INTRODUCTION

Water-resources data for the 2003 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 62 gaging stations; stage and contents for 17 lakes and reservoirs; stage for 26 gaging stations; water quality for 36 gaging stations and continuous water quality for 32 sites; and continuous precipitation at 8 sites. Additional water data were collected at 6 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-03-1A." Water-data reports are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. Beginning with the 2001 water year, water-data reports are available online at http://nc.water.usgs.gov/reports/WDR/.

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

North Carolina Department of Transportation

Water and Sewer Authority of Cabarrus County Town of Bethel Buncombe County Soil & Water Conservation District Triangle Area Water Supply Monitoring Steering Committee

Winston-Salem/Forsyth County Utility Commission

City of Brevard City of Morganton City of Greensboro City of Raleigh City of Rocky Mount

City of Durham

City of Charlotte

City of Danville, Virginia

Macon County Mecklenburg County

Hiwassee River Watershed Coalition Middle Cape Fear River Basin Association Lower Neuse River Basin Association Pender County Emergency Management Upper Cape Fear River Basin Association 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 Yadkin, Inc.

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