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	---	0.00	0.00	---	0.27	0.00	0.91	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.64	---	0.01	---	0.00	2.06	---
TOTAL	0.98	---	---	---	1.23	4.52	0.36	2.82	0.82	3.43	6.11	2.49



SANTEE RIVER BASIN

350110080502045 CRN31

LOCATION.--Lat 35°01'11", long 80°50'17", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Elon Homes for Children, Ardrey-Kell Road, Charlotte, NC.

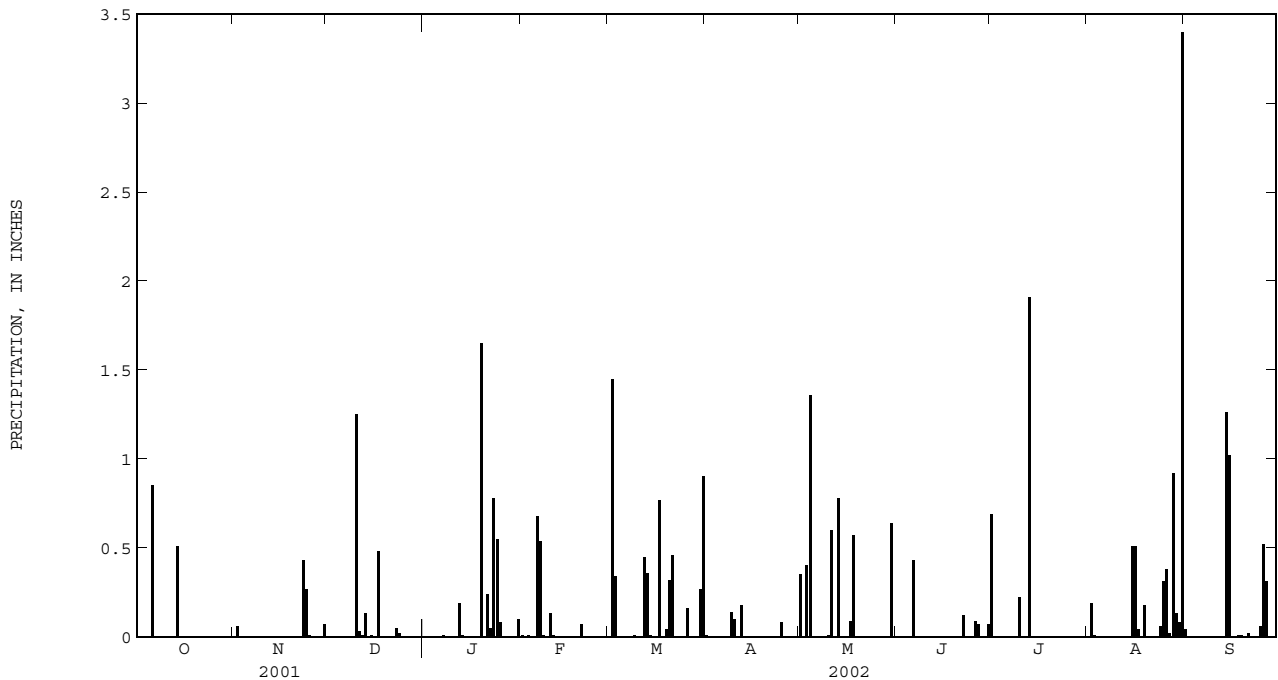
PERIOD OF RECORD.--February 1996 to current year. Records for period February 1996 to September 1998 published in USGS OFR 98-67 and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.35	0.00	0.69	0.00	0.04
2	0.00	0.06	0.00	0.00	0.00	1.45	0.00	0.00	0.00	0.00	0.19	0.00
3	0.00	0.00	0.00	---	0.01	0.34	0.00	0.40	0.00	---	0.01	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	1.36	0.00	---	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
6	0.85	0.00	0.00	---	0.68	0.00	0.00	0.00	0.43	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.14	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.25	0.00	0.13	0.00	0.10	0.01	0.00	0.22	0.00	0.00
11	0.00	0.00	0.03	0.00	0.01	0.00	0.00	0.60	0.00	0.00	0.00	0.00
12	0.00	0.00	0.01	0.19	0.00	0.45	0.18	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.13	0.01	0.00	0.36	0.00	0.78	0.00	1.91	0.00	0.00
14	0.51	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	---	0.00	1.26
15	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	---	0.51	1.02
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.51	0.00
17	0.00	0.00	0.48	0.00	0.00	0.77	0.00	0.09	0.00	---	0.04	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.00	---	0.00	0.01
19	0.00	0.00	0.00	1.65	0.00	0.04	0.00	0.00	0.00	---	0.18	0.01
20	0.00	0.00	0.00	0.00	0.07	0.32	0.00	0.00	0.00	---	0.00	0.00
21	0.00	0.00	0.00	0.24	0.00	0.46	0.00	0.00	0.00	---	0.00	0.02
22	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.12	---	0.00	0.00
23	0.00	0.43	0.05	0.78	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
24	0.00	0.27	0.02	0.55	0.00	0.00	0.00	0.00	0.00	---	0.06	0.00
25	0.00	0.01	0.00	0.08	0.00	0.00	0.08	0.00	0.00	---	0.31	0.06
26	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.09	---	0.38	0.52
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.02	0.31
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.13	0.00
30	0.00	0.07	0.00	0.00	---	0.27	0.00	0.64	0.07	0.00	0.08	0.00
31	0.00	---	0.00	0.10	---	0.90	---	0.00	---	0.00	3.40	---
TOTAL	1.36	0.84	1.98	---	1.46	5.54	0.51	4.80	0.78	---	6.74	3.25



SANTEE RIVER BASIN

352555080574445 CRN34

LOCATION.--Lat 35°25'55", long 80°57'44", Lincoln County, Hydrologic Unit 03050101, Cowans Ford Dam warehouse, Duke Lane, Huntersville, NC.

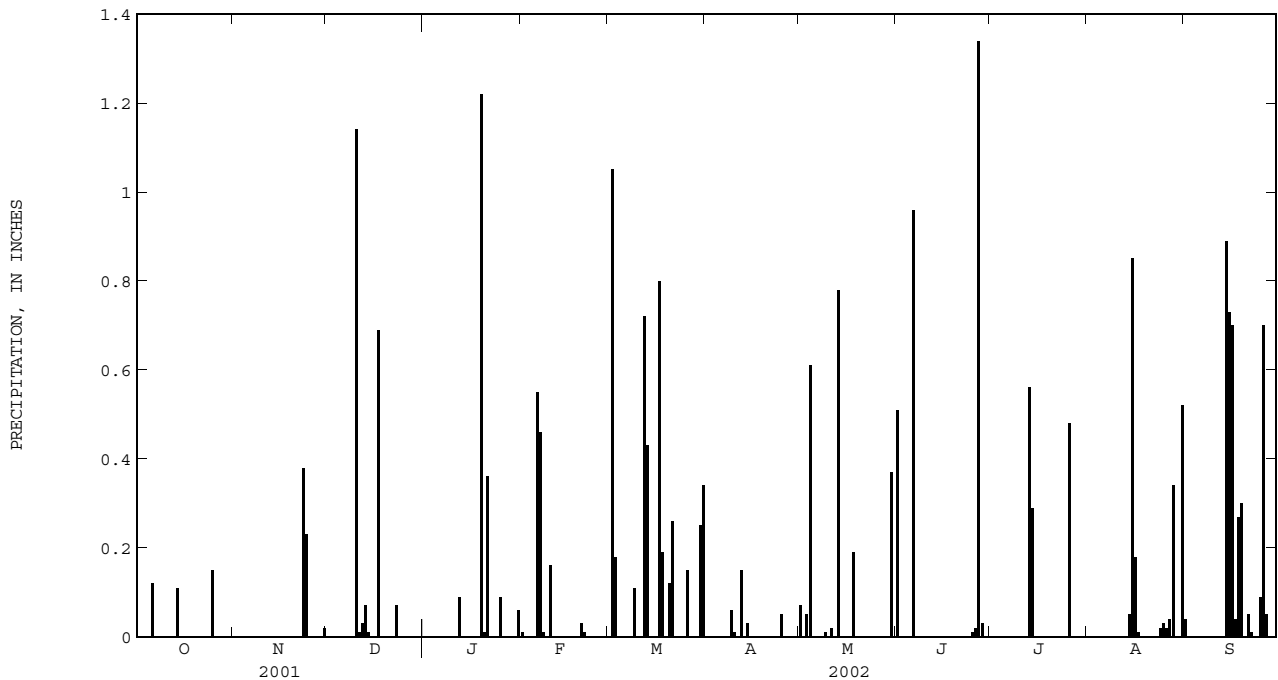
PERIOD OF RECORD.--February 1996 to current year. Records for period February 1996 to September 1998 published in USGS OFR 98-67 and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.07	0.51	0.00	0.00	0.04
2	0.00	0.00	0.00	0.00	0.00	1.05	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	---	0.00	0.18	0.00	0.05	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.12	0.00	0.00	---	0.55	0.00	0.00	0.00	0.96	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.11	0.06	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.14	0.00	0.16	0.00	0.01	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
12	0.00	0.00	0.03	0.09	0.00	0.72	0.15	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.07	0.00	0.00	0.43	0.00	0.78	0.00	0.56	0.00	0.00
14	0.11	0.00	0.01	0.00	0.00	0.00	0.03	0.00	0.00	0.29	0.05	0.89
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.73
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.70
17	0.00	0.00	0.69	0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.01	0.04
18	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.19	0.00	0.00	---	0.27
19	0.00	0.00	0.00	1.22	0.00	0.00	0.00	0.00	0.00	---	0.00	0.30
20	0.00	0.00	0.00	0.01	0.03	0.12	0.00	0.00	0.00	---	0.00	0.00
21	0.00	0.00	0.00	0.36	0.01	0.26	0.00	0.00	0.00	---	0.00	0.05
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.01
23	0.00	0.38	0.07	---	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
24	0.00	0.23	0.00	---	0.00	0.00	0.00	0.00	0.00	---	0.02	0.00
25	0.15	0.00	0.00	0.09	0.00	0.00	0.05	0.00	0.01	---	0.03	0.09
26	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.02	0.48	0.02	0.70
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34	0.00	0.04	0.05
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.34	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.02	0.00	0.00	---	0.25	0.00	0.37	0.00	0.00	---	0.00
31	0.00	---	0.00	0.06	---	0.34	---	0.00	---	0.00	0.52	---
TOTAL	0.38	0.63	2.02	---	1.23	4.60	0.30	2.10	2.87	---	---	3.87



SANTEE RIVER BASIN

351247080592745 CRN37

LOCATION.--Lat 35°12'47", long 80°59'27", Mecklenburg County, Hydrologic Unit 03050101, Berryhill Elementary School, Walkers Ferry Road, Charlotte, NC.

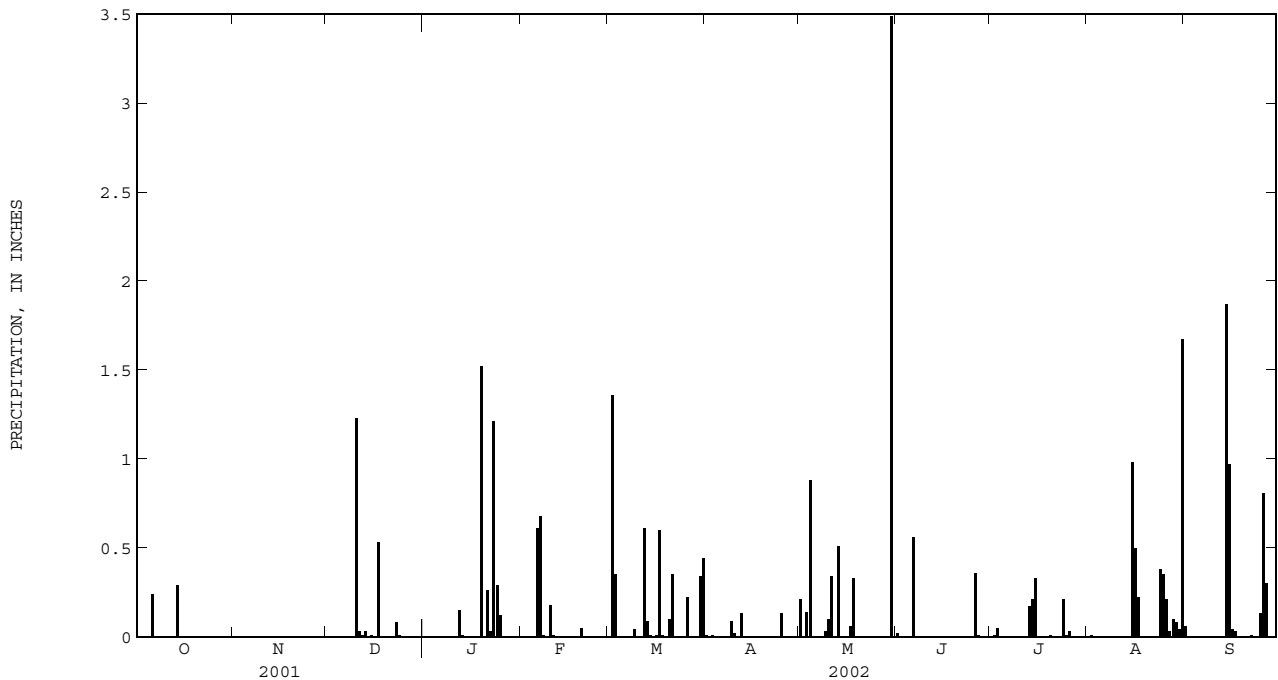
PERIOD OF RECORD.--February 1996 to current year. Records for period February 1996 to September 1998 published in USGS OFR 98-67 and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	0.00	0.00	0.00	0.00	0.01	0.21	0.02	0.00	0.00	0.06
2	0.00	---	0.00	0.00	0.00	1.36	0.00	0.00	0.00	0.01	0.01	0.00
3	0.00	---	0.00	---	0.00	0.35	0.01	0.14	0.00	0.05	0.00	0.00
4	0.00	---	0.00	---	0.00	0.00	0.00	0.88	0.00	0.00	0.00	0.00
5	0.00	---	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.24	---	0.00	---	0.61	0.00	0.00	0.00	0.56	0.00	0.00	0.00
7	0.00	---	0.00	0.00	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	---	0.00	0.00	0.00	0.04	0.09	0.03	0.00	0.00	0.00	0.00
10	0.00	---	1.23	0.00	0.18	0.00	0.02	0.10	0.00	0.00	0.00	0.00
11	0.00	---	0.03	0.00	0.01	0.00	0.00	0.34	0.00	0.00	0.00	0.00
12	0.00	---	0.01	0.15	0.00	0.61	0.13	0.00	0.00	0.00	0.00	0.00
13	0.00	---	0.03	0.01	0.00	0.09	0.00	0.51	0.00	0.17	0.00	0.00
14	0.29	---	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.21	0.00	1.87
15	0.00	---	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.98	0.97
16	0.00	---	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.50	0.04
17	0.00	---	0.53	0.00	0.00	0.60	0.00	0.06	0.00	0.00	0.22	0.03
18	0.00	---	0.00	0.00	0.00	0.01	0.00	0.33	0.00	0.00	0.00	0.00
19	0.00	---	0.00	1.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	---	0.00	0.00	0.05	0.10	0.00	0.00	0.00	0.01	0.00	0.00
21	0.00	---	0.00	0.26	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	---	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
23	0.00	---	0.08	1.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	0.01	0.29	0.00	0.00	0.00	0.00	0.00	0.21	0.38	0.00
25	---	---	0.00	0.12	0.00	0.00	0.13	0.00	0.00	0.01	0.35	0.13
26	---	---	0.00	0.00	0.00	0.22	0.00	0.00	0.36	0.03	0.21	0.81
27	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.03	0.30
28	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00
29	---	---	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.08	0.00
30	---	---	0.00	0.00	---	0.34	0.00	3.49	0.00	0.00	0.04	0.00
31	---	---	0.00	0.00	---	0.44	---	0.00	---	0.00	1.67	---
TOTAL	---	---	1.93	---	1.54	4.53	0.39	6.09	0.95	1.03	4.57	4.22



SANTEE RIVER BASIN

350200081020345 CRN38

LOCATION.--Lat 35°02'00", long 81°02'03", York County, South Carolina, Hydrologic Unit 03050101, Tega Cay Town Hall, Tega Cay Drive, Tega Cay, SC.

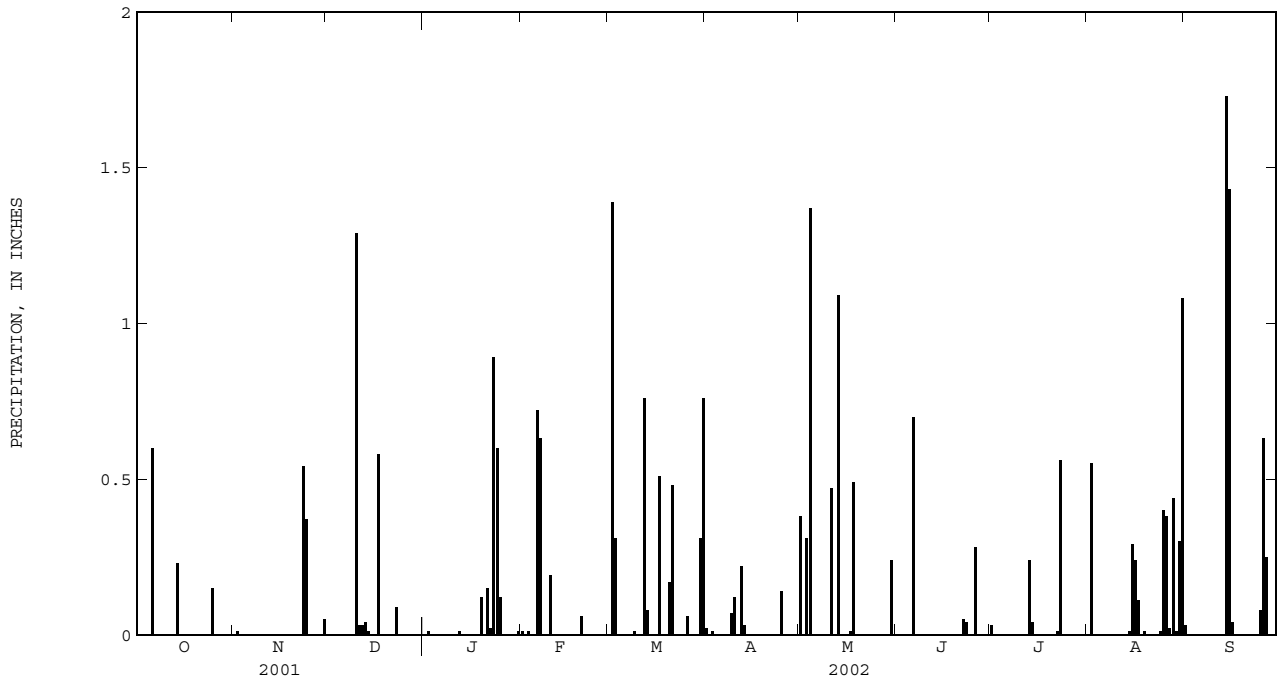
PERIOD OF RECORD.--February 1996 to current year. Records for period February 1996 to September 1998 published in USGS OFR 98-67 and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.38	0.00	0.03	0.00	0.03
2	0.00	0.01	0.00	0.01	0.00	1.39	0.00	0.00	0.00	0.00	0.55	0.00
3	0.00	0.00	0.00	---	0.01	0.31	0.01	0.31	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	1.37	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.60	0.00	0.00	---	0.72	0.00	0.00	0.00	0.70	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.29	0.00	0.19	0.00	0.12	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00
12	0.00	0.00	0.03	0.01	0.00	0.76	0.22	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.04	0.00	0.00	0.08	0.03	1.09	0.00	0.24	0.00	0.00
14	0.23	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.01	1.73
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	1.43
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.04
17	0.00	0.00	0.58	0.00	0.00	0.51	0.00	0.01	0.00	0.00	0.11	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
20	0.00	0.00	0.00	0.00	0.06	0.17	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.15	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.05	0.01	0.00	0.00
23	0.00	0.54	0.09	0.89	0.00	0.00	0.00	0.00	0.04	0.56	0.00	0.00
24	0.00	0.37	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
25	0.15	0.00	0.00	0.12	0.00	0.00	0.14	0.00	0.00	0.00	0.40	0.08
26	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.28	0.00	0.38	0.63
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.25
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
30	0.00	0.05	0.00	0.00	---	0.31	0.00	0.24	0.00	0.00	0.30	0.00
31	0.00	---	0.00	0.01	---	0.76	---	0.00	---	0.00	1.08	---
TOTAL	0.98	0.97	2.07	---	1.62	4.84	0.61	4.36	1.07	0.88	3.85	4.19



353003080591745 CRN40

LOCATION.--Lat 35°29'56", long 80°59'12", North American Datum of 1983, Lincoln County, Hydrologic Unit 03050101, Westport Golf Course driving range, Denver, NC.

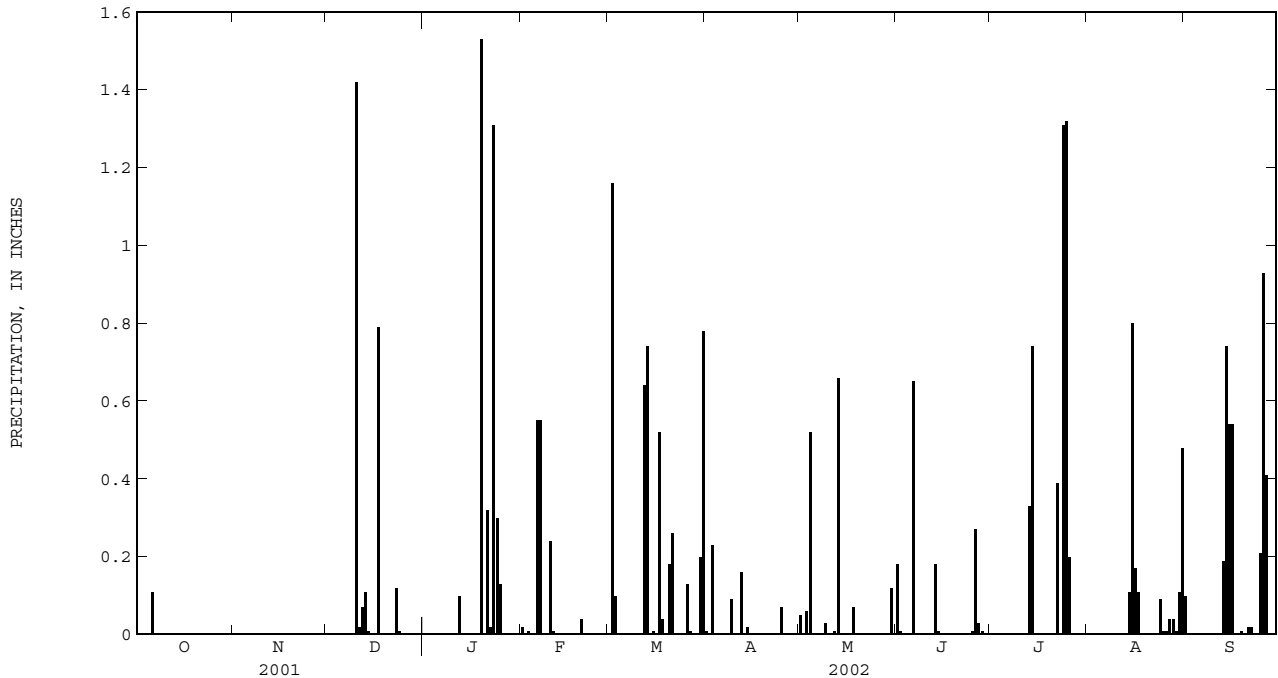
PERIOD OF RECORD.--February 1996 to current year. Records for period February 1996 to September 1998 published in USGS OFR 98-67 and 99-273. Records for February 1996 to June 1996 at site Lake Norman Fire Department, Mooresville, NC (station 353402080543145).

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	0.00	0.02	0.00	0.01	0.05	0.18	0.00	0.00	0.10
2	0.00	---	---	0.00	0.00	1.16	0.00	0.00	0.01	0.00	0.00	0.00
3	0.00	---	---	---	0.01	0.10	0.23	0.06	0.00	0.00	0.00	0.00
4	0.00	---	---	---	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00
5	0.00	---	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.11	---	0.00	---	0.55	0.00	0.00	0.00	0.65	0.00	0.00	0.00
7	0.00	---	0.00	0.00	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	---	0.00	0.00	0.00	0.00	0.09	0.03	0.00	0.00	0.00	0.00
10	0.00	---	1.42	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	---	---	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	0.07	0.10	0.00	0.64	0.16	0.01	0.00	0.00	0.00	0.00
13	---	---	0.11	0.00	0.00	0.74	0.00	0.66	0.18	0.33	0.00	0.19
14	---	---	0.01	0.00	0.00	0.00	0.02	0.00	0.01	0.74	0.11	0.74
15	---	---	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.80	0.54
16	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.54
17	---	---	0.79	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.11	0.00
18	---	---	0.00	0.00	0.00	0.04	0.00	0.07	0.00	0.00	0.00	0.00
19	---	---	0.00	1.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
20	---	---	0.00	0.00	0.04	0.18	0.00	0.00	0.00	0.00	0.00	0.00
21	---	---	0.00	0.32	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.02
22	---	---	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.02
23	---	---	0.12	1.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	0.01	0.30	0.00	0.00	0.00	0.00	0.00	1.31	0.09	0.00
25	---	---	0.00	0.13	0.00	0.00	0.07	0.00	0.01	1.32	0.01	0.21
26	---	---	0.00	0.00	0.00	0.13	0.00	0.00	0.27	0.20	0.01	0.93
27	---	---	0.00	0.00	0.00	0.01	0.00	0.00	0.03	0.00	0.04	0.41
28	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.04	0.00
29	---	---	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
30	---	---	0.00	0.00	---	0.20	0.00	0.12	0.00	0.00	0.11	0.00
31	---	---	0.00	0.00	---	0.78	---	0.00	---	0.00	0.48	---
TOTAL	---	---	---	---	1.42	4.77	0.58	1.52	1.35	4.29	1.98	3.71



SANTEE RIVER BASIN

353014080524945 CRN42

LOCATION.--Lat 35°30'16", long 80°52'47", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050101, private residence, Norman Shores Drive, Cornelius, NC.

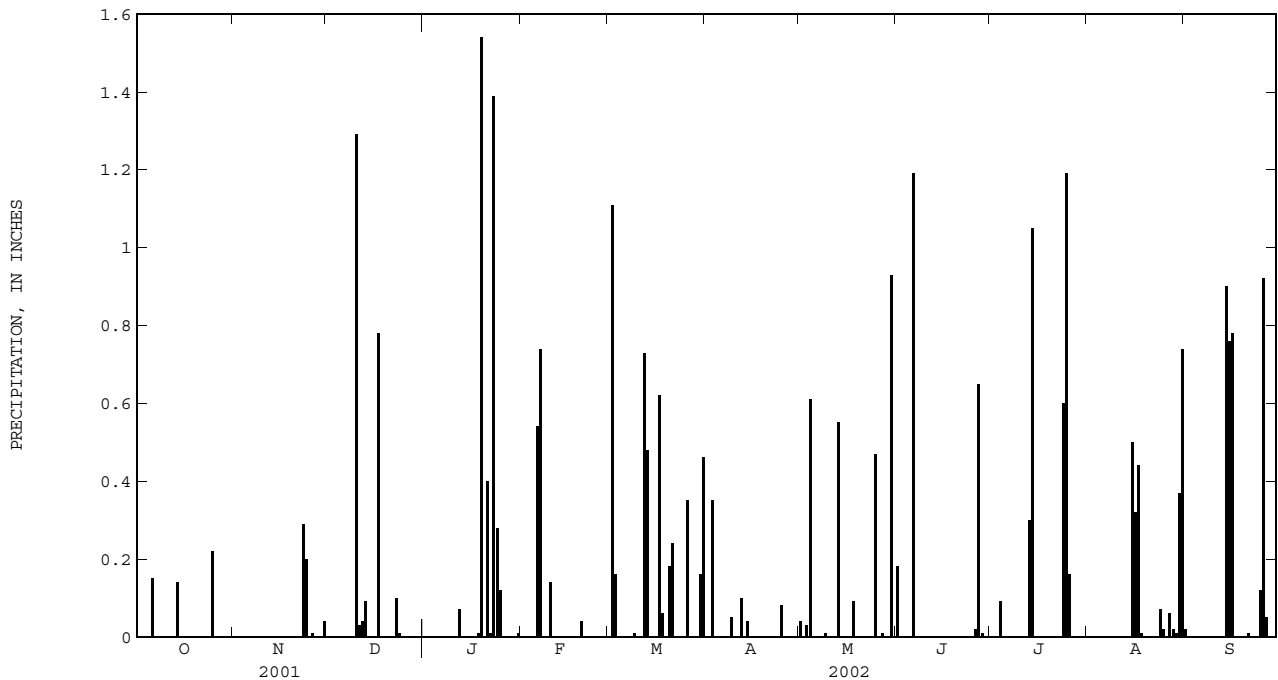
PERIOD OF RECORD.--January 1997 to current year. Records for period January 1997 to September 1998 published in USGS OFR 98-67 and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.18	0.00	0.00	0.02
2	0.00	0.00	0.00	0.00	0.00	1.11	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	---	0.00	0.16	0.35	0.03	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.61	0.00	0.09	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.15	0.00	0.00	---	0.54	0.00	0.00	0.00	1.19	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.29	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.04	0.07	0.00	0.73	0.10	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.09	0.00	0.00	0.48	0.00	0.55	0.00	0.30	0.00	0.00
14	0.14	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	1.05	0.00	0.90
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.76
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.78
17	0.00	0.00	0.78	0.00	0.00	0.62	0.00	0.00	0.00	0.00	0.44	0.00
18	0.00	0.00	0.00	0.01	0.00	0.06	0.00	0.09	0.00	0.00	0.01	0.00
19	0.00	0.00	0.00	1.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.04	0.18	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.40	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.01
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.29	0.10	1.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.20	0.01	0.28	0.00	0.00	0.00	0.00	0.00	0.60	0.07	0.00
25	0.22	0.00	0.00	0.12	0.00	0.00	0.08	0.47	0.00	1.19	0.02	0.12
26	0.00	0.01	0.00	0.00	0.00	0.35	0.00	0.00	0.02	0.16	0.00	0.92
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.65	0.00	0.06	0.05
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
30	0.00	0.04	0.00	0.00	---	0.16	0.00	0.93	0.00	0.00	0.37	0.00
31	0.00	---	0.00	0.01	---	0.46	---	0.00	---	0.00	0.74	---
TOTAL	0.51	0.54	2.34	---	1.46	4.56	0.62	2.74	2.05	3.39	2.56	3.56



SANTEE RIVER BASIN

352440080505045 CRN43

LOCATION.--Lat 35°24'40", long 80°50'50", Mecklenburg County, Hydrologic Unit 03050101, Huntersville Elementary School, Gilead Road, Huntersville, NC.

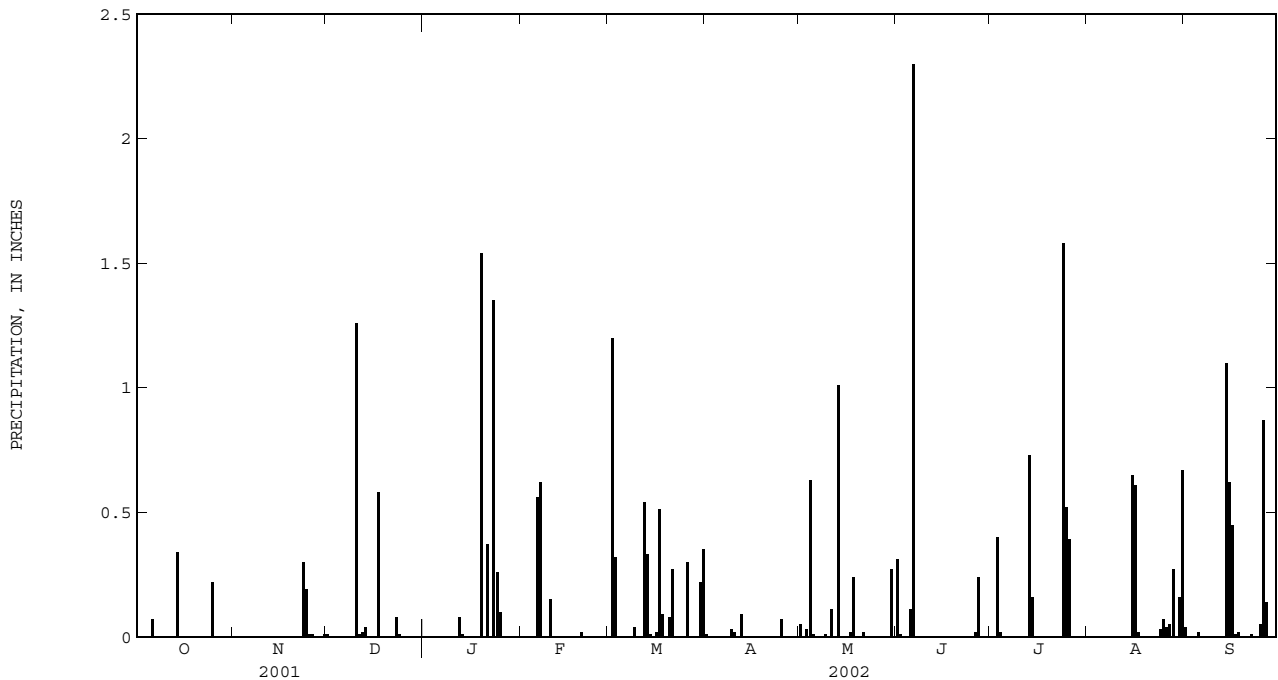
PERIOD OF RECORD.--January 1997 to current year. Records for period January 1997 to September 1998 published in USGS OFR 98-67 and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.05	0.31	0.00	0.00	0.04
2	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.01	0.00	0.00	0.00
3	0.00	0.00	0.00	---	0.00	0.32	0.00	0.03	0.00	0.40	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.63	0.00	0.02	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.01	0.11	0.00	0.00	0.02
6	0.07	0.00	0.00	---	0.56	0.00	0.00	0.00	2.30	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.04	0.03	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.26	0.00	0.15	0.00	0.02	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.08	0.00	0.54	0.09	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.04	0.01	0.00	0.33	0.00	1.01	0.00	0.73	0.00	0.00
14	0.34	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.16	0.00	1.10
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.62
16	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.61	0.45
17	0.00	0.00	0.58	0.00	0.00	0.51	0.00	0.02	0.00	0.00	0.02	0.01
18	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.24	0.00	0.00	0.00	0.02
19	0.00	0.00	0.00	1.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.02	0.08	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.37	0.00	0.27	0.00	0.02	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
23	0.00	0.30	0.08	1.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.19	0.01	0.26	0.00	0.00	0.00	0.00	0.00	1.58	0.03	0.00
25	0.22	0.01	0.00	0.10	0.00	0.00	0.07	0.00	0.00	0.52	0.07	0.05
26	0.00	0.01	0.00	0.00	0.00	0.30	0.00	0.00	0.02	0.39	0.04	0.87
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.05	0.14
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.01	0.00	0.00	---	0.22	0.00	0.27	0.00	0.00	0.16	0.00
31	0.00	---	0.00	0.00	---	0.35	---	0.00	---	0.00	0.67	---
TOTAL	0.63	0.52	2.01	---	1.35	4.28	0.22	2.40	2.99	3.80	2.57	3.33



SANTEE RIVER BASIN

350903081004545 CRN45

LOCATION.--Lat 35°09'02", long 81°00'43", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050101, private residence, Withers Cove Road, Charlotte, NC.

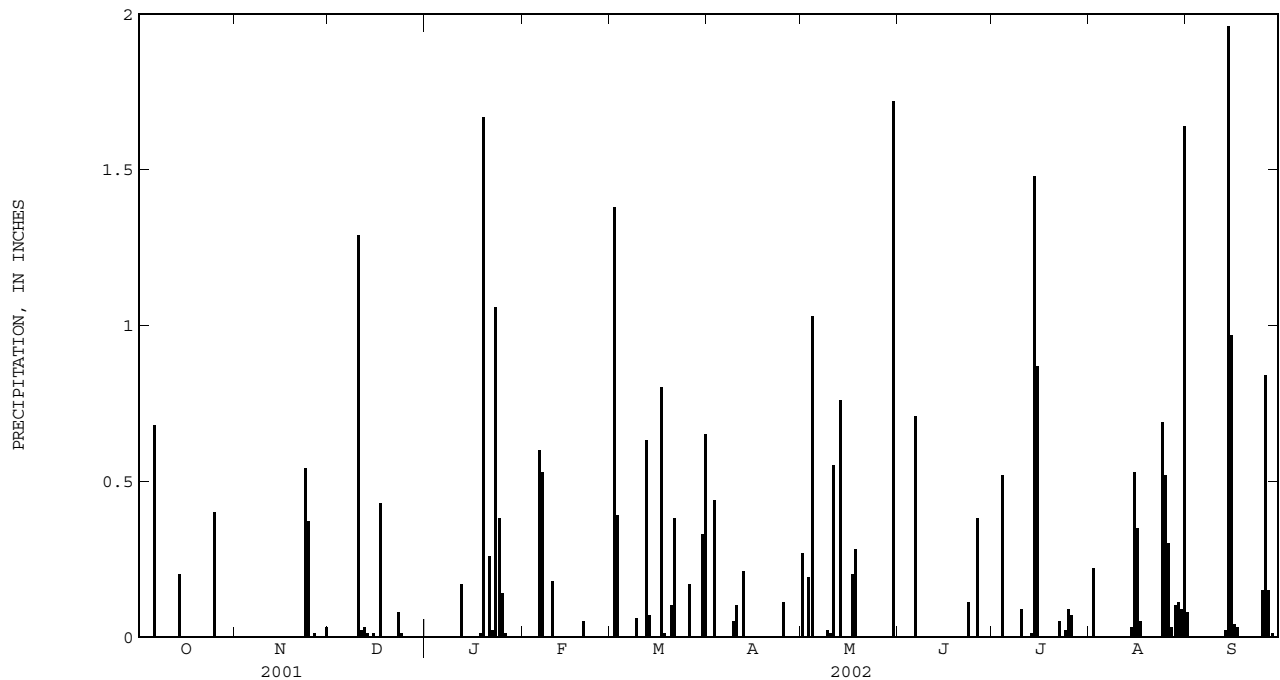
PERIOD OF RECORD.--January 1997 to current year. Records for period January 1997 to September 1998 published in USGS OFR 98-67 and 99-273.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.08
2	0.00	0.00	0.00	0.00	0.00	1.38	0.00	0.00	0.00	0.00	0.22	0.00
3	0.00	0.00	0.00	---	0.00	0.39	0.44	0.19	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	1.03	0.00	0.52	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.68	0.00	0.00	---	0.60	0.00	0.00	0.00	0.71	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.06	0.05	0.02	0.00	0.00	0.00	0.00
10	0.00	0.00	1.29	0.00	0.18	0.00	0.10	0.01	0.00	0.09	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.55	0.00	0.00	0.00	0.00
12	0.00	0.00	0.03	0.17	0.00	0.63	0.21	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.01	0.00	0.00	0.07	0.00	0.76	0.00	0.01	0.00	0.02
14	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.03	1.96
15	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.53	0.97
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.04
17	0.00	0.00	0.43	0.00	0.00	0.80	0.00	0.20	0.00	0.00	0.05	0.03
18	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.28	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.05	0.10	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.26	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00
23	0.00	0.54	0.08	1.06	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00
24	0.00	0.37	0.01	0.38	0.00	0.00	0.00	0.00	0.00	0.02	0.69	0.00
25	0.40	0.00	0.00	0.14	0.00	0.00	0.11	0.00	0.00	0.09	0.52	0.15
26	0.00	0.01	0.00	0.01	0.00	0.17	0.00	0.00	0.38	0.07	0.30	0.84
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.15
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.01
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.11	0.00
30	0.00	0.03	0.00	0.00	---	0.33	0.00	1.72	0.00	0.00	0.09	0.00
31	0.00	---	0.00	0.00	---	0.65	---	0.00	---	0.00	1.64	---
TOTAL	1.28	0.95	1.88	---	1.36	4.97	0.91	5.03	1.20	3.20	4.66	4.25



351229080460245 CRN47

LOCATION.--Lat 35°12'28", long 80°46'00", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Winterfield Elementary School, Winterfield Place, Charlotte, NC.

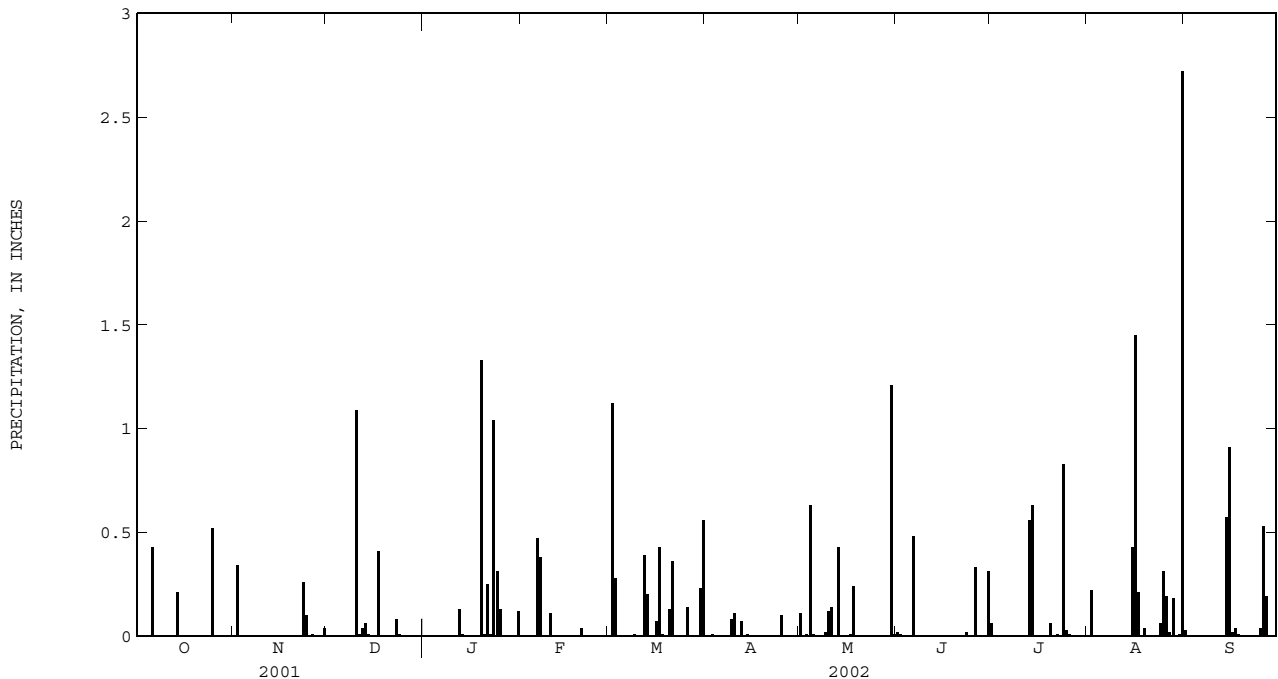
PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.02	0.06	0.00	0.03
2	0.00	0.34	0.00	0.00	0.00	1.12	0.00	0.00	0.01	0.00	0.22	0.00
3	0.00	0.00	0.00	---	0.00	0.28	0.01	0.01	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
6	0.43	0.00	0.00	---	0.47	0.00	0.00	0.00	0.48	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.02	0.00	0.00	0.00	0.00
10	0.00	0.00	1.09	0.00	0.11	0.00	0.11	0.12	0.00	0.00	0.00	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00
12	0.00	0.00	0.04	0.13	0.00	0.39	0.07	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.06	0.01	0.00	0.20	0.00	0.43	0.00	0.56	0.00	0.00
14	0.21	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.63	0.00	0.57
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.91
16	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	1.45	0.02
17	0.00	0.00	0.41	0.00	0.00	0.43	0.00	0.01	0.00	0.00	0.21	0.04
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.24	0.00	0.00	0.00	0.01
19	0.00	0.00	0.00	1.33	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
20	0.00	0.00	0.00	0.01	0.04	0.13	0.00	0.00	0.00	0.06	0.00	0.00
21	0.00	0.00	0.00	0.25	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
23	0.00	0.26	0.08	1.04	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
24	0.00	0.10	0.01	0.31	0.00	0.00	0.00	0.00	0.00	0.83	0.06	0.00
25	0.52	0.00	0.00	0.13	0.00	0.00	0.10	0.00	0.00	0.03	0.31	0.04
26	0.00	0.01	0.00	0.00	0.00	0.14	0.00	0.00	0.33	0.01	0.19	0.53
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.19
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.04	0.00	0.00	---	0.23	0.00	1.21	0.31	0.00	0.01	0.00
31	0.00	---	0.00	0.12	---	0.56	---	0.01	---	0.00	2.72	---
TOTAL	1.16	0.75	1.71	---	1.00	3.93	0.38	2.94	1.17	2.19	5.84	2.34



SANTEE RIVER BASIN

350637080475645 CRN48

LOCATION.--Lat 35°06'40", long 80°47'55", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Olde Providence School, Rea Road, Charlotte, NC.

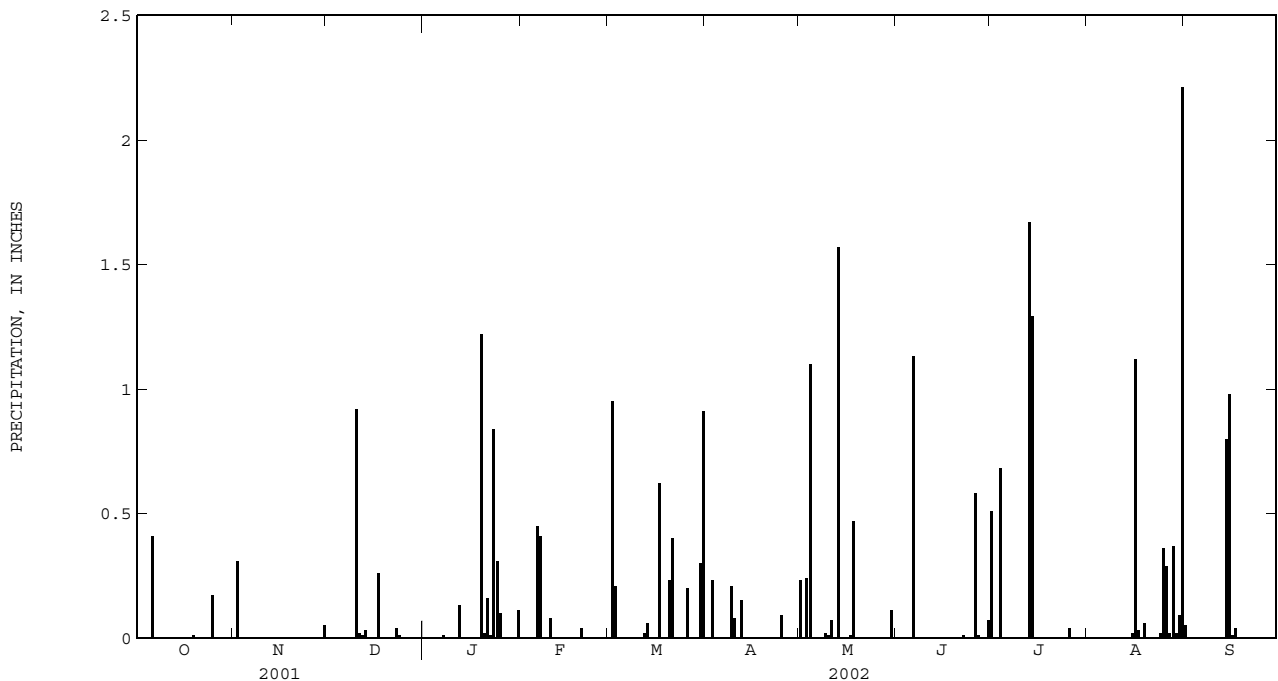
PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.51	0.00	0.05
2	0.00	0.31	0.00	0.00	0.00	0.95	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	---	0.00	0.21	0.23	0.24	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	1.10	0.00	0.68	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.41	0.00	0.00	---	0.45	0.00	0.00	0.00	1.13	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.02	0.00	0.00	0.00	0.00
10	0.00	0.00	0.92	0.00	0.08	0.00	0.08	0.01	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
12	0.00	0.00	0.01	0.13	0.00	0.02	0.15	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.03	0.00	0.00	0.06	0.00	1.57	0.00	1.67	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.29	0.00	0.80
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.98
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	0.01
17	0.00	0.00	0.26	0.00	0.00	0.62	0.00	0.01	0.00	0.00	0.03	0.04
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00
19	0.01	0.00	0.00	1.22	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00
20	0.00	0.00	0.00	0.02	0.04	0.23	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.16	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
23	0.00	---	0.04	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	---	0.01	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
25	0.17	---	0.00	0.10	0.00	0.00	0.09	0.00	0.00	0.00	0.36	0.00
26	0.00	---	0.00	0.00	0.00	0.20	0.00	0.00	0.58	0.04	0.29	---
27	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	---
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	---
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.02	0.00
30	0.00	0.05	0.00	0.00	---	0.30	0.00	0.11	0.07	0.00	0.09	0.00
31	0.00	---	0.00	0.11	---	0.91	---	0.00	---	0.00	2.21	---
TOTAL	0.59	---	1.29	---	0.98	3.90	0.76	3.83	1.80	4.19	4.61	---



SANTEE RIVER BASIN

352224080500345 CRN49

LOCATION.--Lat 35°22'24", long 80°50'03", Mecklenburg County, Hydrologic Unit 03050101, North Mecklenburg High School, Old Statesville Rd., Huntersville, NC.

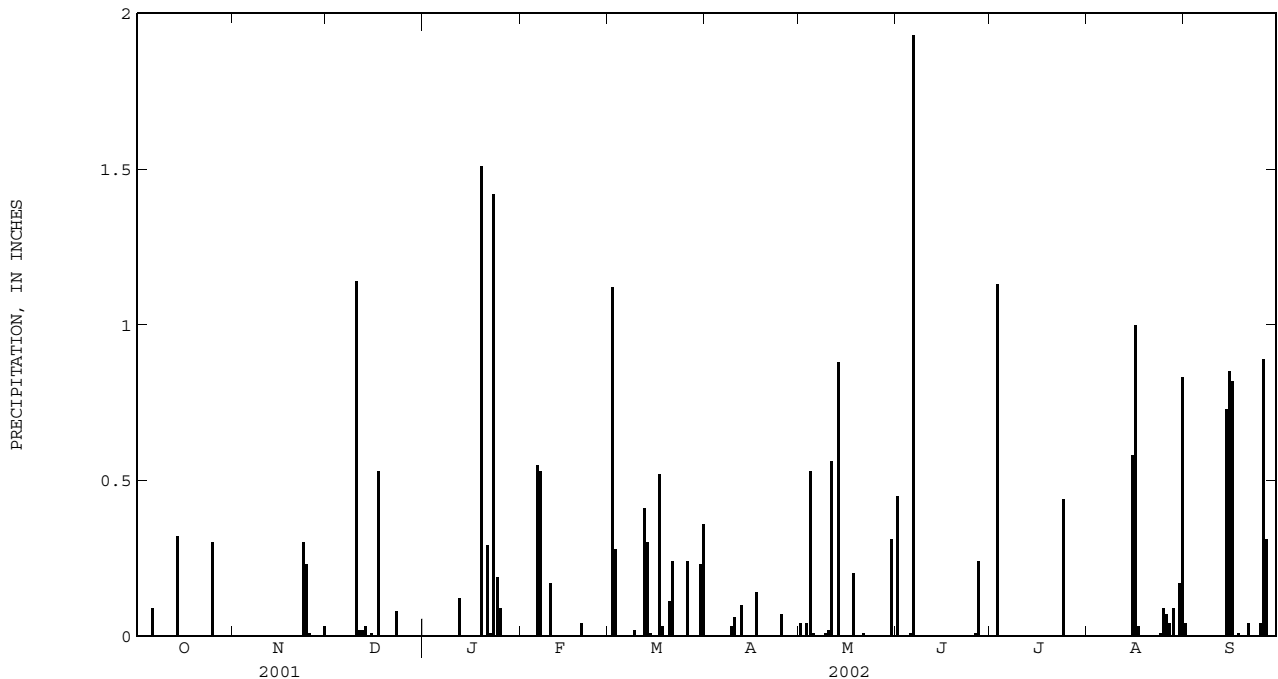
PERIOD OF RECORD.--April 1999 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.45	0.00	0.00	0.04
2	0.00	0.00	0.00	0.00	0.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	---	0.00	0.28	0.00	0.04	0.00	1.13	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00
6	0.09	0.00	0.00	---	0.55	0.00	0.00	0.00	1.93	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.14	0.00	0.17	0.00	0.06	0.02	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.12	0.00	0.41	0.10	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.03	0.00	0.00	0.30	0.00	0.88	0.00	---	0.00	0.00
14	0.32	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	---	0.00	0.73
15	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	---	0.58	0.85
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.82
17	0.00	0.00	0.53	0.00	0.00	0.52	0.14	0.00	0.00	0.00	0.03	0.00
18	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.20	0.00	0.00	0.00	0.01
19	0.00	0.00	0.00	1.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.04	0.11	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.29	0.00	0.24	0.00	0.01	0.00	0.00	0.00	0.04
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.30	0.08	1.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.23	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.44	0.01	0.00
25	0.30	0.01	0.00	0.09	0.00	0.00	0.07	0.00	0.00	0.00	0.09	0.04
26	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.01	0.00	0.07	0.89
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.04	0.31
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.03	0.00	0.00	---	0.23	0.00	0.31	0.00	0.00	0.17	0.00
31	0.00	---	0.00	0.00	---	0.36	---	0.00	---	0.00	0.83	---
TOTAL	0.71	0.57	1.83	---	1.29	3.87	0.40	2.61	2.64	---	2.91	3.73



SANTEE RIVER BASIN

351503080510145 CRN50

LOCATION.--Lat 35°15'03", long 80°51'01", Mecklenburg County, Hydrologic Unit 03050103, Oaklawn School of Math and Science, Oaklawn Ave, Charlotte, NC.

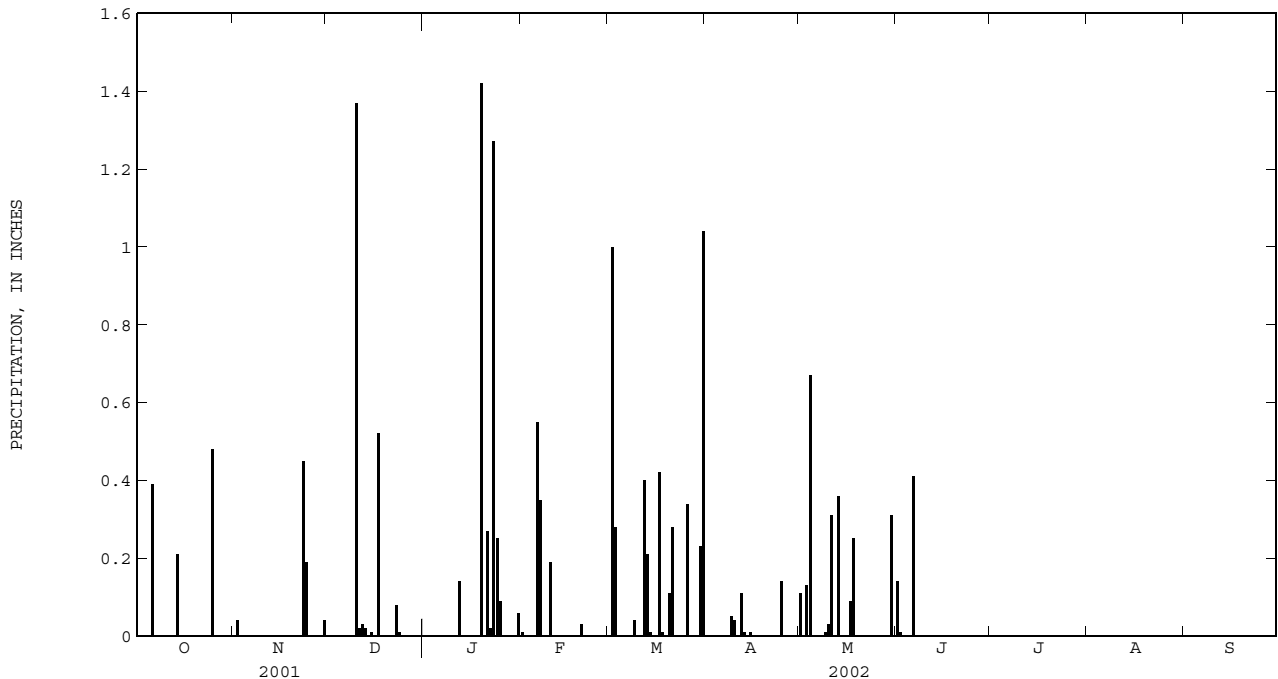
PERIOD OF RECORD.--July 1999 to June 2002 (discontinued).

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, FOR PERIOD OCTOBER 2001 TO JUNE 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.11	0.14	---	---	---
2	0.00	0.04	0.00	0.00	0.00	1.00	0.00	0.00	0.01	---	---	---
3	0.00	0.00	0.00	---	0.00	0.28	0.00	0.13	0.00	---	---	---
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.67	0.00	---	---	---
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	---	---	---
6	0.39	0.00	0.00	---	0.55	0.00	0.00	0.00	0.41	---	---	---
7	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00	---	---	---
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---
9	0.00	0.00	0.00	0.00	0.00	0.04	0.05	0.01	0.00	---	---	---
10	0.00	0.00	1.37	0.00	0.19	0.00	0.04	0.03	0.00	---	---	---
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.31	0.00	---	---	---
12	0.00	0.00	0.03	0.14	0.00	0.40	0.11	0.00	0.00	---	---	---
13	0.00	0.00	0.02	0.00	0.00	0.21	0.01	0.36	0.00	---	---	---
14	0.21	0.00	0.00	0.00	0.00	0.01	0.00	0.00	---	---	---	---
15	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	---	---	---	---
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---
17	0.00	0.00	0.52	0.00	0.00	0.42	0.00	0.09	---	---	---	---
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.25	---	---	---	---
19	0.00	0.00	0.00	1.42	0.00	0.00	0.00	0.00	---	---	---	---
20	0.00	0.00	0.00	0.00	0.03	0.11	0.00	0.00	---	---	---	---
21	0.00	0.00	0.00	0.27	0.00	0.28	0.00	0.00	---	---	---	---
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	---	---	---	---
23	0.00	0.45	0.08	1.27	0.00	0.00	0.00	0.00	---	---	---	---
24	0.00	0.19	0.01	0.25	0.00	0.00	0.00	0.00	---	---	---	---
25	0.48	0.00	0.00	0.09	0.00	0.00	0.14	0.00	---	---	---	---
26	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	---	---	---	---
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	---	---	---
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	---	---	---	---
30	0.00	0.04	0.00	0.00	---	0.23	0.00	0.31	---	---	---	---
31	0.00	---	0.00	0.06	---	1.04	---	0.00	---	---	---	---
TOTAL	1.08	0.72	2.06	---	1.13	4.37	0.36	2.27	---	---	---	---



352310080424845 CRN51

LOCATION.--Lat 35°23'10", long 80°42'48", Cabarrus County, Hydrologic Unit 03040105, Concord Regional Airport, Aviation Boulevard, Concord, NC.

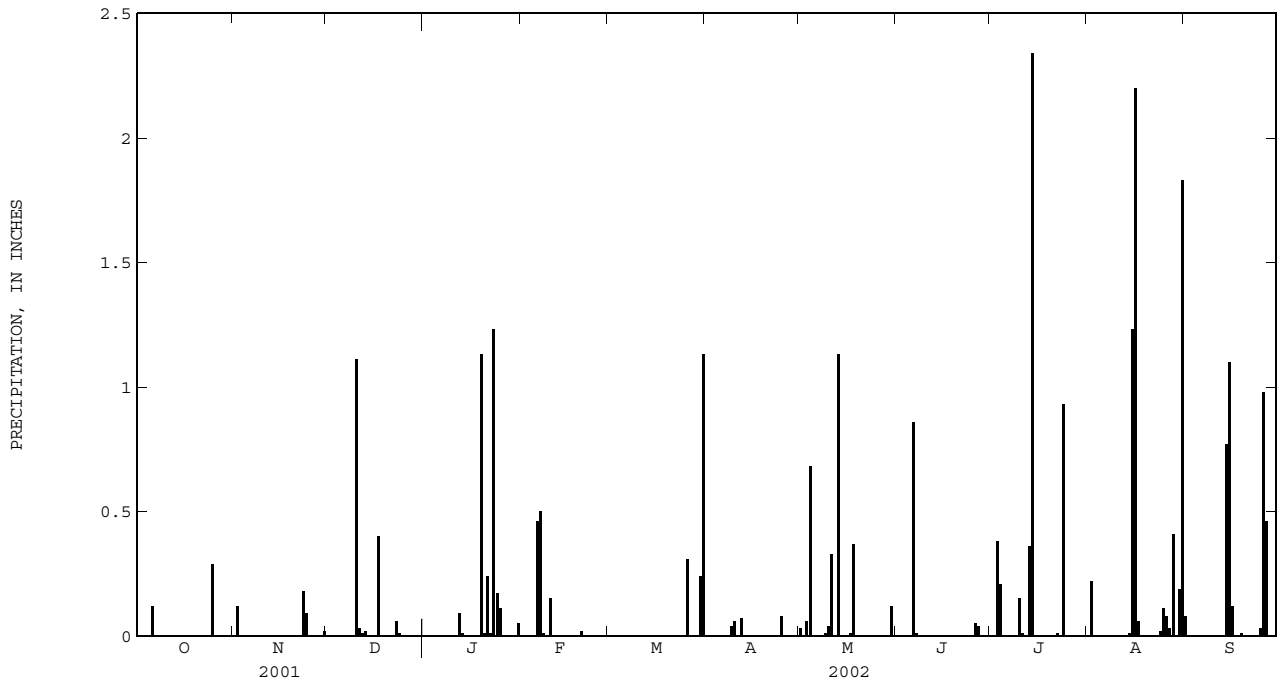
PERIOD OF RECORD.--June 2000 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.08
2	0.00	0.12	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.22	0.00
3	0.00	0.00	0.00	---	0.00	---	0.00	0.06	0.00	0.38	0.00	0.00
4	0.00	0.00	0.00	---	0.00	---	0.00	0.68	0.00	0.21	0.00	0.00
5	0.00	0.00	0.00	---	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00
6	0.12	0.00	0.00	---	0.46	---	0.00	0.00	0.86	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.50	---	0.00	0.00	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	---	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	---	0.04	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.11	0.00	0.15	---	0.06	0.04	0.00	0.15	0.00	0.00
11	0.00	0.00	0.03	0.00	0.00	---	0.00	0.33	0.00	0.01	0.00	0.00
12	0.00	0.00	0.01	0.09	0.00	---	0.07	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.02	0.01	0.00	---	0.00	1.13	0.00	0.36	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	2.34	0.01	0.77
15	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	1.23	1.10
16	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	2.20	0.12
17	0.00	0.00	0.40	0.00	0.00	---	0.00	0.01	0.00	0.00	0.06	0.00
18	0.00	0.00	0.00	0.00	0.00	---	0.00	0.37	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.13	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01
20	0.00	0.00	0.00	0.01	0.02	---	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.24	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	---	0.00	0.00	0.00	0.01	0.00	0.00
23	0.00	0.18	0.06	1.23	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.09	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.93	0.02	0.00
25	0.29	0.00	0.00	0.11	0.00	0.00	0.08	0.00	0.00	0.00	0.11	0.03
26	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.05	0.00	0.08	0.98
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.03	0.46
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.02	0.00	0.00	---	0.24	0.00	0.12	0.00	0.00	0.19	0.00
31	0.00	---	0.00	0.05	---	1.13	---	0.00	---	0.00	1.83	---
TOTAL	0.41	0.41	1.64	---	1.14	---	0.25	2.78	0.96	4.39	6.39	3.55



SANTEE RIVER BASIN

351753081011745 CRN52

LOCATION.--Lat 35°17'53", long 81°01'13", North American Datum of 1983, Gaston County, Hydrologic Unit 03050101, Ida Rankin Elementary School, Central Avenue, Mt. Holly, NC.

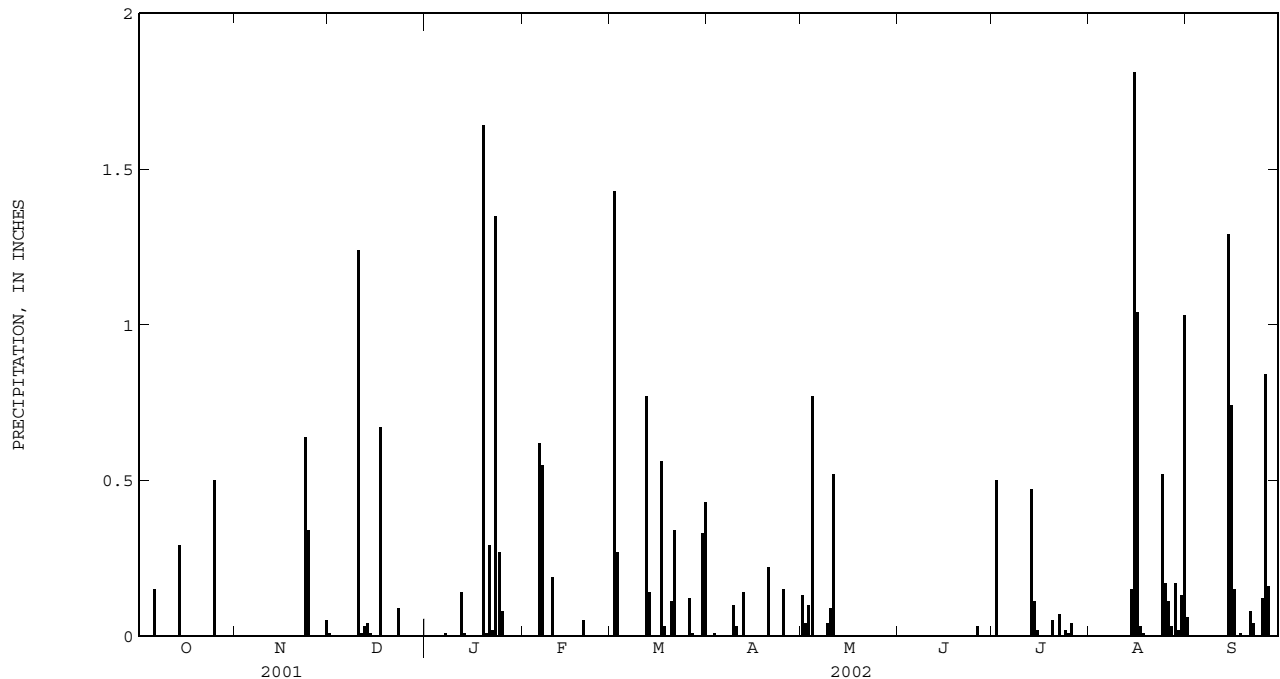
PERIOD OF RECORD.--May 2000 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.13	---	0.00	0.00	0.06
2	0.00	0.00	0.00	0.00	0.00	1.43	0.00	0.04	---	0.50	0.00	0.00
3	0.00	0.00	0.00	---	0.00	0.27	0.01	0.10	---	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.77	---	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00
6	0.15	0.00	0.00	---	0.62	0.00	0.00	0.00	---	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.55	0.00	0.00	0.00	---	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.04	---	0.00	0.00	0.00
10	0.00	0.00	1.24	0.00	0.19	0.00	0.03	0.09	---	0.00	0.00	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.52	---	0.00	0.00	0.00
12	0.00	0.00	0.03	0.14	0.00	0.77	0.14	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.04	0.01	0.00	0.14	0.00	0.00	0.00	0.47	0.00	0.00
14	0.29	0.00	0.01	0.00	0.00	0.00	0.00	---	0.00	0.11	0.15	1.29
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.02	1.81	0.74
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	1.04	0.15
17	0.00	0.00	0.67	0.00	0.00	0.56	0.00	---	0.00	0.00	0.03	0.00
18	0.00	0.00	0.00	0.00	0.00	0.03	0.00	---	0.00	0.00	0.01	0.01
19	0.00	0.00	0.00	1.64	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.01	0.05	0.11	0.22	---	0.00	0.05	0.00	0.00
21	0.00	0.00	0.00	0.29	0.00	0.34	0.00	---	0.00	0.00	0.00	0.08
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	---	0.00	0.07	0.00	0.04
23	0.00	0.64	0.09	1.35	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00
24	0.00	0.34	0.00	0.27	0.00	0.00	0.00	---	0.00	0.02	0.52	0.00
25	0.50	0.00	0.00	0.08	0.00	0.00	0.15	---	0.00	0.01	0.17	0.12
26	0.00	0.00	0.00	0.00	0.00	0.12	0.00	---	0.03	0.04	0.11	0.84
27	0.00	0.00	0.00	0.00	0.00	0.01	0.00	---	0.00	0.00	0.03	0.16
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.17	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	---	0.00	0.00	0.02	0.00
30	0.00	0.05	0.00	0.00	---	0.33	0.00	---	0.00	0.00	0.13	0.00
31	0.00	---	0.00	0.00	---	0.43	---	---	---	0.00	1.03	---
TOTAL	0.94	1.03	2.10	---	1.41	4.54	0.65	---	---	1.29	5.22	3.49



SANTEE RIVER BASIN

351412080541245 CRN53

LOCATION.--Lat 35°14'12", long 80°54'08", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Harding University High School, Alleghany Street, Charlotte, NC.

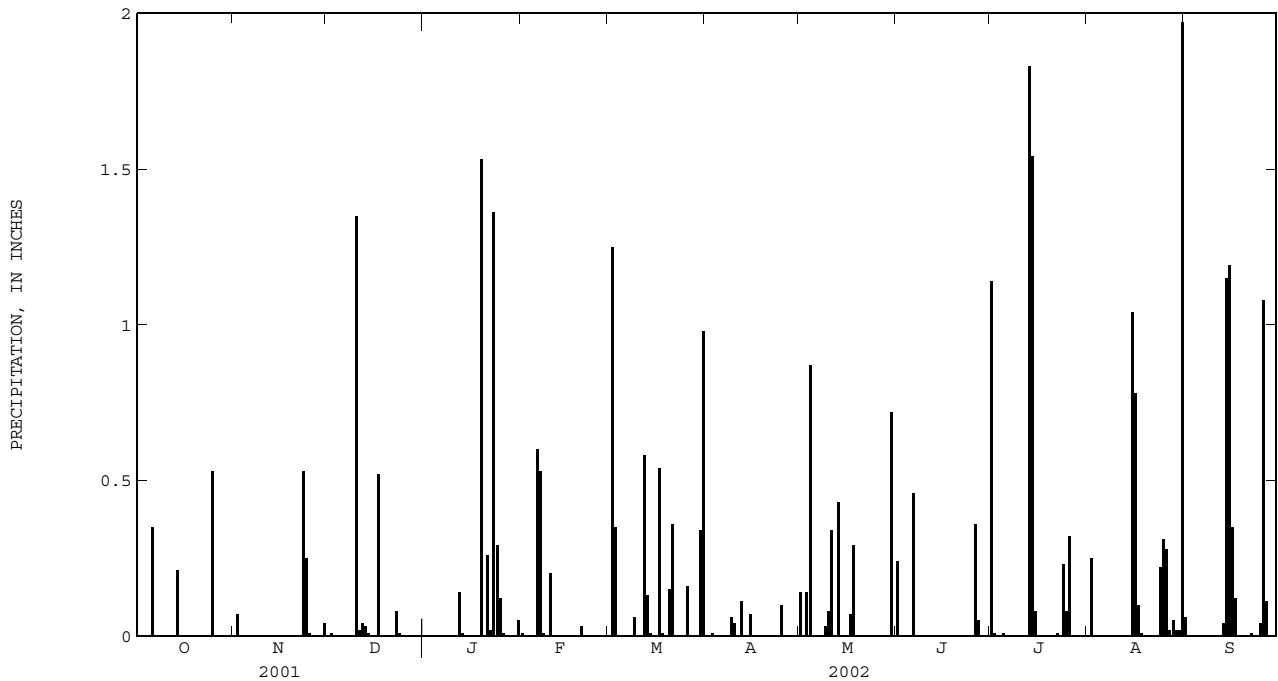
PERIOD OF RECORD.--May 2000 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.14	0.24	1.14	0.00	0.06
2	0.00	0.07	0.01	0.00	0.00	1.25	0.00	0.00	0.00	0.01	0.25	0.00
3	0.00	0.00	0.00	---	0.00	0.35	0.01	0.14	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.87	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
6	0.35	0.00	0.00	---	0.60	0.00	0.00	0.00	0.46	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.06	0.06	0.03	0.00	0.00	0.00	0.00
10	0.00	0.00	1.35	0.00	0.20	0.00	0.04	0.08	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.00
12	0.00	0.00	0.04	0.14	0.00	0.58	0.11	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.03	0.01	0.00	0.13	0.00	0.43	0.00	1.83	0.00	0.04
14	0.21	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	1.54	0.00	1.15
15	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.08	1.04	1.19
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.35
17	0.00	0.00	0.52	0.00	0.00	0.54	0.00	0.07	0.00	0.00	0.10	0.12
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.29	0.00	0.00	0.01	0.00
19	0.00	0.00	0.00	1.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.03	0.15	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.26	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01
23	0.00	0.53	0.08	1.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.25	0.01	0.29	0.00	0.00	0.00	0.00	0.00	0.23	0.22	0.00
25	0.53	0.01	0.00	0.12	0.00	0.00	0.10	0.00	0.00	0.08	0.31	0.04
26	0.00	0.00	0.00	0.01	0.00	0.16	0.00	0.00	0.36	0.32	0.28	1.08
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.02	0.11
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.02	0.00
30	0.00	0.04	0.00	0.00	---	0.34	0.00	0.72	0.00	0.00	0.02	0.00
31	0.00	---	0.00	0.05	---	0.98	---	0.00	---	0.00	1.97	---
TOTAL	1.09	0.90	2.07	---	1.38	4.92	0.39	3.11	1.11	5.25	5.07	4.15



SANTEE RIVER BASIN

351741080475045 CRN54

LOCATION.--Lat 35°17'43", long 80°47'46", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03040105, Derita Elementary School, West Sugar Creek Road, Charlotte, NC.

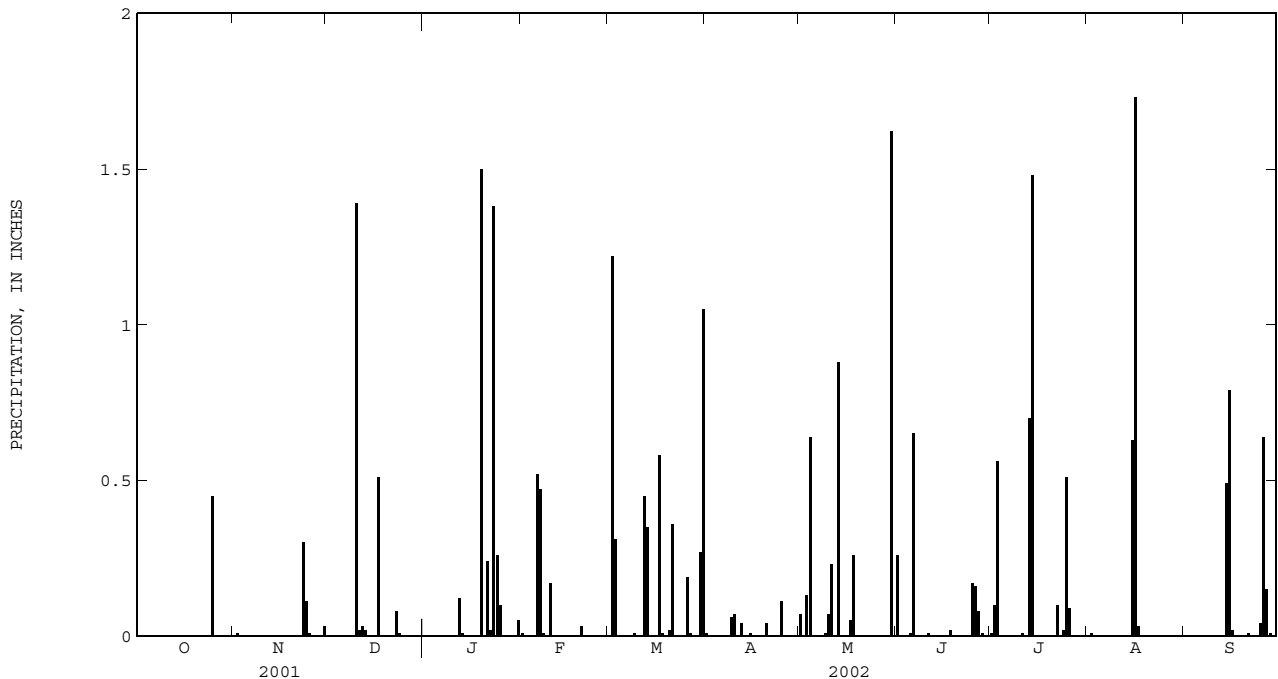
PERIOD OF RECORD.--May 2000 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.07	0.26	0.01	0.00	---
2	0.00	0.01	0.00	0.00	0.00	1.22	0.00	0.00	0.00	0.10	0.01	---
3	0.00	0.00	0.00	---	0.00	0.31	0.00	0.13	0.00	0.56	0.00	---
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.64	0.00	0.00	0.00	---
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
6	---	0.00	0.00	---	0.52	0.00	0.00	0.00	0.65	0.00	0.00	0.00
7	---	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	---	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00
9	---	0.00	0.00	0.00	0.00	0.01	0.06	0.01	0.00	0.00	0.00	0.00
10	---	0.00	1.39	0.00	0.17	0.00	0.07	0.07	0.00	0.00	0.00	0.00
11	---	0.00	0.02	0.00	0.00	0.00	0.00	0.23	0.01	0.01	0.00	0.00
12	---	0.00	0.03	0.12	0.00	0.45	0.04	0.00	0.00	0.00	0.00	0.00
13	---	0.00	0.02	0.01	0.00	0.35	0.00	0.88	0.00	0.70	0.00	0.00
14	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.00	0.49
15	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.63	0.79
16	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.73	0.02
17	---	0.00	0.51	0.00	0.00	0.58	0.00	0.05	0.00	0.00	0.03	0.00
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.26	0.02	0.00	0.00	0.00
19	0.00	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.03	0.02	0.04	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.24	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.01
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00
23	0.00	0.30	0.08	1.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.11	0.01	0.26	0.00	0.00	0.00	0.00	0.00	0.02	---	0.00
25	0.45	0.01	0.00	0.10	0.00	0.00	0.11	0.00	0.17	0.51	---	0.04
26	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.16	0.09	---	0.64
27	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.08	0.00	---	0.15
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	---	0.01
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	---	0.00
30	0.00	0.03	0.00	0.00	---	0.27	0.00	1.62	0.00	0.00	---	0.00
31	0.00	---	0.00	0.05	---	1.05	---	0.00	---	0.00	---	---
TOTAL	---	0.46	2.06	---	1.21	4.83	0.34	3.96	1.37	3.58	---	---



350324080551845 CRN55

LOCATION.--Lat 35°03'26", long 80°55'15", North American Datum of 1983, York County, South Carolina, Hydrologic Unit 03050103, private residence, Hammond Road, Fort Mill, SC.

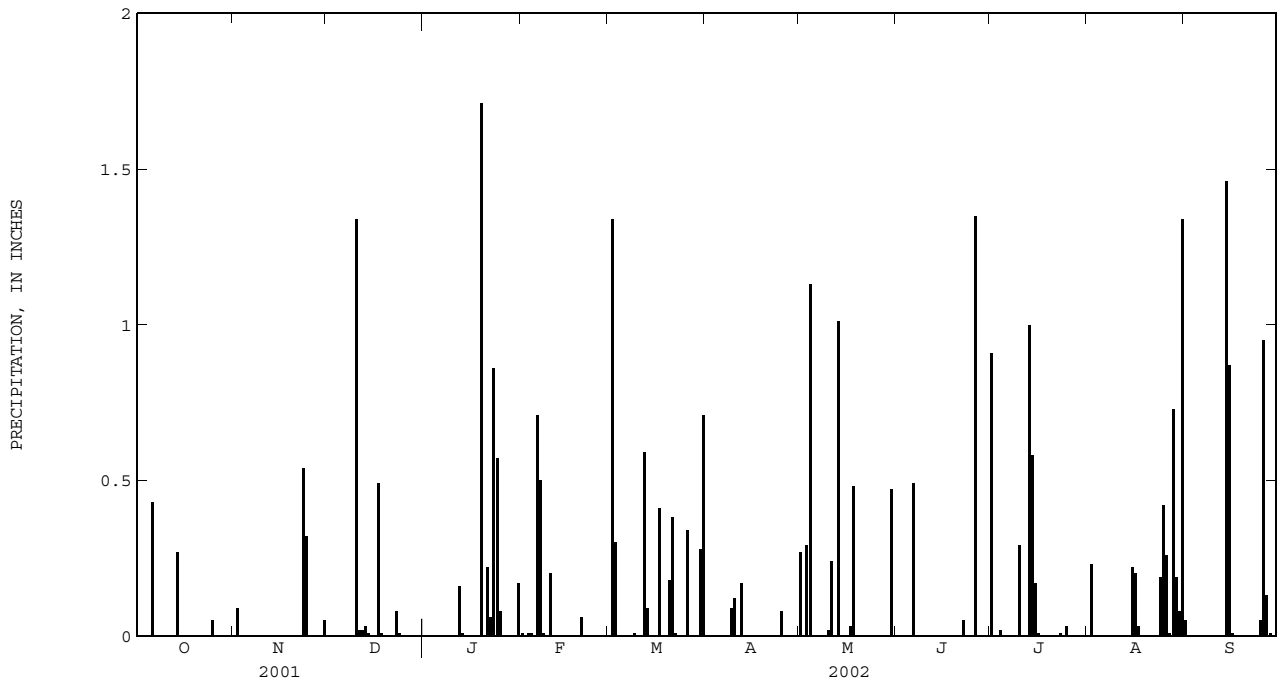
PERIOD OF RECORD.--June 2000 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.27	0.00	0.91	0.00	0.05
2	0.00	0.09	0.00	0.00	0.00	1.34	0.00	0.00	0.00	0.00	0.23	0.00
3	0.00	0.00	0.00	---	0.01	0.30	0.00	0.29	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.01	0.00	0.00	1.13	0.00	0.02	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.43	0.00	0.00	---	0.71	0.00	0.00	0.00	0.49	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.09	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.34	0.00	0.20	0.00	0.12	0.02	0.00	0.29	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.16	0.00	0.59	0.17	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.03	0.01	0.00	0.09	0.00	1.01	0.00	1.00	0.00	0.00
14	0.27	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.00	1.46
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.22	0.87
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.20	0.01
17	0.00	0.00	0.49	0.00	0.00	0.41	0.00	0.03	0.00	0.00	0.03	0.00
18	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.06	0.18	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.22	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.06	0.00	0.01	0.00	0.00	0.05	0.00	0.00	0.00
23	0.00	0.54	0.08	0.86	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
24	0.00	0.32	0.01	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00
25	0.05	0.00	0.00	0.08	0.00	0.00	0.08	0.00	0.00	0.03	0.42	0.05
26	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	1.35	0.00	0.26	0.95
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.13
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.01
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.19	0.00
30	0.00	0.05	0.00	0.00	---	0.28	0.00	0.47	0.00	0.00	0.08	0.00
31	0.00	---	0.00	0.17	---	0.71	---	0.00	---	0.00	1.34	---
TOTAL	0.75	1.00	2.01	---	1.51	4.64	0.46	3.94	1.89	3.02	3.90	3.53



SANTEE RIVER BASIN

350635080513245 CRN56

LOCATION.--Lat 35°06'35", long 80°51'32", Mecklenburg County, Hydrologic Unit 03050103, South Mecklenburg High School, Park Road, Charlotte, NC.

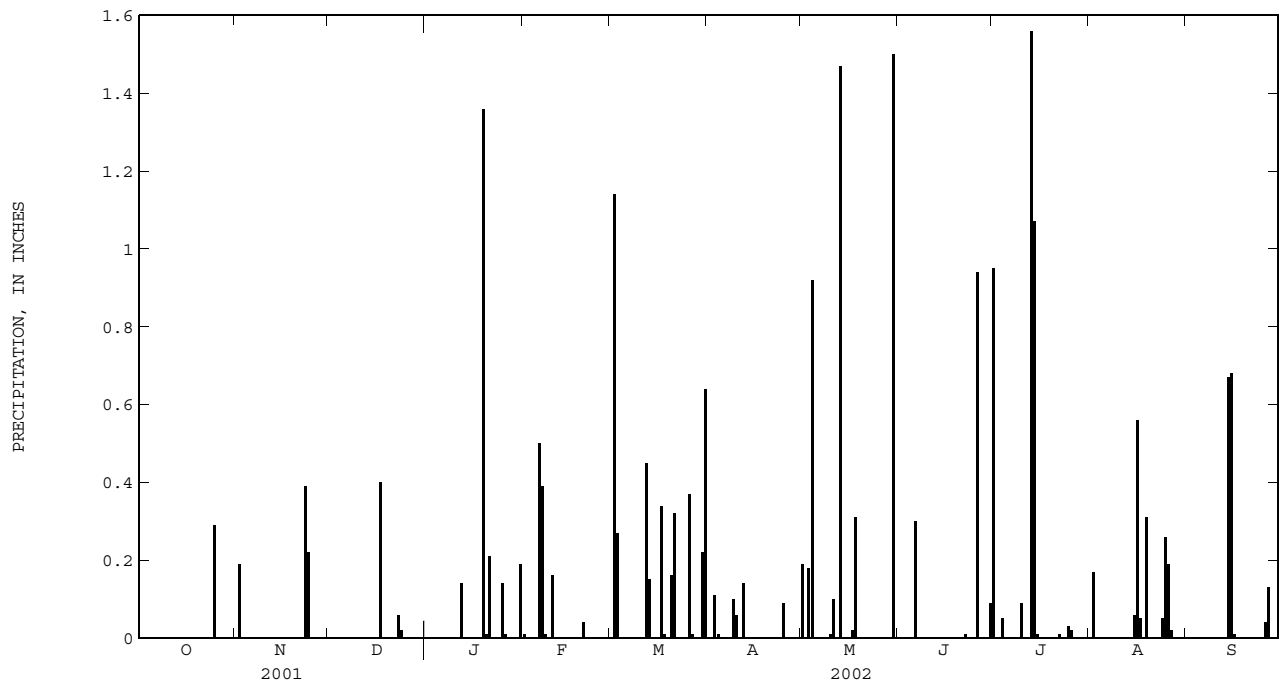
PERIOD OF RECORD.--May 2000 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.19	0.00	0.95	0.00	---
2	0.00	0.19	0.00	---	0.00	1.14	0.00	0.00	0.00	0.00	0.17	---
3	0.00	0.00	0.00	---	0.00	0.27	0.11	0.18	0.00	0.00	0.00	---
4	0.00	0.00	0.00	---	0.00	0.00	0.01	0.92	0.00	0.05	0.00	---
5	---	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	---	0.00	0.00	---	0.50	0.00	0.00	0.00	0.30	0.00	0.00	0.00
7	---	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	---	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	---	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00
10	---	0.00	---	0.00	0.16	0.00	0.06	0.01	0.00	0.09	0.00	0.00
11	---	0.00	---	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00
12	---	0.00	---	0.14	0.00	0.45	0.14	0.00	0.00	0.00	0.00	0.00
13	---	0.00	---	0.00	0.00	0.15	0.00	1.47	0.00	1.56	0.00	0.00
14	---	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	1.07	0.00	0.67
15	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.68
16	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.01
17	---	0.00	0.40	0.00	0.00	0.34	0.00	0.02	0.00	0.00	0.05	0.00
18	---	0.00	0.00	0.00	0.00	0.01	0.00	0.31	0.00	0.00	0.00	0.00
19	---	0.00	0.00	1.36	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00
20	---	0.00	0.00	0.01	0.04	0.16	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.21	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00
23	0.00	0.39	0.06	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.22	0.02	---	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00
25	0.29	0.00	0.00	0.14	0.00	0.00	0.09	0.00	0.00	0.03	0.26	0.00
26	0.00	0.00	0.00	0.01	0.00	0.37	0.00	0.00	0.94	0.02	0.19	0.04
27	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.13
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	---	0.00
30	0.00	0.00	0.00	0.00	---	0.22	0.00	1.50	0.09	0.00	---	0.00
31	0.00	---	0.00	0.19	---	0.64	---	0.00	---	0.00	---	---
TOTAL	---	0.80	---	---	1.11	4.08	0.51	4.70	1.34	3.79	---	---



351109080412145 CRN57

LOCATION.--Lat 35°11'03", long 80°41'22", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Lebanon Road Elementary School, Lebanon Road, Charlotte, NC.

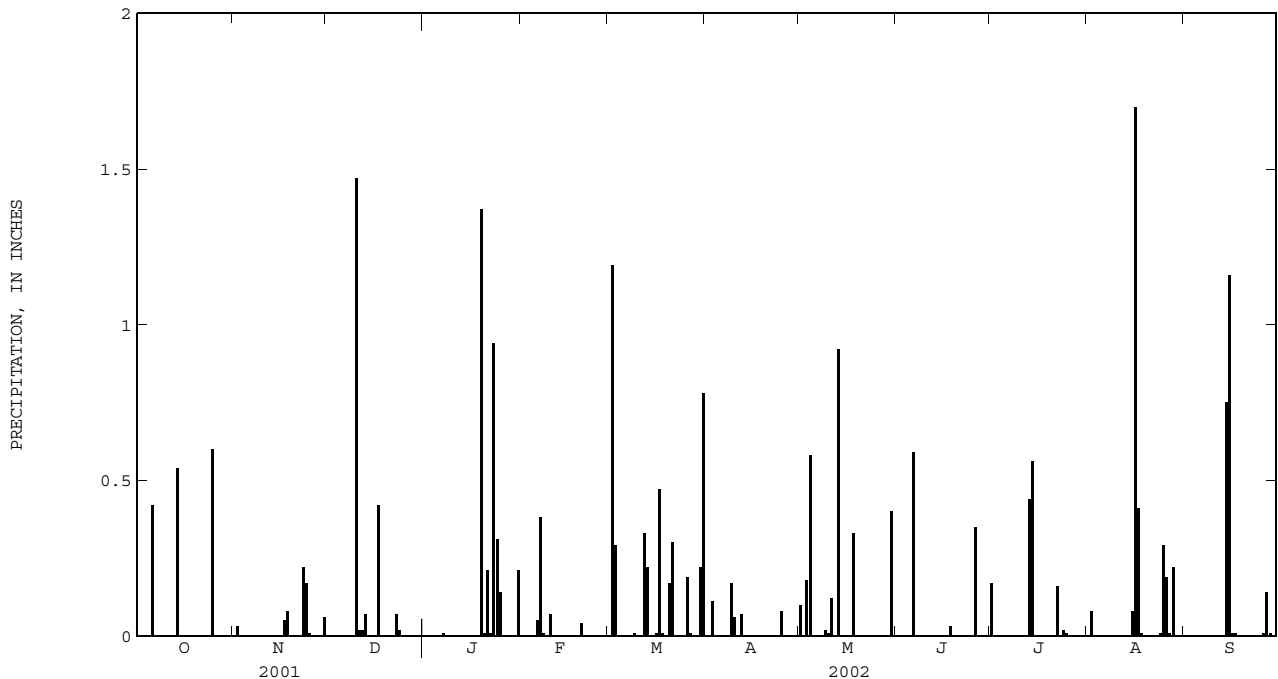
PERIOD OF RECORD.--April 2000 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.17	0.00	---
2	0.00	0.03	0.00	0.00	0.00	1.19	0.00	0.00	0.00	0.00	0.08	---
3	0.00	0.00	0.00	---	0.00	0.29	0.11	0.18	0.00	0.00	0.00	---
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.58	0.00	0.00	0.00	---
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---
6	0.42	0.00	0.00	---	0.05	0.00	0.00	0.00	0.59	0.00	0.00	---
7	0.00	0.00	0.00	0.01	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.17	0.02	0.00	0.00	0.00	0.00
10	0.00	0.00	1.47	0.00	0.07	0.00	0.06	0.01	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	---	0.00	0.33	0.07	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.07	---	0.00	0.22	0.00	0.92	0.00	0.44	0.00	0.00
14	0.54	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.56	0.00	0.75
15	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.08	1.16
16	0.00	0.00	0.00	---	0.00	0.01	0.00	0.00	0.00	0.00	1.70	0.01
17	0.00	0.05	0.42	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.41	0.01
18	0.00	0.08	0.00	0.00	0.00	0.01	0.00	0.33	0.03	0.00	0.01	0.00
19	0.00	0.00	0.00	1.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.01	0.04	0.17	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.21	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00
23	0.00	0.22	0.07	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.17	0.02	0.31	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00
25	0.60	0.01	0.00	0.14	0.00	0.00	0.08	0.00	0.00	0.01	0.29	0.00
26	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.35	0.00	0.19	0.01
27	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.14
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.01
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.06	0.00	0.00	---	0.22	0.00	0.40	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.21	---	0.78	---	0.00	---	0.00	---	---
TOTAL	1.56	0.62	2.09	---	0.55	4.20	0.49	2.66	0.97	1.36	---	---



SANTEE RIVER BASIN

350624081023345 CRN59

LOCATION.--Lat 35°06'24", long 81°02'33", York County, South Carolina, Hydrologic Unit 03050101, YMCA Camp Thunderbird, Thunderbird Lane, Lake Wylie, SC.

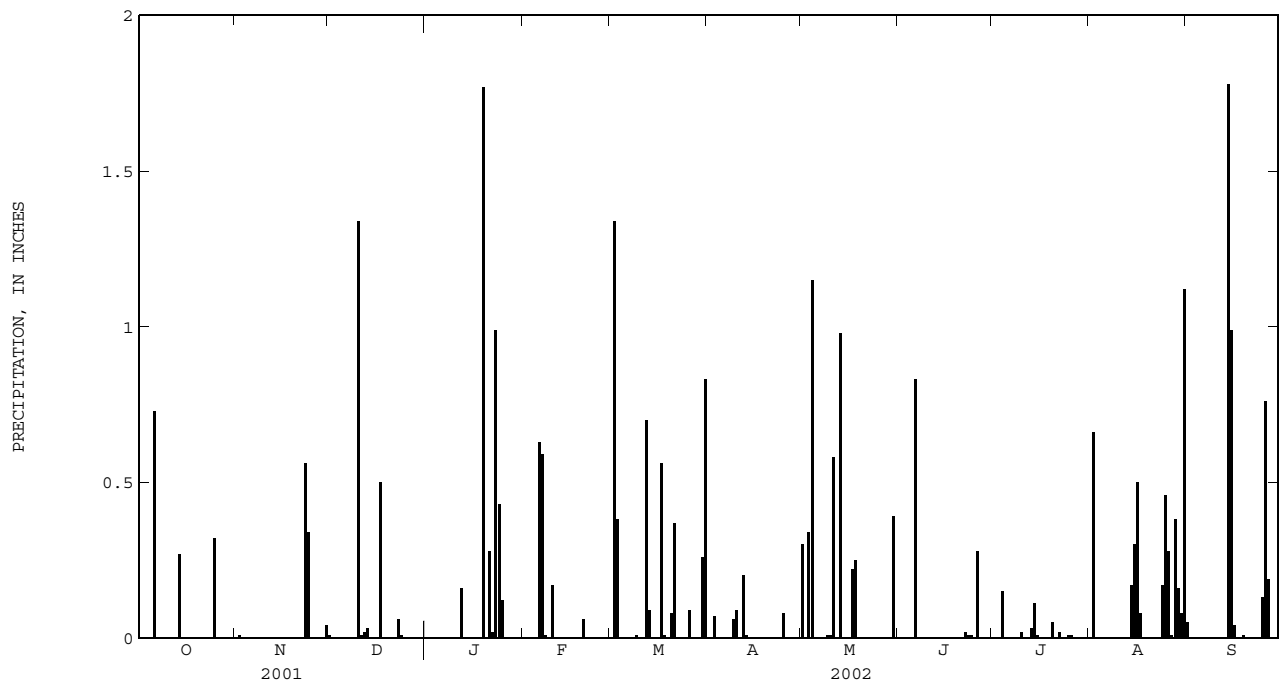
PERIOD OF RECORD.--June 2000 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.05
2	0.00	0.01	0.00	0.00	0.00	1.34	0.00	0.00	0.00	0.00	0.66	0.00
3	0.00	0.00	0.00	---	0.00	0.38	0.07	0.34	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	1.15	0.00	0.15	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.73	0.00	0.00	---	0.63	0.00	0.00	0.00	0.83	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.34	0.00	0.17	0.00	0.09	0.01	0.00	0.02	0.00	0.00
11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.58	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.16	0.00	0.70	0.20	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.03	0.00	0.00	0.09	0.01	0.98	0.00	0.03	0.00	0.00
14	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.17	1.78
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.30	0.99
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.04
17	0.00	0.00	0.50	0.00	0.00	0.56	0.00	0.22	0.00	0.00	0.08	0.00
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.25	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
20	0.00	0.00	0.00	0.00	0.06	0.08	0.00	0.00	0.00	0.05	0.00	0.00
21	0.00	0.00	0.00	0.28	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00
23	0.00	0.56	0.06	0.99	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
24	0.00	0.34	0.01	0.43	0.00	0.00	0.00	0.00	0.01	0.00	0.17	0.00
25	0.32	0.00	0.00	0.12	0.00	0.00	0.08	0.00	0.00	0.01	0.46	0.13
26	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.28	0.01	0.28	0.76
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.19
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.16	0.00
30	0.00	0.04	0.00	0.00	---	0.26	0.00	0.39	0.00	0.00	0.08	0.00
31	0.00	---	0.00	0.00	---	0.83	---	0.00	---	0.00	1.12	---
TOTAL	1.32	0.95	1.98	---	1.46	4.72	0.51	4.23	1.15	0.41	4.37	3.95



SANTEE RIVER BASIN

351104080521845 CRN60

LOCATION.--Lat 35°11'05", long 80°52'18", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Collinswood Elementary School, Applegate Road, Charlotte, NC.

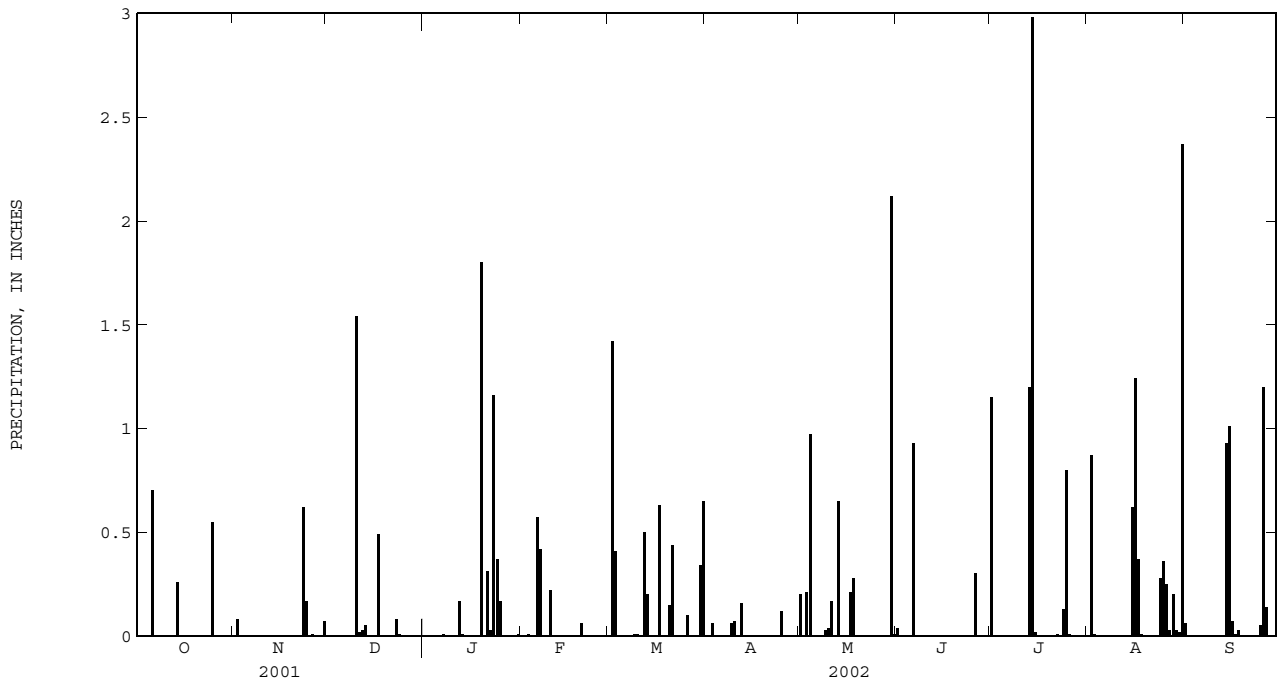
PERIOD OF RECORD.--April 2000 to current year.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.04	1.15	0.00	0.06
2	0.00	0.08	0.00	0.00	0.00	1.42	0.00	0.00	0.00	0.00	0.87	0.00
3	0.00	0.00	0.00	---	0.01	0.41	0.06	0.21	0.00	0.00	0.01	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.97	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.70	0.00	0.00	---	0.57	0.00	0.00	0.00	0.93	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.03	0.00	0.00	0.00	0.00
10	0.00	0.00	1.54	0.00	0.22	0.01	0.07	0.04	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
12	0.00	0.00	0.03	0.17	0.00	0.50	0.16	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.05	0.01	0.00	0.20	0.00	0.65	0.00	1.20	0.00	0.00
14	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.98	0.00	0.93
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.62	1.01
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.07
17	0.00	0.00	0.49	0.00	0.00	0.63	0.00	0.21	0.00	0.00	0.37	0.01
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.01	0.03
19	0.00	0.00	0.00	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.06	0.15	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.31	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
23	0.00	0.62	0.08	1.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.17	0.01	0.37	0.00	0.00	0.00	0.00	0.00	0.13	0.28	0.00
25	0.55	0.00	0.00	0.17	0.00	0.00	0.12	0.00	0.00	0.80	0.36	0.05
26	0.00	0.01	0.00	0.00	0.00	0.10	0.00	0.00	0.30	0.01	0.25	1.20
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.14
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.03	0.00
30	0.00	0.07	0.00	0.00	---	0.34	0.00	2.12	0.00	0.00	0.02	0.00
31	0.00	---	0.00	0.01	---	0.65	---	0.01	---	0.00	2.37	---
TOTAL	1.51	0.95	2.22	---	1.28	4.86	0.47	4.89	1.27	6.30	6.66	3.50



SANTEE RIVER BASIN

351816080564345 CRN61

LOCATION.--Lat 35°18'17", long 80°56'42", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050101, Coulwood Middle School, 500 Kentberry Drive, Charlotte, NC.

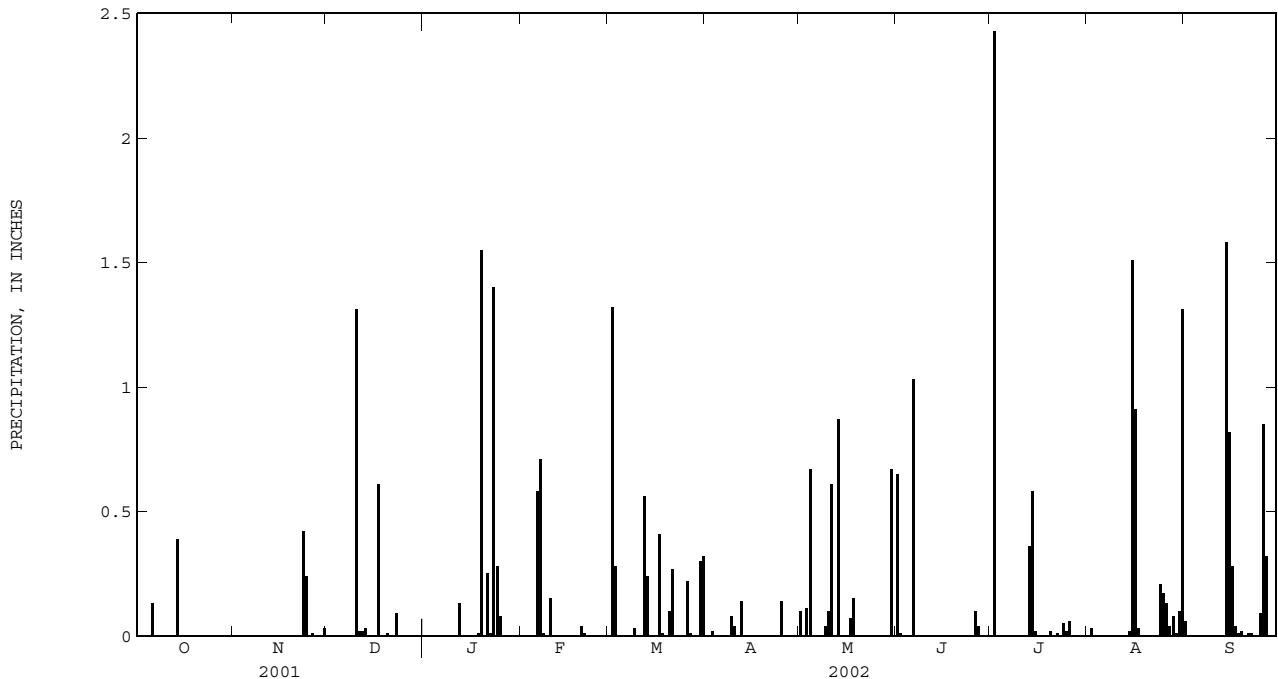
PERIOD OF RECORD.--October 2001 to September 2002.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.65	0.00	0.00	0.06
2	0.00	0.00	0.00	---	0.00	1.32	0.00	0.00	0.01	2.43	0.03	0.00
3	0.00	0.00	0.00	---	0.00	0.28	0.02	0.11	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.13	0.00	0.00	---	0.58	0.00	0.00	0.00	1.03	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.03	0.08	0.04	0.00	0.00	0.00	0.00
10	0.00	0.00	1.31	0.00	0.15	0.00	0.04	0.10	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.13	0.00	0.56	0.14	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.03	0.00	0.00	0.24	0.00	0.87	0.00	0.36	0.00	0.00
14	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.02	1.58
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	1.51	0.82
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.28
17	0.00	0.00	0.61	0.00	0.00	0.41	0.00	0.07	0.00	0.00	0.03	0.04
18	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.15	0.00	0.00	0.00	0.01
19	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
20	0.00	0.00	0.01	0.00	0.04	0.10	0.00	0.00	0.00	0.02	0.00	0.00
21	0.00	0.00	0.00	0.25	0.01	0.27	0.00	0.00	0.00	0.00	0.00	0.01
22	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01
23	0.00	0.42	0.09	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.24	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.05	0.21	0.00
25	---	0.00	0.00	0.08	0.00	0.00	0.14	0.00	0.00	0.02	0.17	0.09
26	---	0.01	0.00	0.00	0.00	0.22	0.00	0.00	0.10	0.06	0.13	0.85
27	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.04	0.32
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
30	0.00	0.03	0.00	0.00	---	0.30	0.00	0.67	0.00	0.00	0.10	0.00
31	0.00	---	0.00	0.00	---	0.32	---	0.00	---	0.00	1.31	---
TOTAL	---	0.70	2.09	---	1.50	4.07	0.42	3.39	1.83	3.55	4.55	4.09



351928080515645 CRN64

LOCATION.--Lat 35°19'28", long 80°51'56", Mecklenburg County, Hydrologic Unit 03050101, Hornets Nest Elementary School, Beatties Ford Road, Charlotte, NC.

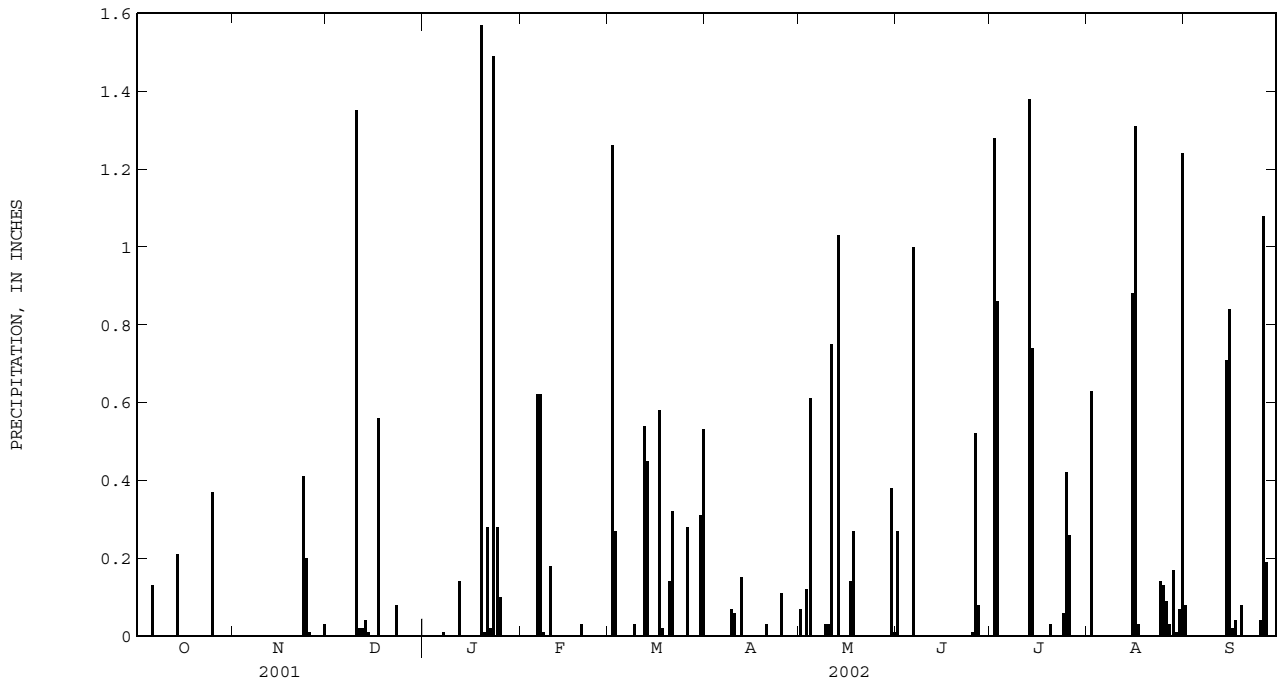
PERIOD OF RECORD.--October 2001 to September 2002.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.27	0.00	0.00	0.08
2	0.00	0.00	0.00	---	0.00	1.26	0.00	0.00	0.00	1.28	0.63	0.00
3	0.00	0.00	0.00	---	0.00	0.27	0.00	0.12	0.00	0.86	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.13	0.00	0.00	---	0.62	0.00	0.00	0.00	1.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.03	0.07	0.03	0.00	0.00	0.00	0.00
10	0.00	0.00	1.35	0.00	0.18	0.00	0.06	0.03	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00
12	0.00	0.00	0.02	0.14	0.00	0.54	0.15	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.04	0.00	0.00	0.45	0.00	1.03	0.00	1.38	0.00	0.00
14	0.21	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.71
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.84
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.02
17	0.00	0.00	0.56	0.00	0.00	0.58	0.00	0.14	0.00	0.00	0.03	0.04
18	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.27	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
20	0.00	0.00	0.00	0.01	0.03	0.14	0.03	0.00	0.00	0.03	0.00	0.00
21	0.00	0.00	0.00	0.28	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.41	0.08	1.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.20	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.06	0.14	0.00
25	0.37	0.01	0.00	0.10	0.00	0.00	0.11	0.00	0.01	0.42	0.13	0.04
26	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.52	0.26	0.09	1.08
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.03	0.19
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
30	0.00	0.03	0.00	0.00	---	0.31	0.00	0.38	0.00	0.00	0.07	0.00
31	0.00	---	0.00	0.00	---	0.53	---	0.01	---	0.00	1.24	---
TOTAL	0.71	0.65	2.08	---	1.46	4.73	0.42	3.44	1.88	5.03	4.73	3.08



SANTEE RIVER BASIN

351229080480145 CRN66

LOCATION.--Lat 35°12'29", long 80°48'03", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Chantilly Elementary School, Briar Creek Road, Charlotte, NC.

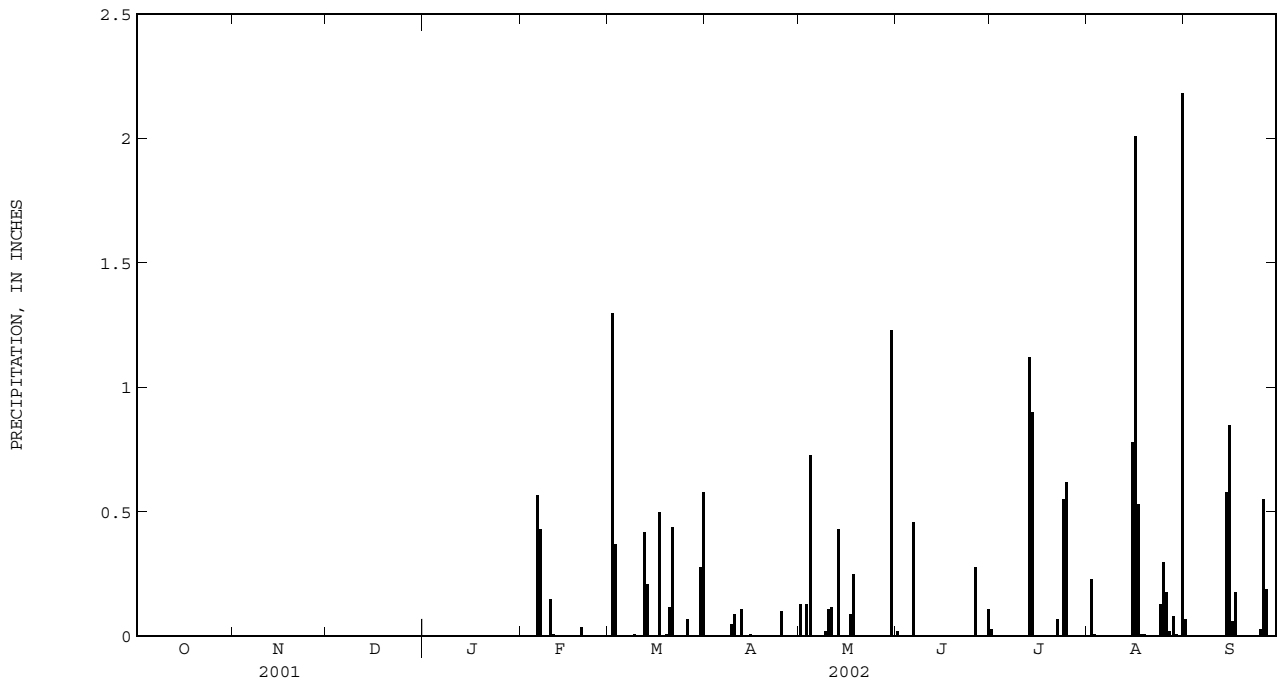
PERIOD OF RECORD.--February 2002 to September 2002.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network.

PRECIPITATION, TOTAL, INCHES, FOR PERIOD FEBRUARY 2002 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	0.00	0.00	0.00	0.13	0.02	0.03	0.00	0.07
2	---	---	---	---	0.00	1.30	0.00	0.00	0.00	0.00	0.23	0.00
3	---	---	---	---	0.00	0.37	0.00	0.13	0.00	0.00	0.01	0.00
4	---	---	---	---	0.00	0.00	0.00	0.73	0.00	0.00	0.00	0.00
5	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	---	---	---	---	0.57	0.00	0.00	0.00	0.46	0.00	0.00	0.00
7	---	---	---	---	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	---	---	---	---	0.00	0.01	0.05	0.02	0.00	0.00	0.00	0.00
10	---	---	---	---	0.15	0.00	0.09	0.11	0.00	0.00	0.00	0.00
11	---	---	---	---	0.01	0.00	0.00	0.12	0.00	0.00	0.00	0.00
12	---	---	---	---	0.00	0.42	0.11	0.00	0.00	0.00	0.00	0.00
13	---	---	---	---	0.00	0.21	0.00	0.43	0.00	1.12	0.00	0.00
14	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.90	0.00	0.58
15	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00	0.78	0.85
16	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	2.01	0.06
17	---	---	---	---	0.00	0.50	0.00	0.09	0.00	0.00	0.53	0.18
18	---	---	---	---	0.00	0.00	0.00	0.25	0.00	0.00	0.01	0.00
19	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00
20	---	---	---	---	0.04	0.12	0.00	0.00	0.00	0.00	0.00	0.00
21	---	---	---	---	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00
23	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.55	0.13	0.00
25	---	---	---	---	0.00	0.00	0.10	0.00	0.00	0.62	0.30	0.03
26	---	---	---	---	0.00	0.07	0.00	0.00	0.28	0.00	0.18	0.55
27	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.19
28	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00
29	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
30	---	---	---	---	---	0.28	0.00	1.23	0.11	0.00	0.00	0.00
31	---	---	---	---	---	0.58	---	0.00	---	0.00	2.18	---
TOTAL	---	---	---	---	1.20	4.31	0.36	3.24	0.87	3.29	6.48	2.51



350646080432545 CRN69

LOCATION.--Lat 35°06'46", long 80°43'24", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Matthews Elementary School, McDowell Avenue, Matthews, NC.

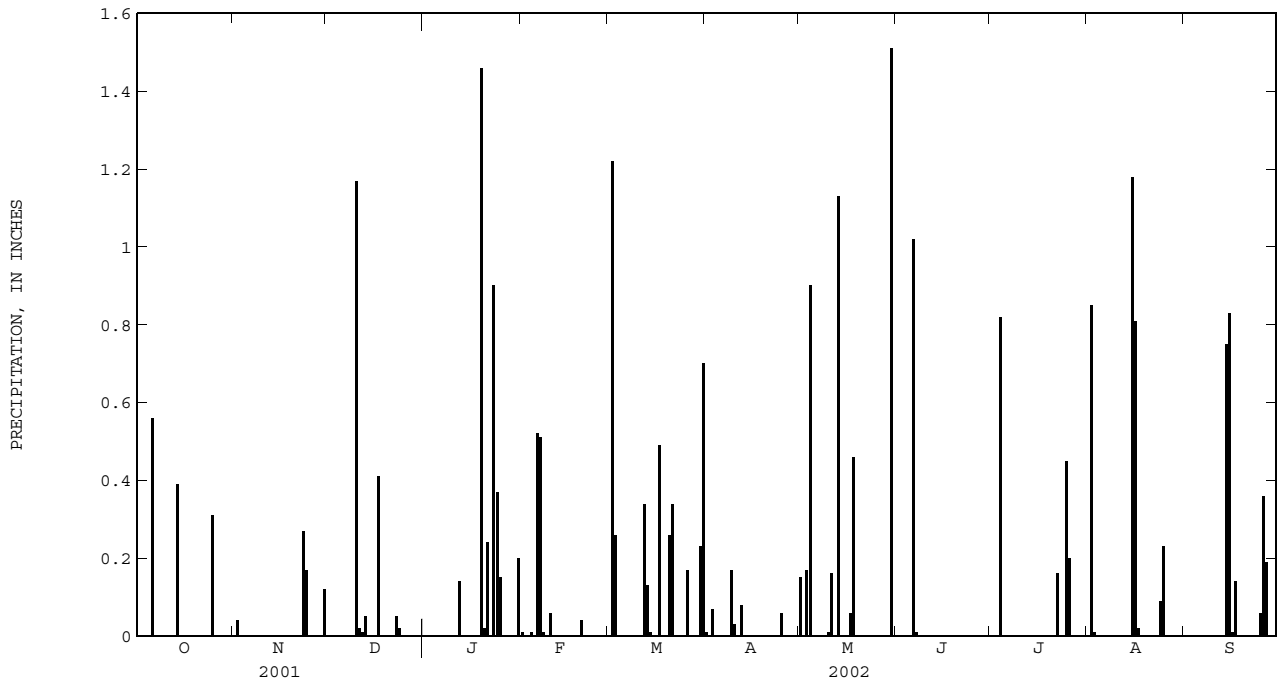
PERIOD OF RECORD.--October 2001 to September 2002.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.15	0.00	0.00	0.00	---
2	0.00	0.04	0.00	---	0.00	1.22	0.00	0.00	0.00	0.00	0.85	---
3	0.00	0.00	0.00	---	0.00	0.26	0.07	0.17	0.00	0.00	0.01	---
4	0.00	0.00	0.00	---	0.01	0.00	0.00	0.90	0.00	0.82	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.56	0.00	0.00	---	0.52	0.00	0.00	0.00	1.02	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.51	0.00	0.00	0.00	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	1.17	0.00	0.06	0.00	0.03	0.01	0.00	0.00	0.00	0.00
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00
12	0.00	0.00	0.01	0.14	0.00	0.34	0.08	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.05	0.00	0.00	0.13	0.00	1.13	0.00	---	0.00	0.00
14	0.39	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	---	0.00	0.75
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	1.18	0.83
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.81	0.01
17	0.00	0.00	0.41	0.00	0.00	0.49	0.00	0.06	0.00	0.00	0.02	0.14
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.02	0.04	0.26	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.24	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00
23	0.00	0.27	0.05	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.17	0.02	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
25	0.31	0.00	0.00	0.15	0.00	0.00	0.06	0.00	0.00	0.45	0.23	0.06
26	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.20	---	0.36
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.19
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	---	0.00
30	0.00	0.12	0.00	0.00	---	0.23	0.00	1.51	0.00	0.00	---	0.00
31	0.00	---	0.00	0.20	---	0.70	---	0.00	---	0.00	---	---
TOTAL	1.26	0.60	1.73	---	1.16	4.15	0.42	4.55	1.03	---	---	---



SANTEE RIVER BASIN

350630080455845 CRN70

LOCATION.--Lat 35°06'42", long 80°45'50", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, Providence High School, Pineville-Matthews Road, Charlotte, NC.

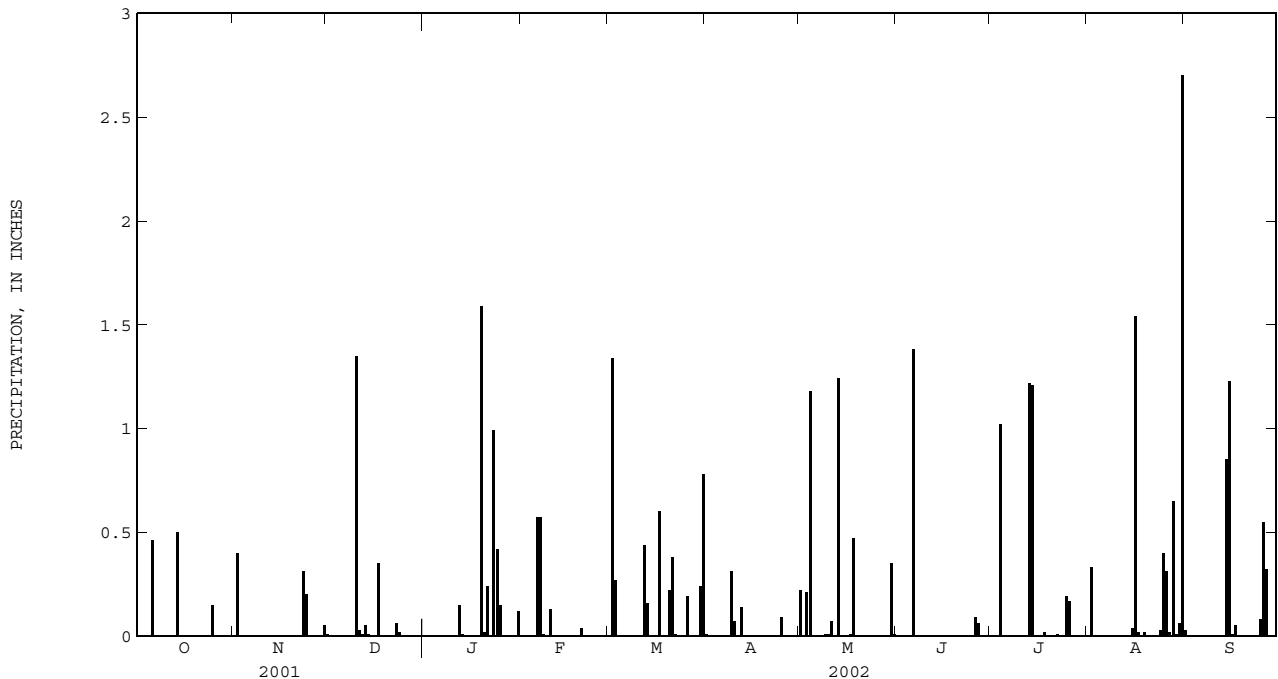
PERIOD OF RECORD.--October 2001 to September 2002.

GAGE.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network. Collection of frozen precipitation during January 2002 is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.22	0.00	0.00	0.00	0.03
2	0.00	0.40	0.00	---	0.00	1.34	0.00	0.00	0.00	0.00	0.33	0.00
3	0.00	0.00	0.00	---	0.00	0.27	0.00	0.21	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	---	0.00	0.00	0.00	1.18	0.00	1.02	0.00	0.00
5	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.46	0.00	0.00	---	0.57	0.00	0.00	0.00	1.38	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	1.35	0.00	0.13	0.00	0.07	0.01	0.00	0.00	0.00	0.00
11	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
12	0.00	0.00	0.01	0.15	0.00	0.44	0.14	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.05	0.01	0.00	0.16	0.00	1.24	0.00	1.22	0.00	0.00
14	0.50	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.21	0.00	0.85
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.23
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.54	0.01
17	0.00	0.00	0.35	0.00	0.00	0.60	0.00	0.01	0.00	0.00	0.02	0.05
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.02	0.00	0.00
19	0.00	0.00	0.00	1.59	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
20	0.00	0.00	0.00	0.02	0.04	0.22	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.24	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00
23	0.00	0.31	0.06	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.20	0.02	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
25	0.15	0.00	0.00	0.15	0.00	0.00	0.09	0.00	0.00	0.19	0.40	0.08
26	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.09	0.17	0.31	0.55
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.02	0.32
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
30	0.00	0.05	0.00	0.00	---	0.24	0.00	0.35	0.00	0.00	0.06	0.00
31	0.00	---	0.00	0.12	---	0.78	---	0.01	---	0.00	2.70	---
TOTAL	1.11	0.96	1.89	---	1.32	4.63	0.62	3.78	1.53	3.84	6.13	3.12



LAKES AND RESERVOIRS IN SOUTH ATLANTIC SLOPE BASIN

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 mi².

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 ft³ at 240.0 ft, of which 23,454,011,000 ft³ 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 mi², 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 ft³ of which 4,878,720,000 ft³ 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 mi², 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 ft³. Usable capacity, 10,230,000,000 ft³, 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 mi², 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 ft³. Usable capacity, 293,800,000 ft³, 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 mi², 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 ft³. Usable capacity, 5,616,584,000 ft³, 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 mi², 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 ft³. Usable capacity, 5,927,040,000 ft³, 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 mi², 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 ft³. Usable capacity, 1,850,000,000 ft³, 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 mi², 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 ft³ at 100.0 ft gage datum (crest of spillway). Usable capacity, 7,943,700,000 ft³, 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 mi², 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 ft³. Usable capacity, 1,717,000,000 ft³, is between elevations 85.0 and 100.0 ft gage datum (crest of spillway).

COOPERATION.--Records furnished by Duke Power Co.

LAKES AND RESERVOIRS IN SOUTH ATLANTIC SLOPE BASIN--Continued

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 mi², 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 ft³. The usable capacity from Sept. 1, 1935, to Sept. 30, 1957, was considered to be 2,277,970,200 ft³ 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 ft³ 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 ft³ between 85.0 and 100.0 ft gage datum (top of flood gates).

COOPERATION.--Records furnished by Duke Power Co.

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 mi², 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 ft³. Capacity has been reduced by silting. The usable capacity prior to October 1957 was considered to be 473,980,000 ft³ and from October 1957 to Sept. 30, 1964, was considered to be 388,300,000 ft³ 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 ft³ 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 mi², 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 ft³. Usable capacity, 26,910,400,000 ft³, 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 mi², 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 ft³. Usable capacity prior to October 1964 was considered to be 1,132,000,000 ft³ between 90.0 and 100.0 ft gage datum (crest of spillway) and from October 1964 to present, 845,000,000 ft³, is considered to be between 93.0 and 100.0 ft gage datum (crest of spillway).

COOPERATION.--Records furnished by Duke Power Co.

LAKES AND RESERVOIRS IN SOUTH ATLANTIC SLOPE BASIN--Continued

OTHER RESERVOIRS

The following smaller reservoirs in the South Atlantic Slope basin are described below. Records of contents are not published herein.

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 mi², approximately.

REMARKS.--Lake is part of Greensboro's municipal water supply. Total capacity is 107,000,000 ft³. 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 mi², approximately.

REMARKS.--Total capacity is 294,000,000 ft³. 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 mi².

REMARKS.--Lake is part of Greensboro's municipal water supply. Total capacity is 869,000,000 ft³. 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 mi², 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 ft³. Dam completed August 1960 and reservoir first filled Jan. 28, 1961. (See station 02096500.)

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 mi², approximately.

REMARKS.--Lake is part of Burlington's water supply. Prior to October 1971 published as "Lake Burlington." Total capacity is 64,900,000 ft³. 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 mi², approximately.

REMARKS.--Lake is part of High Point's municipal water supply. Total capacity is 468,000,000 ft³. 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 mi².

REMARKS.--Total capacity is 220,588,000 ft³. 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 mi², approximately.

REMARKS.-- Usable capacity is 69,700,000 ft³. 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 mi².

REMARKS.--Lake is a cooling-water reservoir for Carolina Power and Light Co. powerplant. Total capacity is 3,136,320,000 ft³ 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.)

LAKES AND RESERVOIRS IN SOUTH ATLANTIC SLOPE BASIN--Continued

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 mi².

REMARKS.--Total capacity is 284,100,000 ft³ of which 281,400,000 ft³ 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 mi².

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 2001 TO SEPTEMBER 2002

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)
02098197 B. Everett Jordan Lake			02111391 W. Kerr Scott Reservoir			
Sept. 30	215.63	9,153	--	1,028.74	1,730	--
Oct. 31	213.77	8,091	-1,062	1,027.19	1,638	-91
Nov. 30	211.78	7,047	-1,044	1,027.40	1,651	12
Dec. 31	210.89	6,612	-435	1,032.22	1,954	304
CAL YR 2001		--	-1,392		--	316
Jan. 31	216.71	9,817	3,205	1,031.42	1,900	-54
Feb. 28	216.56	9,723	-94	1,030.44	1,824	-76
Mar. 31	216.74	9,836	113	1,030.07	1,792	-32
Apr. 30	216.09	9,428	-408	1,030.47	1,826	34
May 31	214.06	8,250	-1,177	1,030.06	1,791	-35
June 30	211.59	6,954	-1,297	1,029.20	1,753	-38
July 31	210.87	6,603	-351	1,028.68	1,726	-27
Aug. 31	210.43	6,396	-206	1,025.66	1,548	-178
Sept. 30	213.98	8,205	1,809	1,032.06	1,944	395
WTR YR 2002		--	-947		--	214
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)
02122400 High Rock Lake			02122699 Tuckertown Reservoir			
Sept. 30	646.64	6,408	--	595.05	1,754	--
Oct. 31	645.09	5,710	-698	594.59	1,708	-46
Nov. 30	646.97	6,561	851	593.90	1,642	-66
Dec. 31	644.82	5,594	-967	595.50	1,801	159
CAL YR 2001		--	-656		--	-17
Jan. 31	651.12	8,711	3,117	595.03	1,752	-49
Feb. 28	645.30	5,802	-2,909	595.32	1,782	30
Mar. 31	651.00	8,644	2,842	594.99	1,748	-34
Apr. 30	649.36	7,753	-891	595.01	1,750	2
May 31	647.96	7,041	-712	595.42	1,792	42
June 30	639.30	3,610	-3,431	593.84	1,637	-155
July 31	637.66	3,111	-499	595.60	1,811	174
Aug. 31	638.64	3,405	294	595.08	1,757	-54
Sept. 30	645.46	5,872	2,467	594.87	1,735	-22
WTR YR 2002		--	-536		--	-19

LAKES AND RESERVOIRS IN SOUTH ATLANTIC SLOPE BASIN--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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)	
		02122844			02123736		
		Badin Lake			Lake Tillery		
Sept. 30	538.47	9,884	--	266.70	3,625	--	
Oct. 31	539.24	10,063	179	273.70	4,976	1,351	
Nov. 30	539.19	10,052	-11	277.80	5,844	868	
Dec. 31	540.52	10,362	310	277.90	5,866	22	
CAL YR 2001		--	109		--	65	
Jan. 31	540.39	10,332	-30	278.00	5,888	22	
Feb. 28	540.27	10,304	-28	277.90	5,866	-22	
Mar. 31	540.01	10,243	-61	277.70	5,822	-44	
Apr. 30	539.86	10,208	-35	278.00	5,888	66	
May 31	538.00	9,777	-431	277.70	5,822	-66	
June 30	538.00	9,777	0	278.10	5,910	88	
July 31	533.69	8,833	-944	277.60	5,801	-109	
Aug. 31	530.54	8,190	-643	277.90	5,866	65	
Sept. 30	536.17	9,368	1,178	275.30	5,307	-559	
WTR YR 2002		--	-516		--	1,682	
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)	
		02128800			02138519		
		Blewett Falls Lake			Lake James		
Sept. 30	176.40	1,672	--	95.7	11,408	--	
Oct. 31	172.00	1,232	-440	94.0	10,967	-441	
Nov. 30	173.30	1,362	130	92.4	10,564	-403	
Dec. 31	176.30	1,662	300	92.9	10,688	124	
CAL YR 2001		--	-130		--	-279	
Jan. 31	177.20	1,752	90	95.7	11,408	720	
Feb. 28	175.60	1,592	-160	97.3	10,835	427	
Mar. 31	176.20	1,652	60	98.4	12,135	300	
Apr. 30	176.40	1,672	20	98.7	12,218	83	
May 31	176.30	1,662	-10	98.6	12,190	-28	
June 30	177.80	1,812	150	96.9	11,727	-463	
July 31	177.50	1,782	-30	93.8	10,916	-811	
Aug. 31	176.30	1,662	-120	91.8	10,416	-500	
Sept. 30	175.70	1,602	-60	93.7	10,890	474	
WTR YR 2002		--	-70		--	-518	

LAKES AND RESERVOIRS IN SOUTH ATLANTIC SLOPE BASIN--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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)
		02141490 Rhodhiss Lake				
Sept. 30	96.8	1,257	--	97.1	1,775	--
Oct. 31	96.3	1,190	-67	96.6	1,691	-84
Nov. 30	96.2	1,176	-14	96.6	1,691	0
Dec. 31	97.0	1,284	108	96.4	1,658	-33
CAL YR 2001		--	54		--	-33
Jan. 31	96.6	1,230	-54	97.5	1,842	184
Feb. 28	96.6	1,230	0	97.3	1,808	-34
Mar. 31	97.2	1,311	81	97.1	1,775	-34
Apr. 30	97.1	1,298	-13	97.1	1,775	0
May 31	97.2	1,311	13	97.2	1,791	17
June 30	96.7	1,243	-68	96.6	1,691	-100
July 31	95.6	1,098	-145	96.5	1,674	-17
Aug. 31	94.7	985	-113	94.0	1,271	-403
Sept. 30	96.8	1,257	272	95.3	1,478	207
WTR YR 2002		--	0		--	-297
		02142441 Lookout Shoals Lake				
Sept. 30	97.1	84	--	95.7	41,780	--
Oct. 31	97.4	94	10	94.4	40,130	-1,650
Nov. 30	97.1	84	-10	93.6	39,140	-990
Dec. 31	97.3	92	8	93.9	39,510	370
CAL YR 2001		--	24		--	-1,120
Jan. 31	97.9	117	25	95.7	41,780	2,270
Feb. 28	97.8	113	-4	96.3	42,550	770
Mar. 31	98.4	138	25	98.9	46,050	3,500
Apr. 30	97.1	84	-54	98.9	46,050	0
May 31	97.5	100	16	98.5	45,500	-550
June 30	97.4	94	-6	97.2	43,740	-1,760
July 31	96.7	68	-26	95.6	41,650	-2,090
Aug. 31	95.8	31	-37	94.4	40,130	-1,520
Sept. 30	87.7	0	-31	93.9	39,510	-620
WTR YR 2002		--	-84		--	-2,270
		02142647 Lake Norman				

LAKES AND RESERVOIRS IN SOUTH ATLANTIC SLOPE BASIN--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Gage Height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
02142676 Mountain Island Lake			
Sept. 30	96.6	402	--
Oct. 31	97.6	525	123
Nov. 30	96.4	378	-147
Dec. 31	96.1	342	-36
CAL YR 2001		--	12
Jan. 31	96.2	354	12
Feb. 28	96.9	438	84
Mar. 31	96.8	426	-12
Apr. 30	96.8	426	0
May 31	96.2	354	-72
June 30	96.9	438	84
July 31	96.1	342	-96
Aug. 31	96.4	378	36
Sept. 30	95.2	238	-140
WTR YR 2002		--	-164

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 mi².

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 NGVD of 1929. 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. 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 14,000 ft³/s on basis of slope-area measurement of peak flow. Minimum discharge for period of record result of freezeup. Maximum peak stage for current water year from high-water mark in well.

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 ft³/s.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137	129	243	e164	259	e161	415	209	160	185	108	131
2	132	125	205	e164	242	198	359	296	161	176	112	132
3	130	126	176	e164	227	458	314	292	160	283	115	138
4	125	124	165	e161	223	331	293	295	155	382	117	129
5	123	124	157	e167	e219	241	279	297	172	261	106	130
6	120	121	154	e194	222	227	266	261	260	190	97	109
7	114	121	151	e203	238	220	256	236	333	166	92	99
8	113	126	152	e164	301	211	257	229	236	150	86	93
9	113	122	153	e155	275	205	262	229	179	142	87	91
10	115	119	173	e155	253	204	334	235	164	137	85	90
11	116	118	507	e155	270	194	333	218	154	131	83	86
12	124	118	407	e155	246	195	272	222	147	130	84	79
13	140	117	283	e152	228	249	276	224	142	133	85	76
14	288	117	279	e152	217	316	300	302	146	146	80	83
15	620	117	252	e152	210	260	347	271	156	191	80	143
16	277	118	222	e150	207	240	341	220	147	156	93	292
17	201	117	213	149	203	515	303	206	137	141	144	252
18	175	117	267	148	197	1040	365	206	132	125	125	158
19	166	117	338	172	192	666	313	216	133	119	103	177
20	159	117	256	420	195	508	288	198	125	132	99	138
21	153	114	230	349	198	440	274	191	132	122	84	139
22	149	114	212	268	191	389	261	187	118	128	79	147
23	147	112	206	433	179	343	247	184	117	144	76	202
24	145	148	222	936	174	319	233	179	120	195	75	218
25	142	318	240	655	170	302	253	173	121	212	79	167
26	137	442	202	541	169	296	279	178	133	184	206	354
27	134	221	192	414	166	328	236	200	192	161	201	e2020
28	130	179	e176	354	e161	301	228	240	349	144	212	e1430
29	131	164	e170	318	---	272	236	187	265	127	168	536
30	131	178	e167	293	---	270	216	172	210	117	127	358
31	131	---	e167	272	---	348	---	168	---	112	127	---
TOTAL	5018	4400	6937	8329	6032	10247	8636	6921	5156	5122	3415	8197
MEAN	161.9	146.7	223.8	268.7	215.4	330.5	287.9	223.3	171.9	165.2	110.2	273.2
MAX	620	442	507	936	301	1040	415	302	349	382	212	2020
MIN	113	112	151	148	161	161	216	168	117	112	75	76
CFSM	0.79	0.72	1.09	1.31	1.05	1.61	1.40	1.09	0.84	0.81	0.54	1.33
IN.	0.91	0.80	1.26	1.51	1.09	1.86	1.57	1.26	0.94	0.93	0.62	1.49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2002, BY WATER YEAR (WY)

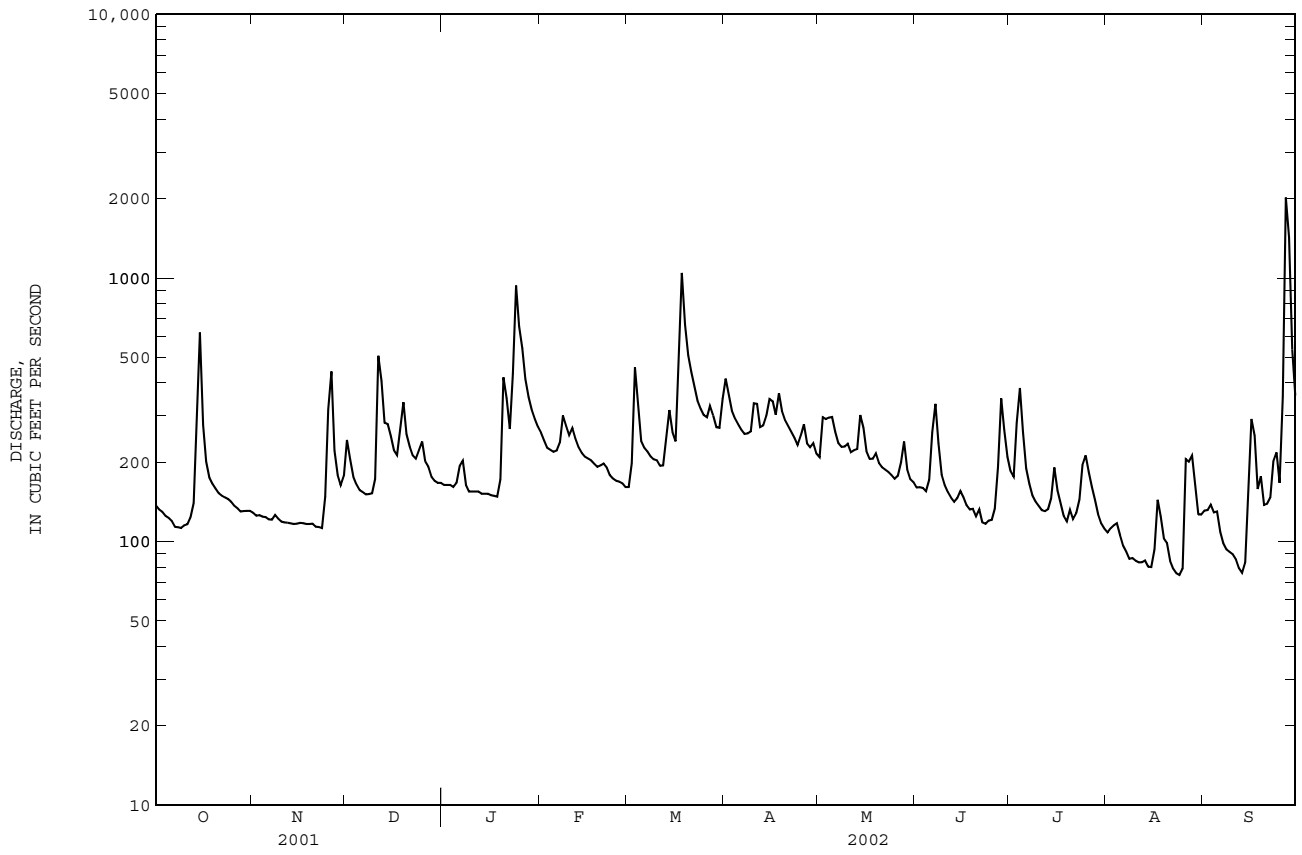
	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	353.0	397.9	401.5	469.0	512.2	583.8	558.4	454.0	384.8	328.7	349.1	320.4																																																																		
MAX	901	1889	797	1346	1173	1316	1350	1052	1036	904	2613	1212																																																																		
(WY)	1991	1978	1958	1995	1998	1979	1983	1973	1992	1941	1940	1979																																																																		
MIN	111	124	146	140	188	222	236	220	158	111	93.7	99.5																																																																		
(WY)	2001	1932	1934	1940	2001	1988	1986	2001	1988	1930	1925	1954																																																																		

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1925 - 2002
ANNUAL TOTAL	84206	78410	
ANNUAL MEAN	230.7	214.8	425.2
HIGHEST ANNUAL MEAN			669
LOWEST ANNUAL MEAN			215
HIGHEST DAILY MEAN	1460	Mar 30	27700
LOWEST DAILY MEAN	110	Jan 16	65
ANNUAL SEVEN-DAY MINIMUM	115	Jan 10	83
MAXIMUM PEAK FLOW			3220
MAXIMUM PEAK STAGE			5.82*
INSTANTANEOUS LOW FLOW			73
ANNUAL RUNOFF (CFSM)	1.13	1.05	2.07
ANNUAL RUNOFF (INCHES)	15.28	14.23	28.18
10 PERCENT EXCEEDS	361	333	705
50 PERCENT EXCEEDS	197	177	341
90 PERCENT EXCEEDS	124	114	166

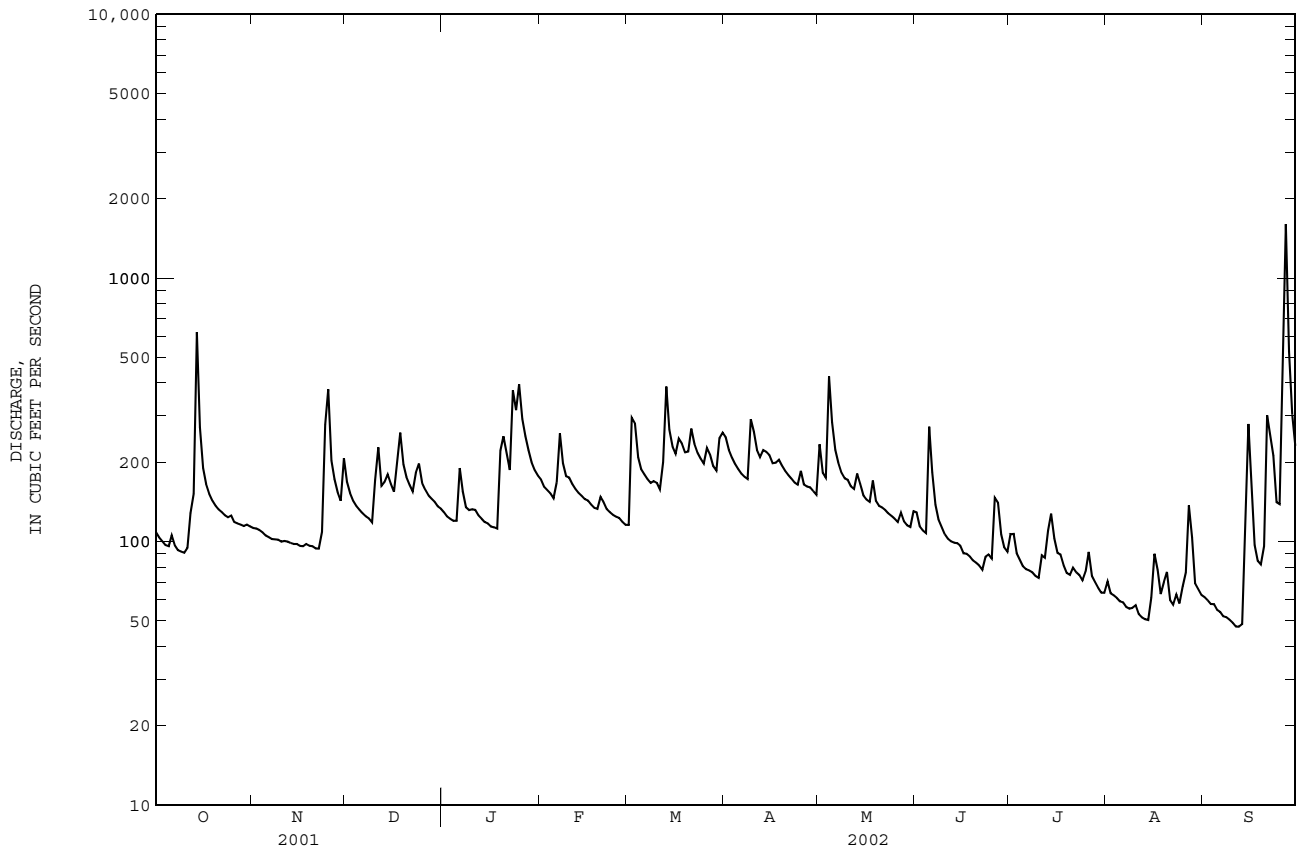
e Estimated.

* See REMARKS.

03161000 SOUTH FORK NEW RIVER NEAR JEFFERSON, NC--Continued



03439000 FRENCH BROAD RIVER AT ROSMAN, NC--Continued



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 mi².

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 NGVD of 1929, 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.--Records good except those for estimated daily discharges, which are poor. Maximum discharge for period of record from rating curve extended above 600 ft³/s on basis of slope-area measurement of peak flow. City of Brevard diverted about 1.7 ft³/s from Catheys Creek for municipal water supply. Minimum discharge for period of record and current water year also occurred Sept. 11, 12, 2002.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	14	19	19	27	20	33	37	18	17	9.7	8.5
2	15	14	18	18	25	41	31	28	18	16	9.0	7.9
3	14	14	17	18	25	33	30	26	17	16	8.8	7.2
4	14	13	16	19	24	27	28	62	16	15	8.2	7.2
5	14	13	16	18	23	25	27	42	34	15	7.9	6.6
6	16	13	16	28	28	24	27	35	23	14	7.6	6.0
7	14	13	15	23	37	24	26	32	20	14	7.8	6.0
8	14	13	15	20	30	23	26	30	18	13	7.6	5.9
9	14	12	15	20	28	23	42	29	18	13	7.2	5.3
10	14	12	27	20	28	22	37	28	16	14	7.5	5.0
11	14	12	30	19	26	21	33	27	16	15	7.6	4.7
12	19	12	22	19	25	28	31	27	15	14	7.1	4.8
13	19	12	24	18	24	44	32	27	15	20	6.6	5.4
14	54	12	26	18	23	32	34	25	15	20	6.6	19
15	24	12	23	17	24	29	32	24	15	17	7.2	31
16	19	11	22	17	23	28	31	23	15	15	9.7	17
17	18	12	30	18	23	38	30	23	14	14	11	13
18	17	11	34	17	22	34	29	27	14	14	8.3	11
19	17	11	27	35	22	32	28	23	13	13	13	10
20	16	11	24	31	25	32	28	22	13	15	11	12
21	16	11	23	30	23	38	27	22	12	14	8.1	33
22	15	11	21	26	22	33	26	21	12	12	8.0	26
23	15	17	26	55	21	31	25	21	15	12	7.7	20
24	15	31	27	45	21	29	24	20	13	12	7.1	14
25	15	32	24	52	20	28	29	20	13	12	10	18
26	14	21	22	40	20	33	25	19	36	13	9.3	54
27	14	19	21	35	19	30	24	22	36	13	23	122
28	14	17	20	31	20	28	24	20	21	11	11	e46
29	14	16	20	29	---	27	23	19	20	11	9.1	e27
30	14	24	19	28	---	35	22	19	18	10	8.4	e21
31	14	---	19	27	---	36	---	19	---	10	8.5	---
TOTAL	521	446	678	810	678	928	864	819	539	434	279.6	574.5
MEAN	16.81	14.87	21.87	26.13	24.21	29.94	28.80	26.42	17.97	14.00	9.019	19.15
MAX	54	32	34	55	37	44	42	62	36	20	23	122
MIN	14	11	15	17	19	20	22	19	12	10	6.6	4.7
CFSM	1.44	1.27	1.87	2.23	2.07	2.56	2.46	2.26	1.54	1.20	0.77	1.64
IN.	1.66	1.42	2.16	2.58	2.16	2.95	2.75	2.60	1.71	1.38	0.89	1.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2002,® BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
23.71	29.47	33.86	43.12	46.09	52.99
70.0	77.9	63.3	86.3	90.1	110
1996	1949	1993	1998	1998	1952
7.30	8.69	13.4	14.5	24.2	20.7
1955	1955	1999	1955	2002	1988

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1945 - 2002®

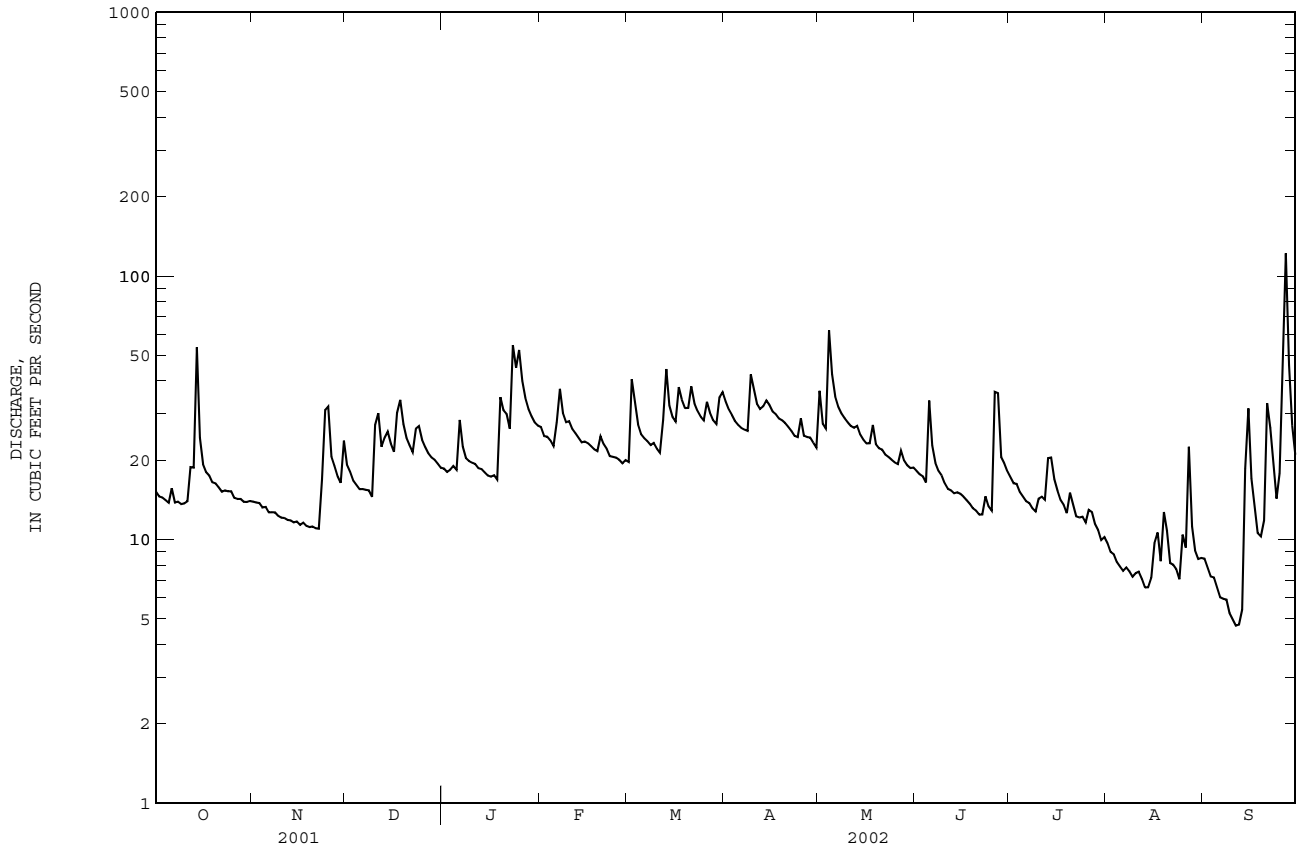
ANNUAL TOTAL	8049	7571.1		
ANNUAL MEAN	22.05	20.74		35.43
HIGHEST ANNUAL MEAN				59.7
LOWEST ANNUAL MEAN				18.3
HIGHEST DAILY MEAN	75	Sep 24	122	Sep 27
LOWEST DAILY MEAN	10	Jul 17	4.7	Sep 11
ANNUAL SEVEN-DAY MINIMUM	11	Jul 12	5.3	Sep 7
MAXIMUM PEAK FLOW			200	Sep 27
MAXIMUM PEAK STAGE			2.93	Sep 27
INSTANTANEOUS LOW FLOW			1.0*	Sep 10
ANNUAL RUNOFF (CFSM)	1.88		1.77	
ANNUAL RUNOFF (INCHES)	25.59		24.07	41.14
10 PERCENT EXCEEDS	33		33	62
50 PERCENT EXCEEDS	20		19	29
90 PERCENT EXCEEDS	13		9.5	13

e Estimated.

® See PERIOD OF RECORD.

* See REMARKS.

03440000 CATHEYS CREEK NEAR BREVARD, NC--Continued



TENNESSEE RIVER BASIN

03441000 DAVIDSON RIVER NEAR BREVARD, NC

LOCATION.--Lat 35°16'23", long 82°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 mi².

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 NGVD of 1929 (levels by Tennessee 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 for estimated daily discharges, which are fair. Minimum discharge for current water year also occurred Sept. 12, 13.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1876 reached a stage of 11.9 ft, from studies by Tennessee Valley Authority.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	44	73	62	102	60	136	119	66	50	34	32
2	43	44	65	59	93	130	119	89	56	47	32	30
3	42	43	61	60	90	129	111	84	58	45	32	29
4	41	42	57	e58	86	95	103	251	61	43	31	28
5	39	41	55	e58	81	e84	98	166	123	40	30	26
6	42	40	54	96	93	79	93	127	86	38	30	25
7	39	39	52	77	167	76	89	112	73	37	29	24
8	37	39	51	65	126	73	88	101	65	36	28	24
9	37	39	51	63	110	75	133	94	61	35	27	23
10	37	38	94	66	108	74	130	92	56	39	27	22
11	37	38	139	66	100	66	112	86	52	58	26	21
12	58	37	89	62	95	94	106	83	50	52	26	20
13	63	37	99	60	90	188	118	84	49	80	25	21
14	339	37	103	57	87	128	115	81	48	85	24	52
15	136	37	92	57	82	108	111	73	47	63	27	131
16	94	36	82	55	80	101	104	70	45	56	50	75
17	77	36	107	54	78	127	104	68	45	46	45	44
18	69	36	148	54	74	122	108	106	43	42	51	38
19	64	36	110	131	73	110	103	73	42	42	45	37
20	60	36	96	149	84	110	98	69	41	39	43	38
21	57	35	87	125	79	137	92	67	40	38	31	160
22	55	35	81	106	72	117	88	65	38	38	30	177
23	52	40	90	278	70	107	83	63	47	38	32	132
24	51	122	105	214	68	100	80	61	48	41	28	78
25	51	217	86	253	66	95	102	58	42	47	39	80
26	48	102	80	178	66	125	82	58	70	48	39	366
27	47	81	74	148	62	115	80	92	133	53	106	1040
28	46	70	72	130	e60	103	81	75	59	59	45	335
29	46	63	70	119	---	97	75	61	57	41	36	183
30	46	87	66	110	---	125	72	58	51	37	33	137
31	44	---	64	105	---	136	---	61	---	35	31	---
TOTAL	1943	1627	2553	3175	2442	3286	3014	2747	1752	1448	1112	3428
MEAN	62.68	54.23	82.35	102.4	87.21	106.0	100.5	88.61	58.40	46.71	35.87	114.3
MAX	339	217	148	278	167	188	136	251	133	85	106	1040
MIN	37	35	51	54	60	60	72	58	38	35	24	20
CFSM	1.55	1.34	2.04	2.54	2.16	2.62	2.49	2.19	1.45	1.16	0.89	2.83
IN.	1.79	1.50	2.35	2.92	2.25	3.03	2.78	2.53	1.61	1.33	1.02	3.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2002,® BY WATER YEAR (WY)

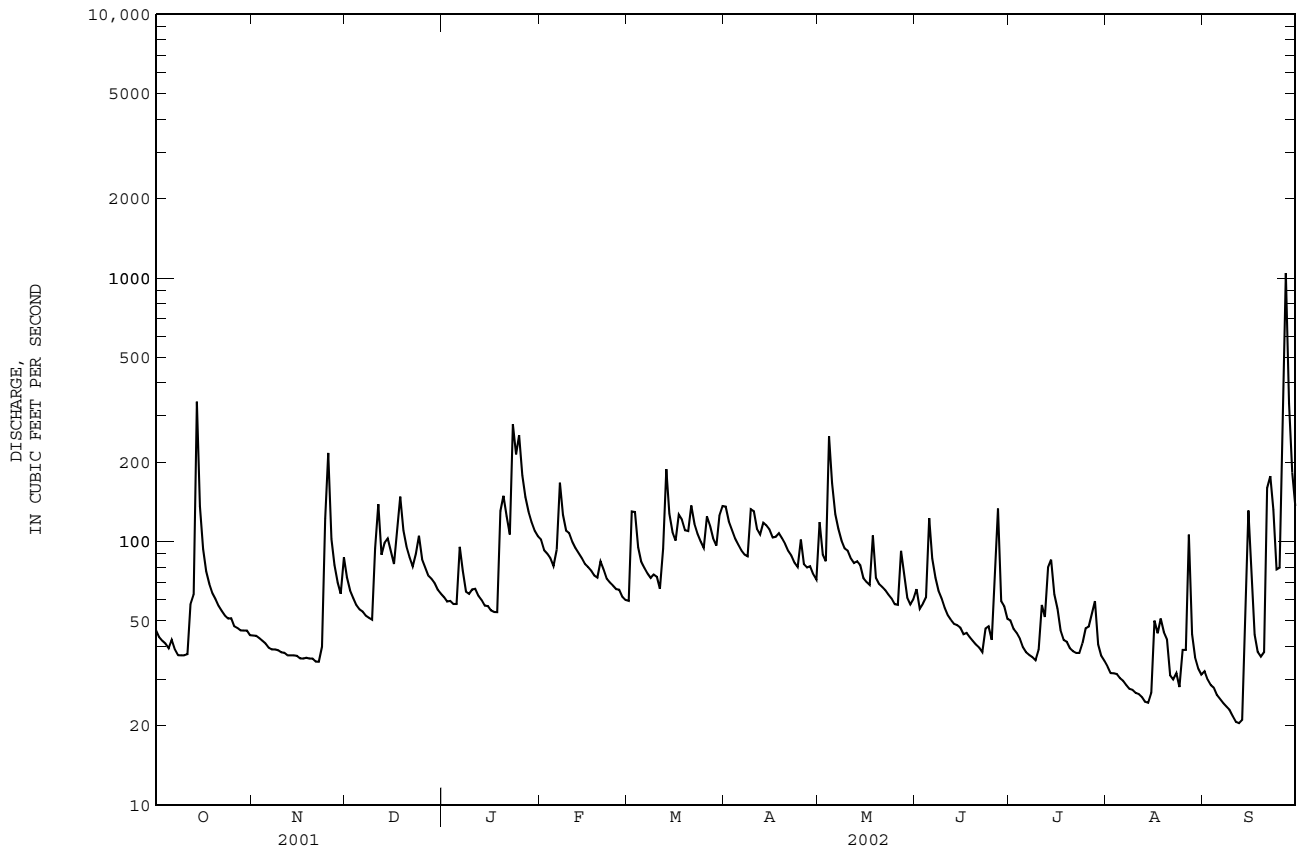
	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955		
MEAN	94.54	104.4	128.9	155.1	167.8	183.7	172.3	140.3	111.3	90.75	97.41	88.24																									
MAX	379	362	323	374	363	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																									

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1921 - 2002®

ANNUAL TOTAL	27343	28527		
ANNUAL MEAN	74.91	78.16	127.7	
HIGHEST ANNUAL MEAN			208	1949
LOWEST ANNUAL MEAN			70.6	1988
HIGHEST DAILY MEAN	370	Jan 19	1040	Sep 27
LOWEST DAILY MEAN	29	Jul 15	20	Sep 12
ANNUAL SEVEN-DAY MINIMUM	31	Jul 12	22	Sep 7
MAXIMUM PEAK FLOW			1530	Sep 27
MAXIMUM PEAK STAGE			4.27	Sep 27
INSTANTANEOUS LOW FLOW			20*	Sep 11
ANNUAL RUNOFF (CFSM)	1.85	1.93	3.16	
ANNUAL RUNOFF (INCHES)	25.18	26.27	42.96	
10 PERCENT EXCEEDS	127	127	228	
50 PERCENT EXCEEDS	61	65	99	
90 PERCENT EXCEEDS	37	35	42	

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

03441000 DAVIDSON RIVER NEAR BREVARD, NC--Continued



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 mi².

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 NGVD of 1929 (levels by Tennessee Valley Authority). Prior to July 5, 1930, nonrecording gage at same site and datum. Satellite and telephone telemetry at station.

REMARKS.--Records fair except those above 2,600 ft³/s, which are poor. 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.

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	376	390	615	453	756	493	981	731	625	400	234	214
2	352	337	515	441	713	855	882	823	493	407	233	207
3	333	323	465	437	668	1680	822	656	459	391	219	197
4	321	315	423	429	650	1010	775	1220	457	398	211	191
5	313	315	414	417	616	814	737	1520	715	357	203	185
6	330	330	405	552	597	742	704	1020	936	322	196	177
7	346	328	398	757	1040	701	680	870	767	301	189	171
8	303	327	391	603	1050	668	663	785	586	288	182	169
9	293	306	379	567	862	648	789	728	524	272	179	165
10	290	293	424	511	798	661	1260	713	483	280	176	162
11	288	288	885	503	770	611	951	687	453	334	174	157
12	313	301	667	483	715	672	856	668	429	382	169	153
13	402	328	625	471	684	1370	886	684	412	406	164	153
14	885	300	656	450	656	1240	895	878	443	549	162	184
15	1340	284	635	424	634	956	875	674	423	641	165	593
16	691	273	565	415	619	860	826	625	392	508	212	787
17	553	263	574	407	600	986	776	598	376	423	296	410
18	490	265	1040	400	581	1050	871	702	366	366	264	305
19	455	264	844	521	568	914	804	638	350	327	301	278
20	434	263	715	1200	584	869	776	571	340	301	270	262
21	418	262	628	931	651	1020	728	553	330	306	220	515
22	407	261	588	885	588	1010	695	540	320	288	190	857
23	405	266	555	1440	565	880	658	525	326	273	202	789
24	396	715	764	1590	551	823	635	511	371	278	195	527
25	394	856	658	1720	538	781	696	495	342	304	197	434
26	401	827	615	1400	530	801	680	481	491	306	347	1420
27	381	600	573	1120	519	891	624	547	844	484	459	3260
28	375	557	526	978	497	776	622	646	611	361	395	3880
29	370	555	515	883	---	732	612	508	470	292	270	2120
30	380	563	497	815	---	847	568	476	448	255	231	1050
31	410	---	478	766	---	1000	---	484	---	240	221	---
TOTAL	13445	11555	18032	22969	18600	27361	23327	21557	14582	11040	7126	19972
MEAN	433.7	385.2	581.7	740.9	664.3	882.6	777.6	695.4	486.1	356.1	229.9	665.7
MAX	1340	856	1040	1720	1050	1680	1260	1520	936	641	459	3880
MIN	288	261	379	400	497	493	568	476	320	240	162	153
CFSM	1.47	1.30	1.97	2.50	2.24	2.98	2.63	2.35	1.64	1.20	0.78	2.25
IN.	1.69	1.45	2.27	2.89	2.34	3.44	2.93	2.71	1.83	1.39	0.90	2.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2002, BY WATER YEAR (WY)

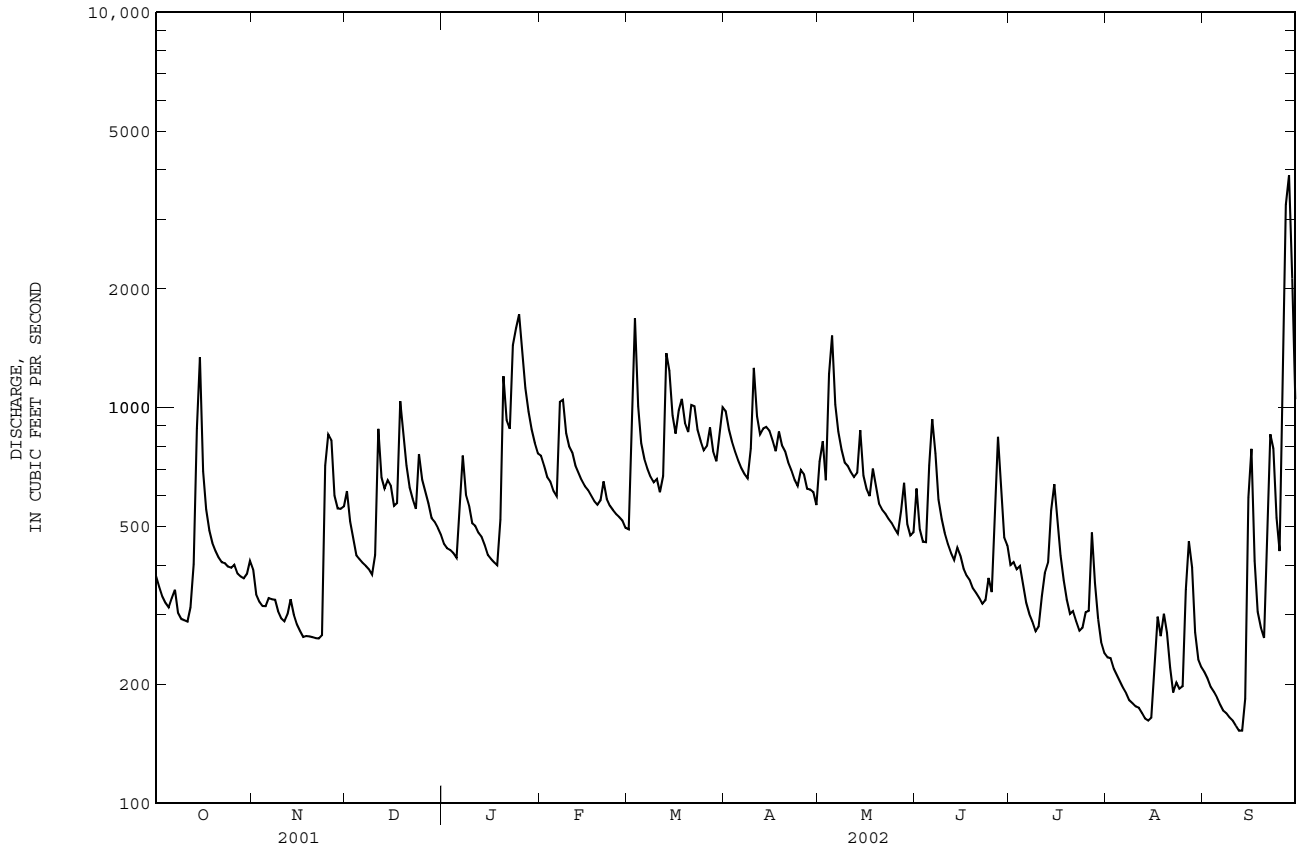
	MEAN	754.7	832.5	1017	1201	1271	1388	1298	1055	867.1	717.3	764.0	681.0
MAX	3504	2486	2142	2783	2735	3169	2509	2339	1872	2214	2363	1828	
(WY)	1965	1980	1962	1937	1998	1979	1936	1973	1989	1949	1994	1979	
MIN	157	235	301	260	561	550	473	434	278	290	191	169	
(WY)	1955	1955	1956	1956	1941	1988	1986	1988	1988	1925	1925	1954	

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1921 - 2002

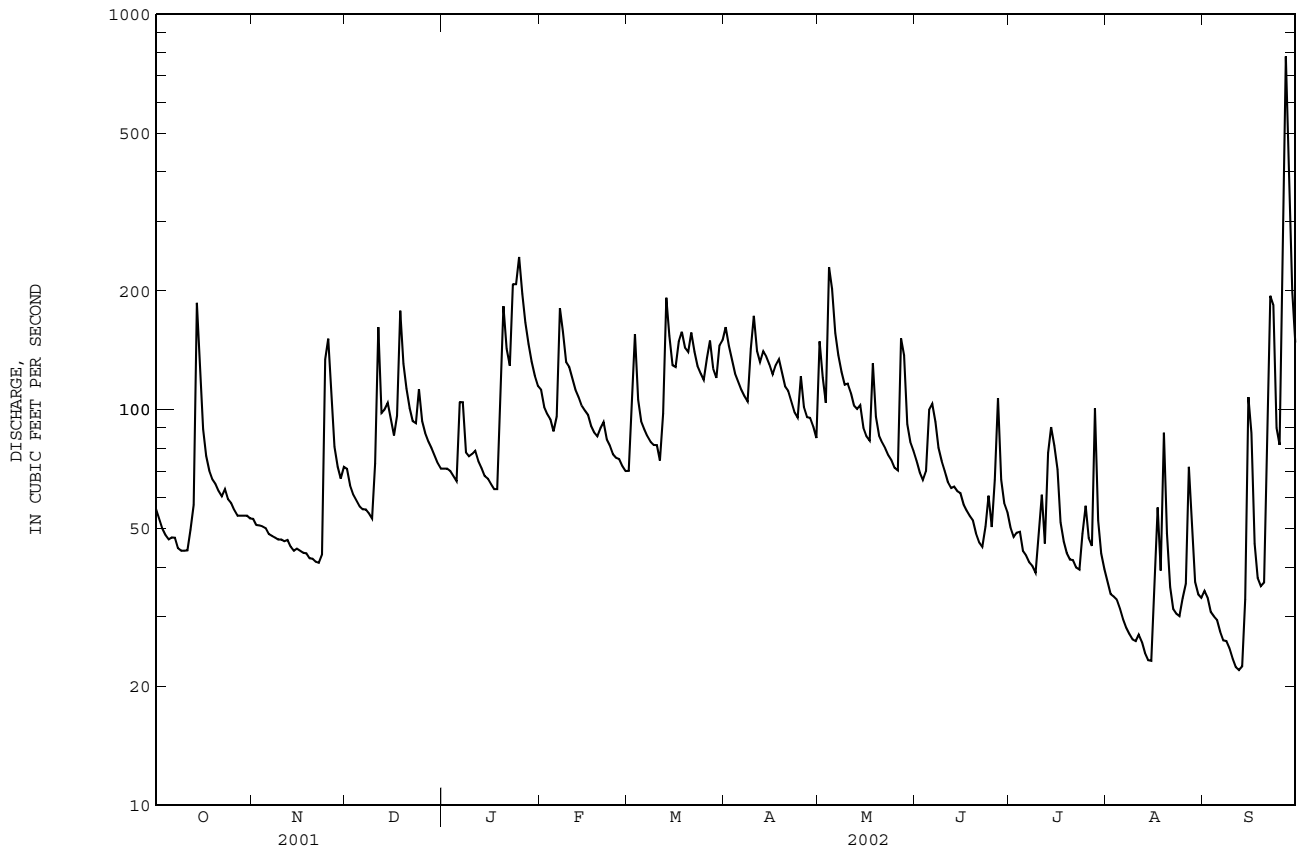
ANNUAL TOTAL	200835	209566	
ANNUAL MEAN	550.2	574.2	985.9
HIGHEST ANNUAL MEAN			1564
LOWEST ANNUAL MEAN			534
HIGHEST DAILY MEAN	2730	Mar 30	3880
LOWEST DAILY MEAN	238	Jul 16	153
ANNUAL SEVEN-DAY MINIMUM	251	Jul 13	161
MAXIMUM PEAK FLOW			4050
MAXIMUM PEAK STAGE			16.42
INSTANTANEOUS LOW FLOW			149
ANNUAL RUNOFF (CFSM)	1.86	1.94	3.33
ANNUAL RUNOFF (INCHES)	25.24	26.34	45.25
10 PERCENT EXCEEDS	865	893	1710
50 PERCENT EXCEEDS	489	511	800
90 PERCENT EXCEEDS	299	234	352

* See REMARKS.

03443000 FRENCH BROAD RIVER AT BLANTYRE, NC--Continued



03446000 MILLS RIVER NEAR MILLS RIVER, NC--Continued



TENNESSEE RIVER BASIN

03447687 FRENCH BROAD RIVER NEAR FLETCHER, NC

LOCATION.--Lat 35°25'43", long 82°33'11", Henderson County, Hydrologic Unit 06010105, on right bank 30 ft downstream of bridge on Secondary Road 1419, 0.4 mi downstream from McDowell Creek, 2.9 mi west of Fletcher, and at river mile 165.3.

DRAINAGE AREA.--640 mi².

PERIOD OF RECORD.--July 2001 to September 2002.

GAGE.--Water-stage recorder. Elevation of gage is 2,055 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges and those above 4,000 ft³/s, which are poor. Maximum discharge for period of record from rating curve extended above 4,000 ft³/s by logarithmic plotting.

DISCHARGE, CUBIC FEET PER SECOND, FOR PERIOD JULY TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	e820	934	624
2	---	---	---	---	---	---	---	---	---	e720	874	658
3	---	---	---	---	---	---	---	---	---	e800	873	875
4	---	---	---	---	---	---	---	---	---	e900	1270	1160
5	---	---	---	---	---	---	---	---	---	e960	969	1090
6	---	---	---	---	---	---	---	---	---	e760	1100	812
7	---	---	---	---	---	---	---	---	---	e640	1020	691
8	---	---	---	---	---	---	---	---	---	e600	970	631
9	---	---	---	---	---	---	---	---	---	e610	813	592
10	---	---	---	---	---	---	---	---	---	e620	774	620
11	---	---	---	---	---	---	---	---	---	e640	772	715
12	---	---	---	---	---	---	---	---	---	e600	692	639
13	---	---	---	---	---	---	---	---	---	e590	688	583
14	---	---	---	---	---	---	---	---	---	e560	851	581
15	---	---	---	---	---	---	---	---	---	506	868	624
16	---	---	---	---	---	---	---	---	---	475	702	532
17	---	---	---	---	---	---	---	---	---	465	679	509
18	---	---	---	---	---	---	---	---	---	471	697	496
19	---	---	---	---	---	---	---	---	---	508	624	486
20	---	---	---	---	---	---	---	---	---	729	567	887
21	---	---	---	---	---	---	---	---	---	840	533	1100
22	---	---	---	---	---	---	---	---	---	606	506	713
23	---	---	---	---	---	---	---	---	---	529	487	610
24	---	---	---	---	---	---	---	---	---	491	558	1470
25	---	---	---	---	---	---	---	---	---	906	524	2150
26	---	---	---	---	---	---	---	---	---	1500	515	1100
27	---	---	---	---	---	---	---	---	---	1010	616	799
28	---	---	---	---	---	---	---	---	---	896	905	684
29	---	---	---	---	---	---	---	---	---	918	715	615
30	---	---	---	---	---	---	---	---	---	1060	596	561
31	---	---	---	---	---	---	---	---	---	886	602	---
TOTAL	---	---	---	---	---	---	---	---	---	22616	23294	23607
MEAN	---	---	---	---	---	---	---	---	---	729.5	751.4	786.9
MAX	---	---	---	---	---	---	---	---	---	1500	1270	2150
MIN	---	---	---	---	---	---	---	---	---	465	487	486
CFSM	---	---	---	---	---	---	---	---	---	1.14	1.17	1.23
IN.	---	---	---	---	---	---	---	---	---	1.31	1.35	1.37

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD JULY TO SEPTEMBER 2001

MEAN	---	---	---	---	---	---	---	---	---	729.5	751.4	786.9
MAX	---	---	---	---	---	---	---	---	---	730	751	787
(WY)	---	---	---	---	---	---	---	---	---	2001	2001	2001
MIN	---	---	---	---	---	---	---	---	---	730	751	787
(WY)	---	---	---	---	---	---	---	---	---	2001	2001	2001

SUMMARY STATISTICS

FOR PERIOD JULY TO SEPTEMBER 2001

MAXIMUM PEAK FLOW	2640	Sep 25
MAXIMUM PEAK STAGE	6.36	Sep 25
INSTANTANEOUS LOW FLOW	455	Jul 17

e Estimated.

TENNESSEE RIVER BASIN

03447687 FRENCH BROAD RIVER NEAR FLETCHER, NC--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	527	507	764	627	1150	858	1870	1330	926	596	333	326
2	503	466	679	e623	1110	1120	1670	1490	881	563	339	318
3	479	451	618	612	1030	2720	1530	1190	773	575	330	299
4	469	441	569	e598	1010	1960	1430	2020	787	564	306	288
5	450	440	542	e588	969	1480	1350	2740	993	528	291	285
6	449	439	535	796	949	1340	1280	1910	1470	470	277	263
7	475	445	526	1140	1630	1250	1230	1560	1380	433	264	250
8	447	443	517	884	1980	1190	1190	1390	1000	415	255	237
9	424	432	513	e773	1530	1150	1300	1280	870	397	244	230
10	419	418	558	e728	1380	1160	2050	1270	799	388	240	220
11	423	413	1250	718	1340	1110	1730	1290	747	556	239	210
12	435	409	1040	694	1250	1150	1510	1180	710	510	237	202
13	510	434	869	673	1200	2010	1540	1140	684	559	227	201
14	888	428	905	652	1150	2300	1560	1530	700	730	220	255
15	1910	411	888	624	1110	1760	1510	1230	698	884	232	765
16	1050	399	793	600	1090	1590	1450	1080	654	743	352	1100
17	762	391	791	590	1060	1800	1360	1010	617	591	488	683
18	667	386	1470	587	1010	2120	1420	1170	590	523	395	472
19	621	389	1310	767	981	1790	1390	1150	568	467	477	410
20	594	387	1050	1830	998	1650	1330	981	548	432	406	373
21	576	383	893	1570	1100	1970	1260	940	527	420	357	575
22	553	383	823	1400	1040	1990	1190	919	508	415	294	1170
23	537	387	777	2090	979	1700	1120	887	508	394	285	1240
24	531	795	943	2790	956	1560	1080	855	556	405	289	807
25	519	1130	951	3150	929	1460	1210	833	541	477	308	618
26	516	1130	838	2430	920	1500	1190	805	610	498	e560	1770
27	496	825	790	1800	908	1740	1070	1020	1860	514	e760	5240
28	490	706	733	1520	870	1500	1050	1440	1060	628	590	5820
29	485	688	707	1360	---	1390	1040	984	763	477	428	4900
30	480	699	683	1250	---	1600	963	858	705	386	357	1790
31	498	---	659	1170	---	1860	---	836	---	354	334	---
TOTAL	18183	15655	24984	35634	31629	49778	40873	38318	24033	15892	10714	31317
MEAN	586.5	521.8	805.9	1149	1130	1606	1362	1236	801.1	512.6	345.6	1044
MAX	1910	1130	1470	3150	1980	2720	2050	2740	1860	884	760	5820
MIN	419	383	513	587	870	858	963	805	508	354	220	201
CFSM	0.92	0.82	1.26	1.80	1.77	2.51	2.13	1.93	1.25	0.80	0.54	1.63
IN.	1.06	0.91	1.45	2.07	1.84	2.89	2.38	2.23	1.40	0.92	0.62	1.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002
MEAN	586.5	521.8	805.9	1149	1130	1606	1362	1236	801.1	621.1	548.5	915.4
MAX	587	522	806	1149	1130	1606	1362	1236	801	730	751	1044
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2001	2001	2002
MIN	587	522	806	1149	1130	1606	1362	1236	801	513	346	787
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2001

SUMMARY STATISTICS

FOR 2002 WATER YEAR

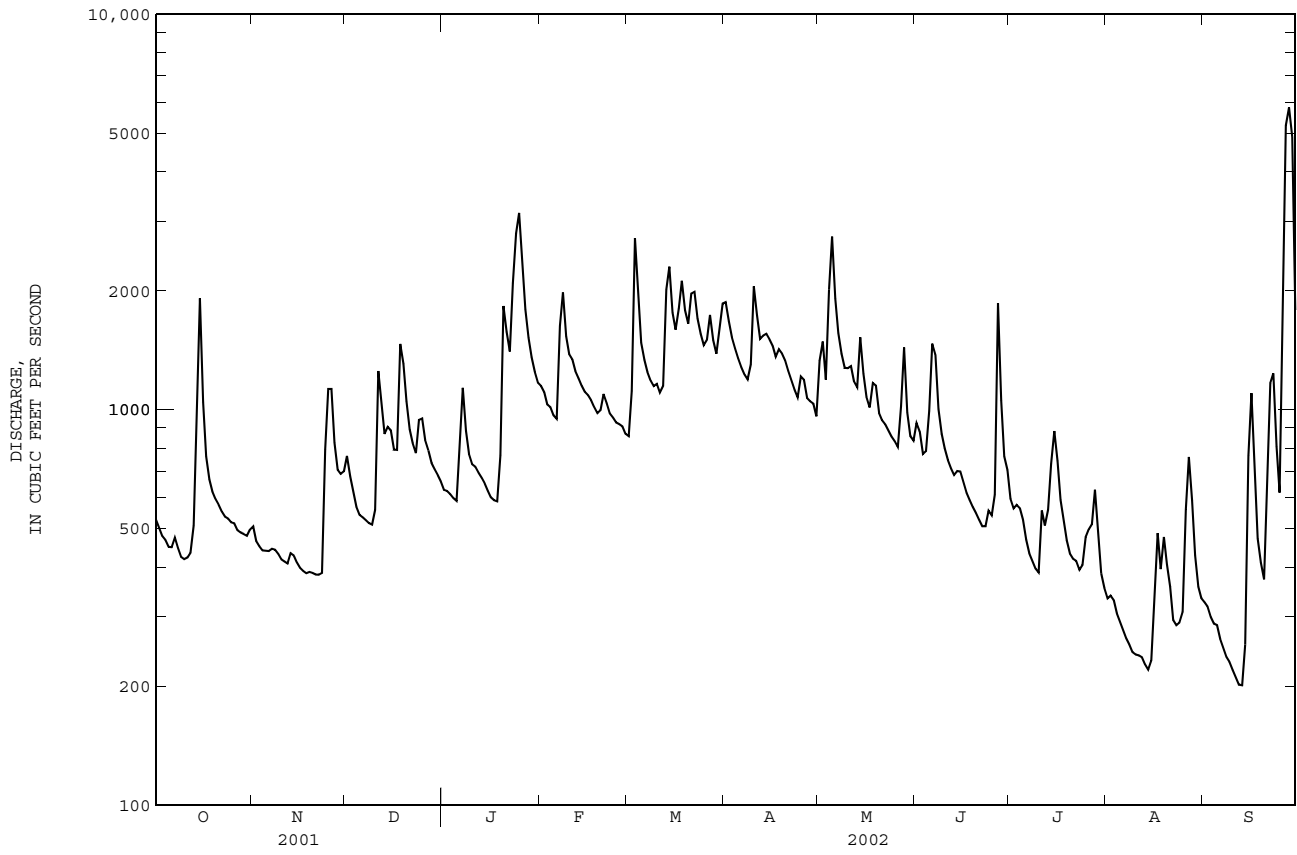
WATER YEARS 2001 - 2002

ANNUAL TOTAL	337010		
ANNUAL MEAN	923.3	923.3	
HIGHEST ANNUAL MEAN		923	2002
LOWEST ANNUAL MEAN		923	2002
HIGHEST DAILY MEAN	5820	Sep 28	5820 Sep 28 2002
LOWEST DAILY MEAN	201	Sep 13	201 Sep 13 2002
ANNUAL SEVEN-DAY MINIMUM	221	Sep 7	221 Sep 7 2002
MAXIMUM PEAK FLOW	6240	Sep 27	6240* Sep 27 2002
MAXIMUM PEAK STAGE	8.55	Sep 27	8.55 Sep 27 2002
INSTANTANEOUS LOW FLOW	193	Sep 12	193 Sep 12 2002
ANNUAL RUNOFF (CFSM)	1.44		1.44
ANNUAL RUNOFF (INCHES)	19.59		19.60
10 PERCENT EXCEEDS	1610		1610
50 PERCENT EXCEEDS	767		767
90 PERCENT EXCEEDS	356		356

e Estimated.

* See REMARKS.

03447687 FRENCH BROAD RIVER NEAR FLETCHER, NC--Continued



TENNESSEE RIVER BASIN

03447894 BENT CREEK AT BENT CREEK GAP NEAR GLEN BALD, NC

LOCATION.--Lat 35°29'36", long 82°36'39", Buncombe County, Hydrologic Unit 06010105, on left bank at upstream side of stone bridge on Bent Creek Gap Road, 0.75 mi northwest of Glen Bald, and 1.1 mi upstream from mouth.

DRAINAGE AREA.--8.74 mi².

PERIOD OF RECORD.--November 2001 to September 2002.

GAGE.--Water-stage recorder. Elevation of gage is 2,080 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges and those above 40 ft³/s, which are poor. Maximum discharge for period of record from rating curve extended above 40 ft³/s by logarithmic plotting. Minimum discharge for current water year also occurred Sept. 12, 13.

DISCHARGE, CUBIC FEET PER SECOND, FOR PERIOD NOVEMBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	e3.0	e4.2	2.5	8.0	4.4	e13	11	e5.1	4.3	2.6	2.5
2	---	e2.9	e3.8	2.5	7.4	7.8	e12	7.5	e4.8	6.0	2.3	2.2
3	---	e2.9	e3.6	e2.4	7.3	9.9	11	7.4	e5.0	6.6	2.3	1.8
4	---	e2.8	e3.5	e2.4	6.8	7.3	9.9	17	5.0	5.1	2.1	1.6
5	---	e2.8	3.3	e2.4	6.4	6.4	9.3	14	9.1	4.3	1.9	1.4
6	---	e2.7	3.3	e5.4	7.3	6.1	8.8	12	7.7	3.8	1.8	1.2
7	---	e2.7	3.1	e5.4	12	6.0	8.5	11	7.1	3.4	1.6	1.1
8	---	2.7	3.1	e4.0	11	5.7	8.3	9.8	5.9	3.1	1.5	1.1
9	---	2.6	2.9	3.9	9.2	5.8	9.5	9.1	5.3	3.0	1.4	0.98
10	---	2.5	4.4	4.0	9.0	5.6	9.6	8.8	4.9	3.7	1.4	0.83
11	---	2.5	8.1	4.0	8.5	5.3	8.5	8.3	4.6	5.6	1.4	0.76
12	---	2.5	5.3	3.7	7.8	6.3	7.9	8.0	4.4	4.1	1.4	0.75
13	---	2.3	3.8	3.5	7.5	11	8.4	8.2	4.3	6.7	1.2	0.84
14	---	2.4	3.7	3.1	7.1	9.3	7.8	8.3	4.3	7.1	1.1	5.0
15	---	2.5	4.2	3.1	6.8	8.2	7.4	7.6	4.3	7.6	1.3	9.3
16	---	2.4	3.7	2.9	6.7	e8.4	7.2	7.2	3.9	6.0	3.6	6.8
17	---	2.4	4.6	2.8	6.4	14	7.4	7.0	3.8	4.6	3.2	4.9
18	---	2.5	7.5	2.9	6.1	16	8.5	8.5	3.6	4.1	2.7	4.3
19	---	2.5	5.6	8.5	6.0	14	7.7	7.3	3.4	3.7	3.0	4.3
20	---	2.5	4.6	15	6.2	13	7.1	7.0	3.3	3.7	2.9	4.9
21	---	2.3	4.2	12	6.2	13	6.5	6.8	3.3	3.8	2.3	9.5
22	---	2.3	3.8	11	5.4	11	6.0	6.6	3.0	3.3	1.8	13
23	---	3.1	3.7	17	5.3	10	5.5	6.4	3.3	3.0	1.7	10
24	---	9.5	3.8	17	5.1	9.3	5.3	6.2	3.7	3.5	1.8	7.3
25	---	14	3.3	e18	5.1	8.5	8.7	6.0	3.4	5.6	2.5	7.6
26	---	6.9	3.1	e15	4.9	9.3	6.4	5.8	8.3	5.2	2.7	16
27	---	5.3	2.9	e13	4.5	9.3	5.8	7.4	14	4.1	4.1	28
28	---	4.5	2.9	e11	4.3	8.3	5.6	7.9	6.6	3.5	3.6	8.6
29	---	4.1	2.8	e10	---	7.8	5.2	6.2	5.4	3.3	2.8	5.7
30	---	4.3	2.7	9.3	---	12	4.7	5.7	4.7	3.0	2.5	4.7
31	---	---	2.5	8.7	---	12	---	e5.4	---	2.6	2.4	---
TOTAL	---	108.4	122.0	226.4	194.3	281.0	237.5	255.4	155.5	137.4	68.9	166.96
MEAN	---	3.613	3.935	7.303	6.939	9.065	7.917	8.239	5.183	4.432	2.223	5.565
MAX	---	14	8.1	18	12	16	13	17	14	7.6	4.1	28
MIN	---	2.3	2.5	2.4	4.3	4.4	4.7	5.4	3.0	2.6	1.1	0.75
CFSM	---	0.41	0.45	0.84	0.79	1.04	0.91	0.94	0.59	0.51	0.25	0.64
IN.	---	0.46	0.52	0.96	0.83	1.20	1.01	1.09	0.66	0.58	0.29	0.71

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2002, BY WATER YEAR (WY)

	---	3.613	3.935	7.303	6.939	9.065	7.917	8.239	5.183	4.432	2.223	5.565
MEAN	---	3.613	3.935	7.303	6.939	9.065	7.917	8.239	5.183	4.432	2.223	5.565
MAX	---	3.61	3.94	7.30	6.94	9.06	7.92	8.24	5.18	4.43	2.22	5.57
(WY)	---	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002
MIN	---	3.61	3.94	7.30	6.94	9.06	7.92	8.24	5.18	4.43	2.22	5.57
(WY)	---	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002

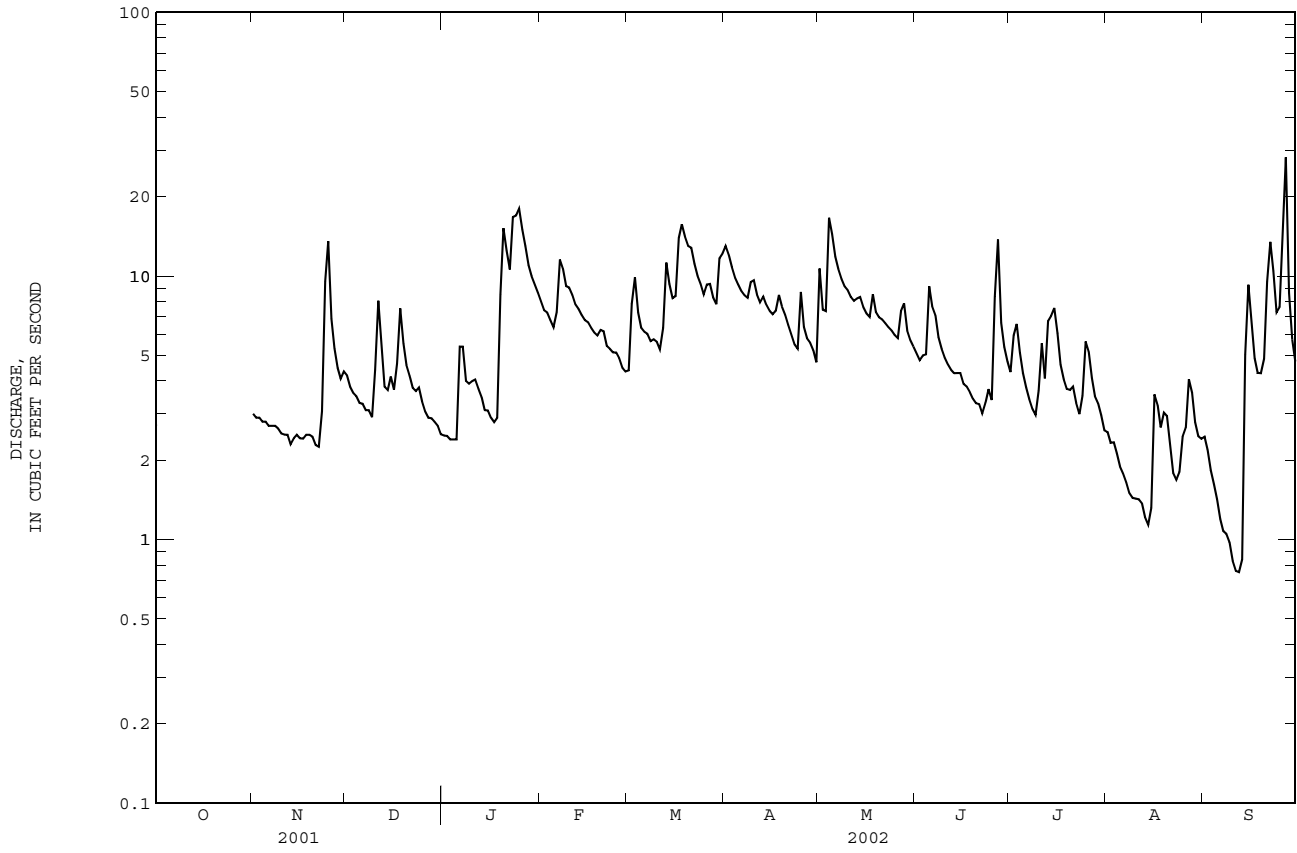
SUMMARY STATISTICS

FOR PERIOD NOVEMBER 2001 TO SEPTEMBER 2002

INSTANTANEOUS PEAK FLOW 50* Jun 26
 INSTANTANEOUS PEAK STAGE 2.90 Jun 26
 INSTANTANEOUS LOW FLOW 0.71* Sep 11

e Estimated.
 * See REMARKS.

03447894 BENT CREEK AT BENT CREEK GAP NEAR GLEN BALD, NC--Continued



0344894205 NORTH FORK SWANNANOVA 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 mi².

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 NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records good except those above 2,000 ft³/s which are fair. Maximum discharge for period of record from rating curve extended above 2,000 ft³/s by logarithmic plotting. Minimum discharge for period of record also occurred Sept. 15, 16, 18, 19, 1998, Oct. 3, 4, 1998. Minimum discharge for current water year also occurred Sept. 13.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	10	20	16	33	15	88	35	18	12	4.5	3.3
2	8.6	10	16	15	29	19	65	31	17	11	4.4	3.8
3	8.1	9.7	14	14	27	23	54	33	17	11	4.5	3.8
4	7.6	9.0	13	14	25	18	46	52	16	11	4.0	3.3
5	7.5	8.6	12	14	22	17	41	50	26	9.4	3.8	2.9
6	7.6	8.4	11	17	24	17	36	42	34	8.7	3.6	2.6
7	7.2	8.3	11	14	55	17	33	38	46	8.4	3.3	2.5
8	7.0	8.0	10	13	49	16	31	34	28	8.2	3.2	2.4
9	7.0	7.6	10	13	44	17	44	31	24	7.9	2.9	2.3
10	6.9	7.6	32	15	43	17	55	29	21	7.6	2.8	2.1
11	7.0	7.3	75	17	42	16	42	26	19	7.6	2.8	1.8
12	9.6	7.3	36	16	36	21	38	25	18	7.6	2.8	1.8
13	11	7.3	38	14	32	41	47	31	18	14	2.7	1.8
14	68	7.3	39	14	29	34	51	34	18	15	2.4	3.0
15	34	7.3	32	14	28	30	46	28	16	12	15	15
16	22	7.0	27	13	26	35	41	26	15	9.4	10	11
17	19	7.0	51	13	24	125	45	24	14	8.1	7.3	6.0
18	17	7.0	99	13	22	120	48	46	13	7.5	7.8	4.7
19	15	6.8	55	58	21	78	42	36	12	7.2	5.0	4.3
20	14	6.6	41	72	21	66	37	32	11	7.0	4.5	3.9
21	13	6.5	33	50	21	68	35	29	11	6.9	3.8	14
22	12	6.3	28	42	20	53	32	27	10	6.5	3.5	40
23	12	6.5	30	143	19	44	29	25	10	6.0	3.3	33
24	12	11	41	123	18	39	27	23	10	8.7	3.2	14
25	13	32	30	148	18	34	34	22	9.9	10	3.7	15
26	11	18	27	86	17	41	28	21	29	7.8	3.3	72
27	11	15	24	64	15	50	27	32	16	6.7	4.4	304
28	11	13	22	52	15	40	26	27	15	6.0	3.9	91
29	11	12	20	44	---	36	25	22	13	5.6	3.4	46
30	11	21	18	39	---	59	23	20	12	5.3	3.5	31
31	10	---	17	35	---	84	---	19	---	4.9	3.4	---
TOTAL	420.1	299.4	932	1215	775	1290	1216	950	536.9	265.0	136.7	742.3
MEAN	13.55	9.980	30.06	39.19	27.68	41.61	40.53	30.65	17.90	8.548	4.410	24.74
MAX	68	32	99	148	55	125	88	52	46	15	15	304
MIN	6.9	6.3	10	13	15	15	23	19	9.9	4.9	2.4	1.8
CFSM	0.93	0.69	2.07	2.70	1.91	2.87	2.80	2.11	1.23	0.59	0.30	1.71
IN.	1.08	0.77	2.39	3.12	1.99	3.31	3.12	2.44	1.38	0.68	0.35	1.90

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2002, BY WATER YEAR (WY)

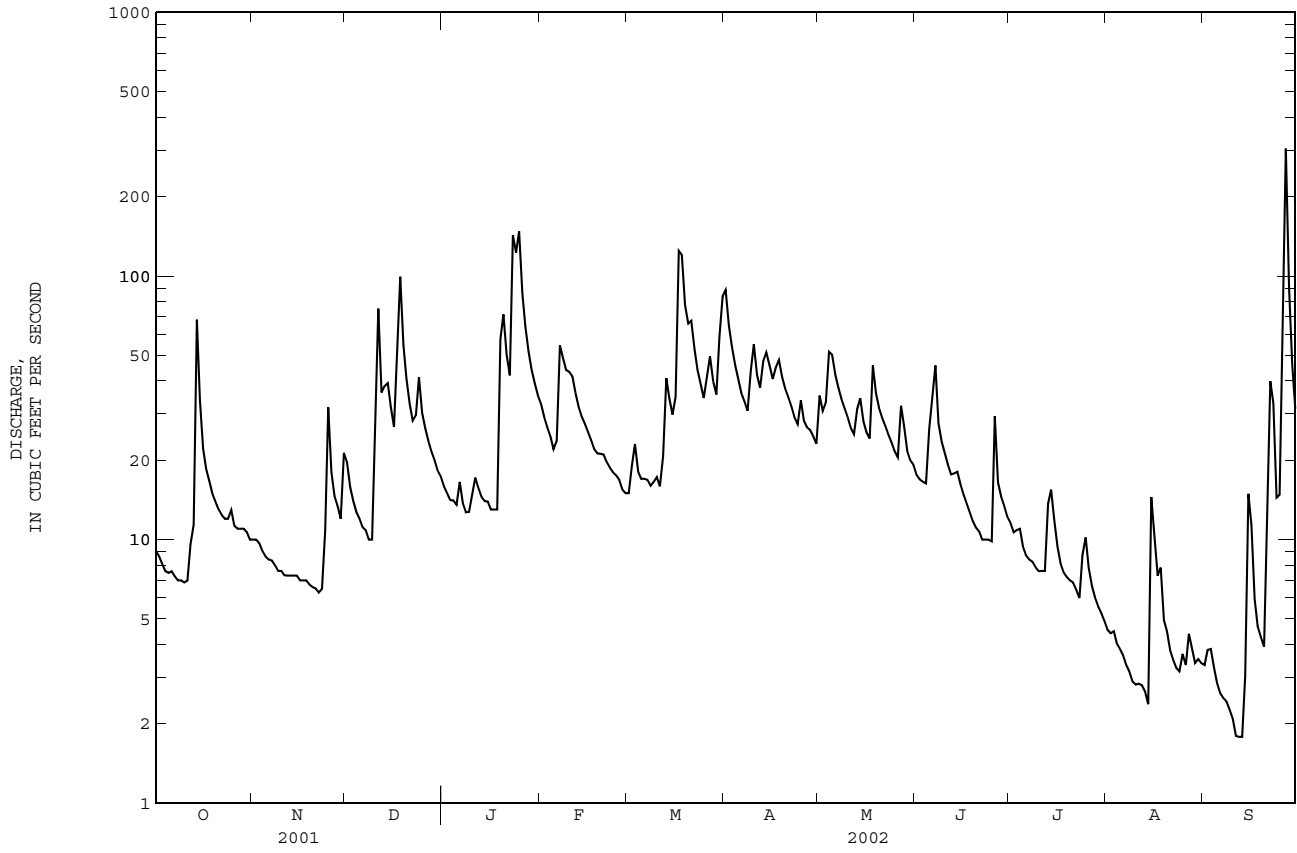
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	26.38	30.60	40.07	61.91	58.92	70.61	53.41	43.71	33.76	22.08	28.85	18.31		
MAX	79.1	84.6	79.8	134	120	111	82.2	74.4	78.0	63.0	123	64.3		
(WY)	1996	1993	1993	1995	1990	1993	1998	1992	1995	1999	1994	1989		
MIN	2.49	4.88	14.8	28.2	27.7	39.5	18.6	18.9	13.5	5.71	3.96	1.92		
(WY)	1999	1999	1999	2000	2002	1999	1995	2001	1998	1998	1998	1998		

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1989 - 2002

ANNUAL TOTAL	9784.2	8778.4		
ANNUAL MEAN	26.81	24.05	40.13	
HIGHEST ANNUAL MEAN			51.9	1995
LOWEST ANNUAL MEAN			24.1	2002
HIGHEST DAILY MEAN	279	Jan 19	304	Sep 27
LOWEST DAILY MEAN	6.3	Nov 22	1.8	Sep 11
ANNUAL SEVEN-DAY MINIMUM	6.7	Nov 17	2.1	Sep 7
MAXIMUM PEAK FLOW			657	Sep 27
MAXIMUM PEAK STAGE			5.14	Sep 27
INSTANTANEOUS LOW FLOW			1.7*	Sep 12
ANNUAL RUNOFF (CFSM)	1.85		1.66	2.77
ANNUAL RUNOFF (INCHES)	25.10		22.52	37.61
10 PERCENT EXCEEDS	51		47	78
50 PERCENT EXCEEDS	20		16	27
90 PERCENT EXCEEDS	8.8		4.2	6.2

* See REMARKS.

0344894205 NORTH FORK SWANNANOA RIVER NEAR WALKERTOWN, NC--Continued



TENNESSEE RIVER BASIN

03450000 BEETREE CREEK NEAR SWANNANOVA, 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 mi².

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 NGVD of 1929. 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 240 ft³/s on basis of computation of peak flow over weir. Minimum discharge for current water year also occurred Sept. 12, 13. Minimum discharge for period of record also occurred July 25, 1996.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	2.0	2.7	e3.6	9.0	e3.8	25	10	3.2	1.7	e1.0	0.97
2	1.6	2.0	2.6	3.6	7.9	4.9	22	8.3	3.0	3.2	e1.0	0.94
3	1.5	1.9	2.4	3.6	7.3	5.2	18	8.0	2.9	2.4	1.1	0.86
4	1.4	1.8	2.3	3.6	6.7	4.2	16	12	6.0	2.3	e1.0	0.80
5	1.4	1.7	2.3	3.4	6.1	4.0	13	12	7.6	1.9	e1.0	0.67
6	1.5	1.5	2.2	3.4	6.8	4.0	12	11	9.0	1.6	e1.0	0.58
7	1.4	1.5	2.2	3.0	13	3.8	11	9.6	11	1.4	e0.92	0.53
8	1.3	1.5	2.1	3.0	12	3.6	9.9	8.7	7.0	1.1	e0.86	0.51
9	1.3	1.5	2.1	e2.9	12	3.7	11	8.0	5.8	1.1	e0.80	0.48
10	1.3	1.5	4.6	3.4	11	3.6	11	7.5	4.9	1.1	e0.78	0.41
11	1.3	1.5	8.4	4.3	10	3.4	9.8	6.9	4.2	1.2	e0.76	0.39
12	1.9	1.4	5.5	3.8	9.2	4.5	9.2	6.5	3.8	1.2	e0.76	0.37
13	1.9	1.4	6.4	3.5	8.4	5.6	10	8.1	5.1	3.1	e0.72	0.40
14	5.3	1.4	6.7	3.4	7.7	5.4	9.8	7.9	5.1	2.7	0.65	0.97
15	3.7	1.4	5.9	3.3	7.2	5.0	9.2	6.7	4.1	1.9	2.6	3.4
16	3.0	1.3	5.4	3.2	6.9	6.1	8.7	6.1	3.8	1.5	1.9	1.8
17	2.8	1.3	9.3	3.0	6.3	17	8.3	5.7	3.4	1.3	3.1	1.1
18	2.7	1.3	19	3.1	5.9	23	7.8	9.7	3.1	1.1	2.8	0.97
19	2.6	1.2	14	12	5.6	20	7.3	7.2	2.9	0.97	1.4	0.91
20	2.5	1.2	11	16	5.6	18	6.8	6.6	2.7	0.99	1.2	0.91
21	2.4	1.1	8.5	13	5.3	18	6.5	6.2	2.5	1.5	1.1	2.1
22	2.3	1.1	7.2	11	5.0	15	6.0	5.9	2.3	1.2	0.99	7.3
23	2.2	1.2	6.9	26	4.7	13	5.6	5.8	2.2	0.96	0.95	5.1
24	2.2	2.5	6.9	30	4.4	12	5.5	5.3	2.2	3.0	0.93	2.6
25	2.7	4.1	5.8	39	4.3	11	8.7	4.8	2.0	2.5	1.1	3.0
26	2.1	2.8	5.2	28	4.2	12	6.6	4.4	2.7	1.9	0.96	8.8
27	2.1	2.7	4.8	22	3.9	12	6.2	4.5	2.9	1.5	1.6	34
28	2.1	2.5	4.5	17	e3.8	11	6.0	4.2	2.5	1.3	1.1	20
29	2.1	2.3	4.3	13	---	10	5.6	3.8	2.1	1.2	1.1	11
30	2.1	2.8	3.9	12	---	18	5.2	3.6	1.8	e1.2	1.00	7.7
31	2.0	---	3.7	10	---	24	---	3.4	---	e1.1	1.0	---
TOTAL	66.4	53.4	178.8	310.1	200.2	304.8	297.7	218.4	121.8	51.12	37.18	119.57
MEAN	2.142	1.780	5.768	10.00	7.150	9.832	9.923	7.045	4.060	1.649	1.199	3.986
MAX	5.3	4.1	19	39	13	24	25	12	11	3.2	3.1	34
MIN	1.3	1.1	2.1	2.9	3.8	3.4	5.2	3.4	1.8	0.96	0.65	0.37
CFSM	0.39	0.33	1.06	1.83	1.31	1.80	1.82	1.29	0.74	0.30	0.22	0.73
IN.	0.45	0.36	1.22	2.11	1.36	2.08	2.03	1.49	0.83	0.35	0.25	0.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2002, [®] BY WATER YEAR (WY)

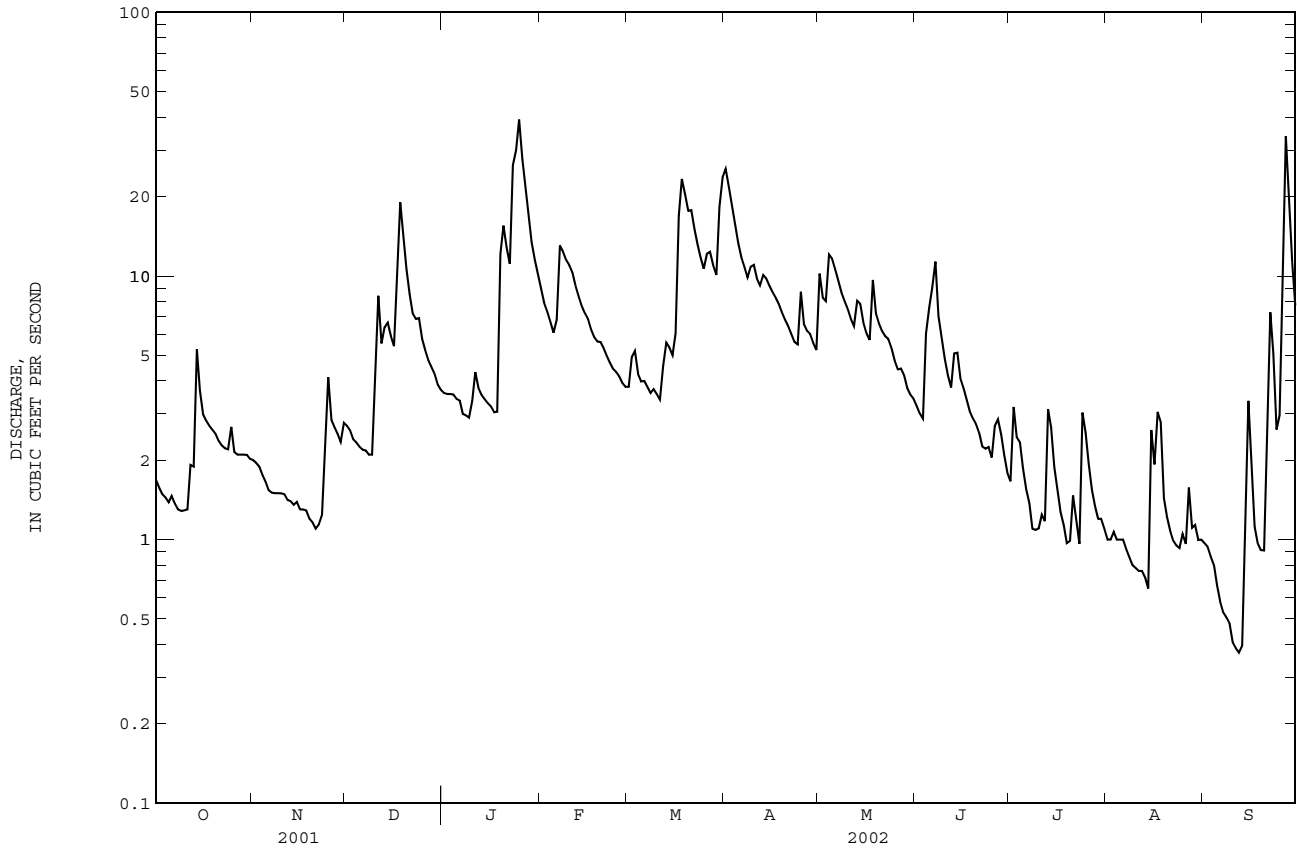
	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	
MEAN	6.101	8.151	10.30	13.57	15.48	18.94	16.68	11.74	8.354	6.099	6.486	4.865																			
MAX	33.9	45.3	25.4	38.5	43.0	43.1	34.2	28.5	27.0	37.9	61.8	21.3																			
(WY)	1930	1980	1933	1937	1990	1975	1936	1973	1949	1949	1940	1928																			
MIN	0.65	1.23	1.58	1.99	4.46	5.25	5.21	4.68	1.82	1.18	0.83	0.51																			
(WY)	1955	1955	1940	1940	1941	1988	1986	1948	1988	1998	1998	1954																			

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1926 - 2002[®]

ANNUAL TOTAL	2711.4	1959.47		
ANNUAL MEAN	7.428	5.368		10.57
HIGHEST ANNUAL MEAN				17.8
LOWEST ANNUAL MEAN				5.37
HIGHEST DAILY MEAN	45	Jan 19	39	Jan 25
LOWEST DAILY MEAN	1.1	Nov 21	0.37	Sep 12
ANNUAL SEVEN-DAY MINIMUM	1.2	Nov 17	0.44	Sep 7
MAXIMUM PEAK FLOW			46	Jan 25
MAXIMUM PEAK STAGE			3.31	Jan 25
INSTANTANEOUS LOW FLOW			0.36*	Sep 11
ANNUAL RUNOFF (CFSM)	1.36		0.98	
ANNUAL RUNOFF (INCHES)	18.47		13.35	26.31
10 PERCENT EXCEEDS	17		12	22
50 PERCENT EXCEEDS	5.0		3.5	7.2
90 PERCENT EXCEEDS	1.7		1.0	1.6

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

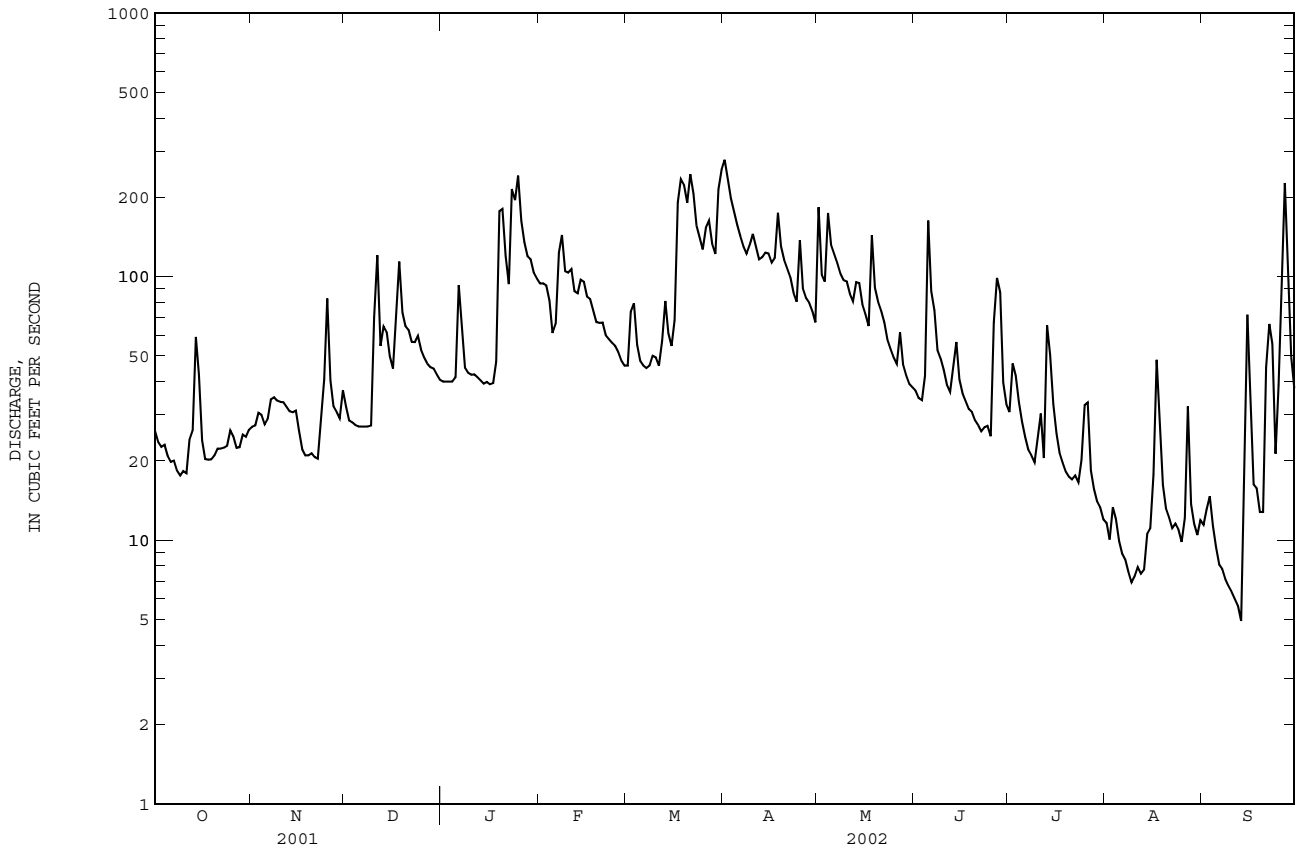
03450000 BEETREE CREEK NEAR SWANNANOVA, NC--Continued



03451000 SWANNANOVA RIVER AT BILTMORE, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1921 - 2002 [®]	
ANNUAL TOTAL	25824		22277.0		157.3	
ANNUAL MEAN	70.75		61.03		277	
HIGHEST ANNUAL MEAN					1949	
LOWEST ANNUAL MEAN					1988	
HIGHEST DAILY MEAN	468	Mar 30	277	Apr 1	7560	Aug 13 1940
LOWEST DAILY MEAN	18	Oct 8	4.9	Sep 13	1.2	Oct 14 1941
ANNUAL SEVEN-DAY MINIMUM	19	Oct 5	6.4	Sep 7	6.4	Sep 7 2002
MAXIMUM PEAK FLOW			539	Jun 5	18400*	Aug 13 1940
MAXIMUM PEAK STAGE			3.19	Jun 5	19.00	Aug 13 1940
INSTANTANEOUS LOW FLOW			4.7	Sep 13	1.1*	Oct 9 1941
ANNUAL RUNOFF (CFSM)	0.54		0.47		1.21	
ANNUAL RUNOFF (INCHES)	7.39		6.37		16.44	
10 PERCENT EXCEEDS	137		132		308	
50 PERCENT EXCEEDS	54		43		104	
90 PERCENT EXCEEDS	25		13		36	

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



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 mi².

WATER-DISCHARGE RECORDS

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 NGVD of 1929. 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 and telephone telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. 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 27.7 ft³/s and 29.5 ft³/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 ft³/s, by logarithmic plotting; maximum gage height, 23.10, from floodmarks. Minimum discharge for period of record and current water year also occurred Sept. 14, 2002.

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	890	773	1070	923	1470	951	2240	1640	773	705	429	397
2	854	756	1040	887	1420	1060	2020	1780	865	685	413	392
3	803	695	918	e875	1340	2460	1810	1520	724	705	431	375
4	788	675	861	e862	1280	2190	1690	2100	709	662	401	359
5	771	655	812	e862	1200	1580	1580	3080	1360	645	392	344
6	747	649	800	1060	1180	1410	1510	2280	1520	577	372	311
7	762	669	799	1540	1660	1320	1440	1750	1570	526	343	280
8	751	677	787	1300	2290	1250	1400	1520	1070	488	327	272
9	709	677	779	1130	1840	1220	1440	1360	862	457	316	257
10	680	643	864	1080	1630	1210	2030	1290	760	447	307	244
11	685	635	1550	1020	1560	1190	2030	1360	700	612	303	230
12	720	631	1540	994	1450	1170	1720	1220	662	621	306	223
13	781	651	1280	957	1380	1760	1710	1220	649	784	295	215
14	1080	674	1290	932	1330	2380	1740	1470	651	912	281	282
15	2190	649	1270	906	1290	1860	1710	1350	651	1110	282	797
16	1600	632	1190	872	1250	1670	1640	1100	619	1010	396	1270
17	1140	610	1170	857	1220	2000	1550	1010	588	765	612	970
18	984	604	1770	860	1170	2450	1680	1250	568	661	585	611
19	920	604	1810	1190	1130	2120	1620	1250	547	601	549	499
20	875	603	1480	2250	1110	1900	1550	1010	521	560	605	451
21	859	600	1300	2150	1180	2090	1480	943	510	532	491	657
22	836	596	1190	1900	1170	2200	1400	914	488	535	401	1340
23	811	618	1150	2300	1100	1890	1330	861	481	497	350	1760
24	806	1000	1200	3260	1060	1720	1270	816	501	484	360	1120
25	794	1650	1350	3440	1040	1620	1490	784	541	573	379	822
26	768	1550	1190	2980	1020	1620	1440	749	605	747	409	1810
27	754	1260	1130	2320	995	1910	1290	855	1680	593	789	4710
28	736	1050	1080	1980	974	1710	1250	1480	1920	789	799	5310
29	734	999	1030	1770	---	1550	1220	1040	978	662	603	4540
30	733	1020	998	1630	---	1850	1150	829	812	539	457	2420
31	738	---	964	1530	---	2190	---	766	---	457	413	---
TOTAL	27299	23505	35662	46617	36739	53501	47430	40597	24885	19941	13396	33268
MEAN	880.6	783.5	1150	1504	1312	1726	1581	1310	829.5	643.3	432.1	1109
MAX	2190	1650	1810	3440	2290	2460	2240	3080	1920	1110	799	5310
MIN	680	596	779	857	974	951	1150	749	481	447	281	215
CFSM	0.93	0.83	1.22	1.59	1.39	1.83	1.67	1.39	0.88	0.68	0.46	1.17
IN.	1.07	0.93	1.40	1.84	1.45	2.11	1.87	1.60	0.98	0.78	0.53	1.31

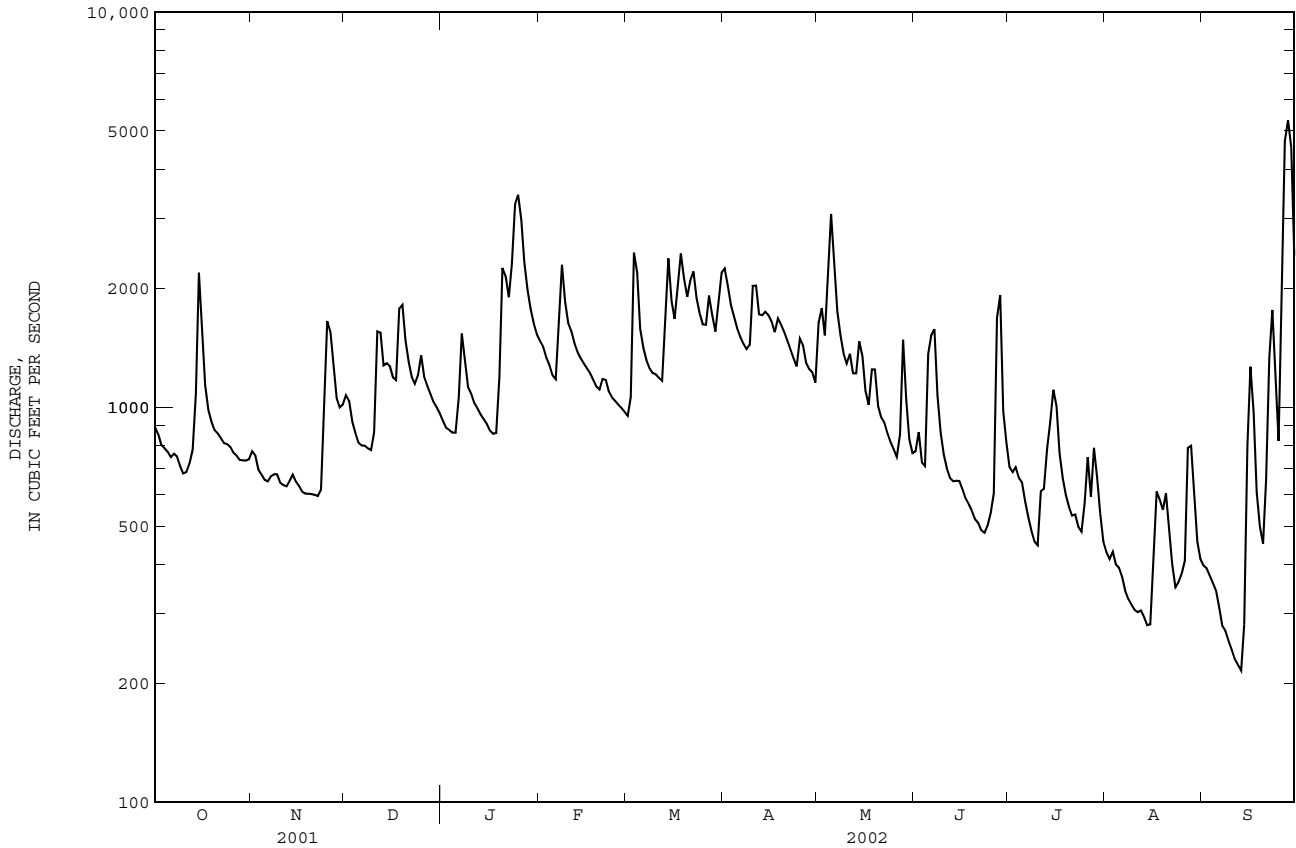
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1896 - 2002, BY WATER YEAR (WY)

MEAN	1575	1613	2080	2424	2659	3007	2743	2172	1865	1682	1671	1448
MAX	7025	5121	5700	6068	6364	7928	5705	4961	5774	11500	8362	4967
(WY)	1965	1980	1915	1937	1998	1899	1899	1973	1909	1916	1901	1906
MIN	353	507	636	548	1083	1037	973	852	547	559	328	346
(WY)	1955	1932	1956	1956	1931	1988	1986	2001	1988	1986	1925	1954

03451500 FRENCH BROAD RIVER AT ASHEVILLE, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1896 - 2002	
ANNUAL TOTAL	412023		402840			
ANNUAL MEAN	1129		1104		2076	
HIGHEST ANNUAL MEAN					3671	1901
LOWEST ANNUAL MEAN					1004	1988
HIGHEST DAILY MEAN	5410	Mar 30	5310	Sep 28	66000	Jul 16 1916
LOWEST DAILY MEAN	469	Jun 20	215	Sep 13	215	Sep 13 2002
ANNUAL SEVEN-DAY MINIMUM	589	Jun 15	246	Sep 7	246	Sep 7 2002
MAXIMUM PEAK FLOW			5600	Sep 28	110000*	Jul 16 1916
MAXIMUM PEAK STAGE			4.11	Sep 28	23.10*	Jul 16 1916
INSTANTANEOUS LOW FLOW			215*	Sep 13	215*	Sep 13 2002
ANNUAL RUNOFF (CFSM)	1.19		1.17		2.20	
ANNUAL RUNOFF (INCHES)	16.22		15.86		29.84	
10 PERCENT EXCEEDS	1820		1850		3630	
50 PERCENT EXCEEDS	933		970		1620	
90 PERCENT EXCEEDS	653		441		762	

e Estimated.
 * See REMARKS.



TENNESSEE RIVER BASIN

03451500 FRENCH BROAD RIVER AT ASHEVILLE, NC--Continued

PRECIPITATION RECORDS

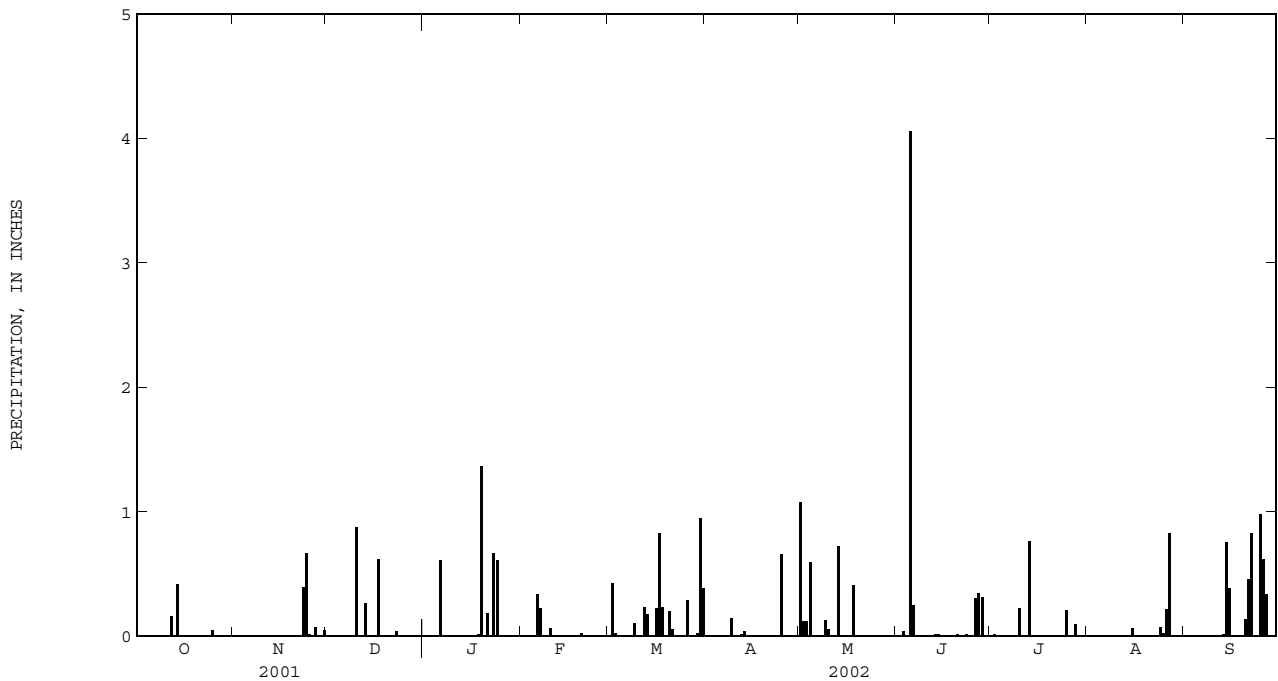
PERIOD OF RECORD.--October 1998 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Gage is operated in cooperation with Tennessee Valley Authority. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.12	0.00	0.02	0.00	0.00
3	0.00	0.00	0.00	0.00	0.01	0.03	0.00	0.12	0.04	0.01	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.01	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.06	0.00	0.00	0.00
6	0.00	0.00	0.00	0.61	0.34	0.00	0.00	0.00	0.25	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.11	0.15	0.13	0.00	0.00	0.00	0.00
10	0.00	0.00	0.88	0.00	0.07	0.00	0.01	0.06	0.00	0.23	0.00	0.00
11	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.16	0.00	0.00	0.00	0.00	0.24	0.02	0.00	0.00	0.00	0.00	0.00
13	0.01	0.00	0.27	0.00	0.00	0.18	0.04	0.73	0.02	0.77	0.00	0.02
14	0.42	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.76
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.39
16	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.01	0.00
17	0.00	0.00	0.62	0.00	0.00	0.83	0.00	0.00	0.00	0.00	0.01	0.00
18	0.00	0.00	0.01	0.02	0.00	0.24	0.00	0.41	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	1.37	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00
20	0.00	0.00	0.00	0.00	0.03	0.20	0.00	0.00	0.02	0.00	0.00	0.14
21	0.00	0.00	0.00	0.19	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.46
22	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.83
23	0.00	0.40	0.04	0.67	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
24	0.00	0.67	0.00	0.61	0.00	0.00	0.01	0.00	0.00	0.00	0.08	0.00
25	0.05	0.02	0.00	0.01	0.00	0.00	0.66	0.00	0.00	0.21	0.03	0.98
26	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.31	0.00	0.22	0.62
27	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.83	0.34
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.10	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.03	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.05	0.00	0.00	---	0.95	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.39	---	0.00	---	0.00	0.00	---
TOTAL	0.64	1.22	1.85	3.49	0.68	4.21	0.90	3.25	5.42	1.37	1.26	4.54





Gaging station at Cataloochee Creek near Cataloochee, North Carolina.

03451690 NEWFOUND CREEK NEAR ALEXANDER, NC

LOCATION.--Lat 35°39'58", long 82°38'04", Buncombe County, Hydrologic Unit 06010105, on left bank 21 ft downstream from bridge on Secondary Road 1641, 0.9 mi above mouth, and 2.6 mi southwest of Alexander.

DRAINAGE AREA.--34.2 mi².

PERIOD OF RECORD.--December 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,910 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	5.9	6.4	e7.8	11	e7.8	38	27	6.7	6.1	3.0	3.3
2	6.2	6.0	6.4	e7.8	11	9.7	25	13	6.3	21	3.6	3.1
3	6.1	6.0	6.3	e7.8	10	10	20	13	7.0	10	3.6	2.8
4	6.0	6.2	6.3	e7.5	9.7	7.9	16	29	16	16	3.0	2.8
5	6.0	6.1	6.4	e7.5	9.1	e7.5	15	19	29	9.5	2.9	2.8
6	6.2	5.9	6.5	14	9.9	e7.5	13	15	26	6.5	2.7	2.6
7	6.0	5.9	6.6	11	14	e7.5	12	12	15	5.7	2.4	2.4
8	5.8	6.0	6.7	e8.8	12	7.5	11	11	9.4	5.3	2.0	2.4
9	6.0	5.9	6.8	e8.8	10	7.8	12	10	8.5	5.0	2.1	2.3
10	5.8	5.9	10	9.0	10	8.0	13	10	7.8	6.0	2.1	2.2
11	6.0	5.9	16	9.5	9.7	7.3	11	10	7.2	7.5	2.2	2.0
12	6.3	5.7	8.5	8.6	9.5	8.3	10	9.5	6.8	5.3	2.2	2.1
13	6.5	5.9	11	8.8	9.5	10	10	15	7.1	16	2.0	1.9
14	13	6.0	9.5	e8.5	9.0	8.7	9.9	14	7.1	11	1.8	2.7
15	8.3	6.0	8.1	e8.5	8.9	8.1	9.8	9.8	6.8	8.9	2.7	6.0
16	6.7	6.0	7.5	8.4	8.9	9.8	9.4	9.3	6.0	6.4	4.1	4.5
17	6.4	6.0	13	8.5	8.5	47	9.2	8.9	5.8	5.6	3.1	3.3
18	6.4	6.0	18	8.5	8.4	36	9.1	12	5.3	5.1	3.0	3.3
19	6.5	6.1	10	40	8.4	26	8.9	9.4	5.0	4.7	2.7	3.4
20	6.6	6.1	8.9	34	8.8	22	8.6	9.0	6.0	4.6	2.8	3.1
21	6.5	5.8	8.3	25	8.6	20	8.3	8.8	6.3	4.5	2.4	6.7
22	6.5	6.1	8.0	19	8.2	17	8.1	8.7	5.0	4.0	1.9	24
23	6.5	6.4	8.1	50	8.1	15	7.5	8.5	4.9	6.6	1.9	11
24	6.2	9.0	8.6	35	7.9	14	7.5	8.3	5.2	7.6	2.3	5.2
25	7.2	11	7.9	50	7.9	13	17	7.9	4.8	8.8	2.4	7.5
26	6.0	7.4	e7.9	26	7.8	14	8.9	7.7	6.5	7.3	3.8	26
27	5.6	6.8	e7.8	20	e7.8	13	8.4	9.2	46	4.5	18	29
28	5.8	6.5	e7.8	17	e7.8	12	8.4	8.3	18	4.1	7.3	11
29	5.9	6.5	7.7	15	---	11	8.1	7.4	9.6	3.9	3.9	7.5
30	5.9	6.7	e7.8	13	---	47	7.5	7.2	7.0	3.4	3.6	6.4
31	5.9	---	e7.8	12	---	45	---	7.0	---	3.3	3.4	---
TOTAL	201.1	191.7	266.6	515.3	260.4	485.4	360.6	354.9	308.1	224.2	104.9	193.3
MEAN	6.487	6.390	8.600	16.62	9.300	15.66	12.02	11.45	10.27	7.232	3.384	6.443
MAX	13	11	18	50	14	47	38	29	46	21	18	29
MIN	5.6	5.7	6.3	7.5	7.8	7.3	7.5	7.0	4.8	3.3	1.8	1.9
CFSM	0.19	0.19	0.25	0.49	0.27	0.46	0.35	0.33	0.30	0.21	0.10	0.19
IN.	0.22	0.21	0.29	0.56	0.28	0.53	0.39	0.39	0.34	0.24	0.11	0.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002
MEAN	6.487	6.390	9.635	15.73	11.48	17.55	14.66	9.953	9.068	7.063	6.044	7.770
MAX	6.49	6.39	10.7	16.6	13.7	19.5	17.3	11.4	10.3	7.23	8.70	9.10
(WY)	2002	2002	2001	2002	2001	2001	2001	2002	2002	2002	2001	2001
MIN	6.49	6.39	8.60	14.8	9.30	15.7	12.0	8.46	7.87	6.89	3.38	6.44
(WY)	2002	2002	2002	2001	2002	2002	2002	2001	2001	2001	2002	2002

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

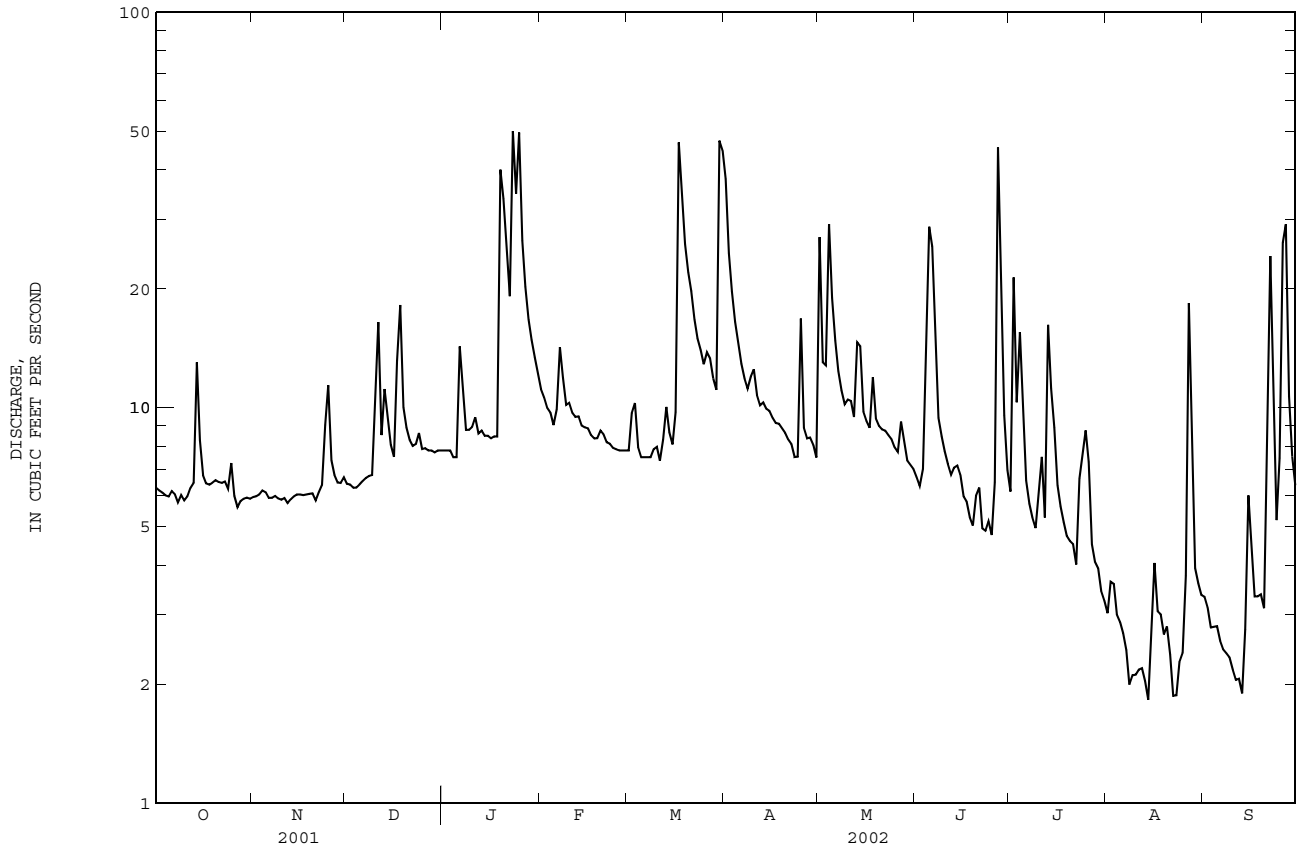
FOR 2002 WATER YEAR

WATER YEARS 2001 - 2002

ANNUAL TOTAL	3878.3	3466.5		
ANNUAL MEAN	10.63	9.497		9.497
HIGHEST ANNUAL MEAN				9.50 2002
LOWEST ANNUAL MEAN				9.50 2002
HIGHEST DAILY MEAN	74	Jan 19	50	Jan 23
LOWEST DAILY MEAN	4.0	Jul 16	1.8	Aug 14
ANNUAL SEVEN-DAY MINIMUM	4.4	Jul 12	2.1	Aug 8
MAXIMUM PEAK FLOW			156	Jun 27
MAXIMUM PEAK STAGE			3.92	Jun 27
INSTANTANEOUS LOW FLOW			1.2	Aug 23
ANNUAL RUNOFF (CFSM)	0.31		0.28	
ANNUAL RUNOFF (INCHES)	4.22		3.77	
10 PERCENT EXCEEDS	18		16	
50 PERCENT EXCEEDS	8.0		7.8	
90 PERCENT EXCEEDS	5.8		3.2	

e Estimated.

03451690 NEWFOUND CREEK NEAR ALEXANDER, NC--Continued



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 mi².

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 NGVD of 1929 (levels by Tennessee Valley Authority). Satellite telemetry at station.

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 fair. Considerable low flow regulation, at times, caused by small power plant at Ivy Dam, 0.4 mi upstream. Minimum discharge for period of record and current water year 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 ft³/s). An outstanding but lesser flood occurred in July, 1916 (stage and discharge unknown).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	36	48	45	121	53	769	162	51	52	29	35
2	41	37	43	54	107	59	518	116	47	56	28	27
3	40	37	41	51	97	77	379	141	47	184	33	33
4	38	36	40	42	95	61	294	219	48	112	27	26
5	37	36	38	51	82	54	239	205	92	87	24	23
6	37	35	38	56	83	57	202	163	138	52	24	21
7	38	34	38	71	135	57	177	140	241	43	21	19
8	36	34	40	50	160	55	159	124	93	42	20	19
9	35	34	39	62	135	55	149	111	74	41	18	19
10	34	34	53	58	128	57	177	100	65	40	19	17
11	36	33	140	74	124	52	144	93	58	62	18	16
12	37	33	77	67	112	59	133	84	53	65	19	16
13	43	33	77	61	104	76	134	100	57	75	17	16
14	60	33	88	54	95	79	130	149	113	91	16	16
15	82	33	69	54	90	69	126	91	67	66	16	45
16	52	34	60	49	86	89	115	80	58	52	33	43
17	46	32	71	49	80	1760	108	74	54	44	31	32
18	43	32	223	50	74	1400	109	120	49	44	22	27
19	42	35	133	268	72	695	103	100	47	41	22	24
20	41	33	95	443	71	452	96	84	46	37	23	26
21	41	32	79	240	74	369	91	80	45	42	20	32
22	40	32	69	172	67	282	91	76	42	35	17	56
23	39	32	64	982	64	228	84	71	39	75	15	132
24	38	42	73	765	64	187	79	67	48	67	15	49
25	40	65	62	861	60	164	139	64	42	86	21	51
26	38	56	57	467	59	172	97	60	51	50	32	130
27	35	45	54	308	58	229	88	58	77	42	181	261
28	35	43	57	227	55	178	84	66	69	36	121	168
29	36	41	52	180	---	165	80	57	53	34	40	91
30	36	41	47	154	---	583	74	54	48	32	32	66
31	36	---	46	134	---	887	---	54	---	30	29	---
TOTAL	1274	1113	2111	6199	2552	8760	5168	3163	2012	1815	983	1536
MEAN	41.10	37.10	68.10	200.0	91.14	282.6	172.3	102.0	67.07	58.55	31.71	51.20
MAX	82	65	223	982	160	1760	769	219	241	184	181	261
MIN	34	32	38	42	55	52	74	54	39	30	15	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2002,® BY WATER YEAR (WY)

	MEAN	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	75.66	90.31	130.4	212.9	259.3	309.3	238.2	154.6	109.8	96.58	86.47	60.14
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	20.5
(WY)	1953	1940	1940	1940	1941	1970	1942	1941	1953	1952	1956	1998

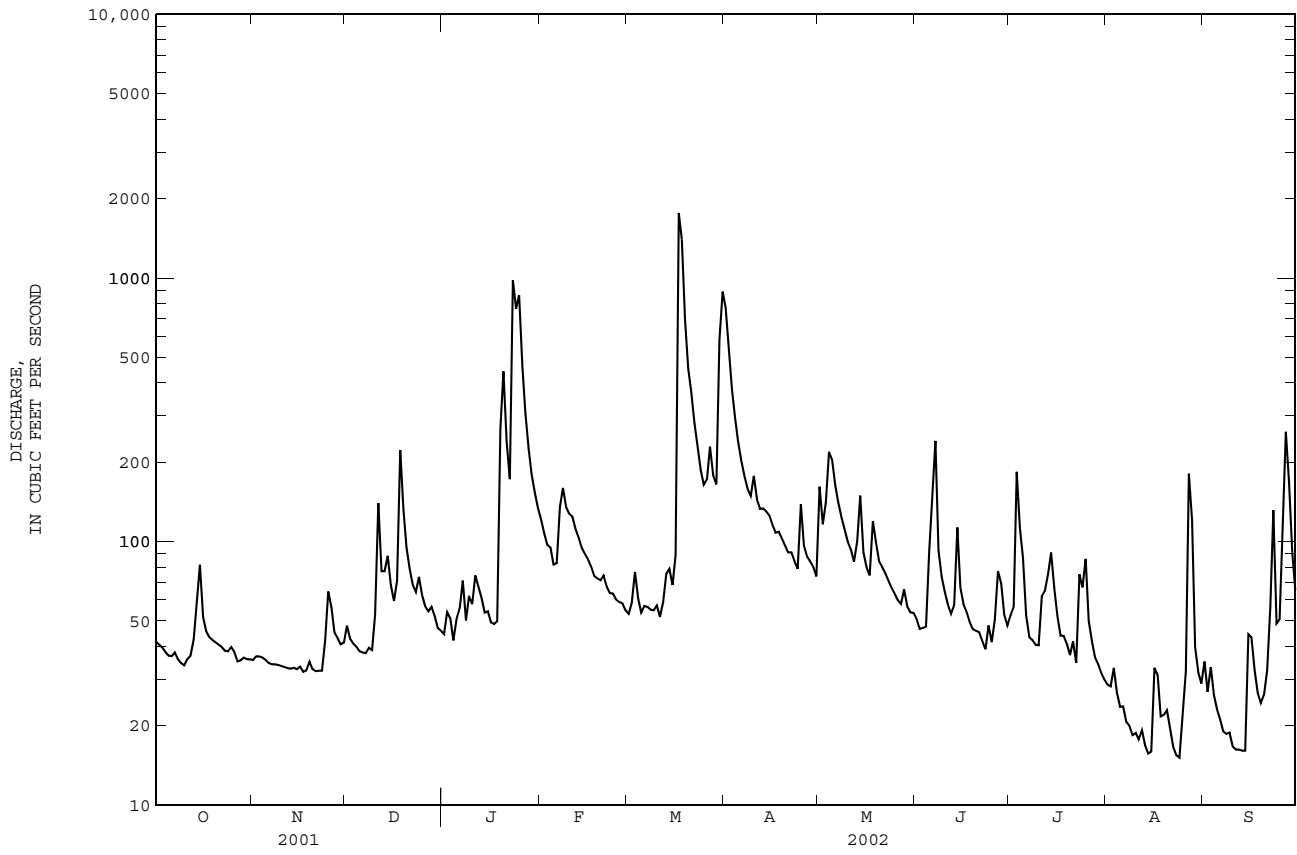
SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1934 - 2002®

ANNUAL TOTAL	36340	36686		
ANNUAL MEAN	99.56	100.5		151.2
HIGHEST ANNUAL MEAN				232
LOWEST ANNUAL MEAN				92.1
HIGHEST DAILY MEAN	1210	Jul 30	1760	Mar 17
LOWEST DAILY MEAN	32	Jan 11	15	Aug 23
ANNUAL SEVEN-DAY MINIMUM	33	Nov 17	17	Sep 8
MAXIMUM PEAK FLOW			4200	Mar 17
MAXIMUM PEAK STAGE			11.73	Mar 17
INSTANTANEOUS LOW FLOW			3.8*	Jul 2
10 PERCENT EXCEEDS	189		177	
50 PERCENT EXCEEDS	65		57	
90 PERCENT EXCEEDS	37		29	

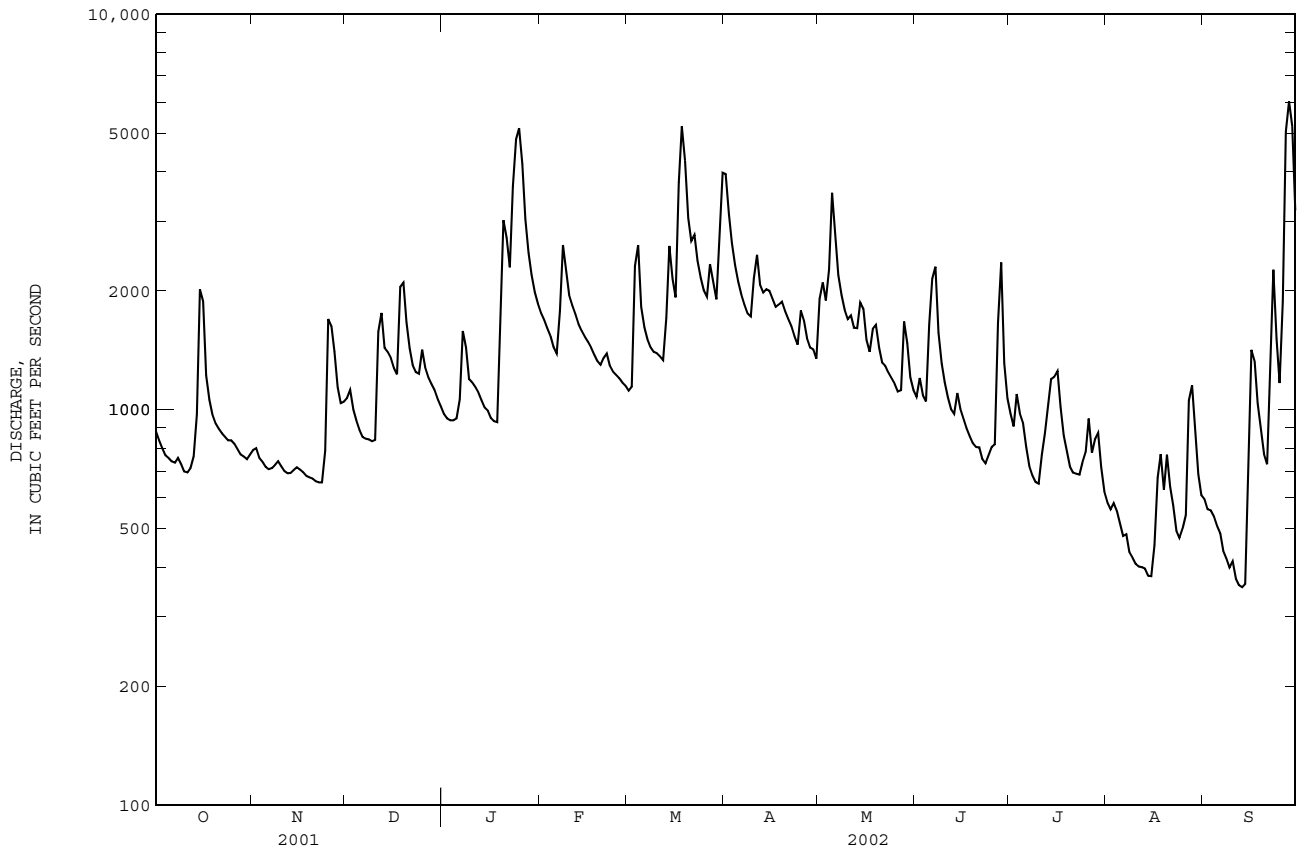
® See PERIOD OF RECORD.

* See REMARKS.

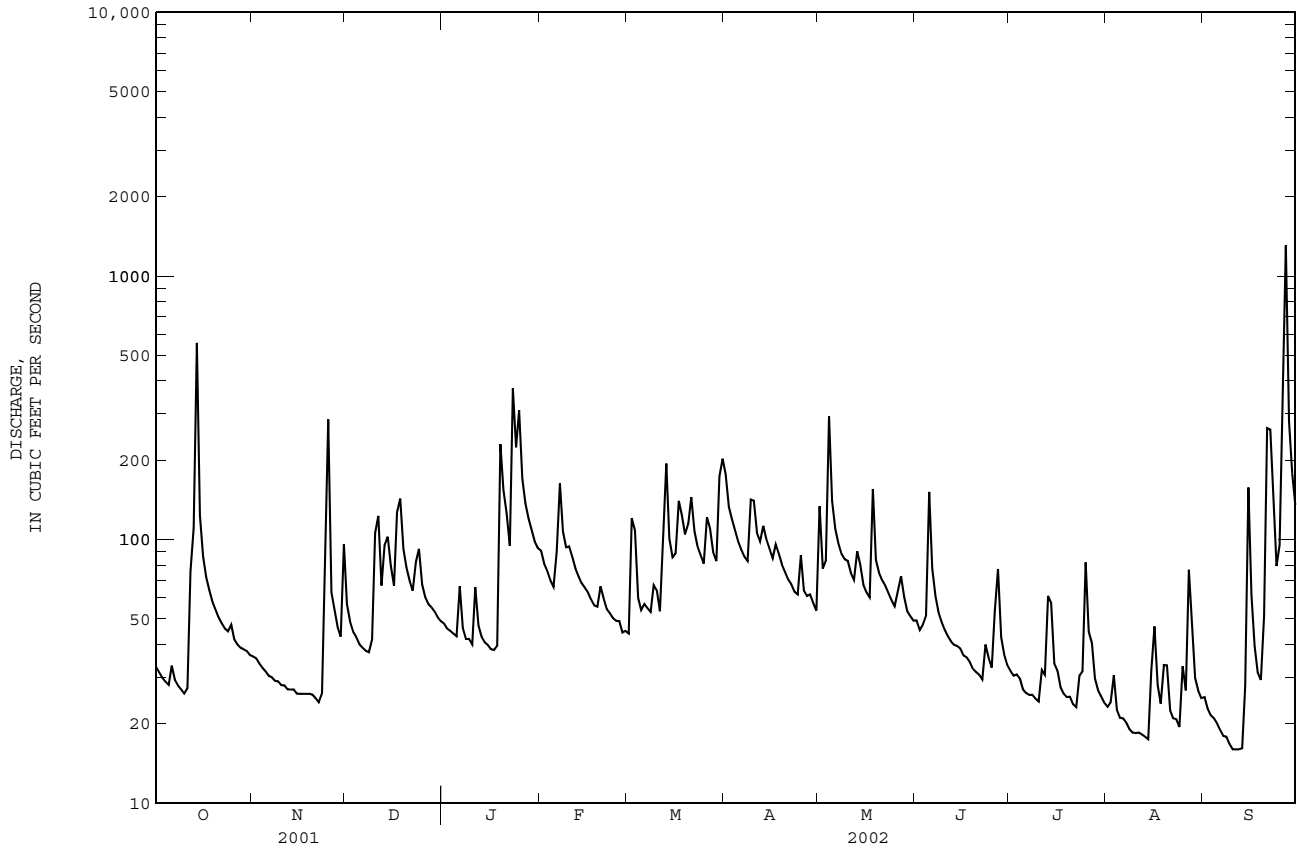
03453000 IVY RIVER NEAR MARSHALL, NC--Continued



03453500 FRENCH BROAD RIVER AT MARSHALL, NC--Continued



03455500 WEST FORK PIGEON RIVER ABOVE LAKE LOGAN NEAR HAZELWOOD, NC--Continued



TENNESSEE RIVER BASIN

03455773 LAKE LOGAN AT DAM NEAR HAZELWOOD, NC

LOCATION.--Lat 35°25'15", long 82°55'30", Haywood County, Hydrologic Unit 06010106, at Lake Logan Dam on West Fork Pigeon River near Hazelwood, and at river mi 7.0.

DRAINAGE AREA.--33.3 mi².

GAGE-HEIGHT RECORDS

PERIOD OF RECORD.--October 1997 to current year. Records for October 1986 to January 1991 and November 1995 to September 1997 are unpublished and available in the USGS District Office, Raleigh, NC.

GAGE.--Water-stage recorder. Datum of gage is 2,856.23 ft above NGVD of 1929. Satellite and telephone telemetry at station.

REMARKS.--Records good. Total capacity is 1,040 ft³/s-day (top of flashboards), all of which is usable. Filling began November 1931. (See station 0345577330).

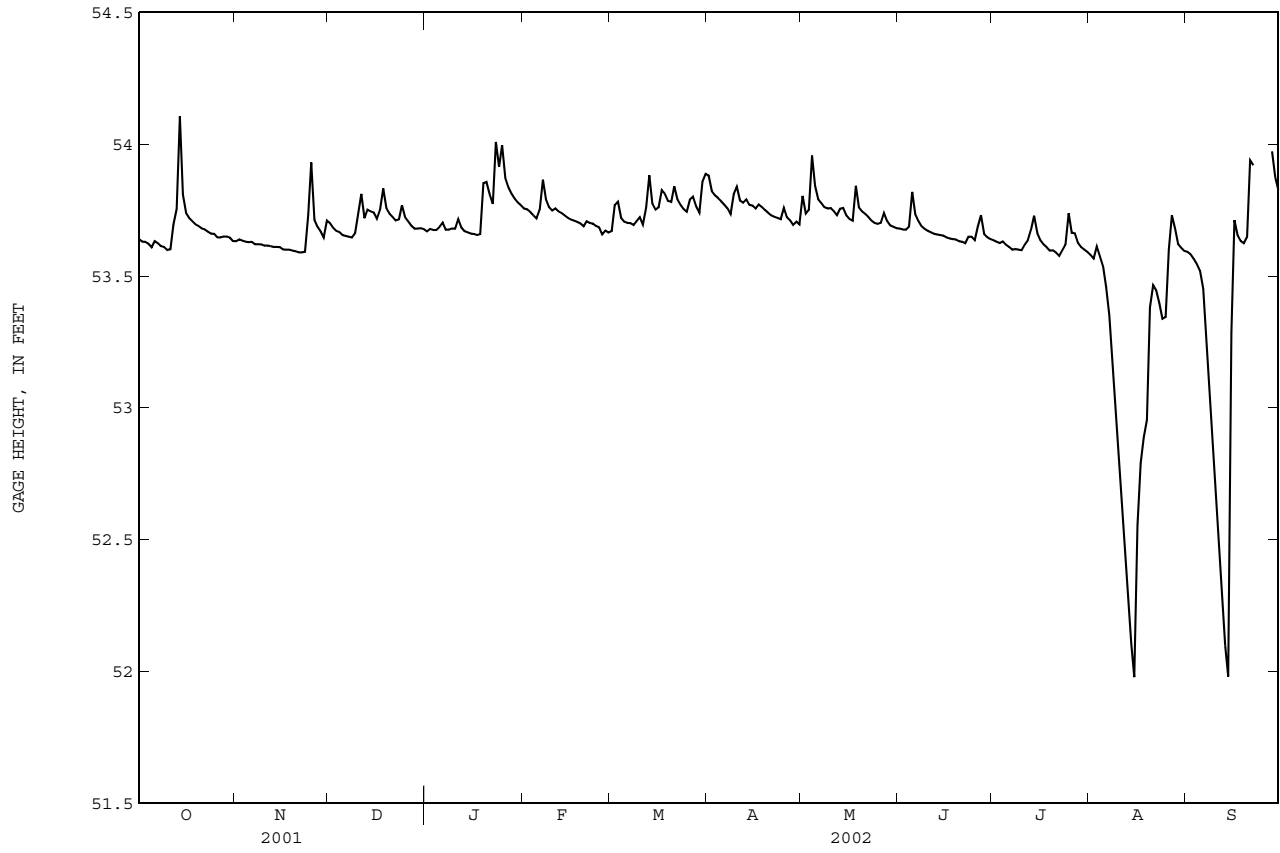
EXTREMES FOR PERIOD OF RECORD.--Maximum, 56.46 ft, Jan. 7, 1998; minimum, 46.42 ft, Sept. 21, 1998.

EXTREMES FOR CURRENT YEAR.--Maximum, not determined; minimum, 51.89 ft, Aug. 15.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53.64	53.63	53.70	53.67	53.76	53.67	53.88	53.80	53.68	53.64	53.58	53.59
2	53.63	53.64	53.68	53.68	53.75	53.77	53.82	53.74	53.68	53.63	53.57	53.58
3	53.63	53.63	53.67	53.67	53.74	53.78	53.81	53.75	53.68	53.62	53.61	53.56
4	53.62	53.63	53.67	53.67	53.73	53.72	53.80	53.96	53.69	53.63	53.58	53.54
5	53.61	53.63	53.66	53.69	53.72	53.71	53.78	53.84	53.82	53.62	53.54	53.52
6	53.63	53.63	53.65	53.70	53.75	53.70	53.77	53.79	53.74	53.61	53.46	53.45
7	53.62	53.62	53.65	53.68	53.87	53.70	53.76	53.78	53.71	53.60	53.35	53.29
8	53.61	53.62	53.65	53.68	53.79	53.69	53.73	53.76	53.69	53.60	53.19	53.10
9	53.61	53.62	53.66	53.68	53.76	53.71	53.81	53.76	53.68	53.60	53.02	52.89
10	53.60	53.62	53.74	53.68	53.75	53.72	53.84	53.76	53.67	53.60	52.88	52.67
11	53.60	53.62	53.81	53.72	53.76	53.70	53.79	53.75	53.67	53.62	52.73	52.45
12	53.70	53.61	53.72	53.68	53.75	53.76	53.78	53.73	53.66	53.64	52.54	52.27
13	53.75	53.61	53.75	53.67	53.74	53.88	53.79	53.76	53.66	53.68	52.33	52.10
14	54.11	53.61	53.75	53.67	53.73	53.77	53.77	53.76	53.66	53.73	52.11	51.98
15	53.81	53.61	53.74	53.66	53.72	53.75	53.77	53.73	53.65	53.66	51.98	53.29
16	53.74	53.60	53.72	53.66	53.71	53.76	53.76	53.72	53.65	53.64	52.55	53.71
17	53.72	53.60	53.75	53.66	53.71	53.83	53.77	53.71	53.64	53.62	52.79	53.65
18	53.71	53.60	53.83	53.66	53.71	53.81	53.76	53.84	53.64	53.61	52.89	53.63
19	53.70	53.60	53.76	53.85	53.70	53.78	53.75	53.76	53.64	53.60	52.95	53.62
20	53.69	53.59	53.74	53.86	53.69	53.78	53.74	53.74	53.63	53.60	53.38	53.65
21	53.68	53.59	53.72	53.81	53.71	53.84	53.73	53.74	53.63	53.59	53.47	53.94
22	53.68	53.59	53.71	53.77	53.70	53.79	53.72	53.72	53.62	53.58	53.45	53.92
23	53.67	53.59	53.72	54.01	53.70	53.77	53.72	53.71	53.65	53.60	53.40	---
24	53.66	53.73	53.77	53.91	53.69	53.75	53.72	53.70	53.65	53.62	53.34	---
25	53.66	53.93	53.72	54.00	53.68	53.74	53.76	53.70	53.64	53.74	53.34	---
26	53.65	53.71	53.71	53.87	53.66	53.79	53.72	53.70	53.69	53.66	53.60	---
27	53.65	53.69	53.69	53.84	53.67	53.80	53.71	53.74	53.73	53.66	53.73	---
28	53.65	53.67	53.68	53.81	53.66	53.76	53.69	53.71	53.66	53.63	53.68	53.97
29	53.65	53.65	53.68	53.79	---	53.74	53.71	53.69	53.65	53.61	53.62	53.88
30	53.65	53.71	53.68	53.78	---	53.86	53.70	53.69	53.64	53.60	53.61	53.83
31	53.63	---	53.68	53.77	---	53.89	---	53.68	---	53.59	53.60	---
MEAN	53.68	53.64	53.71	53.75	53.73	53.77	53.76	53.75	53.67	53.63	53.19	---
MAX	54.11	53.93	53.83	54.01	53.87	53.89	53.88	53.96	53.82	53.74	53.73	---
MIN	53.60	53.59	53.65	53.66	53.66	53.67	53.69	53.68	53.62	53.58	51.98	---

03455773 LAKE LOGAN AT DAM NEAR HAZELWOOD, NC--Continued



PRECIPITATION RECORDS

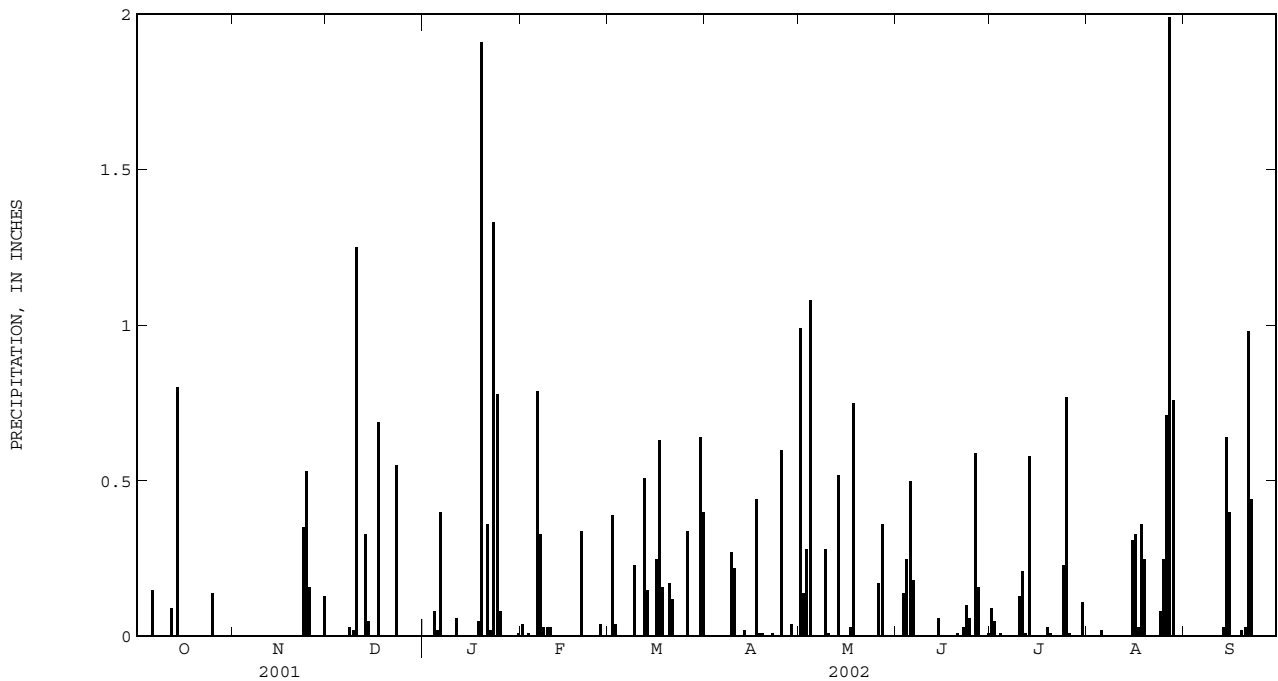
PERIOD OF RECORD.--December 1998 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Satellite and telephone telemetry at station.

REMARKS.--Gage is operated in cooperation with Blue Ridge Paper Products, Inc. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.99	0.00	0.09	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.14	0.00	0.05	0.00	0.00
3	0.00	0.00	0.00	0.00	0.01	0.04	0.00	0.28	0.14	0.00	0.00	0.00
4	0.00	0.00	0.00	0.08	0.00	0.00	0.00	1.08	0.25	0.01	0.00	0.00
5	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.50	0.00	0.02	0.00
6	0.15	0.00	0.00	0.40	0.79	0.00	0.00	0.00	0.18	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.02	0.00	0.03	0.23	0.27	0.28	0.00	0.00	0.00	0.00
10	0.00	0.00	1.25	0.00	0.03	0.00	0.22	0.01	0.00	0.13	0.00	0.00
11	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00
12	0.09	0.00	0.00	0.00	0.00	0.51	0.00	0.00	0.00	0.01	0.00	0.00
13	0.00	0.00	0.33	0.00	0.00	0.15	0.02	0.52	0.00	0.58	0.00	0.03
14	0.80	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.06	---	0.00	0.64
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.31	0.40
16	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	---	0.33	0.00
17	0.00	0.00	0.69	0.00	0.00	0.63	0.44	0.03	0.00	0.00	0.03	---
18	0.00	0.00	0.00	0.05	0.00	0.16	0.01	0.75	0.00	0.00	0.36	---
19	0.00	0.00	0.00	1.91	0.00	0.00	0.01	0.00	0.00	0.03	0.25	0.02
20	0.00	0.00	0.00	0.00	0.34	0.17	0.00	0.00	0.01	0.01	0.00	0.03
21	0.00	0.00	0.00	0.36	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.98
22	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.03	0.00	0.00	0.44
23	0.00	0.35	0.55	1.33	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00
24	0.00	0.53	0.00	0.78	0.00	0.00	0.00	0.00	0.06	0.23	0.08	0.00
25	0.14	0.16	0.00	0.08	0.00	0.00	0.60	0.00	0.00	0.77	0.25	---
26	0.00	0.00	0.00	0.00	0.04	0.34	0.00	0.17	0.59	0.01	0.71	---
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.16	0.00	1.99	---
28	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.76	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.13	0.00	0.00	---	0.64	0.00	0.00	0.01	0.11	0.00	0.00
31	0.00	---	0.00	0.01	---	0.40	---	0.00	---	0.00	0.00	---
TOTAL	1.18	1.17	2.92	5.10	1.64	4.03	1.62	4.61	2.09	---	5.09	---





Gaging station at Mills River near Mills River, North Carolina.

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 mi².

PERIOD OF RECORD.--March 1988 to current year.

REVISED RECORDS.--WDR NC-95-1: 1994 (M).

GAGE.--Water-stage recorder and crest-stage gages. Elevation of gage is 2,839 ft above NGVD of 1929, from topographic map. Satellite and telephone telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are 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 ft³/s by logarithmic plotting. Minimum discharge for current water year also occurred Nov. 20, 21, 22, 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	32	68	e54	104	e45	261	171	52	33	21	28
2	32	32	55	e54	91	142	184	90	48	30	22	26
3	32	30	50	52	84	149	157	93	50	29	33	24
4	33	28	47	e52	78	81	136	390	57	31	23	23
5	33	27	44	e52	69	e73	123	190	199	25	22	22
6	38	25	43	70	96	71	111	137	92	23	23	26
7	35	25	41	53	217	68	104	118	71	22	25	31
8	31	24	41	e48	129	65	96	104	59	21	27	30
9	28	23	47	49	108	80	165	98	53	21	25	29
10	29	22	121	57	109	83	195	98	49	21	24	29
11	28	21	187	83	99	65	127	87	46	29	26	26
12	100	21	84	59	89	113	116	83	43	36	28	24
13	163	21	118	51	82	267	136	104	42	63	28	25
14	722	21	130	48	77	132	118	100	41	84	28	28
15	141	20	101	46	74	107	109	76	40	38	28	117
16	91	20	82	44	71	114	98	70	37	36	26	107
17	75	19	156	43	65	188	110	66	36	28	24	56
18	66	19	210	45	61	170	102	200	35	25	24	43
19	58	19	117	304	62	136	91	99	32	23	24	40
20	52	18	97	244	76	144	85	86	31	22	23	50
21	48	17	85	172	68	204	81	80	29	21	22	411
22	46	17	78	125	60	140	75	76	27	21	22	384
23	45	18	97	502	57	119	69	71	39	25	22	233
24	45	95	129	305	54	110	67	66	39	29	23	132
25	47	396	84	437	53	101	102	61	33	113	23	158
26	40	75	74	230	e49	153	71	65	60	53	32	640
27	38	60	66	177	46	150	69	93	95	52	123	1660
28	37	52	67	147	e44	110	68	71	49	34	80	350
29	36	48	64	128	---	101	62	59	39	28	41	205
30	34	112	58	114	---	232	58	55	34	24	34	147
31	33	---	56	107	---	285	---	52	---	22	28	---
TOTAL	2270	1357	2697	3952	2272	3998	3346	3209	1557	1062	954	5104
MEAN	73.23	45.23	87.00	127.5	81.14	129.0	111.5	103.5	51.90	34.26	30.77	170.1
MAX	722	396	210	502	217	285	261	390	199	113	123	1660
MIN	28	17	41	43	44	45	58	52	27	21	21	22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2002, BY WATER YEAR (WY)

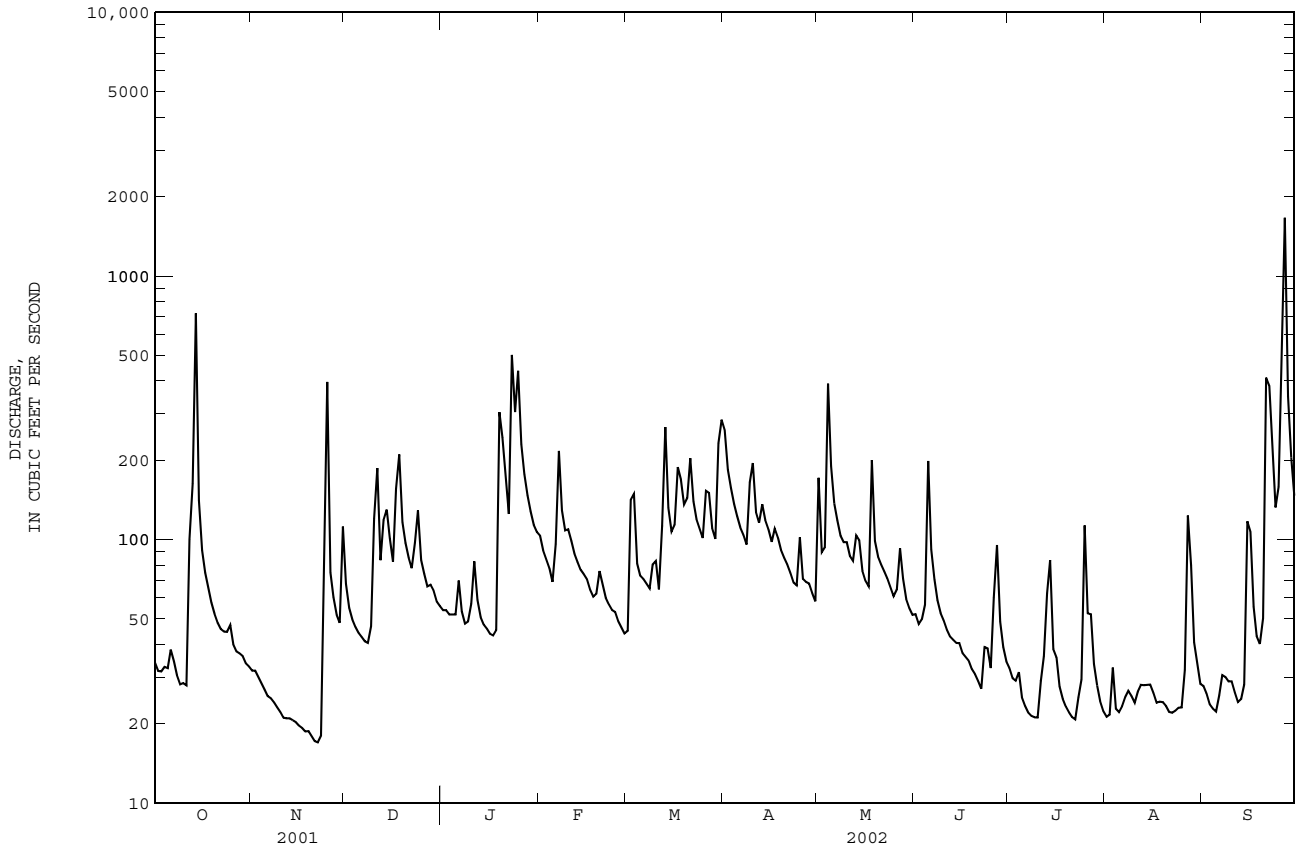
	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02
MEAN	83.02	96.89	114.3	175.9	187.1	195.6	153.0	113.2	95.81	64.37	75.61	65.53			
MAX	262	265	239	314	360	309	268	193	210	209	220	170			
(WY)	1996	1993	1993	1996	1990	1990	1994	1990	1989	1989	1994	2002			
MIN	18.5	34.7	52.1	95.1	81.1	62.6	72.2	48.1	40.0	31.3	24.7	17.3			
(WY)	1999	1999	1989	2000	2002	1988	1995	2001	1988	1993	1998	1998			

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1988 - 2002

ANNUAL TOTAL	26704	31778	
ANNUAL MEAN	73.16	87.06	120.3
HIGHEST ANNUAL MEAN			157
LOWEST ANNUAL MEAN			69.4
HIGHEST DAILY MEAN	886	Jan 19	1660
LOWEST DAILY MEAN	15	Jul 24	17
ANNUAL SEVEN-DAY MINIMUM	18	Jul 13	18
MAXIMUM PEAK FLOW			2800
MAXIMUM PEAK STAGE			5.43
INSTANTANEOUS LOW FLOW			17*
10 PERCENT EXCEEDS	131		160
50 PERCENT EXCEEDS	49		58
90 PERCENT EXCEEDS	24		23

e Estimated.
* See REMARKS.

0345577330 WEST FORK PIGEON RIVER NEAR RETREAT, NC--Continued



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 mi².

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 NGVD of 1929 (levels by Tennessee Valley Authority). Satellite and telephone telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Considerable regulation, at times, caused by Lake Logan (station 03455773).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	56	76	e66	140	78	256	177	81	45	30	30
2	41	55	66	62	127	141	198	123	77	43	28	30
3	39	55	61	64	119	172	178	128	81	43	32	29
4	39	54	58	60	113	109	164	361	95	45	28	28
5	39	53	56	e60	103	97	154	222	185	39	27	27
6	42	51	54	78	119	96	144	174	110	37	28	28
7	42	51	53	67	229	92	137	156	94	35	28	30
8	39	50	52	58	165	89	130	142	83	35	29	30
9	38	49	57	60	145	98	171	133	77	34	28	30
10	39	49	93	64	143	108	202	132	71	35	27	29
11	38	48	177	83	134	90	157	119	68	38	28	28
12	66	47	88	69	124	126	147	114	65	49	29	27
13	96	47	108	62	116	241	160	127	64	57	29	28
14	589	46	119	59	110	155	148	135	62	80	29	32
15	152	46	101	59	107	132	139	108	62	46	29	70
16	101	46	86	56	103	137	130	102	58	43	33	81
17	86	45	120	56	97	192	140	98	55	38	30	44
18	79	45	195	58	93	190	138	200	55	36	30	37
19	73	45	117	255	93	169	126	127	52	34	32	36
20	70	44	99	260	105	165	119	115	50	32	31	37
21	66	43	90	181	101	206	114	109	50	32	28	253
22	63	43	84	146	91	166	111	106	49	32	27	245
23	63	44	94	505	88	150	107	100	55	34	27	154
24	62	100	131	342	86	139	105	95	57	38	27	80
25	67	345	91	483	84	129	130	90	51	87	29	86
26	61	91	84	280	e81	157	100	88	71	55	33	456
27	59	73	76	223	78	169	96	120	89	48	89	1640
28	59	66	77	192	e75	136	98	100	60	37	69	369
29	59	60	73	172	---	128	93	88	51	33	38	227
30	59	100	69	157	---	210	89	83	47	31	33	176
31	58	---	67	146	---	250	---	81	---	31	31	---
TOTAL	2427	1947	2772	4483	3169	4517	4181	4053	2125	1302	1016	4397
MEAN	78.29	64.90	89.42	144.6	113.2	145.7	139.4	130.7	70.83	42.00	32.77	146.6
MAX	589	345	195	505	229	250	256	361	185	87	89	1640
MIN	38	43	52	56	75	78	89	81	47	31	27	27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2002, BY WATER YEAR (WY)

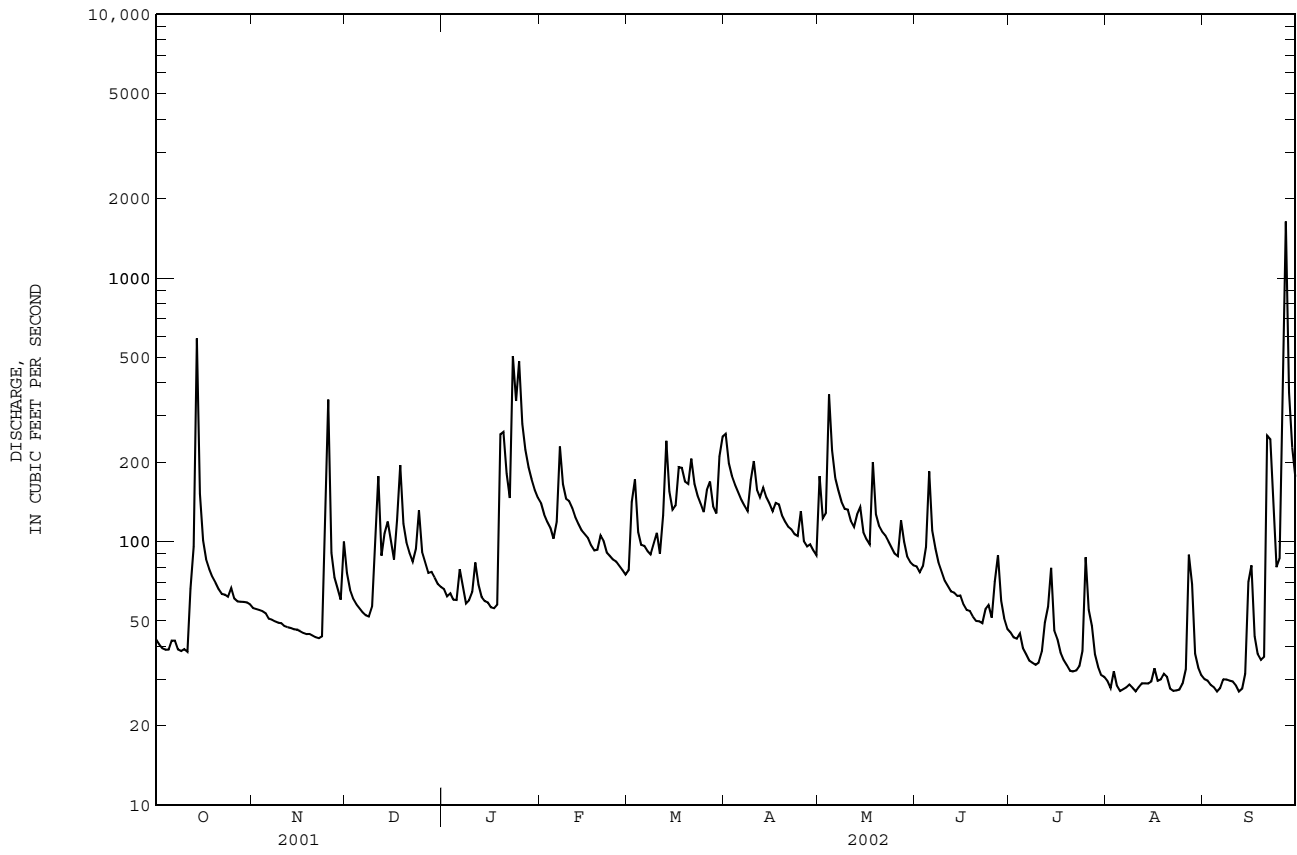
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	91.99	122.2	162.3	206.8	251.4	264.9	221.8	163.0	114.7	82.16	88.07	72.67											
MAX	336	341	334	450	522	461	481	368	287	281	317	207											
(WY)	1996	1993	1984	1998	1998	1997	1983	1984	1992	1989	1994	1989											
MIN	30.5	43.0	83.5	53.5	102	83.6	83.5	81.0	53.0	42.0	29.3	27.6											
(WY)	1999	1982	1989	1981	1986	1988	1986	2001	1988	2002	1993	1998											

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1981 - 2002

ANNUAL TOTAL	36193	36389		
ANNUAL MEAN	99.16	99.70	155.1	
HIGHEST ANNUAL MEAN			211	1996
LOWEST ANNUAL MEAN			87.5	1988
HIGHEST DAILY MEAN	984	Jan 19	1640	Sep 27
LOWEST DAILY MEAN	35	Jul 24	27	Aug 5
ANNUAL SEVEN-DAY MINIMUM	37	Sep 13	28	Aug 4
MAXIMUM PEAK FLOW			2670	Sep 27
MAXIMUM PEAK STAGE			5.38	Sep 27
INSTANTANEOUS LOW FLOW			26	Aug 9
10 PERCENT EXCEEDS	182		175	
50 PERCENT EXCEEDS	70		78	
90 PERCENT EXCEEDS	41		31	

e Estimated.

03456100 WEST FORK PIGEON RIVER AT BETHEL, NC--Continued



0345638607 UNNAMED TRIBUTARY TO PISGAH CREEK AT FLAT LAUREL GAP, NC

LOCATION.--Lat 35°24'19", long 82°45'23", Haywood County, Hydrologic Unit 06010106, on right bank at downstream side of culvert on path dividing Mount Pisgah Campground, 0.2 mi north of Pisgah Inn, 1.4 mi south of Pisgah Mountain.

DRAINAGE AREA.--0.07 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 2001 to September 2002

GAGE.--Water-stage recorder. Datum of gage is 4,836.97 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges and those above 6.0 ft³/s, which are poor. Maximum discharge for current water year from rating curve extended above 6.0 ft³/s by logarithmic plotting. Minimum discharge for current water year also occurred several days in September.

DISCHARGE, CUBIC FEET PER SECOND, FOR PERIOD NOVEMBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	e0.23	0.28	0.42	0.34	0.31	e0.44	0.52	0.25	0.16	0.12	0.08
2	---	e0.23	0.25	0.38	0.34	0.63	0.40	0.32	0.24	0.18	0.12	0.08
3	---	e0.22	0.25	0.40	0.34	0.45	0.40	0.31	0.24	0.16	0.12	0.08
4	---	e0.22	0.23	0.38	0.33	0.36	0.40	0.74	0.23	0.15	0.11	0.06
5	---	e0.21	0.23	0.40	0.34	0.35	0.39	0.36	0.35	0.14	0.09	0.06
6	---	e0.21	0.21	0.42	0.38	0.34	0.39	0.34	0.26	0.12	0.09	0.06
7	---	e0.21	0.18	0.40	0.52	0.34	0.38	0.31	0.24	0.12	0.09	0.06
8	---	e0.20	0.18	0.40	0.37	0.34	0.40	0.32	0.23	0.11	0.08	0.06
9	---	e0.20	0.18	0.42	0.37	0.37	0.74	0.32	0.23	0.11	0.08	0.06
10	---	0.20	0.64	0.45	0.43	0.34	0.50	0.31	0.22	0.12	0.08	0.06
11	---	0.21	0.45	0.55	0.37	0.33	0.43	0.31	0.21	0.12	0.08	0.06
12	---	0.22	0.37	0.47	0.34	0.47	0.42	0.31	0.20	0.12	0.08	0.06
13	---	0.23	0.50	0.43	0.37	0.78	0.51	0.35	0.20	0.23	0.08	0.07
14	---	0.23	0.56	0.40	0.32	0.38	0.46	0.30	0.20	0.15	0.08	0.22
15	---	0.23	0.44	0.41	0.32	0.37	0.43	0.28	0.20	0.14	0.09	0.41
16	---	0.23	0.40	0.43	0.31	e0.37	0.40	0.28	0.20	0.25	0.11	0.13
17	---	0.23	0.96	0.44	0.31	0.59	0.35	0.28	0.20	0.28	0.08	0.10
18	---	0.23	1.0	0.44	0.31	0.47	0.34	0.38	0.20	0.26	0.35	0.09
19	---	0.23	0.83	1.2	0.31	0.40	0.34	0.28	0.20	0.25	0.11	0.08
20	---	0.23	0.75	0.65	0.35	0.44	0.34	0.28	0.19	0.18	0.07	0.31
21	---	0.23	0.72	0.80	0.34	0.46	0.34	0.28	0.16	0.10	0.06	0.43
22	---	0.21	0.70	0.54	0.34	0.39	0.33	0.28	0.16	0.10	0.06	0.73
23	---	0.38	1.0	1.2	0.33	0.38	0.32	0.28	0.19	0.13	0.06	0.20
24	---	0.67	1.0	0.95	0.32	0.37	0.31	0.26	0.17	0.48	0.06	0.13
25	---	0.84	0.95	0.99	0.31	0.37	0.38	0.26	0.16	0.16	0.06	0.23
26	---	0.32	0.83	0.67	0.31	e0.44	0.31	0.29	0.19	0.13	0.06	1.7
27	---	0.28	0.76	0.63	0.31	0.39	0.31	0.30	0.18	0.12	0.28	3.1
28	---	0.26	0.69	0.61	0.31	0.37	0.31	0.26	0.16	0.13	0.08	0.59
29	---	0.25	0.62	0.57	---	0.37	0.31	0.25	0.16	0.14	0.07	0.47
30	---	0.38	0.55	0.45	---	0.54	0.30	0.25	0.16	0.13	0.07	0.42
31	---	---	0.49	0.35	---	0.53	---	0.25	---	0.12	0.08	---
TOTAL	---	8.22	17.20	17.25	9.64	13.04	11.68	9.86	6.18	5.09	3.05	10.19
MEAN	---	0.274	0.555	0.556	0.344	0.421	0.389	0.318	0.206	0.164	0.098	0.340
MAX	---	0.84	1.0	1.2	0.52	0.78	0.74	0.74	0.35	0.48	0.35	3.1
MIN	---	0.20	0.18	0.35	0.31	0.31	0.30	0.25	0.16	0.10	0.06	0.06
CFSM	---	3.91	7.93	7.95	4.92	6.01	5.56	4.54	2.94	2.35	1.41	4.85
IN.	---	4.37	9.14	9.17	5.12	6.93	6.21	5.24	3.28	2.70	1.62	5.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2002, BY WATER YEAR (WY)

MEAN	---	0.274	0.555	0.556	0.344	0.421	0.389	0.318	0.206	0.164	0.098	0.340
MAX	---	0.27	0.55	0.56	0.34	0.42	0.39	0.32	0.21	0.16	0.098	0.34
(WY)	---	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002
MIN	---	0.27	0.55	0.56	0.34	0.42	0.39	0.32	0.21	0.16	0.098	0.34
(WY)	---	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002

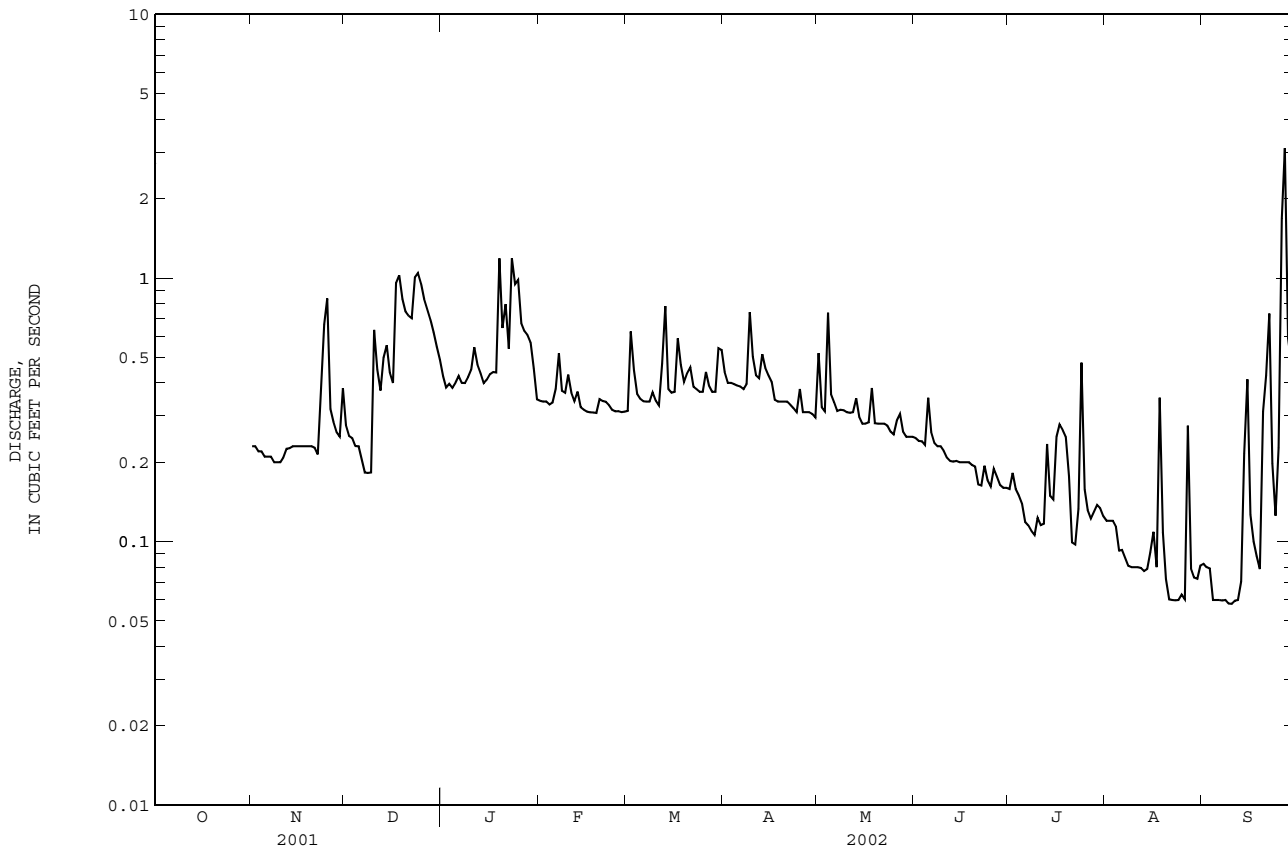
SUMMARY STATISTICS

FOR PERIOD NOVEMBER 2001 TO SEPTEMBER 2002

INSTANTANEOUS PEAK FLOW 9.7* Sep 26
 INSTANTANEOUS PEAK STAGE 1.89 Sep 26
 INSTANTANEOUS LOW FLOW 0.05* Aug 23

e Estimated.

0345638607 UNNAMED TRIBUTARY TO PISGAH CREEK AT FLAT LAUREL GAP, NC--Continued



0345638607 UNNAMED TRIBUTARY TO PISGAH CREEK AT FLAT LAUREL GAP, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February to September 2002.

REMARKS.--Station operated in cooperation with the National Park Service to define baseline water quality of a small wetland in the Blue Ridge Parkway.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, (PER-CENT SATURATION) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (00301)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD FET FIELD (MG/L AS CACO3) (00410)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	
FEB 23...	1200	--	--	--	--	--	--	--	--	--	--	--	--	
APR 23...	1155	.33	9.0	77	6.1	6	8.2	.65	.317	.37	.64	3	.60	
SEP 11...	1130	.07	8.2	75	6.3	7	13.2	.66	.345	.39	.77	3	.60	
Date	Time	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS ST02) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	FECAL COLIFORM, MFC MF, WATER (COL/100 ML) (31616)	ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)
FEB 23...	--	--	--	--	--	--	--	--	--	76	--	--	--	--
APR 23...	<.1	4.37	.5	<.04	<.10	.12	<.008	<.02	<.06	--	30	<2	5.0	
SEP 11...	<.1	5.15	.3	<.04	E.06	.07	<.008	<.02	<.06	110	20	<2	5.9	
Date	Time	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, 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)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY, DIS-SOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)
FEB 23...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 23...	<10	<8	<10	<13	<6	30	<.08	5.4	<.01	<50	<30	<2	<9	
SEP 11...	<10	<8	<10	<13	<6	80	E.05	6.5	<.01	<50	<30	<2	<9	
Date	Time	STRONTIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANADIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	1,4-DICHLOROBENZENE DISSOLV (UG/L) (34572)	1METHYLNAPHTHALENE WATER, FILTERD REC (UG/L) (62054)	26DIMETHYLNAPHTHALENE WATER, FILTERD REC (UG/L) (62055)	2METHYLNAPHTHALENE WATER, FILTERD REC (UG/L) (62056)	3-BETACOPROSTANOL, WATER, FILTERD REC (UG/L) (62057)	3METHYL 1 (H) - INDOL, WATER, FILTERD REC (UG/L) (62058)	3-TERT-BHA, WATER, FILTERD REC (UG/L) (62059)	4-CUMYL, WATER, FILTERD REC (UG/L) (62060)	4-OCTYL, WATER, FILTERD REC (UG/L) (62061)	4-TERT-OCTYL, PHENOL, WATER, FILTERD REC (UG/L) (62062)
FEB 23...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 23...	5.4	<8	<24	<.5	<.5	<.5	<.5	<2	<1	<5	<1	<1	<1	
SEP 11...	5.9	<8	<24	<.5	<.5	<.5	<.5	<2	<1	<5	<1	<1	<1	
Date	Time	5METHYL 1HBENZOTRIAZLE WATER, FILTERD REC (UG/L) (62063)	ACETOPHENONE WATER, FILTERD REC (UG/L) (62064)	AHT NAPHTHALENE WATER, FILTERD REC (UG/L) (62065)	ANTHRACENE DISSOLV (UG/L) (34221)	ANTHRACENE WATER, FILTERD REC (UG/L) (62066)	BENZOPHENONE A-PYRENE DISSOLV (UG/L) (34248)	BENZOPHENONE WATER, FILTERD REC (UG/L) (62067)	BETA-SITOSTEROL, WATER, FILTERD REC (UG/L) (62068)	BISPHENOL A, WATER, FILTERD REC (UG/L) (62069)	BISPHENOL A-D3 SURRGTE S2033/8033 WAT FLT PERCENT (99583)	BROMOMACIL, WATER, DISS, FORM REC (UG/L) (04029)	BROMOFORM DISSOLV (UG/L) (34288)	CAF-FEINE, WATER, FILTERD REC (UG/L) (50305)
FEB 23...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 23...	<2	<.5	<.5	<.5	<.5	<.5	<.5	<2	<1	45.6	<.5	<.5	<.5	
SEP 11...	<2	<.5	<.5	<.5	<.5	<.5	<.5	<2	<1	.0	<.5	<.5	<.5	

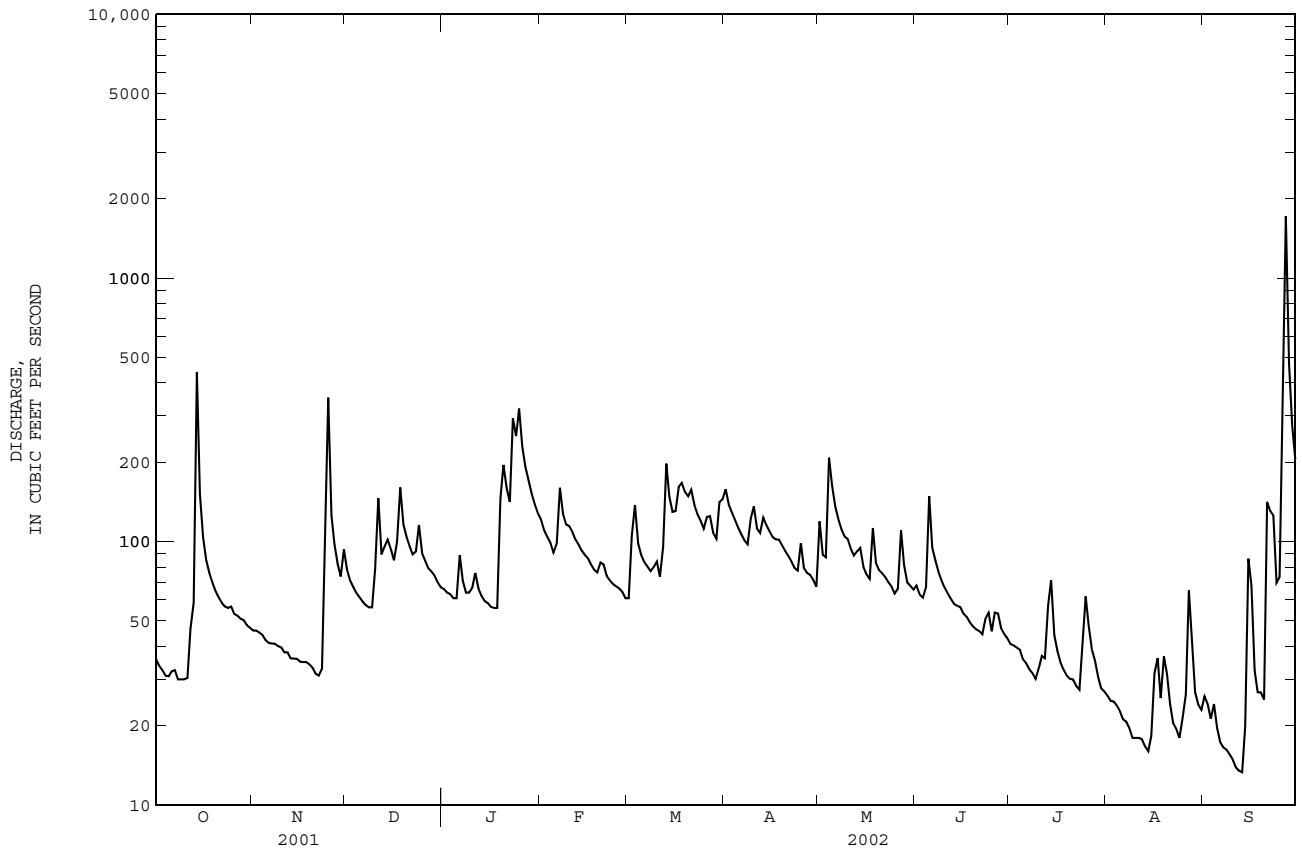
0345638607 UNNAMED TRIBUTARY TO PISGAH CREEK AT FLAT LAUREL GAP, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CAFFE- INE-C13 SURRGTE S2033/ 8033 WAT FLT PERCENT (99584)	CAMPHOR WATER, FLTRD REC (UG/L) (62070)	CAR- BARYL WATER 0.7 U GF, REC (UG/L) (82680)	CARBA- ZOLE, WATER, FLTRD REC (UG/L) (62071)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CHOLE- TEROL, WATER, FLTRD REC (UG/L) (62072)	COT- ININE, WATER, FLTRD REC (UG/L) (62005)	DCFLBI- PHENYL, SURRGTE S2033/ 8033 WAT FLT PERCENT (99585)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	D-LIMO- NENE, WATER, FLTRD REC (UG/L) (62073)	FLUORO- ANTHENE D10 SUR S2033/ 8033 WAT FLT PERCENT (99586)	HHMCP- BENZO- PYRAN, WATER, FLTRD REC (UG/L) (62075)	
FEB 23...	--	--	--	--	--	--	--	--	--	--	--	--	
APR 23...	82.9	M	<1	<.5	<.5	<2	<1	18.8	<.5	<.5	<.5	83.1	<.5
SEP 11...	81.6	<.5	<1	<.5	<.5	<2	<1	80.8	<.5	<.5	<.5	73.7	<.5
Date	INDOLE, WATER, FLTRD REC (UG/L) (62076)	ISOBOR- NEOL, WATER, FLTRD REC (UG/L) (62077)	ISO- PHORONE DISSOLV REC (UG/L) (34409)	ISO- PROPYL BENZENE WATER, FLTRD REC (UG/L) (62078)	ISO- QUIN- OLINE, WATER, FLTRD REC (UG/L) (62079)	MENTHOL WATER, FLTRD REC (UG/L) (62080)	METAL- AXYL WATER, FLTRD REC (UG/L) (50359)	METHYL SALICY- LATE, WATER, FLTRD REC (UG/L) (62081)	METO- LACHLOR WATER DISSOLV REC (UG/L) (39415)	DEET, WATER, FLTRD REC (UG/L) (62082)	NAPHTH- ALENE DISSOLV REC (UG/L) (34443)	NONYL- PHENOL, DIETHOX WATER, FLTRD REC (UG/L) (62083)	DI- ETHOXY- OCTYL- PHENOL WAT FLT REC (UG/L) (61705)
FEB 23...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 23...	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<5	<1
SEP 11...	<.5	<.5	<.5	<.5	<.5	<.5	<.5	E.1	<.5	E.1	<.5	<5	<1
Date	MONO- ETHOXY- OCTYL- PHENOL WAT FLT REC (UG/L) (61706)	PARA- CRESOL, WATER, FLTRD REC (UG/L) (62084)	PARA- NONYL- PHENOL, WATER, FLTRD REC (UG/L) (62085)	PENTA- CHLORO- PHENOL DISSOLV REC (UG/L) (34459)	PHENAN - THREN EDISSOL V(UG/L) (UG/L) (34462)	PHENOL WATER FILTRD REC (UG/L) (34466)	PRO- METON, WATER, DISS REC (UG/L) (04037)	PYRENE DISSOLV REC (UG/L) (34470)	STIGMA- STANOL, WATER, FLTRD REC (UG/L) (62086)	TETRA- CHLORO- ETHY- LENE DISSOLV REC (UG/L) (34476)	FYROL CEF, WATER, FLTRD REC (UG/L) (62087)	FYROL PCF, WATER, FLTRD REC (UG/L) (62088)	TRIBUTL PHOS- PHATE, WATER, FLTRD REC (UG/L) (62089)
FEB 23...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 23...	<1	<1	<5	<2	<.5	<.5	<.5	<.5	<2	<.5	<.5	<.5	<.5
SEP 11...	<1	<1	<5	<2	<.5	<.5	<.5	<.5	<2	<.5	<.5	<.5	E.3
Date	TRICLO- SAN, WATER, FLTRD REC (UG/L) (62090)	TRI- ETHYL CITRATE WATER, FLTRD REC (UG/L) (62091)	TRIPHNL PHOS- PHATE, WATER, FLTRD REC (UG/L) (62092)	TRIS(2- BUTOXE- PHOS- PHATE, WATER, FLTRD REC (UG/L) (62093)	DICHLOR VOS, WATER FLTRD REC (UG/L) (38775)	SAMPLE WEIGHT, WASTE- WATER METHOD, WAT FLT (ML) (99587)							
FEB 23...	--	--	--	--	--	--							
APR 23...	<1	<.5	<.5	<.5	<1.00	886							
SEP 11...	<1	<.5	<.5	<.5	<1.00	825							

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified

03456500 EAST FORK PIGEON RIVER NEAR CANTON, NC--Continued



PRECIPITATION RECORDS

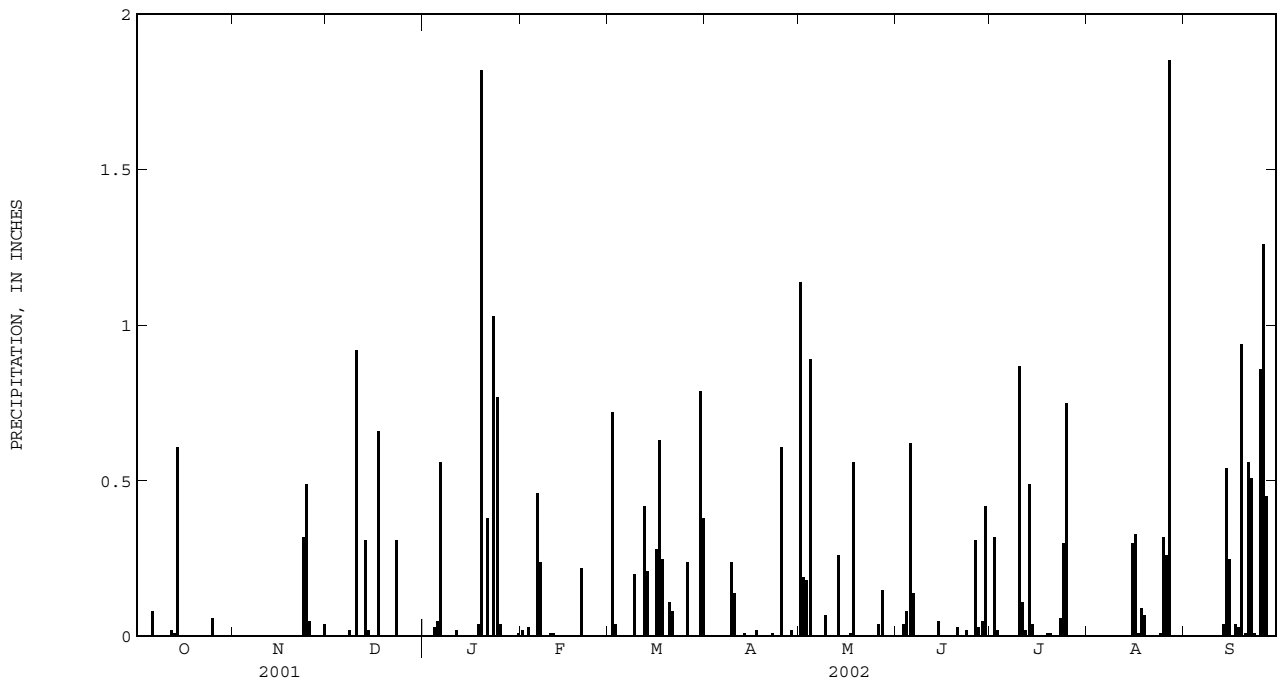
PERIOD OF RECORD.--October 1999 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Satellite and telephone telemetry at station.

REMARKS.--Gage is operated in cooperation with Blue Ridge Paper Products, Inc. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.02	0.00	0.00	1.14	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.19	0.00	0.32	0.00	0.00
3	0.00	0.00	0.00	0.00	0.03	0.04	0.00	0.18	0.04	0.02	0.00	0.00
4	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.89	0.08	0.00	0.00	0.00
5	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.62	0.00	0.00	0.00
6	0.08	0.00	0.00	0.56	0.46	0.00	0.00	0.00	0.14	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.20	0.24	0.07	0.00	0.00	0.00	0.00
10	0.00	0.00	0.92	0.00	0.01	0.00	0.14	0.00	0.00	0.87	0.00	0.00
11	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.11	0.00	0.00
12	0.02	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.02	0.00	0.00
13	0.01	0.00	0.31	0.00	0.00	0.21	0.01	0.26	0.00	0.49	0.00	0.04
14	0.61	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.05	0.04	0.00	0.54
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.25
16	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.33	0.00
17	0.00	0.00	0.66	0.00	0.00	0.63	0.02	0.01	0.00	0.00	0.01	0.04
18	0.00	0.00	0.00	0.04	0.00	0.25	0.00	0.56	0.00	0.00	0.09	0.03
19	0.00	0.00	0.00	1.82	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.94
20	0.00	0.00	0.00	0.00	0.22	0.11	0.00	0.00	0.03	0.01	0.00	0.01
21	0.00	0.00	0.00	0.38	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.56
22	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.51
23	0.00	0.32	0.31	1.03	0.00	0.00	0.00	0.00	0.02	0.06	0.00	0.01
24	0.00	0.49	0.00	0.77	0.00	0.00	0.00	0.00	0.00	0.30	0.01	0.00
25	0.06	0.05	0.00	0.04	0.00	0.00	0.61	0.00	0.04	0.75	0.32	0.86
26	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.04	0.31	0.00	0.26	1.26
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.03	0.00	1.85	0.45
28	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.05	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.42	0.00	0.00	0.00
30	0.00	0.04	0.00	0.00	---	0.79	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.01	---	0.38	---	0.00	---	0.00	0.00	---
TOTAL	0.78	0.90	2.24	4.75	0.99	4.35	1.05	3.49	1.79	3.00	3.24	5.50





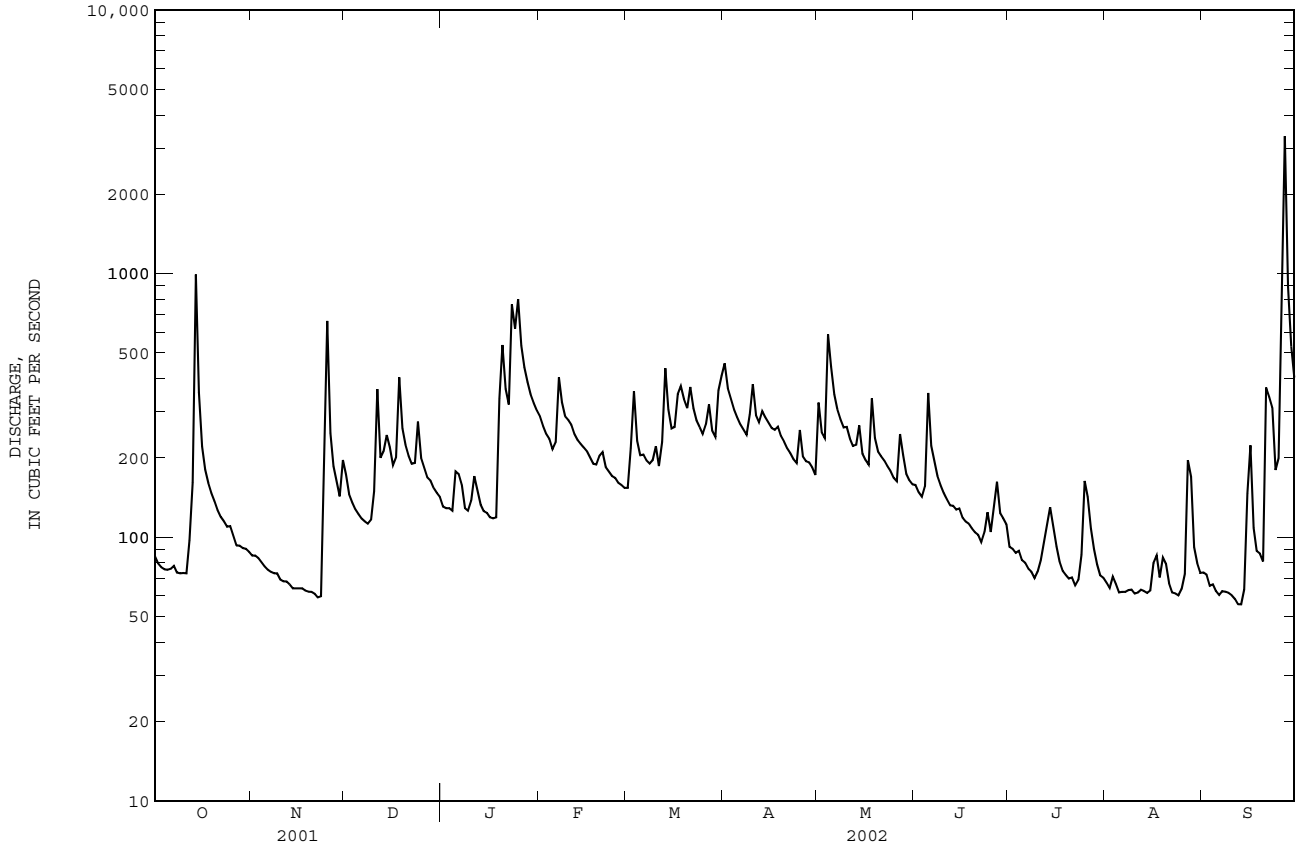
Gaging station at Pigeon River near Canton, North Carolina.

03456991 PIGEON RIVER NEAR CANTON, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1932 - 2002*	
ANNUAL TOTAL	71569		71010		321.2	
ANNUAL MEAN	196.1		194.5		503	1949
HIGHEST ANNUAL MEAN					170	1988
LOWEST ANNUAL MEAN					12800	Aug 13 1940
HIGHEST DAILY MEAN	1430	Jan 19	3320	Sep 27	27	Sep 7 1954
LOWEST DAILY MEAN	59	Nov 22	59	Sep 7	40	Sep 13 1998
ANNUAL SEVEN-DAY MINIMUM	62	Nov 17	5340	Sep 27	31600*	Aug 30 1940
MAXIMUM PEAK FLOW			7.05	Sep 27	20.75*	Aug 30 1940
MAXIMUM PEAK STAGE			54*	Sep 12	15*	Jan 8 1956
INSTANTANEOUS LOW FLOW			367		606	
10 PERCENT EXCEEDS	367		338		606	
50 PERCENT EXCEEDS	153		159		228	
90 PERCENT EXCEEDS	75		65		85	

e Estimated.

* Regulated period only (1932-2002). See REMARKS.



TENNESSEE RIVER BASIN

03459500 PIGEON RIVER NEAR HEPSCO, 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 mi².

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 NGVD of 1929 (levels by Tennessee Valley Authority). Satellite and telephone telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. 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 ft³/s-day. Maximum discharge for period of record, from rating curve extended above 12,000 ft³/s on basis of slope-area measurements at gage heights 14.94 and 15.82 ft. Maximum gage height for period of record 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 ft³/s.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	219	373	e307	773	e319	1060	738	315	205	145	154
2	203	217	301	295	737	359	859	600	301	210	137	148
3	193	215	284	e289	657	584	767	590	296	212	131	139
4	190	213	271	e281	592	459	696	1170	338	278	132	129
5	187	210	259	e274	490	e384	645	1030	567	215	119	124
6	196	202	257	361	497	e398	603	767	462	180	114	115
7	199	200	253	399	710	384	570	696	405	167	108	109
8	188	200	253	e311	661	376	544	618	337	165	106	e108
9	180	195	269	e307	608	382	568	537	310	159	104	108
10	175	194	347	e335	573	420	740	531	288	197	102	103
11	180	194	719	410	554	367	605	496	273	288	101	95
12	181	192	450	409	510	370	560	475	258	289	101	103
13	258	191	434	374	477	599	561	541	249	329	103	96
14	877	190	494	357	460	550	563	609	249	440	103	e111
15	671	190	451	355	450	461	536	480	255	322	136	e267
16	419	189	397	348	441	478	509	419	233	244	173	e410
17	348	187	454	350	428	856	503	401	224	210	165	228
18	318	188	799	410	413	856	519	590	216	190	159	185
19	296	189	555	810	404	696	481	513	209	177	200	167
20	285	189	478	1240	433	636	483	449	205	176	226	164
21	273	184	432	869	451	670	463	427	202	170	153	450
22	263	182	405	789	411	609	449	417	187	157	126	695
23	256	184	416	1650	399	549	425	396	187	167	121	733
24	248	290	597	1570	389	568	385	378	233	208	117	395
25	263	773	461	1910	380	543	546	359	210	347	119	383
26	245	489	418	1300	378	567	444	346	234	328	154	1140
27	224	351	388	1020	353	682	398	415	331	230	618	3510
28	223	320	372	889	e323	561	400	418	318	211	554	1630
29	227	292	363	828	---	526	391	362	245	182	261	953
30	226	310	342	834	---	836	358	336	234	161	192	730
31	221	---	327	784	---	984	---	326	---	161	167	---
TOTAL	8424	7339	12619	20665	13952	17029	16631	16430	8371	6975	5247	13682
MEAN	271.7	244.6	407.1	666.6	498.3	549.3	554.4	530.0	279.0	225.0	169.3	456.1
MAX	877	773	799	1910	773	984	1060	1170	567	440	618	3510
MIN	175	182	253	274	323	319	358	326	187	157	101	95

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2002, BY WATER YEAR (WY)

MEAN	410.8	494.4	660.7	878.9	1023	1146	984.9	719.1	537.0	418.0	420.7	374.6
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	123
(WY)	1955	1954	1940	1940	1941	1988	1986	1941	1988	1986	1953	1999

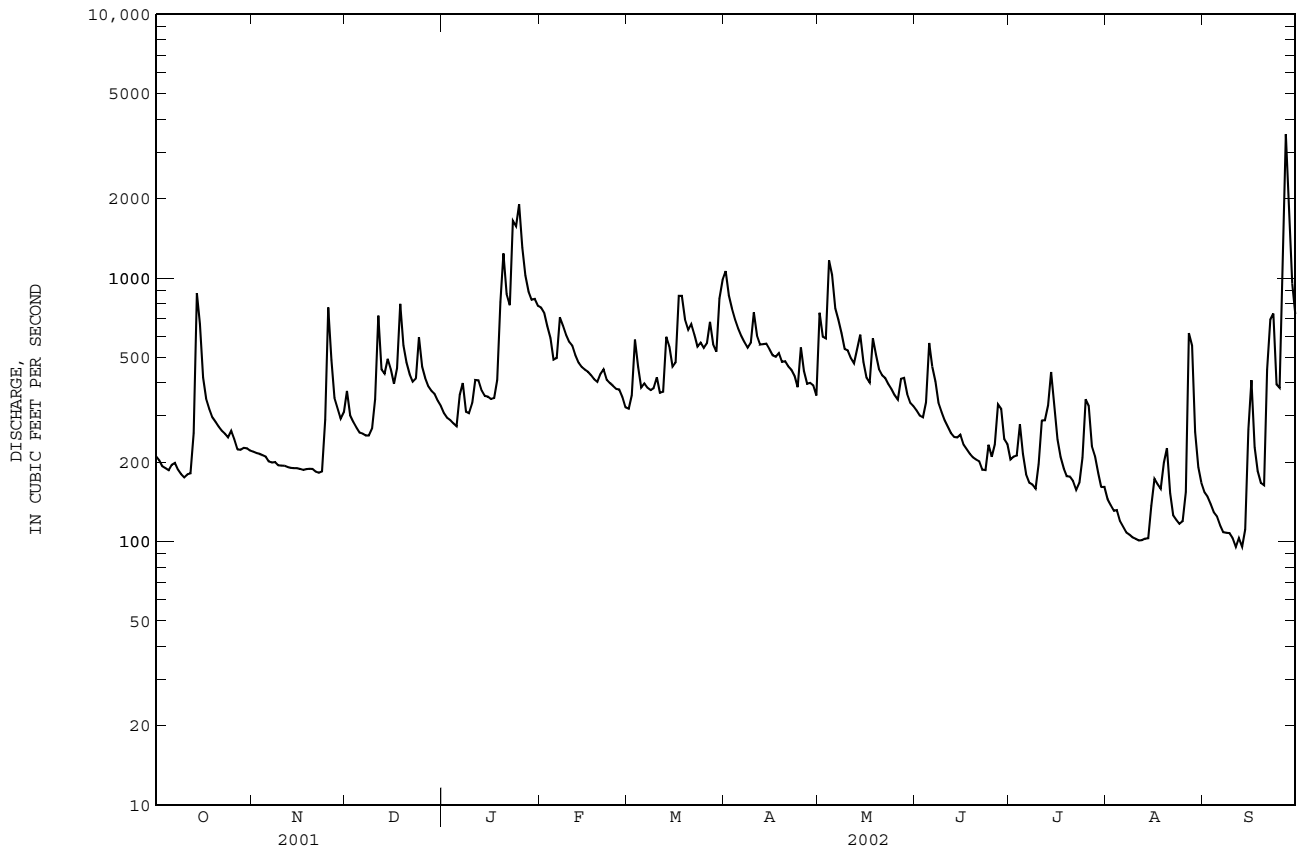
SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1927 - 2002

ANNUAL TOTAL	152812	147364										
ANNUAL MEAN	418.7	403.7								670.6		
HIGHEST ANNUAL MEAN										943		1949
LOWEST ANNUAL MEAN										341		1988
HIGHEST DAILY MEAN	2180	Jan 19								17100	Aug 13	1940
LOWEST DAILY MEAN	152	Jul 24								95	Sep 11	Sep 30 1941
ANNUAL SEVEN-DAY MINIMUM	169	Jul 13								103	Aug 8	Sep 12 1999
MAXIMUM PEAK FLOW										5620	Sep 27	32700* Aug 30 1940
MAXIMUM PEAK STAGE										6.82	Sep 27	15.82* Aug 30 1940
INSTANTANEOUS LOW FLOW										85	Sep 11	81 Sep 30 1941
10 PERCENT EXCEEDS	747									723		1240
50 PERCENT EXCEEDS	327									347		500
90 PERCENT EXCEEDS	191									158		205

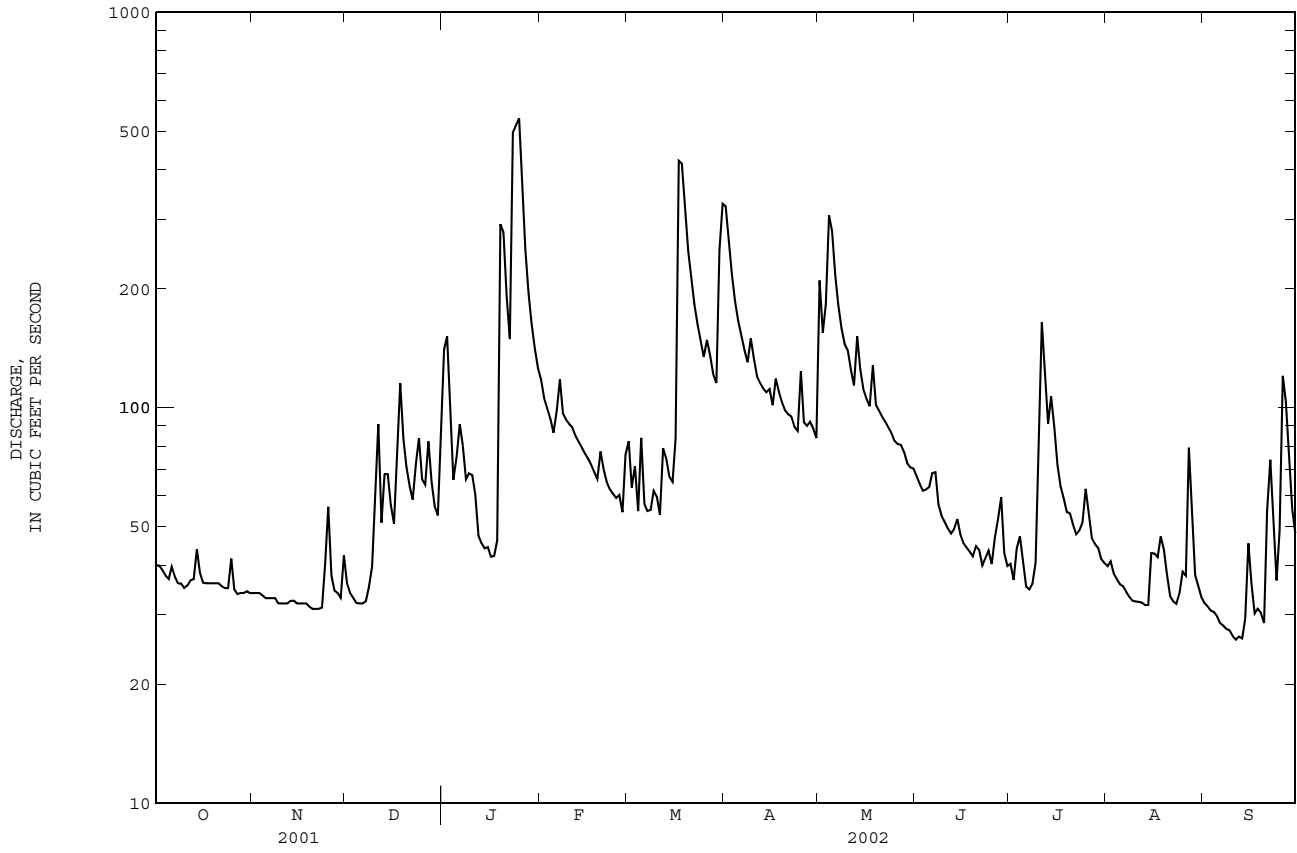
e Estimated.

* See REMARKS.

03459500 PIGEON RIVER NEAR HEPCO, NC--Continued



03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, NC--Continued



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to 1996, May 1999 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: August 1973 to September 1986.

WATER TEMPERATURE: October 1962 to September 1986.

INSTRUMENTATION.--Temperature recorder from October 1962 to September 1986. Water-quality monitor from May 1974 to September 1986.

REMARKS.--Station operated as part of the Hydrologic Benchmark network from October 1962 to current year. Miscellaneous chemical data published for 1945 water year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 43 microsiemens, June 13, 1974; minimum, 7 microsiemens, Feb. 28, 1983.

WATER TEMPERATURE: Maximum, 23.5°C, Aug. 5, 1977; minimum, 0.0°C, on several days during winter months of most years.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE LAB (STANDARD UNITS) (00403)	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM DIS-SOLVED (MG/L AS MG) (00925)	POTASSIUM DIS-SOLVED (MG/L AS K) (00935)	SODIUM DIS-SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD FET LAB (MG/L AS CACO3) (00417)	CHLORIDE DIS-SOLVED (MG/L AS CL) (00940)	SILICON DIS-SOLVED (UG/L AS SI) (01140)
OCT													
09...	1130	36	6.6	14	7.5	5.5	1.06	.35	.58	1.15	5	.4	4100
DEC													
04...	1430	32	6.7	16	15.5	5.5	1.06	.33	.60	1.28	5	.5	3900
JAN													
25...	1035	555	6.4	14	2.0	6.0	.89	.29	.61	.82	2	.4	2700
MAR													
15...	1210	66	6.9	13	20.5	9.0	.97	.29	.56	1.14	4	.4	3500
19...	1220	308	6.7	12	14.0	10.0	.91	.28	.58	.92	3	.5	3000
JUN													
03...	1250	64	6.8	15	28.0	17.0	1.04	.32	.61	1.15	4	.4	4100
AUG													
13...	1300	33	6.9	16	26.0	17.5	1.14	.33	--	--	6	.5	4000

Date	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00945)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106)	ALUMINUM, MONOMER ORGANIC WATER UNFLTRD (UG/L) (49288)	ALUMINUM, MONOMER ORGANIC WATER UNFLTRD (UG/L) (49287)
OCT						
09...	1.1	--	.15	1.3	<40	<40
DEC						
04...	1.1	<.028	.32	1.2	<27	<40
JAN						
25...	1.8	<.028	1.14	1.8	43	<40
MAR						
15...	1.2	<.028	.60	1.1	<27	<40
19...	1.6	<.028	.74	1.2	<27	<40
JUN						
03...	1.0	<.028	.54	1.0	<27	<40
AUG						
13...	1.0	<.028	.55	1.2	<27	<40

Remark codes used in this report:
 < -- Less than



Gaging station at Second Broad River near Logan, North Carolina.

TENNESSEE RIVER BASIN

03460795 PIGEON RIVER BELOW POWER PLANT NEAR WATERVILLE, NC

LOCATION.--Lat 35°47'02", long 83°06'44", Cocke County Tennessee, Hydrologic Unit 06010106, 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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,360 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Considerable regulation, caused by Walters Hydroelectric Plant, 1.0 mi upstream. Minimum discharge for period of record and current water year affected by regulation.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	181	213	488	412	1400	684	2170	1400	525	158	511	155
2	212	178	417	735	1470	619	1910	1820	244	572	158	413
3	177	162	581	471	535	279	1390	1050	688	559	496	395
4	249	161	325	451	1220	247	1390	1720	755	528	149	131
5	470	370	189	568	1220	1070	693	2240	1280	329	151	378
6	364	351	277	246	1060	552	1040	1610	619	478	498	150
7	191	333	282	e510	1240	443	986	1200	331	143	533	144
8	404	129	442	661	791	276	1600	1230	810	120	483	142
9	546	147	292	327	399	170	1240	1060	647	555	129	140
10	194	194	579	120	254	203	1300	873	215	649	383	361
11	145	256	833	427	811	801	1220	849	704	608	137	119
12	288	741	510	550	1190	645	1380	596	791	249	135	355
13	181	566	666	196	727	234	265	1380	654	619	369	369
14	586	331	661	412	1100	535	876	939	355	189	144	146
15	797	410	584	357	487	1300	584	1010	479	212	143	152
16	427	437	735	498	190	1280	918	1060	158	519	147	155
17	662	132	848	231	342	3430	861	536	162	502	381	153
18	426	143	1360	255	658	3720	742	331	475	532	145	148
19	302	433	595	1850	563	2650	606	539	474	288	e141	131
20	185	152	757	2890	967	738	1080	748	438	495	e407	129
21	202	122	633	1350	919	1470	828	888	128	158	170	162
22	474	196	203	1080	969	1390	757	657	490	229	e164	212
23	317	133	215	2900	356	1150	818	662	163	567	135	268
24	445	161	781	3640	340	295	1170	701	204	571	367	183
25	340	336	814	3710	1010	1320	570	605	499	600	141	808
26	373	479	890	2890	417	1090	364	487	490	426	156	1040
27	169	274	794	2620	733	1230	222	724	525	547	547	2640
28	217	288	543	1960	868	951	523	874	187	156	584	2560
29	406	463	278	1000	---	905	879	687	512	152	506	1120
30	387	274	269	914	---	1620	442	712	134	e484	176	1060
31	298	---	326	784	---	1670	---	301	---	e499	507	---
TOTAL	10615	8565	17167	35015	22236	32967	28824	29489	14136	12693	9093	14319
MEAN	342.4	285.5	553.8	1130	794.1	1063	960.8	951.3	471.2	409.5	293.3	477.3
MAX	797	741	1360	3710	1470	3720	2170	2240	1280	649	584	2640
MIN	145	122	189	120	190	170	222	301	128	120	129	119
†	-4	+24	-15	+11	-60	+50	-13	+9	-21	-27	-22	+70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
MEAN	313.2	465.8	609.1	1266	1530	1764	1559	1101	798.5	662.3	430.4	342.6
MAX	540	609	645	2187	3096	3505	2540	1488	1432	1036	674	477
(WY)	1998	1998	2001	1998	1998	1997	1998	1997	1997	1999	2001	2002
MIN	153	286	554	810	794	1063	961	676	471	409	293	176
(WY)	1999	2002	2002	2000	2002	2002	2002	2001	2002	2002	2002	1999

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1997 - 2002

	2001	2002	1997-2002
ANNUAL TOTAL	272627	235119	
ANNUAL MEAN	746.9	644.2	840.7 (UNADJUSTED)
HIGHEST ANNUAL MEAN		645	1246 1998
LOWEST ANNUAL MEAN			644 2002
HIGHEST DAILY MEAN	4240	Jan 20	10800 Jan 8 1998
LOWEST DAILY MEAN	122	Nov 21	74 Nov 19 2000
ANNUAL SEVEN-DAY MINIMUM	182	Sep 27	117 Oct 2 1998
MAXIMUM PEAK FLOW			18400 Jan 8 1998
MAXIMUM PEAK STAGE		9.46	13.42 Jan 8 1998
INSTANTANEOUS LOW FLOW		24*	24* Jun 23 2002
10 PERCENT EXCEEDS	1410	1290	1850
50 PERCENT EXCEEDS	618	495	610
90 PERCENT EXCEEDS	192	152	158

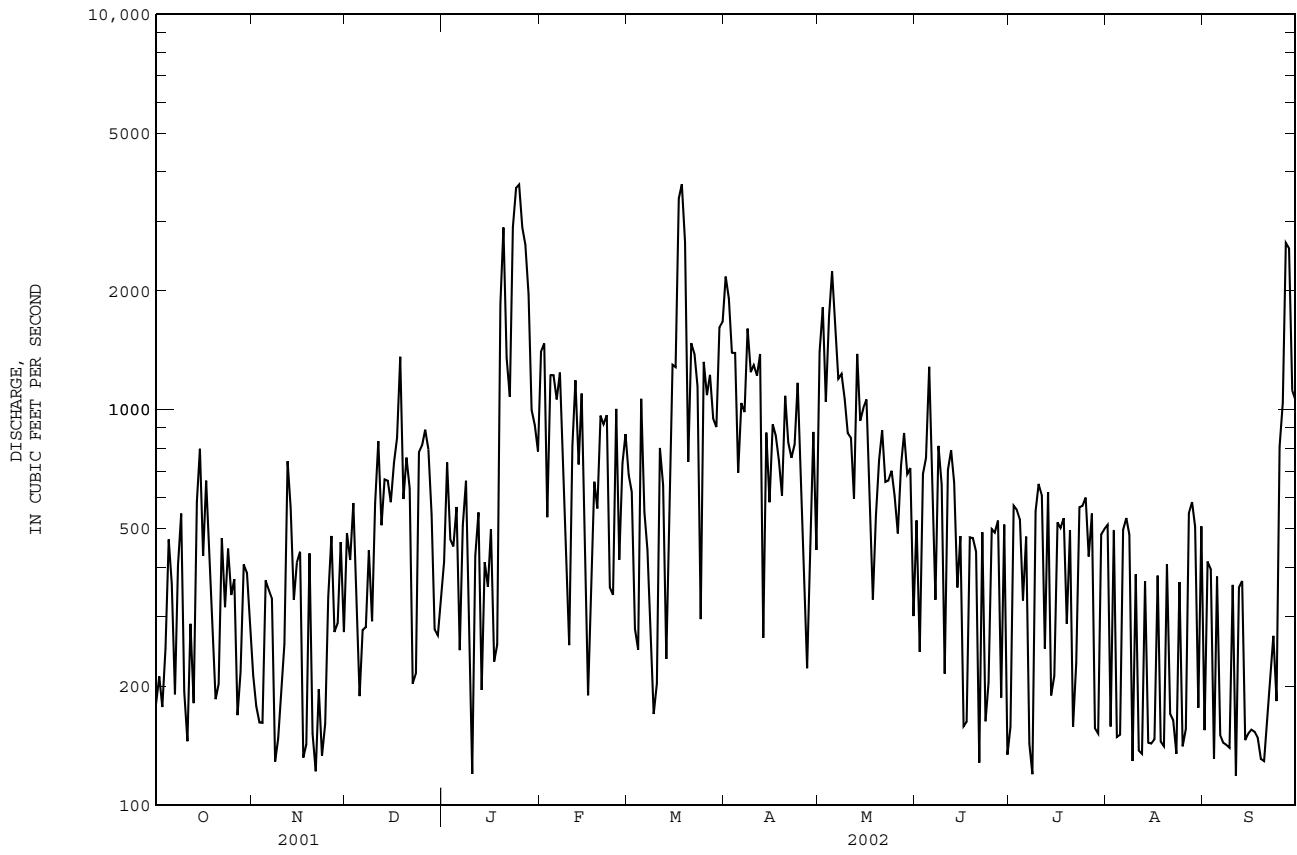
e Estimated.

† Change in contents, equivalent in cubic feet per second, in Walters Reservoir, provided by Carolina Power and Light Company.

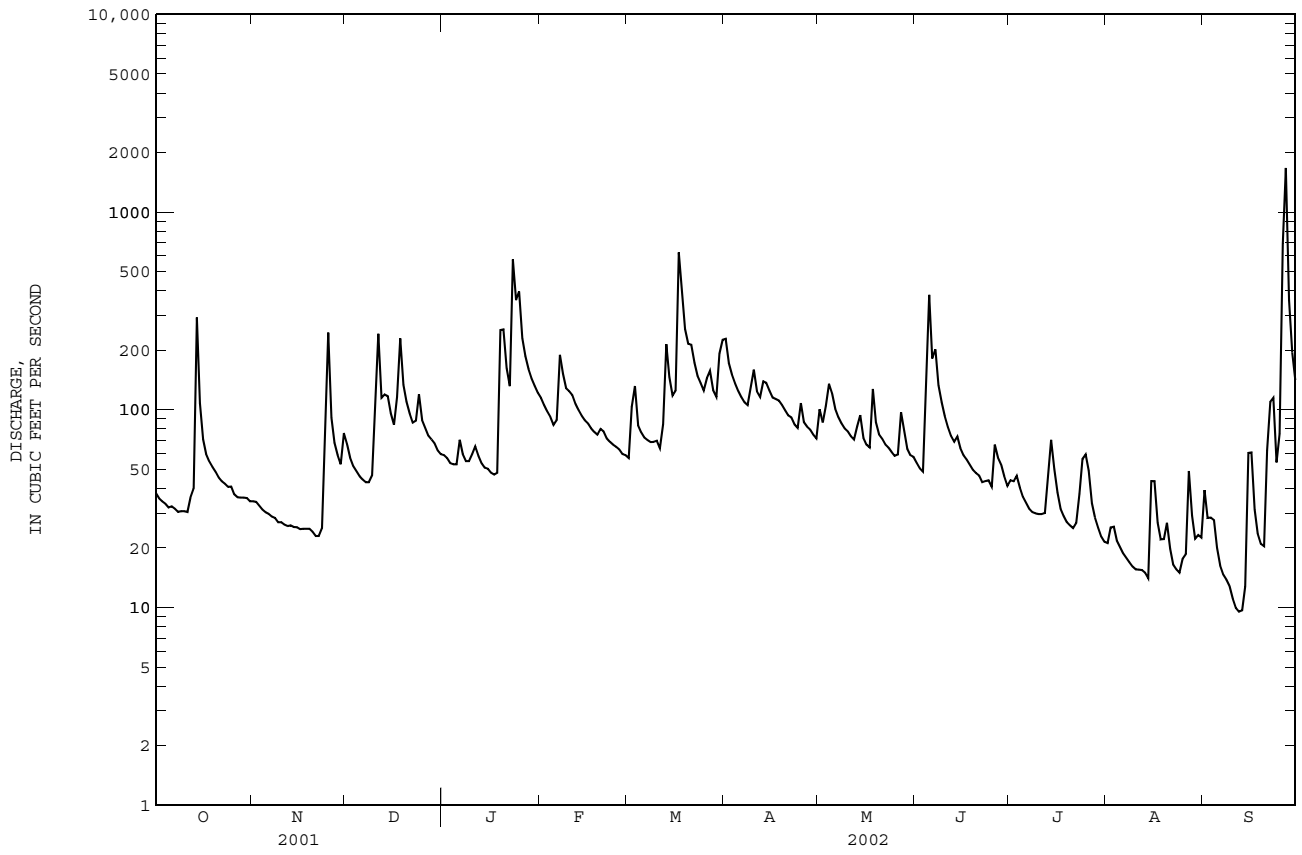
‡ Adjusted for change in contents.

* See REMARKS.

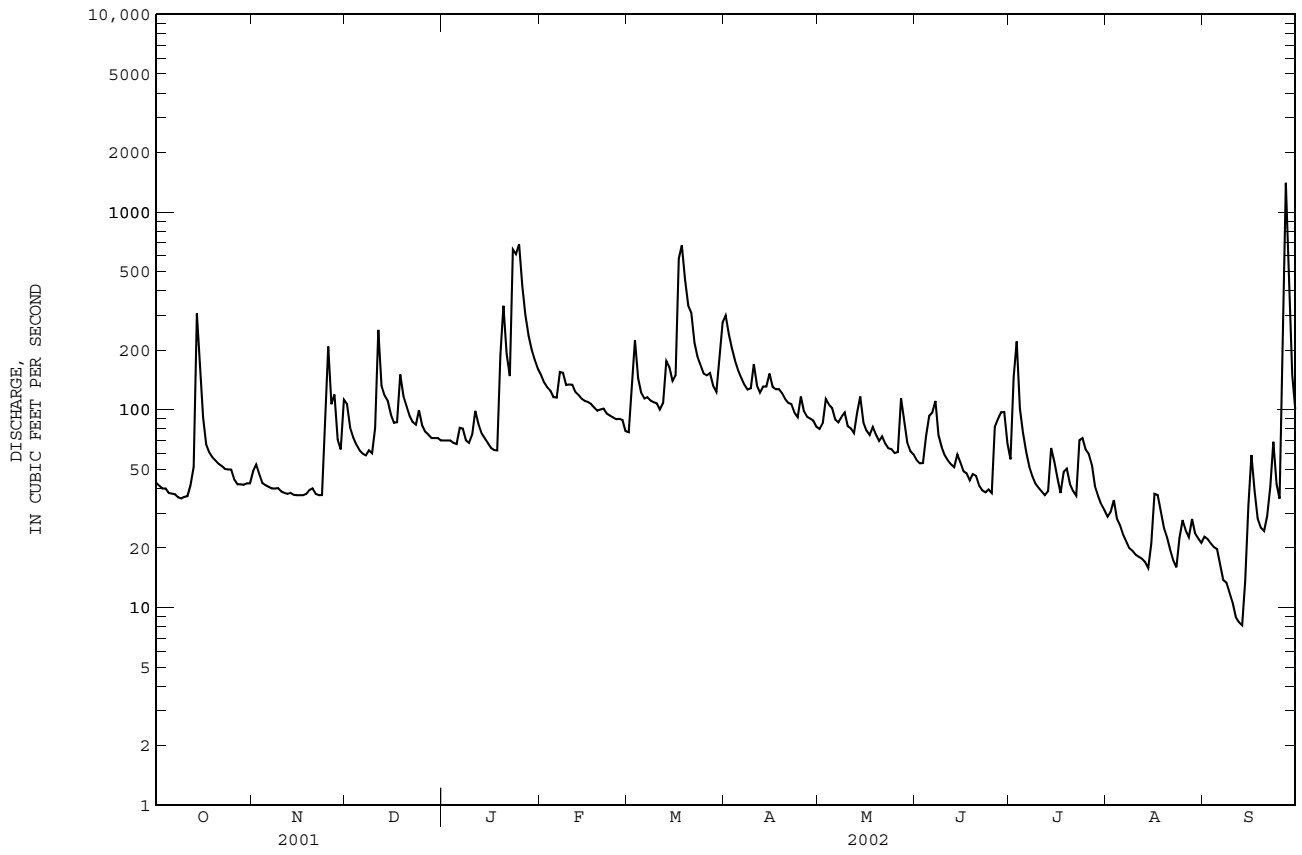
03460795 PIGEON RIVER BELOW POWER PLANT NEAR WATERVILLE, NC--Continued



03463300 SOUTH TOE RIVER NEAR CELO, NC--Continued



03479000 WATAUGA RIVER NEAR SUGAR GROVE, NC--Continued



0349998425 LITTLE TENNESSEE RIVER AT RIVERSIDE, NC

LOCATION.--Lat 35°05'26", long 83°22'50", Macon County, Hydrologic Unit 06010202, at bridge on Secondary Road 1644, 6 mi south of Franklin.

DRAINAGE AREA.--120 mi²

PERIOD OF RECORD.--June 2000 to current year.

REMARKS.--Samples collected for the Upper Little Tennessee Sediment Study.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM (80226)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)
OCT													
02...	1100	--	--	--	--	--	4.0	1.3	--	--	--	--	--
09...	1100	--	--	--	--	--	2.2	.64	--	--	--	--	--
16...	1100	--	--	--	--	--	12	--	--	--	--	--	--
23...	1100	--	--	--	--	--	4.1	--	--	--	--	--	--
24...	1305	--	--	--	--	--	--	--	0	0	8	59	90
24...	1400	--	--	--	--	--	A4.0	--	--	--	--	--	--
30...	1100	--	--	--	--	--	3.0	--	--	--	--	--	--
NOV													
06...	1100	--	--	--	--	--	1.8	--	--	--	--	--	--
13...	1100	--	--	--	--	--	2.9	--	--	--	--	--	--
20...	1100	--	--	--	--	--	2.1	--	--	--	--	--	--
27...	1100	--	--	--	--	--	6.5	--	--	--	--	--	--
JAN													
20...	1130	64	68	100	100	100	87	--	--	--	--	--	--
23...	1325	64	72	82	100	100	369	996	--	--	--	--	--
23...	1327	--	--	--	--	--	289	--	--	--	--	--	--
24...	1421	--	--	--	--	--	47	73.6	0	0	4	29	74
SEP													
26...	1538	--	--	--	--	--	--	--	0	0	5	38	91

Date	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SEDI-MENT, DIS-CHARGE, BEDLOAD (TONS/DAY) (80225)
OCT					
02...	--	--	--	--	--
09...	--	--	--	--	--
16...	--	--	--	--	--
23...	--	--	--	--	--
24...	97	99	100	100	.50
24...	--	--	--	--	--
30...	--	--	--	--	--
NOV					
06...	--	--	--	--	--
13...	--	--	--	--	--
20...	--	--	--	--	--
27...	--	--	--	--	--
JAN					
20...	--	--	--	--	--
23...	--	--	--	--	--
23...	--	--	--	--	--
24...	96	99	100	100	52
SEP					
26...	99	100	100	100	46

Remark codes used in this report:
A -- Average value



Gaging station at Yadkin River at Patterson, North Carolina.

TENNESSEE RIVER BASIN

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 mi².

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 NGVD of 1929 (levels by Tennessee Valley Authority). Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Minimum discharge for period of record also occurred Aug. 30, 31, Sept. 16, 17, 2000. Minimum discharge for current water year also occurred Sept. 13.

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	138	195	172	335	205	559	409	280	150	103	103
2	140	139	171	169	309	346	462	341	221	146	110	96
3	135	136	160	e165	293	529	416	334	206	149	125	92
4	130	135	152	e163	283	341	382	915	199	148	103	92
5	128	133	147	e163	266	298	358	692	351	136	96	88
6	157	130	146	220	300	282	339	484	307	126	90	85
7	146	128	144	235	527	269	324	414	260	138	86	81
8	130	128	141	188	407	258	315	375	225	125	81	79
9	125	128	139	179	352	261	411	350	209	119	79	76
10	124	126	177	179	331	275	483	340	198	123	76	72
11	125	125	292	182	312	246	402	329	188	134	77	70
12	140	123	202	174	294	311	375	312	183	148	76	67
13	181	122	203	169	282	508	380	324	180	193	70	67
14	481	121	234	164	270	415	378	332	181	302	69	114
15	361	122	230	163	263	357	394	290	183	187	73	495
16	244	120	204	158	259	340	356	278	170	167	120	314
17	207	120	213	156	249	337	341	271	166	147	114	169
18	189	120	383	157	242	332	331	397	158	139	116	145
19	179	118	272	371	235	310	327	298	153	132	111	139
20	172	118	237	593	257	302	313	276	151	126	98	135
21	165	116	215	482	267	394	302	265	152	123	87	294
22	160	116	201	395	242	342	290	258	143	120	81	450
23	155	122	210	858	233	315	276	252	151	125	82	300
24	152	253	290	752	227	302	272	248	164	146	81	214
25	159	283	228	1070	220	290	323	240	153	170	157	222
26	146	216	214	681	220	350	280	229	265	141	154	880
27	141	175	204	524	213	409	273	256	185	128	322	1890
28	140	164	196	443	e210	334	272	264	162	119	144	1140
29	140	152	191	397	---	316	272	230	159	115	120	575
30	141	206	182	362	---	534	251	219	162	106	109	427
31	140	---	177	338	---	650	---	222	---	102	107	---
TOTAL	5280	4333	6350	10422	7898	10758	10457	10444	5865	4430	3317	8971
MEAN	170.3	144.4	204.8	336.2	282.1	347.0	348.6	336.9	195.5	142.9	107.0	299.0
MAX	481	283	383	1070	527	650	559	915	351	302	322	1890
MIN	124	116	139	156	210	205	251	219	143	102	69	67
CFSM	1.22	1.03	1.46	2.40	2.01	2.48	2.49	2.41	1.40	1.02	0.76	2.14
IN.	1.40	1.15	1.69	2.77	2.10	2.86	2.78	2.78	1.56	1.18	0.88	2.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2002, BY WATER YEAR (WY)

	MEAN	246.0	296.7	386.8	484.7	559.1	603.0	557.6	423.0	337.5	252.4	235.9	219.4
MAX	1078	815	841	1008	1252	1199	1014	999	694	772	695	671	
(WY)	1965	1980	1962	1946	1990	1952	1964	1976	1949	1989	1974	1950	
MIN	70.5	101	153	120	222	244	172	157	110	94.8	78.3	80.2	
(WY)	1955	1955	2001	1981	1986	1988	1986	1986	1988	1986	1986	1954	

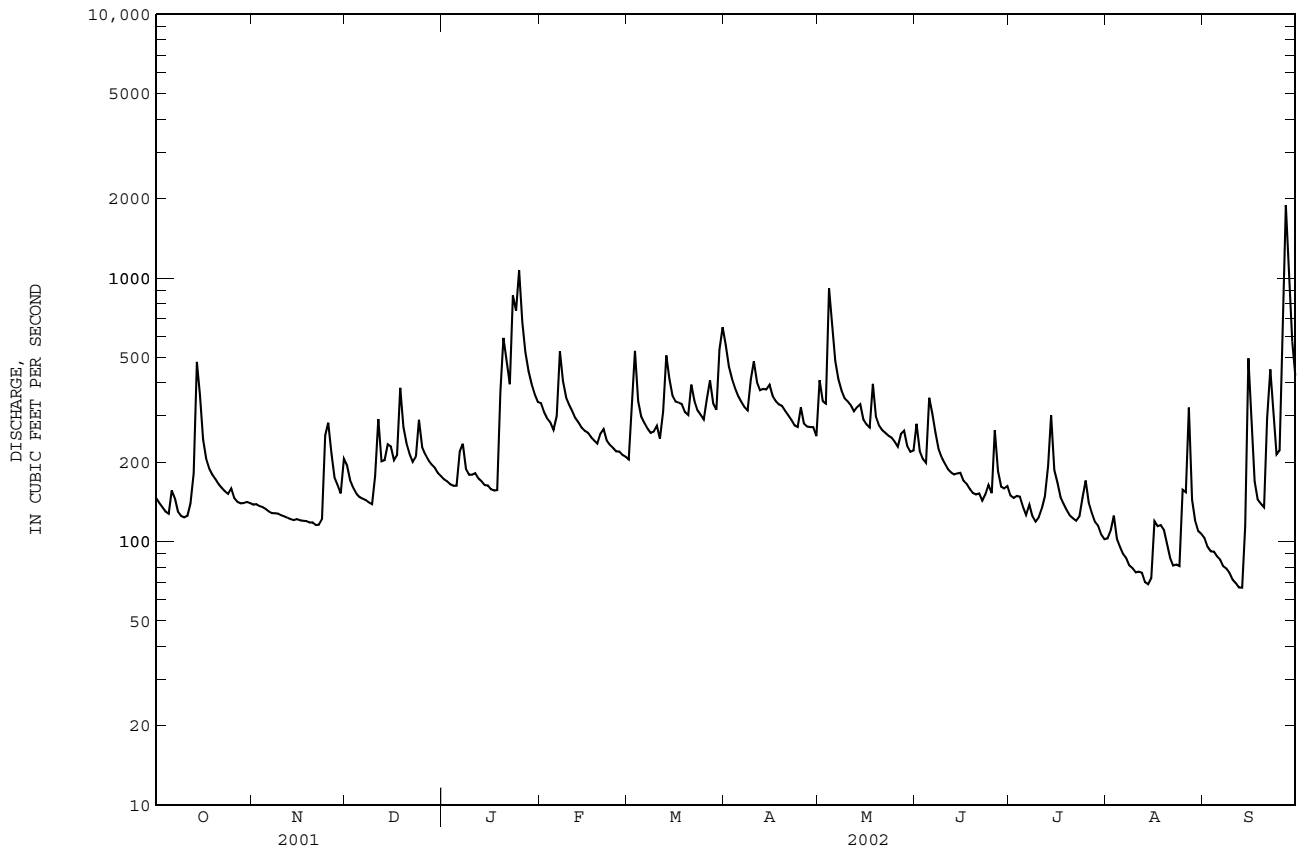
SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1944 - 2002

ANNUAL TOTAL	74550	88525	
ANNUAL MEAN	204.2	242.5	382.9
HIGHEST ANNUAL MEAN			588
LOWEST ANNUAL MEAN			173
HIGHEST DAILY MEAN	975	Jan 19	1890
LOWEST DAILY MEAN	75	Sep 18	67
ANNUAL SEVEN-DAY MINIMUM	81	Sep 13	73
MAXIMUM PEAK FLOW			2140
MAXIMUM PEAK STAGE			5.79
INSTANTANEOUS LOW FLOW			64*
ANNUAL RUNOFF (CFSM)	1.46	1.73	2.73
ANNUAL RUNOFF (INCHES)	19.81	23.52	37.16
10 PERCENT EXCEEDS	334	397	695
50 PERCENT EXCEEDS	171	201	302
90 PERCENT EXCEEDS	111	111	127

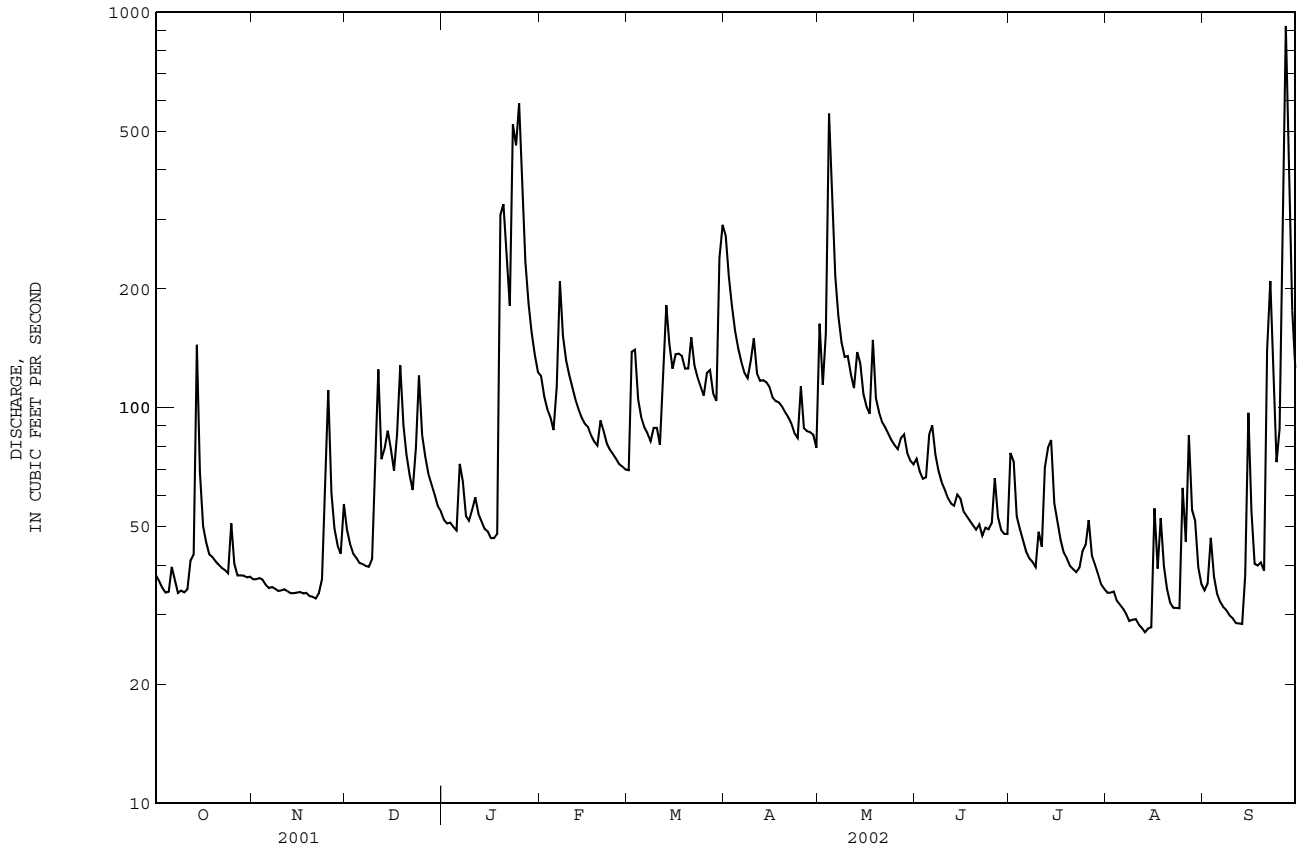
e Estimated.

* See REMARKS.

03500000 LITTLE TENNESSEE RIVER NEAR PRENTISS, NC--Continued



03500240 CARTOOGECHAYE CREEK NEAR FRANKLIN, NC--Continued



WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 2000 to current year.

REMARKS.--Samples collected for the Upper Little Tennessee Sediment Study. Samples are collected in the City Park from the pedestrian bridge about 0.3 mi downstream of the gage.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SED. SUSP. SIEVE DIAM. % FINER THAN (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN (70335)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80226)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80227)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN (80229)
OCT													
02...	1200	35	--	--	--	--	--	1	.10	--	--	--	--
09...	1200	34	--	--	--	--	--	.6	.06	--	--	--	--
16...	1200	50	--	--	--	--	--	4	.47	--	--	--	--
23...	1200	39	--	--	--	--	--	3	.32	--	--	--	--
24...	1500	37	--	--	--	--	--	1.4	.14	--	--	--	--
24...	1530	37	--	--	--	--	--	--	--	2	2	16	58
30...	1200	36	--	--	--	--	--	2	.21	--	--	--	--
NOV													
06...	1200	34	--	--	--	--	--	.8	.07	--	--	--	--
13...	1200	33	--	--	--	--	--	1	.12	--	--	--	--
20...	1200	32	--	--	--	--	--	2	.22	--	--	--	--
27...	1200	48	--	--	--	--	--	3	.41	--	--	--	--
JAN													
23...	1110	783	80	87	97	100	100	324	685	--	--	--	--
23...	1112	783	--	--	--	--	--	302	639	--	--	--	--
24...	1015	381	--	--	--	--	--	6	6.1	.5	1	12	70
SEP													
26...	1106	554	--	--	--	--	--	--	--	.5	2	17	80

Date	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SEDI-MENT, DIS-CHARGE, BEDLOAD (TONS/DAY) (80225)
OCT						
02...	--	--	--	--	--	--
09...	--	--	--	--	--	--
16...	--	--	--	--	--	--
23...	--	--	--	--	--	--
24...	--	--	--	--	--	--
24...	71	76	78	84	100	.005
30...	--	--	--	--	--	--
NOV						
06...	--	--	--	--	--	--
13...	--	--	--	--	--	--
20...	--	--	--	--	--	--
27...	--	--	--	--	--	--
JAN						
23...	--	--	--	--	--	--
23...	--	--	--	--	--	--
24...	92	97	99	100	100	3.6
SEP						
26...	93	95	96	97	100	5.6



Ivy River near Marshall, North Carolina.

TENNESSEE RIVER BASIN

0350056050 CULLASAJA RIVER AT SR 1620 NEAR HIGHLANDS, NC

LOCATION.--Lat 35°04'14", long 83°13'57", Macon County, Hydrologic Unit 06010202, at bridge on Secondary Road 1620, downstream from Long Branch and approximately 3.4 mi northwest of Highlands.

DRAINAGE AREA.--18.8 mi².

PERIOD OF RECORD.--July 2001 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,230 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges and discharges above 650 ft³/s, which are fair. Minimum discharge for period of record and current water year also occurred Sept. 12, 2002. Minimum discharge for period July to Sept. 2001 also occurred Sept. 19, 2001.

DISCHARGE, CUBIC FEET PER SECOND, FOR PERIOD JULY TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	e50	30	32
2	---	---	---	---	---	---	---	---	---	e40	32	29
3	---	---	---	---	---	---	---	---	---	e62	70	45
4	---	---	---	---	---	---	---	---	---	e60	65	44
5	---	---	---	---	---	---	---	---	---	e66	58	33
6	---	---	---	---	---	---	---	---	---	e50	45	27
7	---	---	---	---	---	---	---	---	---	e46	99	24
8	---	---	---	---	---	---	---	---	---	e42	97	22
9	---	---	---	---	---	---	---	---	---	e40	52	22
10	---	---	---	---	---	---	---	---	---	e38	48	70
11	---	---	---	---	---	---	---	---	---	37	44	42
12	---	---	---	---	---	---	---	---	---	34	45	32
13	---	---	---	---	---	---	---	---	---	32	113	28
14	---	---	---	---	---	---	---	---	---	31	104	25
15	---	---	---	---	---	---	---	---	---	30	62	24
16	---	---	---	---	---	---	---	---	---	29	52	21
17	---	---	---	---	---	---	---	---	---	28	46	21
18	---	---	---	---	---	---	---	---	---	28	42	19
19	---	---	---	---	---	---	---	---	---	26	38	24
20	---	---	---	---	---	---	---	---	---	43	34	81
21	---	---	---	---	---	---	---	---	---	33	30	45
22	---	---	---	---	---	---	---	---	---	29	27	33
23	---	---	---	---	---	---	---	---	---	26	26	27
24	---	---	---	---	---	---	---	---	---	28	25	331
25	---	---	---	---	---	---	---	---	---	58	27	105
26	---	---	---	---	---	---	---	---	---	44	31	71
27	---	---	---	---	---	---	---	---	---	39	32	57
28	---	---	---	---	---	---	---	---	---	40	29	49
29	---	---	---	---	---	---	---	---	---	40	25	44
30	---	---	---	---	---	---	---	---	---	44	24	39
31	---	---	---	---	---	---	---	---	---	32	26	---
TOTAL	---	---	---	---	---	---	---	---	---	1225	1478	1466
MEAN	---	---	---	---	---	---	---	---	---	39.52	47.68	48.87
MAX	---	---	---	---	---	---	---	---	---	66	113	331
MIN	---	---	---	---	---	---	---	---	---	26	24	19
CFSM	---	---	---	---	---	---	---	---	---	2.11	2.54	2.60
IN.	---	---	---	---	---	---	---	---	---	2.43	2.93	2.91

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD JULY TO SEPTEMBER 2001

MEAN	---	---	---	---	---	---	---	---	---	39.52	47.68	48.87
MAX	---	---	---	---	---	---	---	---	---	39.5	47.7	48.9
(WY)	---	---	---	---	---	---	---	---	---	2001	2001	2001
MIN	---	---	---	---	---	---	---	---	---	39.5	47.7	48.9
(WY)	---	---	---	---	---	---	---	---	---	2001	2001	2001

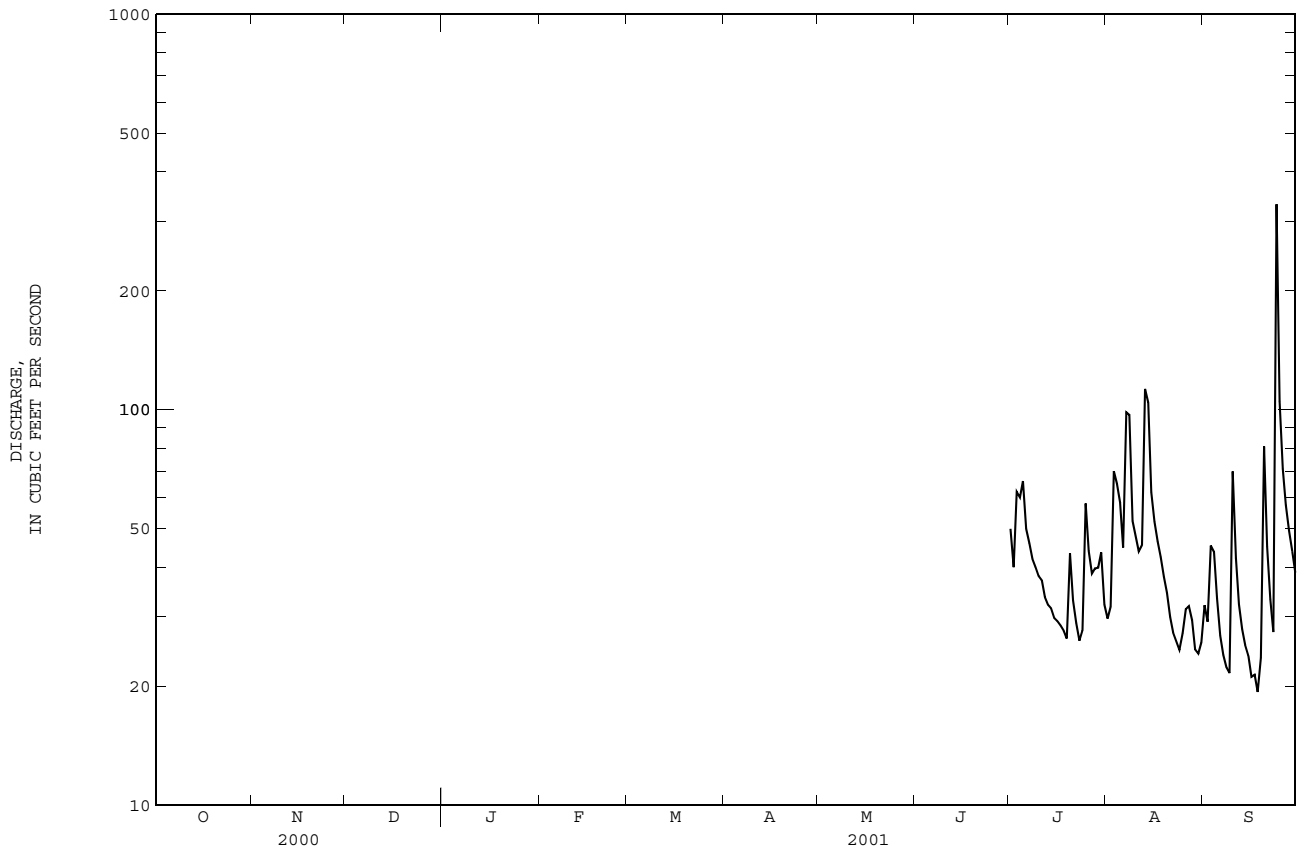
SUMMARY STATISTICS

FOR PERIOD JULY TO SEPTEMBER 2001

MAXIMUM PEAK FLOW	667	Sep 24
MAXIMUM PEAK STAGE	7.10	Sep 24
INSTANTANEOUS LOW FLOW	16*	Sep 18

e Estimated.
* See REMARKS.

0350056050 CULLASAJA RIVER AT SR 1620 NEAR HIGHLANDS, NC--Continued



TENNESSEE RIVER BASIN

0350056050 CULLASAJA RIVER AT SR 1620 NEAR HIGHLANDS, NC--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	37	61	39	84	39	99	101	48	22	20	15
2	31	37	51	38	73	147	85	65	34	21	15	16
3	30	35	46	40	68	126	79	61	29	53	13	25
4	28	34	43	36	65	82	74	200	31	50	11	17
5	28	35	41	35	61	72	69	116	84	26	10	14
6	38	37	40	63	80	68	65	92	61	19	9.9	11
7	33	30	38	51	137	65	63	82	42	16	9.3	10
8	30	30	37	41	90	61	61	75	35	15	8.7	9.5
9	29	29	35	39	78	64	157	72	31	14	8.5	9.0
10	29	27	63	44	79	63	128	75	27	13	8.4	8.7
11	30	27	88	48	75	56	96	67	25	20	8.8	8.6
12	62	28	53	42	71	87	85	65	23	23	8.6	8.3
13	80	27	65	38	67	156	97	67	22	48	8.3	9.3
14	365	25	70	36	61	92	92	67	22	61	8.5	42
15	121	26	59	35	55	80	93	57	23	36	8.6	268
16	79	26	50	33	56	78	87	54	20	24	12	96
17	68	23	87	32	53	83	77	52	19	18	11	51
18	60	24	110	32	51	79	76	72	19	15	11	42
19	56	25	69	126	50	71	70	55	17	14	10	38
20	53	24	59	125	59	77	65	50	17	13	9.1	52
21	50	22	53	113	56	104	62	47	17	12	8.5	176
22	48	20	50	85	49	78	58	46	15	14	7.9	154
23	46	29	70	198	47	73	53	45	21	14	9.0	107
24	45	132	82	154	45	69	53	41	24	15	9.0	74
25	48	112	57	209	43	66	67	39	19	17	25	81
26	42	63	53	129	43	94	54	38	52	27	42	354
27	40	50	49	108	41	86	51	38	61	16	77	921
28	40	45	47	97	39	71	52	38	28	13	30	282
29	39	43	46	89	---	66	48	35	26	13	22	163
30	39	102	42	82	---	129	44	33	24	12	18	122
31	37	---	41	80	---	122	---	37	---	14	16	---
TOTAL	1759	1204	1755	2317	1776	2604	2260	1982	916	688	474.1	3184.4
MEAN	56.74	40.13	56.61	74.74	63.43	84.00	75.33	63.94	30.53	22.19	15.29	106.1
MAX	365	132	110	209	137	156	157	200	84	61	77	921
MIN	28	20	35	32	39	39	44	33	15	12	7.9	8.3
CFSM	3.02	2.14	3.02	3.98	3.38	4.48	4.02	3.41	1.63	1.18	0.82	5.66
IN.	3.49	2.39	3.48	4.59	3.52	5.16	4.48	3.93	1.82	1.36	0.94	6.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002
MEAN	56.74	40.13	56.61	74.74	63.43	84.00	75.33	63.94	30.53	30.85	31.49	77.51
MAX	56.7	40.1	56.6	74.7	63.4	84.0	75.3	63.9	30.5	39.5	47.7	106
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2001	2001	2002
MIN	56.7	40.1	56.6	74.7	63.4	84.0	75.3	63.9	30.5	22.2	15.3	48.9
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2001

SUMMARY STATISTICS

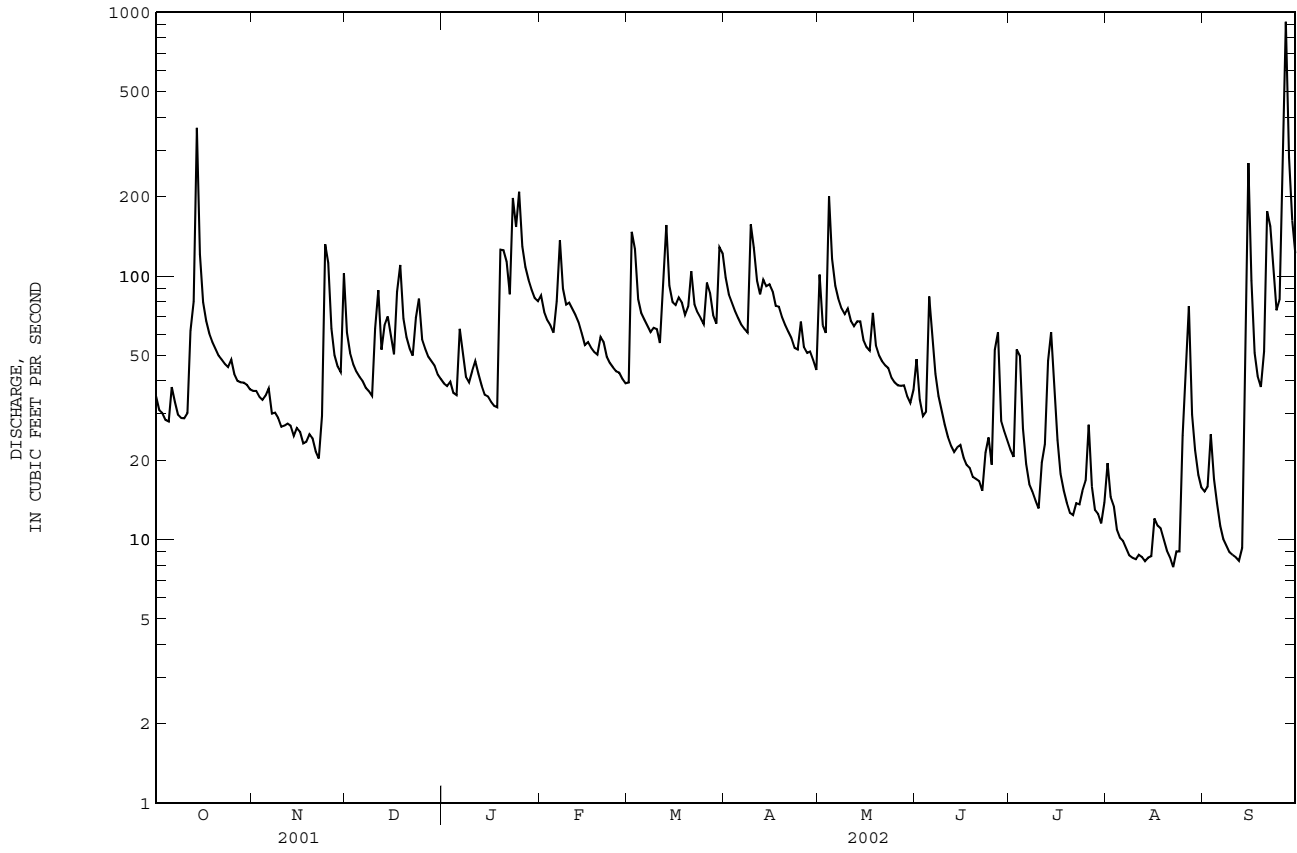
FOR 2002 WATER YEAR

WATER YEARS 2001 - 2002

ANNUAL TOTAL	20919.5	
ANNUAL MEAN	57.31	57.31
HIGHEST ANNUAL MEAN		57.3 2002
LOWEST ANNUAL MEAN		57.3 2002
HIGHEST DAILY MEAN	921 Sep 27	921 Sep 27 2002
LOWEST DAILY MEAN	7.9 Aug 22	7.9 Aug 22 2002
ANNUAL SEVEN-DAY MINIMUM	8.5 Aug 9	8.5 Aug 9 2002
MAXIMUM PEAK FLOW	1500 Sep 27	1500 Sep 27 2002
MAXIMUM PEAK STAGE	10.18 Sep 27	10.18 Sep 27 2002
INSTANTANEOUS LOW FLOW	6.7* Aug 22	6.7* Aug 22 2002
ANNUAL RUNOFF (CFSM)	3.06	3.06
ANNUAL RUNOFF (INCHES)	41.48	41.51
10 PERCENT EXCEEDS	98	98
50 PERCENT EXCEEDS	46	46
90 PERCENT EXCEEDS	14	14

* See REMARKS.

0350056050 CULLASAJA RIVER AT SR 1620 NEAR HIGHLANDS, NC--Continued



TENNESSEE RIVER BASIN

0350116510 CULLASAJA RIVER AT SECONDARY ROAD 1653 NEAR FRANKLIN, NC

LOCATION.--Lat 35°09'52", long 83°21'37", Macon County, Hydrologic Unit 06010202, at bridge on Secondary Road 1653, 1.8 mi southeast of Franklin.

DRAINAGE AREA.--91.1 mi²

PERIOD OF RECORD.--June 2000 to current year.

REMARKS.--Samples collected for the Upper Little Tennessee Sediment Study.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM (80226)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)
OCT													
02...	1100	--	--	--	--	--	1.3	--	--	--	--	--	--
09...	1300	--	--	--	--	--	.8	--	--	--	--	--	--
16...	1300	--	--	--	--	--	8.2	--	--	--	--	--	--
23...	1300	--	--	--	--	--	2.9	--	--	--	--	--	--
25...	1200	--	--	--	--	--	2.5	--	--	--	--	--	--
25...	1310	--	--	--	--	--	--	0	0	13	66	78	--
30...	1300	--	--	--	--	--	3.8	--	--	--	--	--	--
NOV													
06...	1300	--	--	--	--	--	1.5	--	--	--	--	--	--
13...	1300	--	--	--	--	--	.5	--	--	--	--	--	--
20...	1300	--	--	--	--	--	.8	--	--	--	--	--	--
27...	1300	--	--	--	--	--	2.8	--	--	--	--	--	--
JAN													
20...	1040	100	--	--	--	--	9.0	--	--	--	--	--	--
23...	1215	79	85	100	100	100	114	244	--	--	--	--	--
23...	1216	--	--	--	--	--	169	--	--	--	--	--	--
24...	1224	--	--	--	--	--	2.8	3.3	0	0	10	73	94
SEP													
26...	1312	--	--	--	--	--	--	--	0	2	17	60	86

Date	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/DAY) (80225)
OCT					
02...	--	--	--	--	--
09...	--	--	--	--	--
16...	--	--	--	--	--
23...	--	--	--	--	--
25...	--	--	--	--	--
25...	85	90	93	100	.08
30...	--	--	--	--	--
NOV					
06...	--	--	--	--	--
13...	--	--	--	--	--
20...	--	--	--	--	--
27...	--	--	--	--	--
JAN					
20...	--	--	--	--	--
23...	--	--	--	--	--
23...	--	--	--	--	--
24...	98	99	100	100	2.8
SEP					
26...	97	99	100	100	5.9

TENNESSEE RIVER BASIN

599

0350156375 LAKE EMORY AT DAM NEAR FRANKLIN, NC

LOCATION.--Lat 35°13'09", long 83°22'16", Macon County, Hydrologic Unit 06010202, at the Lake Emory dam, 2.5 mi north-northeast of Franklin.

DRAINAGE AREA.--310 mi²

PERIOD OF RECORD.--June 2000 to current year.

REMARKS.--Samples collected for the Upper Little Tennessee Sediment Study.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SEDI- MENT, SUS- PENDED (MG/L) (80154)
OCT		
02...	1400	12
09...	1400	15
16...	1400	13
23...	1400	8.9
25...	1500	2.9
30...	1400	12
NOV		
06...	1400	28
13...	1400	17
20...	1400	31
27...	1400	18
JAN		
20...	1225	A31
23...	1417	A93

Remark codes used in this report:
A -- Average value

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 mi².

WATER-DISCHARGE RECORDS

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 NGVD of 1929 (levels by 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. Minimum discharge for current water year also occurred Sept. 11, 12.

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	352	344	554	460	990	629	2060	1130	589	399	237	250
2	336	356	451	e440	956	688	1590	1130	538	391	244	234
3	316	345	417	e450	891	1480	1380	1070	498	397	261	226
4	297	336	392	e450	861	976	1220	3030	509	381	262	268
5	282	340	398	e460	821	853	1130	2580	722	378	225	222
6	316	320	375	492	831	813	1050	1520	690	368	212	202
7	352	320	378	652	1410	771	1000	1200	658	357	197	198
8	306	324	373	496	1230	748	969	1040	551	339	192	185
9	286	322	377	458	1050	746	1000	940	494	330	172	162
10	285	310	426	471	979	797	1430	922	475	295	175	186
11	286	312	856	485	950	723	1140	874	451	304	190	146
12	299	312	586	470	888	791	1040	803	439	290	154	143
13	410	303	524	455	855	1300	1050	828	425	399	174	168
14	938	310	602	447	820	1230	1030	921	442	676	173	168
15	1130	316	605	430	790	1010	1040	756	435	484	165	725
16	617	298	529	424	778	1000	990	712	415	405	243	845
17	514	307	545	408	760	1130	951	688	405	358	299	409
18	476	292	964	418	729	1180	932	940	412	338	277	332
19	454	290	724	972	721	1060	918	773	375	309	293	326
20	434	298	624	2190	730	1010	886	696	365	290	240	295
21	422	290	564	1340	799	1170	859	659	350	301	217	740
22	409	293	535	1190	731	1110	829	639	362	301	190	1320
23	385	290	520	2460	699	1020	792	617	348	295	188	968
24	395	558	745	2570	690	961	773	618	378	313	194	571
25	411	723	603	3510	674	920	887	586	404	370	201	515
26	380	626	558	2280	668	935	859	565	572	406	434	1870
27	354	479	536	1650	655	1230	775	567	644	333	629	5190
28	358	421	515	1380	630	1000	769	661	460	299	437	3310
29	364	409	497	1220	---	946	762	572	399	276	349	1370
30	344	450	472	1120	---	1540	725	543	400	264	292	959
31	360	---	465	1040	---	2160	---	527	---	239	252	---
TOTAL	12868	10894	16710	31288	23586	31927	30836	29107	14205	10885	7768	22503
MEAN	415.1	363.1	539.0	1009	842.4	1030	1028	938.9	473.5	351.1	250.6	750.1
MAX	1130	723	964	3510	1410	2160	2060	3030	722	676	629	5190
MIN	282	290	373	408	630	629	725	527	348	239	154	143
CFSM	0.95	0.83	1.24	2.31	1.93	2.36	2.36	2.15	1.09	0.81	0.57	1.72
IN.	1.10	0.93	1.43	2.67	2.01	2.72	2.63	2.48	1.21	0.93	0.66	1.92

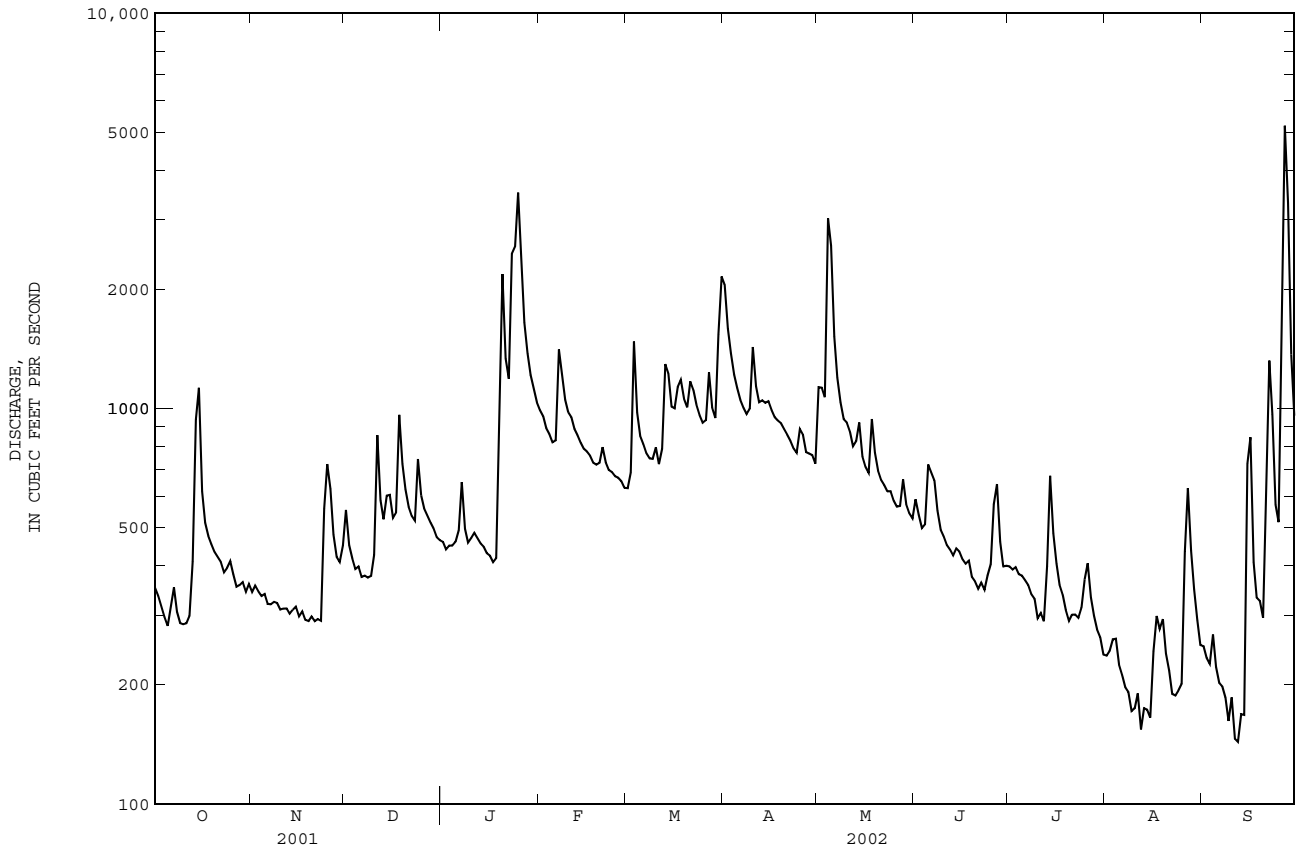
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2002,® BY WATER YEAR (WY)

MEAN	639.1	789.3	1026	1355	1566	1725	1523	1163	912.4	685.4	631.1	575.2
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	458	351	238	213	201
(WY)	1955	1955	1966	1981	1986	1988	1986	2001	1988	1986	1986	1999

03503000 LITTLE TENNESSEE RIVER AT NEEDMORE, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1944 - 2002 [®]	
ANNUAL TOTAL	203518		242577		1049	
ANNUAL MEAN	557.6		664.6		1565	
HIGHEST ANNUAL MEAN					495	
LOWEST ANNUAL MEAN					1986	
HIGHEST DAILY MEAN	3020	Jan 20	5190	Sep 27	17200	Oct 5 1964
LOWEST DAILY MEAN	249	Sep 17	143	Sep 12	71	Nov 7 1954
ANNUAL SEVEN-DAY MINIMUM	262	Sep 13	165	Sep 8	142	Oct 2 1986
MAXIMUM PEAK FLOW			7070		22100	
MAXIMUM PEAK STAGE			6.60		12.87	
INSTANTANEOUS LOW FLOW			142*		52*	
ANNUAL RUNOFF (CFSM)	1.28		1.52		2.41	
ANNUAL RUNOFF (INCHES)	17.36		20.70		32.70	
10 PERCENT EXCEEDS	910		1130		1910	
50 PERCENT EXCEEDS	475		509		804	
90 PERCENT EXCEEDS	312		262		357	

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



PRECIPITATION RECORDS

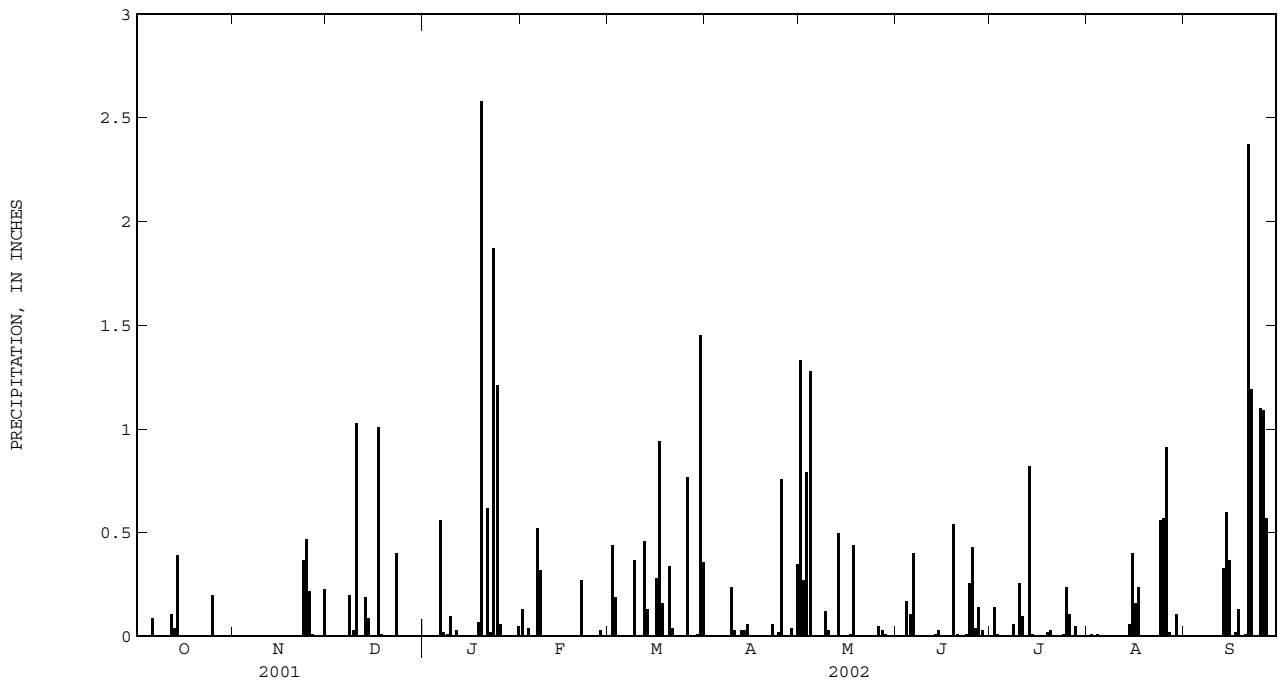
PERIOD OF RECORD.--October 1998 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Gage is operated in cooperation with Tennessee Valley Authority. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

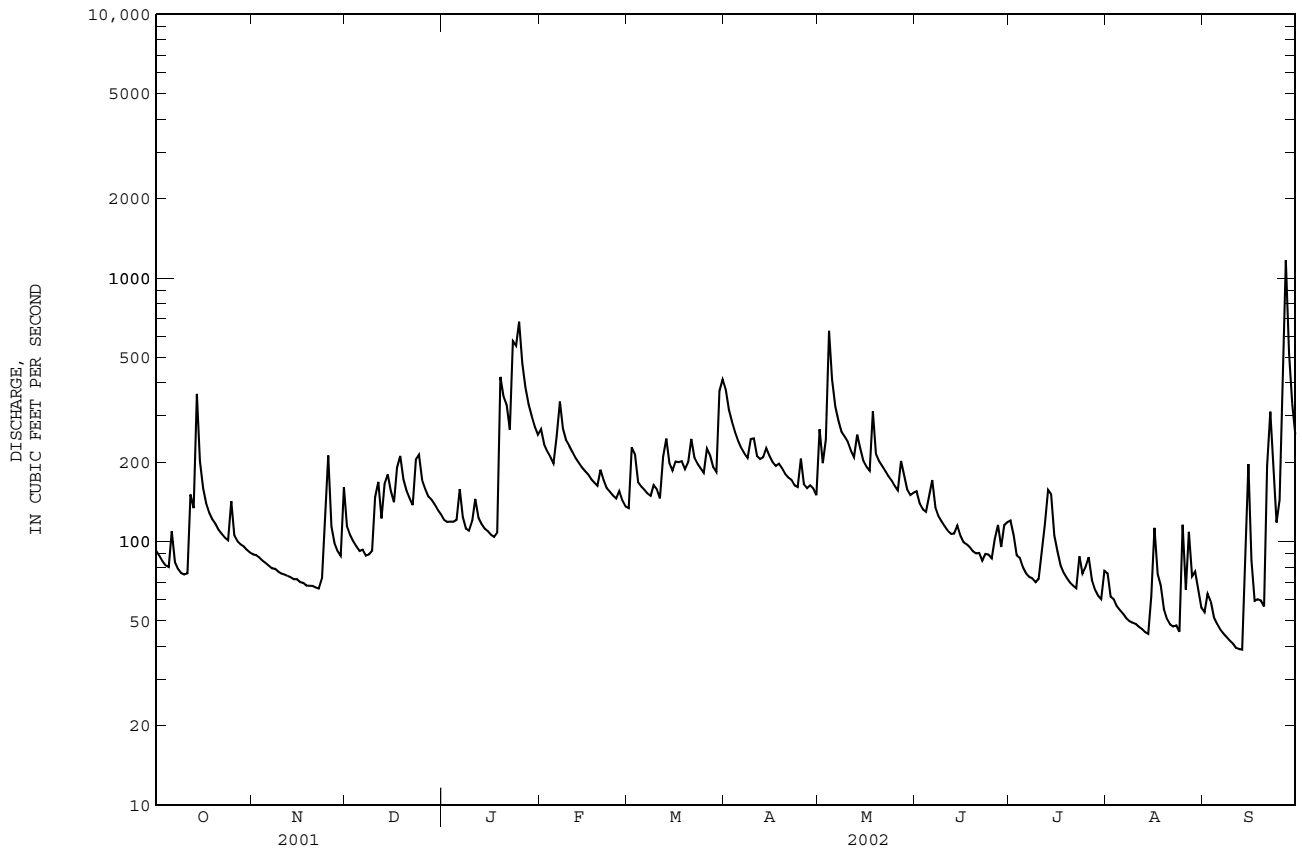
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.13	0.00	0.00	1.33	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.27	0.00	0.14	0.01	0.00
3	0.00	0.00	0.00	0.00	0.04	0.19	0.00	0.79	0.00	0.01	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28	0.17	0.00	0.01	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00
6	0.09	0.00	0.00	0.56	0.52	0.00	0.00	0.00	0.40	0.00	0.00	0.00
7	0.00	0.00	0.00	0.02	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.20	0.01	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
9	0.00	0.00	0.03	0.10	0.00	0.37	0.24	0.12	0.00	0.00	0.00	0.00
10	0.00	0.00	1.03	0.00	0.00	0.00	0.03	0.03	0.00	0.26	0.00	0.00
11	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00
12	0.11	0.00	0.00	0.00	0.00	0.46	0.03	0.00	0.00	0.00	0.00	0.00
13	0.04	0.00	0.19	0.00	0.00	0.13	0.03	0.50	0.01	0.82	0.00	0.33
14	0.39	0.00	0.09	0.00	0.00	0.00	0.06	0.00	0.03	0.01	0.06	0.60
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.37
16	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.16	0.00
17	0.00	0.00	1.01	0.00	0.00	0.94	0.00	0.01	0.00	0.00	0.24	0.02
18	0.00	0.00	0.01	0.07	0.00	0.16	0.00	0.44	0.00	0.00	0.00	0.13
19	0.00	0.00	0.00	2.58	0.00	0.00	0.00	0.00	0.54	0.02	0.00	0.00
20	0.00	0.00	0.00	0.00	0.27	0.34	0.00	0.00	0.01	0.03	0.00	0.01
21	0.00	0.00	0.00	0.62	0.00	0.04	0.00	0.00	0.00	0.00	0.00	2.37
22	0.00	0.00	0.00	0.02	0.00	0.00	0.06	0.00	0.00	0.00	0.00	1.19
23	0.00	0.37	0.40	1.87	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
24	0.00	0.47	0.00	1.21	0.00	0.00	0.02	0.00	0.26	0.01	0.56	0.00
25	0.20	0.22	0.00	0.06	0.00	0.00	0.76	0.00	0.43	0.24	0.57	1.10
26	0.00	0.01	0.00	0.00	0.03	0.77	0.00	0.05	0.04	0.11	0.91	1.09
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.14	0.00	0.02	0.57
28	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.01	0.03	0.05	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.01	0.00	0.00	0.00	0.00	0.11	0.00
30	0.00	0.23	0.00	0.00	---	1.45	0.35	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.05	---	0.36	---	0.00	---	0.00	0.00	---
TOTAL	0.83	1.30	2.96	7.20	1.31	5.94	1.62	4.86	2.18	1.86	3.05	7.78



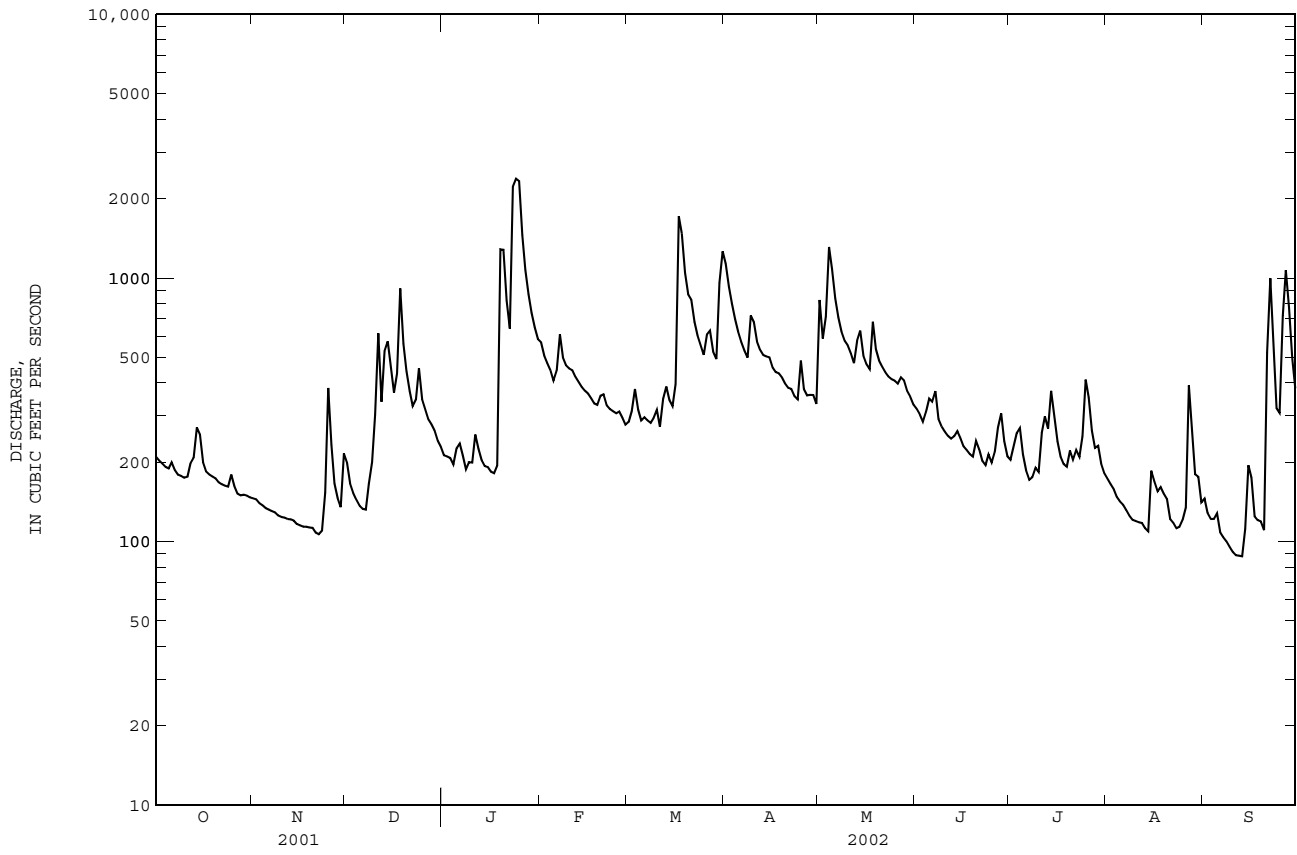


Lake Logan dam, North Carolina.

03504000 NANTAHALA RIVER NEAR RAINBOW SPRINGS, NC--Continued



03512000 OCONALUFTEE RIVER AT BIRDTOWN, NC--Continued

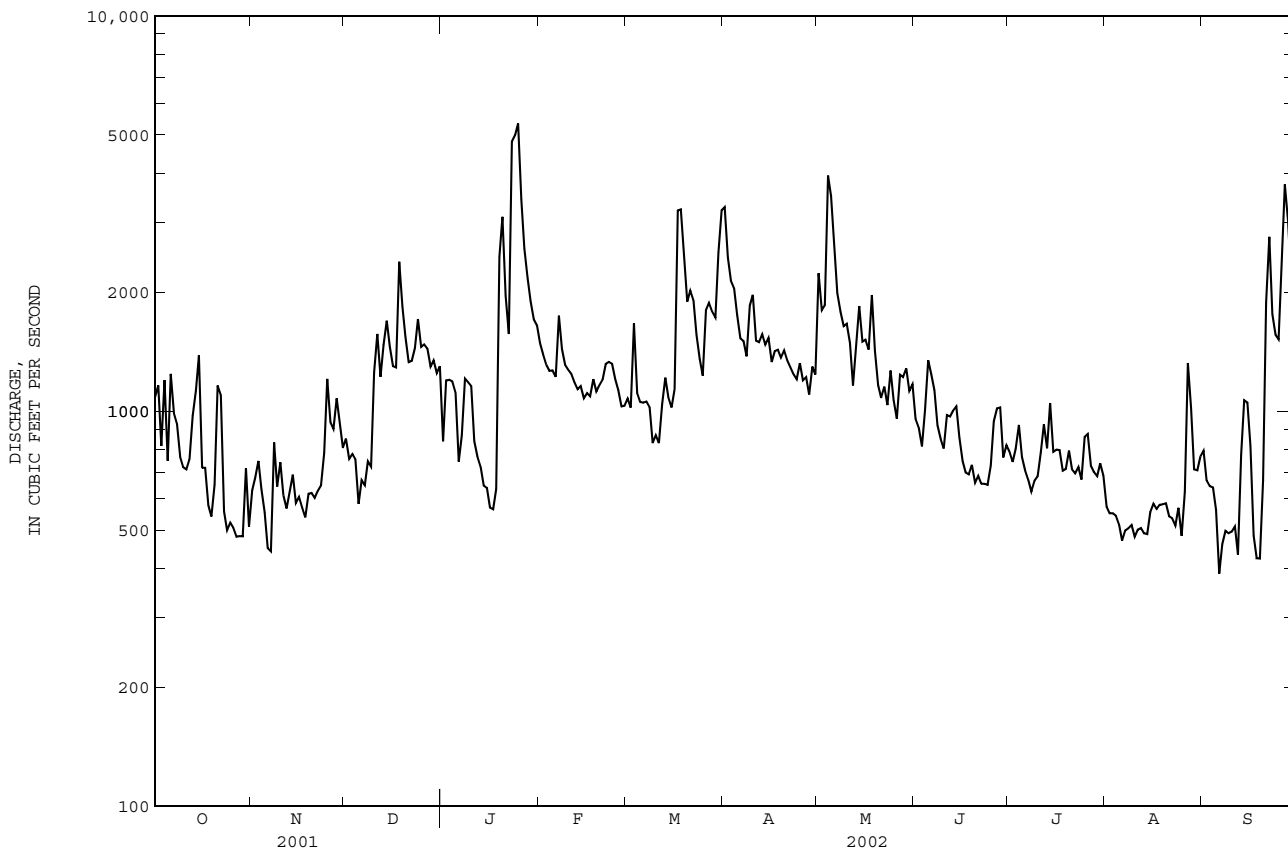


03513000 TUCKASEGEE RIVER AT BRYSON CITY, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1898 - 2002 [®]	
ANNUAL TOTAL	398811		422942		1588	
ANNUAL MEAN	1093		1159		2576	
HIGHEST ANNUAL MEAN					879	
LOWEST ANNUAL MEAN					28000	
HIGHEST DAILY MEAN	5190	Jan 19	5340	Jan 25	28000	Mar 4 1917
LOWEST DAILY MEAN	442	Nov 7	388	Sep 6	31*	Sep 9 1925
ANNUAL SEVEN-DAY MINIMUM	505	Oct 23	468	Sep 6	97	Sep 4 1925
MAXIMUM PEAK FLOW			8200		61600*	
MAXIMUM PEAK STAGE			6.35		15.96	
INSTANTANEOUS LOW FLOW			343*		27*	
10 PERCENT EXCEEDS	1650		1880		2840	
50 PERCENT EXCEEDS	984		1030		1250	
90 PERCENT EXCEEDS	588		549		602	

[®] See PERIOD OF RECORD.

* See REMARKS.



PRECIPITATION RECORDS

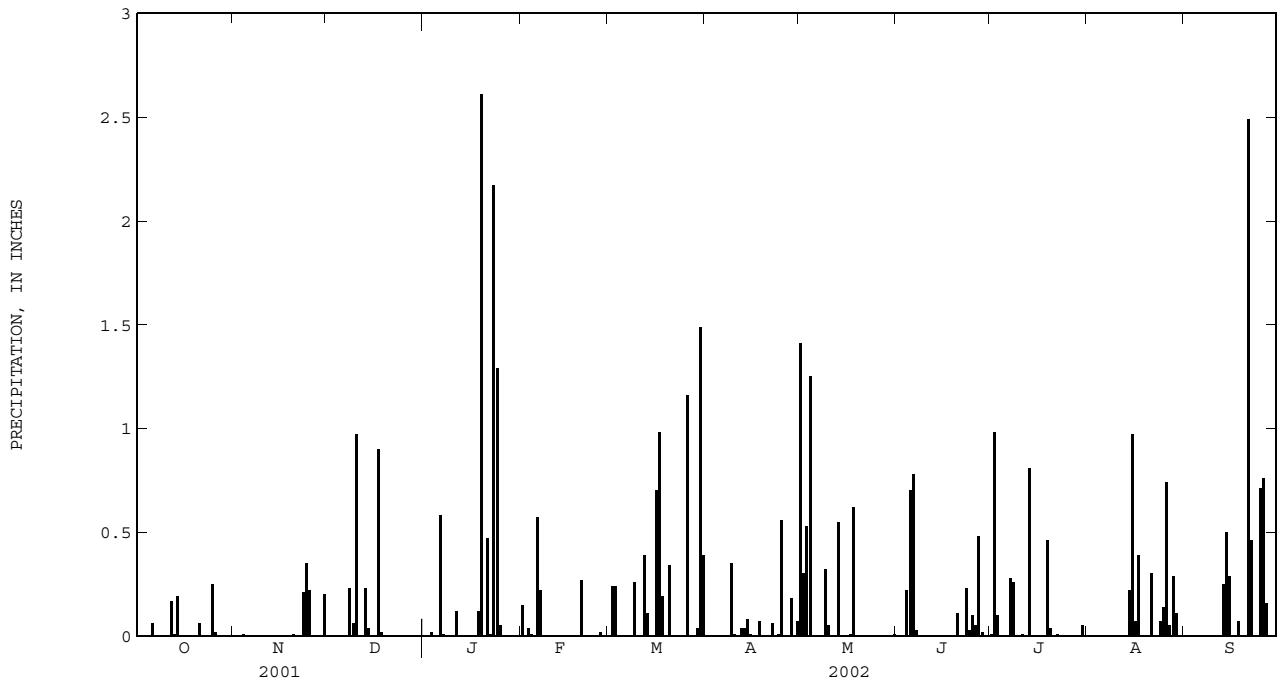
PERIOD OF RECORD.--October 1999 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Gage is operated in cooperation with Tennessee Valley Authority and the North Carolina Department of Environment and Natural Resources. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.15	0.00	0.00	1.41	0.00	0.01	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.30	0.00	0.98	0.00	0.00
3	0.00	0.00	0.00	0.02	0.04	0.24	0.00	0.53	0.00	0.10	0.00	0.00
4	0.00	0.01	0.00	0.00	0.01	0.00	0.00	1.25	0.22	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00	0.00
6	0.06	0.00	0.00	0.58	0.57	0.00	0.00	0.00	0.78	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.22	0.00	0.00	0.00	0.03	0.28	0.00	0.00
8	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00
9	0.00	0.00	0.06	0.00	0.00	0.26	0.35	0.32	0.00	0.00	0.00	0.00
10	0.00	0.00	0.97	0.00	0.00	0.00	0.01	0.05	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
12	0.17	0.00	0.00	0.00	0.00	0.39	0.04	0.00	0.00	0.00	0.00	0.00
13	0.01	0.00	0.23	0.00	0.00	0.11	0.04	0.55	0.00	0.81	0.00	0.25
14	0.19	0.00	0.04	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.22	0.50
15	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.97	0.29
16	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.07	0.00
17	0.00	0.00	0.90	0.00	0.00	0.98	0.00	0.01	0.00	0.00	0.39	0.00
18	0.00	0.00	0.02	0.12	0.00	0.19	0.07	0.62	0.00	0.00	0.00	0.07
19	0.00	0.00	0.00	2.61	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.00
20	0.00	0.01	0.00	0.00	0.27	0.34	0.00	0.00	0.11	0.04	0.00	0.00
21	0.06	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.30	2.49
22	0.00	0.00	---	0.01	0.00	0.00	0.06	0.00	0.00	0.01	0.00	0.46
23	0.00	0.21	---	2.17	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00
24	0.00	0.35	---	1.29	0.00	0.00	0.01	0.00	0.03	0.00	0.07	0.00
25	0.25	0.22	---	0.05	0.00	0.00	0.56	0.00	0.10	0.00	0.14	0.71
26	0.02	0.00	---	0.00	0.02	1.16	0.00	0.00	0.05	0.00	0.74	0.76
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.05	0.16
28	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.02	0.00	0.29	0.00
29	0.00	0.00	0.00	0.00	---	0.04	0.00	0.00	0.00	0.00	0.11	0.00
30	0.00	0.20	0.00	0.00	---	1.49	0.07	0.00	0.00	0.05	0.00	0.00
31	0.00	---	0.00	0.00	---	0.39	---	0.01	---	0.00	0.00	---
TOTAL	0.76	1.00	---	7.45	1.28	6.53	1.48	5.05	2.75	3.01	3.35	5.69





Little River above High Falls, North Carolina.

TENNESSEE RIVER BASIN

0351706800 CHEOAH RIVER NEAR BEAR PEN GAP NEAR TAPOCO, NC

LOCATION.--Lat 35°26'18", long 83°55'08", Graham County, Hydrologic Unit 06010204, on right bank, 93 ft downstream of U.S. Forest Service bridge number 62 on Slickrock Road, 1.7 mi upstream of mouth, and 1.2 mi east southeast of Tapoco.

DRAINAGE AREA.--206 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,260 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Considerable regulation at times caused by Santeetlah Dam, 10.3 mi upstream. Water from Santeetlah Lake, 10.3 mi upstream, is diverted to hydro powerplant on the Little Tennessee River, which bypasses gage. Minimum discharge for period of record also occurred Sept. 17, 20, 2000.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	22	45	44	185	52	971	200	66	45	26	30
2	26	23	37	45	91	77	612	138	63	36	25	19
3	26	23	33	37	86	88	513	185	60	47	23	17
4	24	22	31	39	82	68	499	868	58	60	22	16
5	24	21	30	47	75	63	454	1110	61	37	22	15
6	24	21	29	44	86	61	266	551	121	33	21	14
7	24	21	28	42	117	59	95	509	87	31	19	13
8	23	21	29	36	436	57	88	356	65	36	19	13
9	23	21	40	36	730	63	115	216	57	61	18	13
10	22	21	88	44	99	61	294	201	53	49	18	12
11	22	21	121	61	81	56	468	189	50	40	18	11
12	22	20	66	50	77	83	445	176	48	35	17	11
13	23	20	108	45	73	80	440	218	47	96	16	11
14	54	20	177	42	70	71	424	190	48	80	16	16
15	33	20	111	41	68	67	105	170	47	53	19	24
16	26	20	76	38	66	70	72	161	44	42	30	18
17	24	20	103	37	64	161	70	155	42	37	37	19
18	24	20	156	41	61	173	68	732	40	35	31	28
19	24	20	102	354	60	138	70	987	45	33	26	22
20	24	21	77	279	69	129	65	111	46	32	23	17
21	23	20	65	189	64	121	64	94	38	31	20	159
22	23	20	58	137	59	100	68	91	36	29	18	143
23	23	21	64	4220	58	91	61	85	40	32	18	58
24	23	35	70	2790	57	84	59	80	46	36	22	36
25	28	117	56	3760	55	79	115	75	53	42	22	48
26	24	45	52	2000	58	89	75	76	52	37	23	145
27	22	35	49	968	54	86	70	95	42	30	48	147
28	22	31	46	265	52	77	84	86	43	29	25	92
29	23	29	44	667	---	73	75	76	40	28	21	57
30	23	67	41	1110	---	755	67	72	36	26	21	42
31	23	---	39	742	---	1390	---	77	---	34	19	---
TOTAL	776	838	2071	18250	3133	4622	6872	8330	1574	1272	703	1266
MEAN	25.03	27.93	66.81	588.7	111.9	149.1	229.1	268.7	52.47	41.03	22.68	42.20
MAX	54	117	177	4220	730	1390	971	1110	121	96	48	159
MIN	22	20	28	36	52	52	59	72	36	26	16	11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

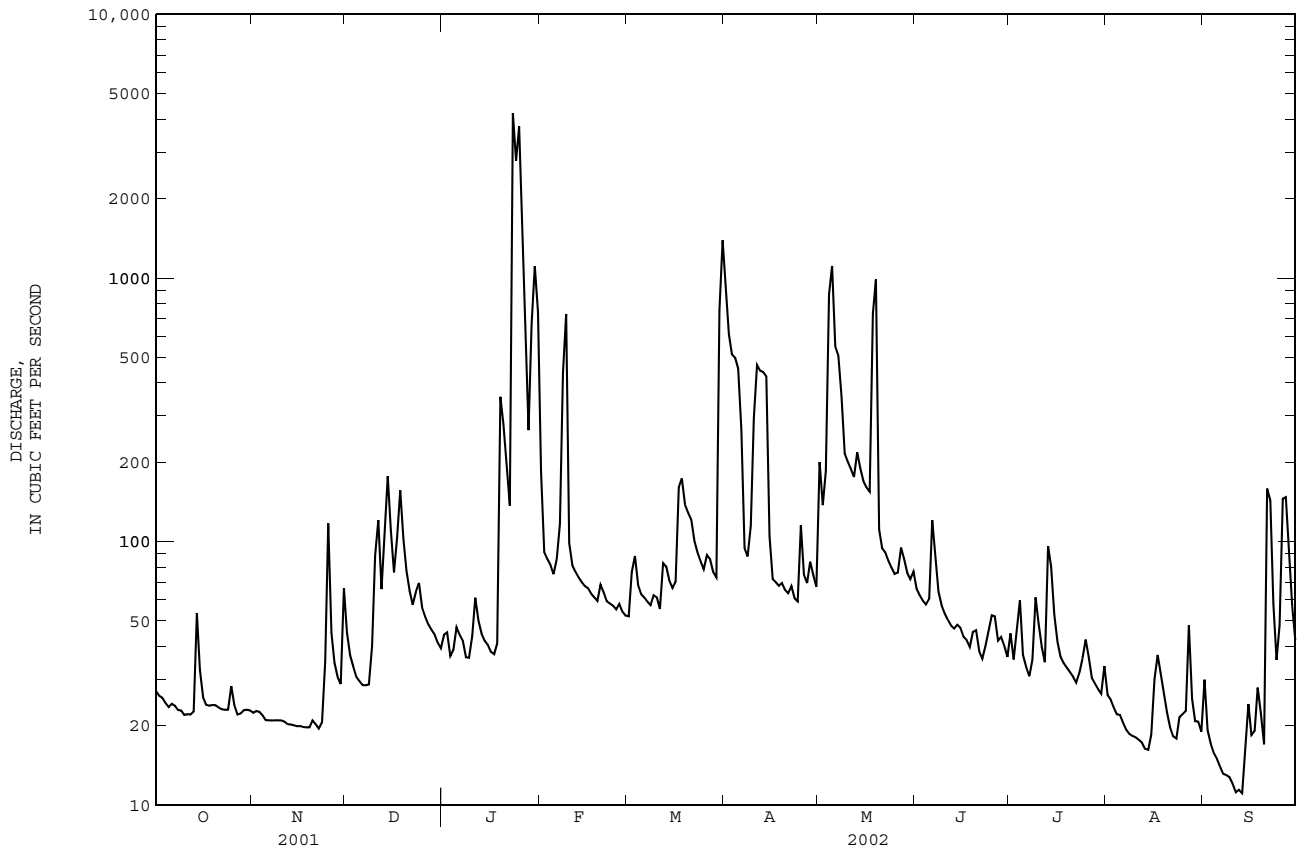
	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
MEAN	19.66	30.41	46.34	240.6	94.45	103.5	144.9	127.0	59.40	59.10	31.08	33.30
MAX	25.0	36.6	66.8	589	112	149	229	269	72.1	80.7	46.6	42.2
(WY)	2002	2001	2002	2002	2002	2002	2002	2002	2001	2000	2001	2002
MIN	12.1	26.7	31.5	65.8	77.3	79.7	64.3	53.2	52.5	41.0	22.7	19.9
(WY)	2001	2000	2000	2000	2000	2000	2001	2001	2002	2002	2002	2000

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2000 - 2002	
ANNUAL TOTAL	21000		49707			
ANNUAL MEAN	57.53		136.2		82.57	
HIGHEST ANNUAL MEAN					136	
LOWEST ANNUAL MEAN					54.9	
HIGHEST DAILY MEAN	456	Jan 19	4220	Jan 23	4220	Jan 23 2002
LOWEST DAILY MEAN	20	Nov 12	11	Sep 11	9.1	Sep 17 2000
ANNUAL SEVEN-DAY MINIMUM	20	Nov 12	12	Sep 7	9.8	Sep 14 2000
MAXIMUM PEAK FLOW			8150		8150	
MAXIMUM PEAK STAGE			8.58		8.58	
INSTANTANEOUS LOW FLOW			10		8.8*	
10 PERCENT EXCEEDS	100		200		121	
50 PERCENT EXCEEDS	47		48		44	
90 PERCENT EXCEEDS	23		20		18	

* See REMARKS.

0351706800 CHEOAH RIVER NEAR BEAR PEN GAP NEAR TAPOCO, NC--Continued



0351706800 CHEOAH RIVER NEAR BEAR PEN GAP NEAR TAPOCO, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1999 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1999 to current year.

INSTRUMENTATION.--Temperature probe since October 1999. Satellite telemetry at station.

REMARKS.--Records fair. Station operated in cooperation with Tapoco, Inc.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 30.0°C, July 30, 2002; minimum recorded, 0°C, periodically in winter months.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 30.0°C, July 30; minimum recorded, .1°C, Jan. 1, 2, 4, 5.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	16.4	11.9	14.0	11.5	8.3	10	12.1	10.3	11.0	0.7	0.1	0.3
2	16.8	12.2	14.3	13.7	10.5	12.0	10.8	9.2	9.9	1.2	0.1	0.6
3	17.3	12.8	14.9	14.7	12.0	13.2	9.7	8.0	8.8	1.8	0.8	1.2
4	17.1	13.3	15.2	13.1	10.9	12.0	9.3	7.5	8.4	1.1	0.1	0.4
5	17.1	13.6	15.4	11.6	9.3	10.5	9.8	7.6	8.6	0.9	0.1	0.4
6	16.3	12.9	14.9	10.0	7.6	8.9	10.6	8.5	9.5	1.9	0.7	1.3
7	14.6	10.7	12.6	9.3	6.7	8.1	11.3	9.9	10.7	1.9	1.2	1.7
8	13.7	9.8	11.8	9.4	6.8	8.2	12.4	11.2	11.8	2.0	0.2	1.1
9	14.1	10.2	12.2	10.3	7.7	9.0	12.3	10.2	11.4	2.3	0.3	1.2
10	14.7	11.0	12.9	9.8	7.6	8.8	10.2	9.7	9.9	4.2	1.5	2.9
11	15.5	13.1	14.2	10.0	7.5	8.7	10.9	10.0	10.3	6.2	4.2	5.2
12	16.8	15.0	15.8	9.5	7.2	8.4	11.9	9.9	10.7	4.4	2.8	3.6
13	18.1	16.4	17.3	9.0	7.0	8.0	12.5	11.9	12.2	4.2	2.7	3.4
14	17.9	15.8	17.2	8.3	6.1	7.3	13.3	11.6	12.6	4.8	2.0	3.4
15	16.7	13.6	15.0	8.3	5.9	7.1	11.6	10.1	10.6	5.2	3.6	4.5
16	14.2	11.7	13.1	8.2	5.8	7.0	10.7	9.5	10.1	4.4	2.5	3.4
17	12.8	9.9	11.2	8.7	6.1	7.4	12.4	10.3	11.5	5.3	2.8	4.0
18	12.0	8.3	10.2	9.8	7.2	8.5	11.9	9.2	10.7	6.0	4.9	5.3
19	12.4	8.9	10.7	10.3	8.0	9.2	9.2	7.4	8.3	7.1	5.2	6.2
20	13.6	10.0	11.8	10.0	7.6	9.5	8.6	5.6	7.0	6.7	5.5	6.2
21	14.4	11.1	12.7	7.6	5.8	6.8	5.6	4.2	5.0	7.6	6.2	6.8
22	15.3	11.9	13.6	7.5	5.0	6.3	5.5	3.9	4.8	6.7	4.6	5.8
23	15.7	12.6	14.0	8.9	6.4	7.5	8.1	5.1	6.8	8.4	6.6	7.7
24	17.4	13.5	15.4	12.0	8.9	10.4	7.6	4.3	5.9	9.3	8.4	8.8
25	16.3	13.3	15.2	12.6	11.1	12.0	4.3	2.8	3.6	8.4	7.6	8.0
26	13.3	10.1	11.9	11.1	9.3	10.3	3.0	1.6	2.1	8.5	7.4	7.8
27	10.1	8.2	9.3	13.9	10.5	12.3	2.5	1.2	1.8	8.8	7.0	7.8
28	9.4	6.6	8.0	14.6	12.4	13.4	4.1	1.7	2.8	8.9	6.6	7.8
29	9.4	6.3	7.8	14.6	13.0	13.8	4.4	2.8	3.6	9.9	8.5	9.1
30	9.7	6.5	8.2	14.3	12.1	13.6	2.8	1.4	1.9	10.4	8.6	9.4
31	10.7	7.6	9.1	---	---	---	1.9	0.7	1.3	11.3	9.1	10.1
MONTH	18.1	6.3	12.9	14.7	5.0	9.6	13.3	0.7	7.9	11.3	0.1	4.7

0351706800 CHEOAH RIVER NEAR BEAR PEN GAP NEAR TAPOCO, NC--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	12.5	9.7	11.3	5.2	0.9	3.0	13.4	10.8	11.8	16.6	14.6	15.7
2	9.7	6.8	7.9	6.6	4.0	5.3	15.0	10.4	12.5	19.8	15.6	17.3
3	6.9	6.1	6.5	6.7	3.5	5.9	13.1	10.5	12.3	17.9	14.9	16.1
4	6.4	3.9	5.6	4.2	1.3	2.6	13.4	9.4	11.1	16.8	14.2	15.1
5	4.2	2.6	3.5	5.3	0.6	2.8	13.4	9.4	11.1	18.6	16.2	17.2
6	4.9	3.7	4.1	7.0	2.4	4.6	12.8	8.3	10.5	18.9	15.9	17.4
7	5.8	4.9	5.3	8.7	4.3	6.3	12.8	7.8	10.3	20.7	16.9	18.6
8	8.1	4.1	5.9	10.1	5.5	7.8	15.0	10.3	12.3	20.8	17.5	19.0
9	8.6	6.6	7.5	11.7	8.9	10.3	14.7	13.0	13.7	21.2	18.4	19.6
10	9.6	7.4	8.4	9.7	6.3	7.9	16.8	12.8	14.6	19.4	18.3	18.9
11	8.4	5.9	7.2	9.2	4.5	6.9	16.7	12.9	14.6	21.1	17.8	19.4
12	6.9	4.4	5.7	8.6	7.4	8.0	15.5	13.9	14.7	21.9	19.3	20.3
13	6.8	4.3	5.5	9.6	8.4	8.9	16.8	14.2	15.4	20.6	16.8	19.4
14	6.8	4.0	5.5	13.9	9.1	11.3	16.9	14.9	15.9	18.1	14.6	16.4
15	7.8	4.8	6.4	15.2	10.8	12.9	18.9	14.6	16.7	19.1	14.0	16.4
16	9.2	6.9	7.7	15.0	12.9	13.8	20.1	15.7	17.8	19.3	15.2	17.3
17	7.4	5.3	6.3	13.8	12.9	13.3	20.2	16.9	18.5	20.2	16.7	18.3
18	6.9	3.6	5.3	13.5	12.7	13.1	20.8	16.5	18.5	19.0	15.7	17.4
19	6.4	4.1	5.4	14.7	12.0	13.2	22.2	17.1	19.3	18.5	15.5	16.9
20	10.1	6.4	8.3	13.9	12.7	13.3	22.0	18.1	19.8	15.5	11.6	13.7
21	10.4	7.6	8.9	14.3	10.9	12.6	20.7	17.9	19.1	16.0	11.2	13.3
22	8.6	5.6	6.9	10.9	6.7	8.5	20.7	16.9	18.7	16.6	10.7	13.5
23	8.0	4.7	6.0	9.7	4.7	7.1	18.4	13.8	16.1	18.1	12.1	14.9
24	8.1	4.3	6.2	11.2	5.8	8.6	16.2	14.0	15.0	19.0	13.2	16.0
25	9.2	5.5	7.4	14.1	8.3	11.2	17.8	14.1	15.5	20.1	14.3	17.1
26	9.2	6.1	7.8	13.4	11.6	12.4	14.8	12.0	13.0	20.2	15.7	17.7
27	6.1	1.8	3.5	11.6	7.8	9.5	15.1	12.1	13.5	17.1	15.4	16.2
28	4.4	0.5	2.2	12.2	6.7	9.3	18.6	14.3	16.1	18.9	15.2	16.9
29	---	---	---	14.7	9.5	11.9	19.5	15.2	17.1	20.6	16.1	18.2
30	---	---	---	13.4	11.6	12.4	17.6	13.4	15.7	21.9	16.6	19.0
31	---	---	---	12.3	11.5	11.9	---	---	---	23.6	17.5	20.3
MONTH	12.5	0.5	6.4	15.2	0.6	9.2	22.2	7.8	15.0	23.6	10.7	17.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	24.5	18.8	21.3	27.4	21.7	24.5	29.3	23.2	26.0	26.6	21.0	23.5
2	24.6	19.4	21.8	27.3	22.8	24.8	29.5	23.6	26.3	27.8	22.3	24.6
3	25.9	20.2	22.7	27.4	21.9	23.9	29.3	23.8	26.3	27.9	22.6	25.0
4	23.2	20.9	22.0	25.6	20.8	22.9	28.5	23.5	25.5	28.0	22.9	25.2
5	24.3	20.0	22.0	27.3	21.6	24.3	29.1	22.5	25.4	28.7	23.3	25.5
6	22.2	19.5	21.0	28.2	22.5	25.0	28.7	23.4	25.7	27.6	22.5	24.8
7	23.8	18.8	21.1	27.5	22.1	24.6	28.0	21.6	24.5	27.5	21.9	24.4
8	25.1	19.8	22.2	27.1	22.2	24.6	27.3	21.0	23.8	26.5	21.8	23.9
9	25.1	19.7	22.3	26.4	21.3	24.0	27.0	21.0	23.7	26.8	21.4	23.8
10	25.5	19.5	22.3	24.9	22.0	23.4	27.2	22.1	24.4	26.5	20.8	23.3
11	25.5	19.3	22.2	26.6	21.4	23.6	27.8	22.2	24.8	24.6	20.3	22.4
12	24.9	19.2	22.0	26.2	22.6	24.1	28.2	22.9	25.2	25.3	19.8	22.3
13	24.8	20.3	22.4	23.9	19.9	21.5	27.0	22.3	24.6	24.6	20.2	22.3
14	22.4	20.3	21.3	23.0	19.6	20.9	26.9	22.6	24.5	23.6	21.6	22.4
15	22.9	18.5	20.4	26.1	20.4	22.7	26.3	23.0	24.5	22.9	21.1	21.9
16	20.6	17.3	19.3	27.3	21.5	24.1	25.2	22.4	23.7	25.5	20.9	22.8
17	23.7	17.0	20.1	27.8	22.1	24.7	24.9	22.4	23.4	22.9	21.5	22.1
18	23.6	18.3	20.8	27.5	23.0	25.1	25.1	21.5	23.2	22.1	21.0	21.4
19	25.0	19.1	21.5	27.1	22.8	24.7	26.4	21.8	23.6	24.4	20.5	22.1
20	24.7	18.9	21.5	27.4	22.7	24.6	27.7	21.8	24.3	23.3	21.4	22.2
21	24.8	19.4	22.0	27.8	22.1	24.8	28.5	22.6	25.3	22.1	20.1	20.9
22	24.6	18.7	21.6	28.2	23.0	25.1	27.8	23.5	25.4	20.5	19.6	20.0
23	23.4	21.0	22.1	27.7	22.1	24.5	28.9	23.4	25.7	21.8	19.1	20.2
24	24.3	19.9	21.9	26.0	22.5	24.2	27.7	24.0	25.5	21.6	19.2	20.4
25	25.1	20.6	22.4	24.6	22.5	23.3	26.7	23.3	24.6	20.5	18.9	19.7
26	24.5	20.3	22.1	27.0	22.0	24.0	26.2	22.1	23.9	18.9	18.3	18.6
27	25.2	21.1	23.0	27.7	22.9	24.9	23.3	20.2	21.8	19.5	18.5	19.1
28	23.2	21.2	22.1	27.8	23.0	25.2	26.0	20.1	22.6	21.0	18.1	19.3
29	26.5	20.8	23.1	29.7	23.6	26.1	25.2	22.0	23.4	21.9	18.2	19.7
30	27.1	21.7	24.2	30.0	24.2	26.5	26.0	21.3	23.4	21.0	18.6	19.8
31	---	---	---	28.9	23.1	25.7	25.9	21.8	23.6	---	---	---
MONTH	27.1	17.0	21.8	30.0	19.6	24.3	29.5	20.1	24.5	28.7	18.1	22.1

TENNESSEE RIVER BASIN

0351751500 CHEOAH RIVER NEAR TAPOCO, NC

LOCATION.--Lat 35°26'51", long 83°56'22", Graham County, Hydrologic Unit 06010204, on left bank, 15 ft downstream from Cheoah Power House Bridge, 12 ft east of Highway 129, 300 ft upstream of mouth, and 0.2 mi north northeast of Tapoco.

DRAINAGE AREA.--215 mi².

PERIOD OF RECORD.--October 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,120 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records good.

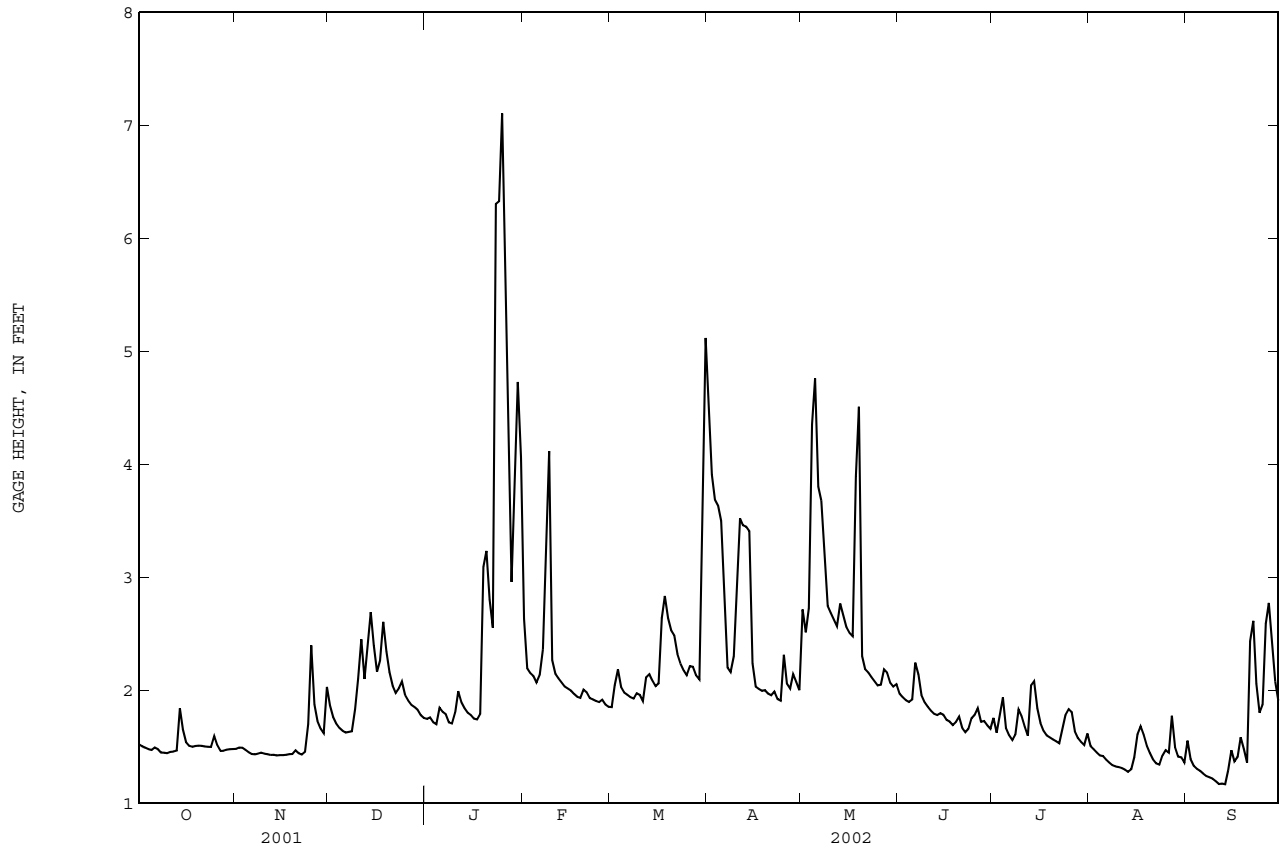
EXTREMES FOR PERIOD OF RECORD--Maximum, 8.87 ft, Jan. 23, 2002; minimum, 1.03 ft, Sept. 16, 17, 2000.

EXTREMES FOR CURRENT YEAR.--Maximum 8.87 ft, Jan. 23; minimum 1.15 ft, Sept. 11, 13.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.52	1.48	1.87	1.75	2.63	1.85	4.56	2.71	1.97	1.75	1.50	1.55
2	1.50	1.49	1.76	1.76	2.19	2.05	3.91	2.51	1.94	1.62	1.48	1.39
3	1.49	1.49	1.70	1.72	2.15	2.18	3.69	2.73	1.91	1.77	1.45	1.33
4	1.48	1.47	1.67	1.70	2.13	2.03	3.63	4.35	1.90	1.94	1.42	1.30
5	1.47	1.45	1.64	1.84	2.07	1.98	3.50	4.76	1.92	1.67	1.42	1.29
6	1.49	1.44	1.62	1.81	2.13	1.96	2.90	3.80	2.24	1.60	1.39	1.26
7	1.48	1.43	1.63	1.79	2.36	1.94	2.20	3.68	2.14	1.56	1.36	1.24
8	1.45	1.44	1.64	1.71	3.19	1.92	2.16	3.21	1.96	1.61	1.34	1.23
9	1.45	1.45	1.83	1.70	4.12	1.97	2.30	2.75	1.89	1.83	1.32	1.22
10	1.44	1.44	2.10	1.80	2.27	1.96	2.89	2.69	1.85	1.77	1.32	1.19
11	1.45	1.43	2.45	1.99	2.14	1.90	3.52	2.63	1.82	1.68	1.31	1.17
12	1.46	1.43	2.10	1.89	2.10	2.11	3.46	2.57	1.79	1.60	1.30	1.17
13	1.46	1.43	2.36	1.84	2.07	2.14	3.45	2.77	1.78	2.04	1.28	1.17
14	1.84	1.42	2.69	1.80	2.03	2.08	3.41	2.67	1.80	2.08	1.30	1.29
15	1.65	1.43	2.40	1.78	2.01	2.04	2.24	2.56	1.78	1.84	1.41	1.47
16	1.54	1.43	2.16	1.75	2.00	2.06	2.03	2.51	1.74	1.71	1.61	1.37
17	1.51	1.43	2.26	1.74	1.97	2.64	2.01	2.48	1.72	1.64	1.68	1.41
18	1.50	1.43	2.60	1.79	1.94	2.83	1.99	3.89	1.69	1.60	1.61	1.58
19	1.51	1.44	2.34	3.09	1.93	2.64	2.00	4.51	1.72	1.58	1.51	1.48
20	1.51	1.47	2.16	3.23	2.00	2.53	1.97	2.30	1.77	1.56	1.44	1.36
21	1.51	1.44	2.04	2.80	1.98	2.48	1.96	2.19	1.66	1.55	1.39	2.43
22	1.50	1.43	1.98	2.55	1.93	2.32	1.99	2.16	1.63	1.53	1.35	2.61
23	1.50	1.45	2.02	6.30	1.92	2.24	1.92	2.12	1.66	1.66	1.34	2.06
24	1.50	1.70	2.08	6.33	1.90	2.17	1.91	2.08	1.75	1.78	1.42	1.80
25	1.59	2.40	1.96	7.10	1.89	2.13	2.31	2.04	1.78	1.83	1.47	1.87
26	1.51	1.87	1.91	5.75	1.92	2.21	2.06	2.05	1.84	1.81	1.45	2.59
27	1.46	1.73	1.87	4.57	1.87	2.21	2.01	2.18	1.72	1.64	1.77	2.77
28	1.46	1.66	1.85	2.96	1.85	2.13	2.14	2.16	1.73	1.58	1.50	2.40
29	1.47	1.62	1.83	3.66	---	2.10	2.07	2.07	1.69	1.54	1.41	2.08
30	1.48	2.03	1.78	4.73	---	3.68	2.00	2.03	1.66	1.51	1.41	1.91
31	1.48	---	1.75	4.06	---	5.12	---	2.05	---	1.62	1.36	---
MEAN	1.51	1.54	2.00	2.88	2.17	2.31	2.61	2.75	1.81	1.69	1.43	1.63
MAX	1.84	2.40	2.69	7.10	4.12	5.12	4.56	4.76	2.24	2.08	1.77	2.77
MIN	1.44	1.42	1.62	1.70	1.85	1.85	1.91	2.03	1.63	1.51	1.28	1.17

0351751500 CHEOAH RIVER NEAR TAPOCO, NC--Continued



TENNESSEE RIVER BASIN

03548330 BRASSTOWN CREEK NEAR BRASSTOWN, NC

LOCATION.--Lat 35°02'24", long 83°57'34", Clay County, Hydrologic Unit 06020002, on right bank 20 ft upstream from bridge on Secondary Road 1134, 0.1 mi northwest of Brasstown, and 0.8 mi above mouth.

DRAINAGE AREA.--83.1 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1944, 1947, 1953-55, 1960-64, 1988. July 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,600 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Maximum discharge for period of record from rating curve extended above 1,400 ft³/s by logarithmic plotting. Minimum discharge for current water year also occurred Aug. 15, Sept. 13. Minimum discharge for period of record also occurred Sept. 20, 2000.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	41	47	45	111	74	334	222	68	48	37	39
2	48	42	43	44	101	84	229	146	65	51	45	36
3	46	42	42	45	96	99	183	169	62	51	42	52
4	43	41	41	45	92	83	158	943	68	47	35	39
5	43	39	39	45	86	78	142	363	131	44	34	35
6	52	38	39	58	108	77	131	215	120	40	32	32
7	48	38	39	59	183	76	123	170	82	38	30	30
8	44	38	39	50	147	75	118	146	73	37	28	29
9	42	38	40	48	129	78	117	132	67	36	27	28
10	42	38	54	47	120	79	133	132	64	39	26	26
11	41	38	81	48	111	74	115	124	61	83	26	25
12	44	37	55	46	106	100	111	112	59	205	25	24
13	44	37	61	45	101	103	112	122	57	192	24	24
14	71	37	75	45	96	93	110	115	58	201	23	32
15	61	37	63	44	93	88	108	102	60	133	27	62
16	51	37	56	43	91	99	102	96	56	79	44	38
17	48	36	69	42	88	92	98	94	54	65	44	33
18	46	36	104	44	85	89	97	119	51	57	42	39
19	45	36	72	297	83	86	94	93	50	53	37	42
20	45	37	63	254	89	93	91	87	48	51	32	36
21	44	35	57	221	87	153	89	85	49	48	29	105
22	44	35	53	159	83	126	87	82	45	45	28	145
23	43	37	57	384	80	111	83	79	45	44	27	76
24	42	49	71	576	79	103	82	76	47	43	27	56
25	59	86	59	894	77	97	109	74	50	64	42	82
26	45	53	55	292	78	118	89	72	48	69	45	206
27	42	44	53	201	76	130	86	101	47	50	99	204
28	42	42	51	163	74	111	85	105	46	45	105	118
29	42	40	50	141	---	104	81	82	52	42	104	81
30	41	51	48	124	---	483	77	74	53	39	62	67
31	41	---	46	113	---	502	---	71	---	38	44	---
TOTAL	1440	1235	1722	4662	2750	3758	3574	4603	1836	2077	1272	1841
MEAN	46.45	41.17	55.55	150.4	98.21	121.2	119.1	148.5	61.20	67.00	41.03	61.37
MAX	71	86	104	894	183	502	334	943	131	205	105	206
MIN	41	35	39	42	74	74	77	71	45	36	23	24
CFSM	0.56	0.50	0.67	1.81	1.18	1.46	1.43	1.79	0.74	0.81	0.49	0.74
IN.	0.64	0.55	0.77	2.09	1.23	1.68	1.60	2.06	0.82	0.93	0.57	0.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

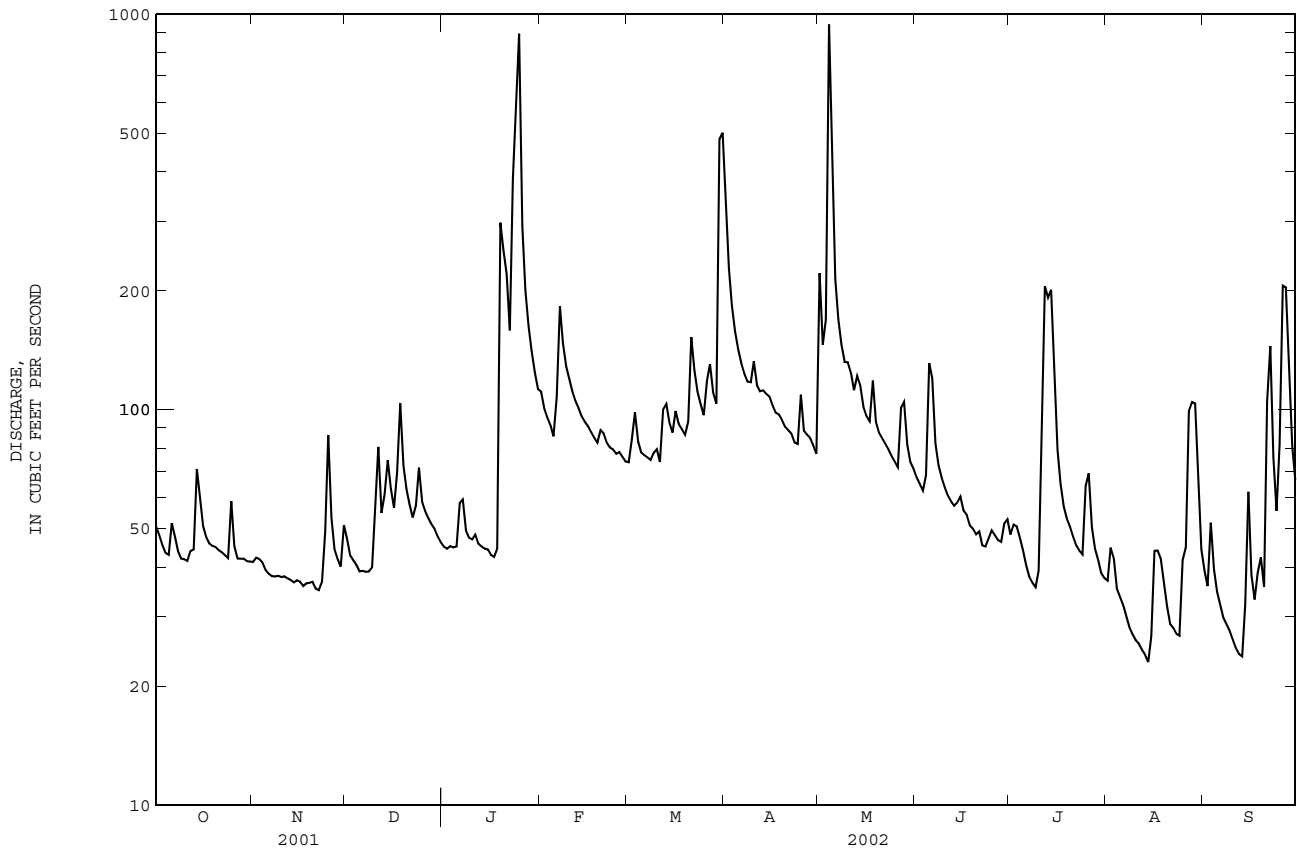
	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
MEAN	36.82	47.23	51.18	122.4	99.71	123.2	103.6	104.4	75.15	58.61	41.92	55.87
MAX	46.5	53.3	55.5	150	101	125	119	148	89.1	67.0	51.6	75.6
(WY)	2002	2001	2002	2002	2001	2001	2002	2002	2001	2002	2001	2001
MIN	27.2	41.2	46.8	94.5	98.2	121	88.1	60.3	61.2	47.9	33.1	30.7
(WY)	2001	2002	2001	2001	2002	2002	2001	2001	2002	2000	2000	2000

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1999 - 2002	
ANNUAL TOTAL	26980		30770			
ANNUAL MEAN	73.92		84.30		78.42	
HIGHEST ANNUAL MEAN					84.3	
LOWEST ANNUAL MEAN					72.5	
HIGHEST DAILY MEAN	626	Jan 19	943	May 4	943	May 4 2002
LOWEST DAILY MEAN	35	Nov 21	23	Aug 14	18	Sep 16 2000
ANNUAL SEVEN-DAY MINIMUM	36	Nov 16	25	Aug 9	19	Sep 14 2000
MAXIMUM PEAK FLOW			2030		2030	
MAXIMUM PEAK STAGE			9.81		9.81	
INSTANTANEOUS LOW FLOW			22*		17*	
ANNUAL RUNOFF (CFSM)	0.89		1.01		0.94	
ANNUAL RUNOFF (INCHES)	12.08		13.77		12.82	
10 PERCENT EXCEEDS	116		133		129	
50 PERCENT EXCEEDS	59		59		58	
90 PERCENT EXCEEDS	40		37		36	

* See REMARKS.

03548330 BRASSTOWN CREEK NEAR BRASSTOWN, NC--Continued



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 mi².

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 NGVD of 1929 (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. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Considerable diurnal fluctuation since 1924 caused by Mission power plant at Andrews Dam 7 mi upstream, normal regulated storage, about 75 ft³/s-day. Flow regulated since 1942 by Chatuge Lake (station 03546500) 22 mi upstream. Prior to regulation, maximum discharge: 23,100 ft³/s, Mar. 19, 1899, from rating curve extended above 5,000 ft³/s; gage height: 18.4 ft, from graph based on gage readings, site and datum then in use; minimum daily discharge: 10 ft³/s, Dec. 3, 1924, result of freezeup and filling of Lake Andrews, site and datum then in use. Minimum discharge for period of record also occurred Oct. 1, 2, 2000.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage observed is that of Mar. 19, 1899.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	260	248	267	385	1180	320	1710	820	365	425	913	536
2	616	230	254	588	845	340	1210	625	353	705	866	496
3	697	241	250	924	451	393	917	758	347	798	713	748
4	1120	228	522	740	733	354	747	2960	348	898	619	757
5	671	223	367	538	1100	384	655	1830	567	600	952	467
6	287	497	623	344	1060	334	601	1120	529	333	883	519
7	268	694	485	450	1430	327	558	883	409	303	666	527
8	688	500	235	310	1220	322	529	710	369	398	589	570
9	1050	311	247	269	765	353	451	685	342	561	570	639
10	979	303	409	272	550	351	478	615	338	601	580	856
11	635	378	480	288	507	320	420	569	316	349	555	945
12	558	360	350	256	752	416	406	528	313	703	498	718
13	250	639	357	268	964	507	532	550	315	669	559	325
14	302	842	368	257	1080	584	483	575	338	922	688	248
15	707	1160	354	732	772	404	470	490	323	700	480	339
16	1070	942	336	881	406	456	455	467	304	821	682	392
17	845	247	405	806	391	457	448	457	302	1060	493	535
18	395	213	897	708	379	443	449	587	289	1170	319	761
19	249	209	812	1080	364	427	441	490	275	1020	729	1070
20	265	402	814	1360	390	465	432	457	271	617	840	909
21	251	1240	966	1000	375	615	431	443	273	314	925	1980
22	725	681	555	817	359	553	439	413	270	688	908	2870
23	960	218	338	1650	343	504	414	443	261	924	716	1940
24	601	260	456	2280	340	514	410	410	294	765	593	1340
25	695	379	408	3630	335	451	500	398	341	766	593	1190
26	341	290	374	1700	353	473	410	385	380	845	605	1610
27	372	258	370	1320	327	552	389	454	372	802	788	1170
28	484	263	323	1170	329	490	393	512	304	483	688	933
29	792	228	312	1250	---	472	402	398	357	756	849	668
30	1050	358	496	1320	---	1520	367	377	327	677	476	903
31	608	---	653	1100	---	2070	---	398	---	746	428	---
TOTAL	18791	13042	14083	28693	18100	16171	16547	20807	10192	21419	20763	26961
MEAN	606.2	434.7	454.3	925.6	646.4	521.6	551.6	671.2	339.7	690.9	669.8	898.7
MAX	1120	1240	966	3630	1430	2070	1710	2960	567	1170	952	2870
MIN	249	209	235	256	327	320	367	377	261	303	319	248

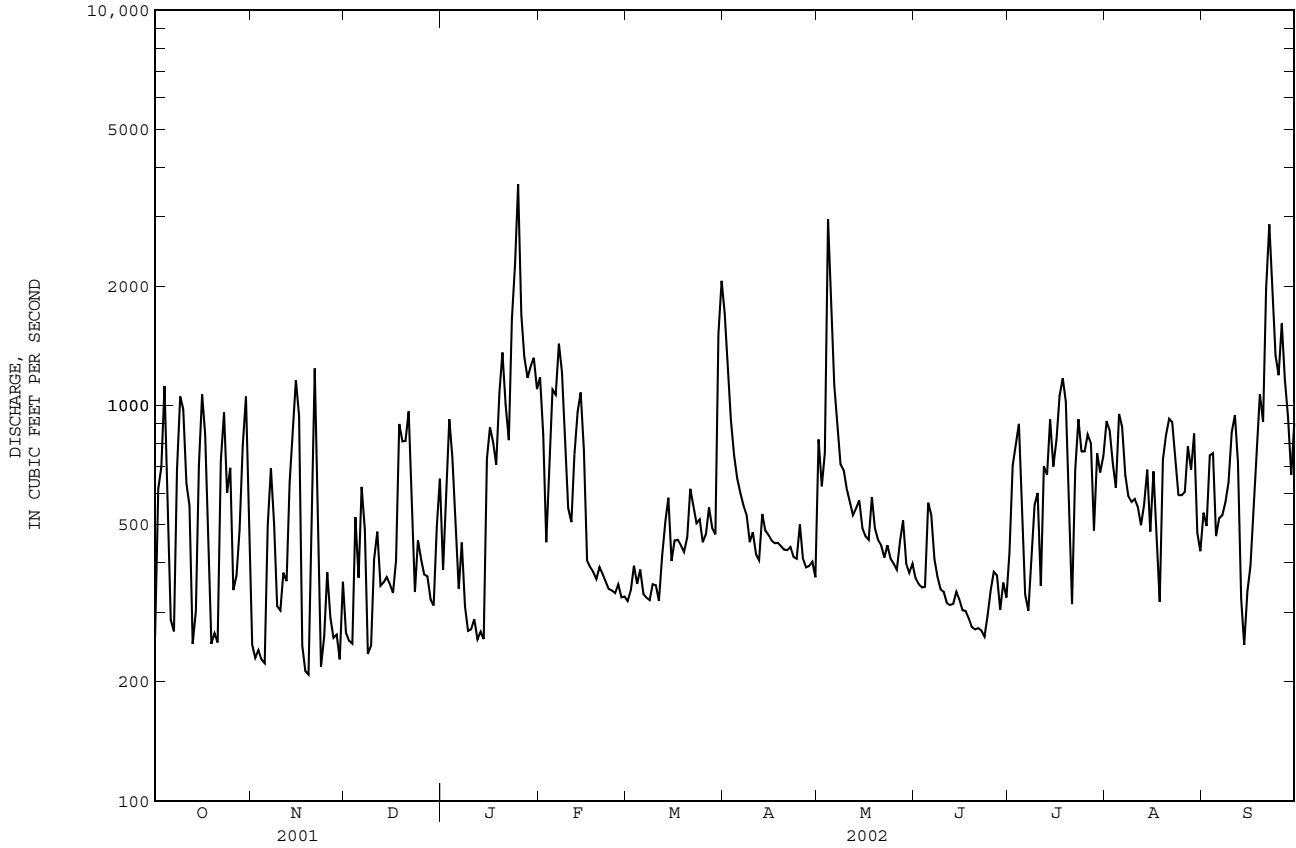
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2002,[®] BY WATER YEAR (WY)

	MEAN	526.2	584.6	926.5	1122	1198	1092	1027	918.8	884.0	874.9	861.8	717.4
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	

03548500 HIWASSEE RIVER ABOVE MURPHY, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1942 - 2002 [®]	
ANNUAL TOTAL	184862		225569		893.1	
ANNUAL MEAN	506.5		618.0		1414	1990
HIGHEST ANNUAL MEAN					397	1988
LOWEST ANNUAL MEAN					11600	Feb 16 1990
HIGHEST DAILY MEAN	2460	Jan 19	3630	Jan 25	62	Oct 19 1952
LOWEST DAILY MEAN	209	Nov 19	209	Nov 19	80	Oct 18 1952
ANNUAL SEVEN-DAY MINIMUM	251	Jul 16	268	Nov 27	18600	May 28 1973
MAXIMUM PEAK FLOW			5260	May 4	13.88	May 28 1973
MAXIMUM PEAK STAGE			7.33	May 4	106*	Oct 2 1993
INSTANTANEOUS LOW FLOW			109	Sep 13	1610	
10 PERCENT EXCEEDS	862		1060		782	
50 PERCENT EXCEEDS	424		496		228	
90 PERCENT EXCEEDS	264		288			

[®] Regulated period only (1942-2002). See REMARKS.
 * 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 1473 at Tomotla, 600 ft upstream from bridge on U.S. Highways 19 and 74, 0.2 mi upstream from Rogers Creek, 4.7 mi northeast of Murphy, and at mile 6.6.

DRAINAGE AREA.--104 mi².

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). WDR NC-91-1: 1979-1994(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,556.46 ft above NGVD of 1929 (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 ft³/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 ft³/s.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	63	111	120	311	147	832	361	148	96	77	112
2	76	63	99	115	273	176	602	266	142	139	79	111
3	73	62	91	113	253	229	474	456	136	140	76	116
4	71	62	86	107	246	191	396	1370	142	152	68	85
5	69	60	82	105	221	176	346	885	168	115	65	75
6	80	58	80	135	264	170	311	549	216	95	61	68
7	74	58	80	128	419	165	286	423	190	87	57	63
8	69	58	83	114	370	160	269	356	145	87	54	59
9	67	58	107	110	324	183	313	318	134	80	53	56
10	68	57	170	110	295	183	308	305	127	91	52	53
11	65	57	263	123	270	166	277	272	121	99	50	50
12	70	55	182	116	249	248	263	250	117	225	49	49
13	73	55	180	112	233	279	255	274	113	201	47	47
14	104	55	208	108	218	259	250	263	115	206	45	71
15	92	55	192	106	209	235	240	231	115	164	73	99
16	76	55	168	103	202	301	230	213	108	150	103	73
17	72	54	231	101	192	324	256	205	105	117	97	63
18	69	54	348	106	183	337	226	324	100	104	108	69
19	69	53	259	636	177	312	214	244	100	95	98	72
20	69	53	210	789	201	340	206	221	120	91	77	63
21	67	52	178	596	188	373	199	207	124	94	63	1150
22	65	52	158	468	176	332	193	196	99	106	57	1580
23	65	55	189	1230	170	298	181	186	95	136	55	561
24	65	86	244	1430	165	271	177	177	96	96	54	320
25	79	224	202	1760	159	250	219	168	107	171	63	321
26	68	122	181	910	167	306	182	162	100	128	61	607
27	64	96	164	595	157	325	176	188	103	132	194	611
28	64	86	151	454	150	284	180	196	117	99	119	496
29	64	81	143	377	---	261	180	167	125	90	117	343
30	64	127	132	325	---	709	165	160	114	83	91	263
31	64	---	126	290	---	987	---	159	---	82	122	---
TOTAL	2213	2126	5098	11892	6442	8977	8406	9752	3742	3751	2385	7706
MEAN	71.39	70.87	164.5	383.6	230.1	289.6	280.2	314.6	124.7	121.0	76.94	256.9
MAX	104	224	348	1760	419	987	832	1370	216	225	194	1580
MIN	64	52	80	101	150	147	165	159	95	80	45	47
CFSM	0.69	0.68	1.58	3.69	2.21	2.78	2.69	3.02	1.20	1.16	0.74	2.47
IN.	0.79	0.76	1.82	4.25	2.30	3.21	3.01	3.49	1.34	1.34	0.85	2.76

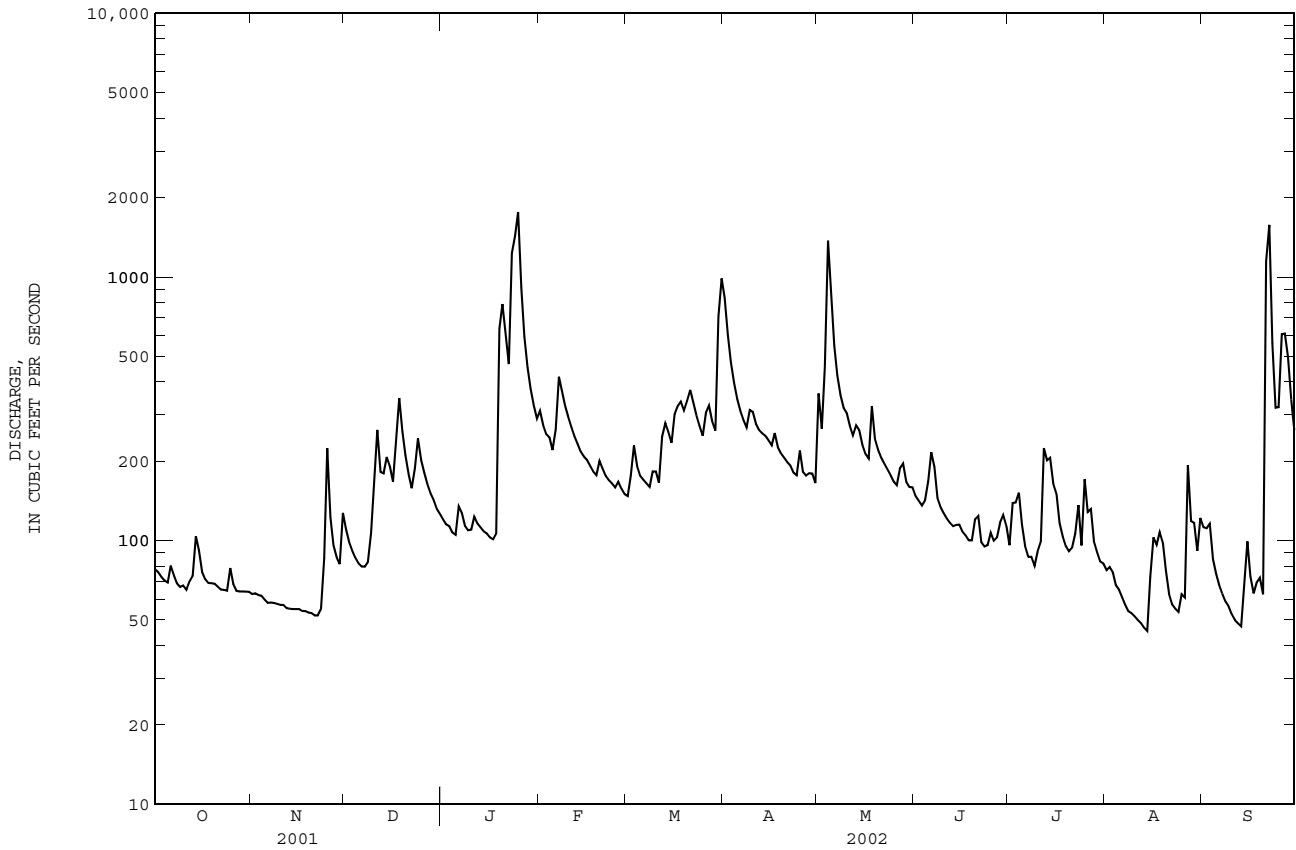
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2002,[®] BY WATER YEAR (WY)

MEAN	97.89	156.2	286.5	397.1	451.8	457.8	366.6	260.6	190.9	167.3	135.4	103.1
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

03550000 VALLEY RIVER AT TOMOTLA, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1904 - 2002 [®]	
ANNUAL TOTAL	60944		72490		255.0	
ANNUAL MEAN	167.0		198.6		379	
HIGHEST ANNUAL MEAN					1922	
LOWEST ANNUAL MEAN					111	
HIGHEST DAILY MEAN	1330	Jan 19	1760	Jan 25	8190	Feb 16 1995
LOWEST DAILY MEAN	52	Nov 21	45	Aug 14	12	Aug 27 1925
ANNUAL SEVEN-DAY MINIMUM	53	Nov 16	50	Aug 8	13	Aug 24 1925
MAXIMUM PEAK FLOW			3170	Sep 22	18000*	Nov 19 1906
MAXIMUM PEAK STAGE			9.01	Sep 22	20.50	Nov 19 1906
INSTANTANEOUS LOW FLOW			44	Aug 14	12*	Aug 27 1925
ANNUAL RUNOFF (CFSM)	1.61		1.91		2.45	
ANNUAL RUNOFF (INCHES)	21.80		25.93		33.31	
10 PERCENT EXCEEDS	290		341		497	
50 PERCENT EXCEEDS	127		136		176	
90 PERCENT EXCEEDS	67		61		59	

[®] See PERIOD OF RECORD.
 * See REMARKS.



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 mi².

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 ft³/s-day at 2,258.60 ft (top of gate), of which 10,400 ft³/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 ft³/s-day, Mar. 27, 1994; elevation, 2,259.20 ft. Minimum content observed: 1,030 ft³/s-day, Sept. 16, 1980; elevation, 2,141.50 ft.

EXTREMES FOR CURRENT YEAR.--Maximum content observed: 12,800 ft³/s-day, Jan. 25; elevation, 2,258.30 ft. Minimum content observed: 8,810 ft³/s-day, Sept. 13,14; elevation, 2,232.70 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 mi².

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 ft³/s-day, at 1,710.0 ft (top of gate) of which 476,900 ft³/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 ft³/s-day, May 28, 1973; elevation, 1,710.20 ft. Minimum content observed (after first filling): 78,300 ft³/s-day, Jan. 29, 1955; elevation, 1,472.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum content observed: 687,800 ft³/s-day, May 29; elevation, 1,702.48 ft. Minimum content observed: 415,000 ft³/s-day, Jan. 19; elevation, 1,638.28 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 mi².

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 ft³/s-day, at 1,928.0 ft (top of flashboard), of which 61,700 ft³/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 ft³/s-day, Apr. 20, 1943; elevation, 1,927.80 ft. Minimum content observed (after first filling): 9,400 ft³/s-day, Sept. 5, 1947, and Jan. 27, 1956; elevation, 1,860.11 ft, Sept. 5, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum content observed: 111,300 ft³/s-day, July 1; elevation, 1,925.13 ft. Minimum content observed: 75,100 ft³/s-day, Jan. 18; elevation, 1,912.30 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 mi².

PERIOD OF RECORD.--September 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.63 ft below sea level.

LAKES AND RESERVOIRS IN OHIO RIVER BASIN

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 ft³/s-day at 1,526.5 ft (top of gate), of which 154,300 ft³/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 ft³/s-day, May 28, 1973; elevation, 1,528.02 ft. Minimum content observed (after first filling): 35,800 ft³/s-day, Jan. 28, 1948; elevation, 1,413.41 ft.

EXTREMES FOR CURRENT YEAR.--Maximum content observed: 200,100 ft³/s-day, May 29; elevation, 1,520.64 ft. Minimum content observed: 88,100 ft³/s-day, Jan. 8; elevation, 1,468.91 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 mi².

PERIOD OF RECORD.--Prior to November 1967 published as Asheville Steam-Electric Generating Plant Lake.

REMARKS.--Total capacity is 4,540 ft³/s-day, of which 2,120 ft³/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 mi².

REMARKS.--Total capacity at crest of spillway is 11,600 ft³/s-day, of which 8,900 ft³/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 mi².

REMARKS.--Total capacity is 844 ft³/s-day, of which 823 ft³/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 mi².

REMARKS.--Total capacity is 1,040 ft³/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 mi².

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 mi².

REMARKS.--Total capacity is 233 ft³/s-day (at crest of spillway), of which approximately 116 ft³/s-day is usable. Filling began in 1926.

LAKES AND RESERVOIRS IN OHIO RIVER BASIN

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 mi².

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 ft³/s-day at 2,890.0 ft (top of gates), of which 63,500 ft³/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 mi².

REMARKS.--Total capacity of East Fork Lake is 671 ft³/s-day, of which 625 ft³/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 mi².

REMARKS.--Total capacity of Wolf Creek Lake is 5,070 ft³/s-day, of which 3,850 ft³/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 mi².

REMARKS.--Total capacity is 17,500 ft³/s-day, of which 2,290 ft³/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 mi².

REMARKS.--Total capacity is 3,200 ft³/s-day, of which 350 ft³/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 mi².

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 ft³/s-day, at 3,100.0 ft (top of gate), of which 33,700 ft³/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 mi².

REMARKS.--Total capacity is 17,700 ft³/s-day, of which 920 ft³/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 mi².

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 ft³/s-day (top of gate) at elevation 1,817.0 ft, of which 66,600 ft³/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

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 mi².

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 ft³/s-day at 1,280.0 ft (top of gate), of which 4,400 ft³/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

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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	2,253.30	11,980	---	1,676.34	563,600	---
Oct. 31	2,252.50	11,860	-120	1,665.38	517,300	-46,300
Nov. 30	2,256.90	12,570	710	1,651.60	463,100	-54,200
Dec. 31	2,254.00	12,100	-470	1,644.51	463,900	-26,200
CAL YR 2001		---	-1,020		---	153,600
Jan. 31	2,256.20	12,450	350	1,651.53	462,800	25,900
Feb. 28	2,245.60	10,770	-1,680	1,652.33	465,800	3,000
Mar. 31	2,255.40	12,320	1,550	1,672.35	546,400	80,600
Apr. 30	2,252.90	11,920	-400	1,685.31	603,900	57,500
May 31	2,254.70	12,210	290	1,702.01	685,400	81,500
June 30	2,250.80	11,590	-620	1,700.89	679,600	-5,800
July 31	2,245.40	10,740	-850	1,696.68	658,400	-21,200
Aug. 31	2,240.90	10,050	-690	1,681.54	586,700	-71,700
Sept. 30	2,254.30	12,150	2,100	1,680.07	580,100	-6,600
WTR YR 2002		---	170		---	16,500
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	1,917.92	89,500	---	1,503.17	153,800	---
Oct. 31	1,914.90	81,500	-8,000	1,489.09	122,800	-31,000
Nov. 30	1,913.23	77,300	-4,200	1,481.85	109,600	-13,200
Dec. 31	1,913.18	77,200	-100	1,471.23	91,600	-18,000
CAL YR 2001		---	5,100		---	11,900
Jan. 31	1,914.92	81,500	4,300	1,473.94	96,000	4,400
Feb. 28	1,915.36	82,600	1,100	1,478.37	103,600	7,600
Mar. 31	1,918.58	91,300	8,700	1,494.95	134,800	31,200
Apr. 30	1,921.32	99,200	7,900	1,506.95	163,200	28,400
May 31	1,924.60	109,600	10,400	1,519.77	197,400	34,200
June 30	1,925.11	111,200	1,600	1,516.94	189,300	-8,100
July 31	1,923.25	105,200	-6,000	1,515.56	185,500	-3,800
Aug. 31	1,919.54	94,000	-11,200	1,506.61	162,300	-23,200
Sept. 30	1,917.69	88,800	-5,200	1,502.09	151,200	-11,100
WTR YR 2002		---	-700		---	-2,600

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.

Station number and stream	Tributary to	Location	Drainage area, (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 2002, IN ATLANTIC SLOPE BASINS						
PEE DEE RIVER BASIN						
02123881 Rocky River	Pee Dee River	Lat 35°28'29", Long 80°46'48", Mecklenburg County, Hydrologic Unit 03040105, on Secondary Road 1608, 1.3 miles upstream from West Branch, and 4.2 miles southeast of Davidson.	13.4	1970-99, 2000-01	11-07-01	3.44
02123989 Rocky River	Pee Dee River	Lat 35°26'31", Long 80°45'08", Cabarrus County, Hydrologic Unit 03040105, on State Highway 73, 1.75 miles below West Branch, and 7.7 miles southwest of Kannapolis.	40.9	1948, 1961-62	11-07-01	5.32
02124091 Clarke Creek	Rocky River	Lat 35°23'12", Long 80°43'46", Cabarrus County, Hydrologic Unit 03040105, on Secondary Road 1440, 0.2 mile above mouth, and 0.75 mile northeast of Pleasant Grove.	28.2	1952-53, 1961-62, 1967	11-07-01	0.36
02124101 Rocky River	Pee Dee River	Lat 35°22'59", Long 80°43'18", Cabarrus County, Hydrologic Unit 03040105, on Secondary Road 1445, 0.6 mile below Clarke Creek, and 1.1 miles east of Pleasant Grove.	76.8	1953, 1961-62	11-07-01	6.36
02124110 Rocky River	Pee Dee River	Lat 35°21'33", Long 80°40'31", Cabarrus County, Hydrologic Unit 03040105, on U.S. Highway 29, 2.2 miles west of Roberta Mill, and 3.6 miles upstream from Mallard Creek.	87.2	1952-58, 1961-62, 1967, 1973-74, 1979	11-07-01	5.94
02124160 Mallard Creek	Rocky River	Lat 35°20'02", Long 80°40'05", Cabarrus County, Hydrologic Unit 03040105, on Secondary Road 1300, 0.2 mile upstream from mouth and 1.3 miles northwest of Harrisburg.	41.1	1955-65, 1971, 1973-81	11-07-01	12.1
0212418255 Rocky River	Pee Dee River	Lat 35°20'06", Long 80°37'41", Cabarrus County, Hydrologic Unit 03040105, on Secondary Road 1304, 1.1 miles north of Harrisburg and 1.7 miles downstream from Mallard Creek.	134	1970-73, 1975	11-08-01	17.5
02124237 Coddle Creek	Rocky River	Lat 35°20'32", Long 80°36'45", Cabarrus County, Hydrologic Unit 03040105, on State Highway 49, 2.0 miles above mouth, and 2.7 miles northeast of Harrisburg.	74.3	1961-62	11-08-01	5.58

Station number and stream	Tributary to	Location	Drainage area, (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 2002, IN ATLANTIC SLOPE BASINS						
PEE DEE RIVER BASIN						
02124277 Rocky River	Pee Dee River	Lat 35°18'59", Long 80°35'43", Cabarrus County, Hydrologic Unit 03040105, on Secondary Road 1139, below Back Creek, and 0.7 mile north of Rocky River.	231	1967	11-08-01	26.4
02124320 Reedy Creek	Rocky River	Lat 35°18'12", Long 80°35'41", Cabarrus County, Hydrologic Unit 03040105, on Secondary Road 1136, 0.3 mile southeast of Rocky River, and 0.4 mile above Caldwell Creek.	30.9	1955-63	11-08-01	2.09
02124374 Irish Buffalo Creek	Rocky River	Lat 35°20'50", Long 80°32'52", Cabarrus County, Hydrologic Unit 03040105, on Secondary Road 1132, 1 mile south of Faggarts Crossroads, and 1 mile upstream from mouth.	45.5	1974-84, 1986-99, 2000-01	11-08-01	4.87
02124394 Coldwater Creek	Irish Buffalo Creek	Lat 35°20'41", Long 80°31'41", Cabarrus County, Hydrologic Unit 03040105, above U.S. Highway 601, 1 mile above Irish Buffalo Creek, and 5.25 miles southeast of Concord.	63.4	1952-54, 1959, 1961-62	11-08-01	2.09
02124401 Rocky River	Pee Dee River	Lat 35°19'26", Long 80°30'59", Cabarrus County, Hydrologic Unit 03040105, on U.S. Highway 601, 1 mile upstream from Hamby Branch, and 3 miles northeast of Flows Store.	392	1970-71, 1973-99, 2000-01	11-08-01	63.3
02124596 Dutch Buffalo Creek	Rocky River	Lat 35°18'51", Long 80°27'52", Cabarrus County, Hydrologic Unit 03040105, on State Highway 200, and 0.2 mile west of Georgeville.	98.2	1948, 1952-53, 1961-62, 1986-96	11-08-01	1.76
02124644 Rocky River	Pee Dee River	Lat 35°15'16", Long 80°28'22", Cabarrus County, Hydrologic Unit 03040105, on State Highway 27, 1.25 miles below Dutch Buffalo Creek, and 2.5 miles northeast of Midland.	536	1961-62	11-08-01	71.3
02124668 Clear Creek	Rocky River	Lat 35°11'40", Long 80°31'46", Union County, Hydrologic Unit 03040105, on U.S. Highway 601, 0.4 mile north of Brief, and 1.7 miles above mouth.	22.5	1954, 1961-62	11-08-01	0.56
0212471905 Goose Creek	Rocky River	Lat 35°10'33", Long 80°30'40", Union County, Hydrologic Unit 03040105, on Secondary Road 1547, approx. 0.5 mile above mouth, and approx. 3.5 miles east of Fairview.	41.4		11-07-01	0.60

Station number and stream	Tributary to	Location	Drainage area, (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 2002, IN ATLANTIC SLOPE BASINS						
PEE DEE RIVER BASIN						
0212476710 Crooked Creek	Rocky River	Lat 35°08'41", Long 80°28'18", Union County, Hydrologic Unit 03040105, on Secondary Road 1547, approx. 2.5 miles above mouth, and 3.5 miles east of Fairview.	47.3		11-07-01	3.06
02124781 Rocky River	Pee Dee River	Lat 35°09'55", Long 80°23'51", Stanly County, Hydrologic Unit 03040105, on State Highway 200, 0.5 mile downstream from Rock Hole Creek, and 5.0 miles southeast of Stanfield.	708	1971, 1973-77	11-07-01	84.7
02124813 Rocky River	Pee Dee River	Lat 35°11'42", Long 80°16'48", Stanly County, Hydrologic Unit 03040105, on Secondary Road 1970, 1.9 miles upstream from Long Creek, and 3.5 miles southeast of Oakboro.	763	1961-62, 1970-71, 1973-74	11-08-01	56.4
02125126 Long Creek	Rocky River	Lat 35°13'05", Long 80°15'28", Stanly County, Hydrologic Unit 03040105, on Secondary Road 1917, 1 mile upstream from mouth, and 4 mile east of Oakboro.	198	1970-71, 1973-77, 1979-99, 2000-01	11-08-01	13.8
02125482 Richardson Creek	Rocky River	Lat 35°04'16", Long 80°24'25", Union County, Hydrologic Unit 03040105, on Secondary Road 1649, 1.2 miles downstream of Watson Creek, and 1.5 miles northwest of Fairfield.	153	1961-62, 1981-84, 1986-99, 2000	11-08-01	8.90
02125591 Richardson Creek	Rocky River	Lat 35°09'27", Long 80°14'07", Anson County, Hydrologic Unit 03040105, on Secondary Road 1600, 0.5 mile upstream from mouth, and 3.8 miles southwest of Cottonville.	234	1982-84	11-07-01	7.52
02125650 Rocky River	Pee Dee River	Lat 35°09'52", Long 80°12'22", Stanly County, Hydrologic Unit 03040105, on Secondary Road 1943, and approx. 4.5 miles south-southeast of Aquadale.	1,232		11-09-01	86.0
02125951 Lanes Creek	Rocky River	Lat 35°07'49", Long 80°11'18", Union County, Hydrologic Unit 03040105, on Secondary Road 1612, 1.5 miles above mouth, and 4.75 miles northwest of Ansonville.	133		11-09-01	0.03
02126201 Rocky River	Pee Dee River	Lat 35°11'39", Long 80°06'49", Stanly County, Hydrologic Unit 03040105, on U.S. Highway 52, 2.5 miles south of Norwood, and 4.5 miles above mouth.	1,403		11-07-01	79.7

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	Discharge (ft ³ /s)
DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 2002, IN ATLANTIC SLOPE BASINS						
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, 1986-2001	12-7-01 1-31-02 5-30-02 6-25-02	2.42 7.49 0 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, 1996-2001	10-5-01 3-29-02 6-25-02 9-6-02	0.88 4.62 0.49 1.15
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, 1991-2001	12-4-01 1-29-02 6-28-02	32.8 55.5 62.6
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, 1976-2001	10-5-01 6-24-02 8-5-02	71.6 23.8 47.6
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, 1997-2001	10-5-01 3-29-02 6-25-02 9-6-02	0 15.1 0 1.54
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, 1996-2001	12-7-01 4-3-02 7-1-02 9-9-02	148 637 108 140
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, 1980-2001	12-7-01 4-3-02 7-1-02 9-20-02	13.6 49.9 13.2 12.7
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, 1978-2001	12-6-01 6-25-02	24.4 12.3

^a Approximately.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 2002--Continued

Station Number and Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
CAPE FEAR RIVER BASIN--Continued						
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, 1985-2001	12-5-01	5.06
					4-2-02	220
					6-26-02	1.04
					8-7-02	0.08
0210102530	Cape Fear River	Lat 35°28'40", long 79°31'12", Moore County, Hydrologic Unit 03030004, at State Highway 22 near High Falls.	792	1993-94, 1997, 1999-2001	08-07-02	0.84
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, 1985-2001	12-4-01	26.0
					4-3-02	582
					5-29-02	35.5
					8-12-02	1.14
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	1997-2001	12-3-01	26.2
					4-4-02	235
					5-29-02	6.28
					8-12-02	1.24
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, 1980-2001	12-4-01	75.8
					4-3-02	1250
					5-29-02	22.0
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, 1997-2001	12-30-01	81.1
					4-3-02	280
					5-29-02	50.0
					9-11-02	52.3
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, 1996-2001	10-1-01	50.8
					11-26-01	73.3
					4-11-02	84.9
					6-3-02	66.1
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	1985-2001	10-2-01	13.8
					2-22-02	39.0
					5-30-02	19.2
					8-29-02	9.32

[†] Operated as a continuous-record gaging station.

^a Approximately.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 2002--Continued

Station Number and Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
PEE DEE RIVER BASIN--Continued						
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 [†] , 1981-2001	10-24-01	9.22
					3-25-02	195
					9-26-02	24.1
02123881 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	1970-2001	11-7-01	3.44
					1-9-02	5.22
					9-30-02	4.99
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, 1986-2001	10-23-01	4.52
					11-8-01	4.87
					1-17-02	7.22
					8-14-02	0.89
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, 1973-2001	11-8-01	63.3
					2-26-02	103
					9-24-02	53.4
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, 1973-2001	10-11-01	12.7
					11-8-01	13.5
					2-25-02	45.3
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, 1986-2001	11-8-01	8.90
					2-12-02	46.6
					4-19-02	17.7
					7-3-02	8.07
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, 1986-2001	10-24-01	20.4
					2-12-02	113
					4-19-02	56.7
					7-3-02	2.86

[†] Operated as a continuous-record gaging station.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 2002--Continued

Station Number and Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
PEE DEE RIVER BASIN--Continued						
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	1985-2001	10-24-01	2.37
					2-12-02	45.7
					4-19-02	22.8
					7-3-02	0.25
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, 1995-2001	12-5-01	0.16
					3-27-02	4.93
					6-25-02	0.90
					9-5-02	4.38
SANTEE RIVER BASIN						
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, [†] 1995-2001	10-4-01	35.0
					12-4-01	33.3
					6-14-02	51.3
					9-5-02	17.2
0214272204 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	1986-2001	10-22-01	10.6
					2-13-02	52.0
					8-12-02	2.53
02143027 Henry Fork	South Fork Catawba 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, 1996-2001	12-19-01	107
					3-14-02	303
					6-21-02	21.3
					8-30-02	28.9
02143069 South Fork Catawba River	Catawba River	Lat 35°37'58", long 81°18'20", Catawba County, bridge on State Highway 10, 1 mile downstream from Henry Fork, and 2.2 miles west of Startown.	210	1974-77, 1979-88, 1991-93, 1997-2001	2-13-02	176
					3-20-02	291
					6-21-02	27.8
					8-30-02	48.7
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, 1978-2001	2-13-02	60.5
					7-11-02	24.4
					9-30-02	24.5

^b Baseflow.[†] Operated as a continuous-record gaging station.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 2002--Continued

Station Number and Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
SANTEE RIVER BASIN--Continued						
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, 1996-2001	2-20-02 7-11-02 9-24-02	36.1 4.77 9.76
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	1996-2001	2-21-02 9-10-02	78.7 38.3
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 [†] , 1982-2001	2-20-02 7-10-02 9-24-02	98.4 103 118
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, 1980-2001	12-5-01 3-6-02 6-21-02 9-4-02	32.7 157 28.9 22.0
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, 1979-2001	12-3-01 3-6-02 6-21-02 9-4-02	37.1 72.6 42.1 14.5
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	1985-2001	11-26-01 2-25-02 5-31-02 8-23-02	82.9 53.2 41.3 19.0
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, 1974-2001	10-4-01 11-27-01 4-10-02 8-22-02	24.4 46.2 105 12.3

[†] Operated as a continuous-record gaging station.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 2002--Continued

Station Number and Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
KANAWA RIVER BASIN--Continued						
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, 1981-2001	10-2-01	116
					11-28-01	111
					4-16-02	407
					6-4-02	201
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 [†] , 1995-99 2001	11-30-01	57.3
					3-8-02	75.2
					6-27-02	79.9
					8-23-02	21.0
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, 1992-2001	12-13-01	86.8
					2-19-02	81.0
					4-10-02	132
					6-26-02	76.0
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	1993-2001	2-22-02	950
					4-15-02	1390
					6-24-02	512
					8-23-02	311
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 down- stream of Chambers Branch.	162	1969-78, 1980-2001	12-12-01	211
					3-5-02	180
					4-11-02	283
					6-18-02	105
					6-18-02	103
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	1981-2001	12-12-01	52.8
					3-5-02	51.9
					4-11-02	91.0
					6-18-02	33.6
03461976 North Toe River	Nolichucky River	Lat 35°58'51", long 82°00'59", Avery County, Hydrologic Unit 06010108, at bridge on U.S. Highway 19E, 0.1 mi downstream of Jones Creek, 0.7 mi north of Ingalls, and at mile 50.9.	74.1	1969-71, 1973-74, 1976-2001	10-10-01	40.7
					12-6-01	46.8
					3-6-02	81.1
					6-12-02	58.4
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 down- stream of Bear Creek, and at mile 27.6	145	1969-70, 1972-75, 1978, 1982-2001	10-10-01	66.8
					12-6-01	93.3
					3-6-02	161
					6-12-02	93.2

[†] Operated as a continuous-record gaging station.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 2002--Continued

Station Number and Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Date	Discharge (ft ³ /s)
TENNESSEE RIVER BASIN--Continued						
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, 1980-2001	3-7-02 4-12-02 7-18-02 8-20-02	114 229 62.7 68.0
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, 1997-99 2001	3-7-02 8-27-02	495 332
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, 1986-2001	10-4-01 11-27-01 4-10-02 8-22-02	17.5 65.8 67.3 8.19
03500466 Cullasaja River	Little Tennessee River	Lat 35°04'02", long 83°13'31", Macon County, Hydrologic Unit 06010202, at Dam, and 2.0 mi northwest of Highlands.	14.4	1999-2001	10-25-01 11-26-01 2-22-02 5-31-02 8-21-02	33.6 47.2 36.4 23.6 4.18
0350116510 Cullasaja River	Little Tennessee River	Lat 35°09'52", long 83°21'37", Macon County, Hydrologic Unit 06010202, at bridge on Secondary Road 1653, 1.7 mi southeast of Franklin.	91.1	2001	10-25-01 1-23-02	117 742
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, 1982-2001	2-25-02 3-28-02 5-30-02 8-23-02	415 709 403 158
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, 1973-2001	11-29-01 2-21-02 6-4-02 8-22-02	31.8 70.6 47.5 21.9

[†] Operated as a continuous-record gaging station.



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2001

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3							1
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22
28	29	30	31				25	26	27	28	29	30		23	24	25	26	27	28	29
														30	31					

2002

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
		1	2	3	4	5						1	2						1	2
6	7	8	9	10	11	12	3	4	5	6	7	8	9	3	4	5	6	7	8	9
13	14	15	16	17	18	19	10	11	12	13	14	15	16	10	11	12	13	14	15	16
20	21	22	23	24	25	26	17	18	19	20	21	22	23	17	18	19	20	21	22	23
27	28	29	30	31			24	25	26	27	28			24	25	26	27	28	29	30
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APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6			1	2	3	4								1
7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15
21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
28	29	30					26	27	28	29	30	31		23	24	25	26	27	28	29
																				30

JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3	1	2	3	4	5	6	7
7	8	9	10	11	12	13	4	5	6	7	8	9	10	8	9	10	11	12	13	14
14	15	16	17	18	19	20	11	12	13	14	15	16	17	15	16	17	18	19	20	21
21	22	23	24	25	26	27	18	19	20	21	22	23	24	22	23	24	25	26	27	28
28	29	30	31				25	26	27	28	29	30	31	29	30					

CONVERSION FACTORS

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

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$\text{°F} = (1.8 \times \text{°C}) + 32$$