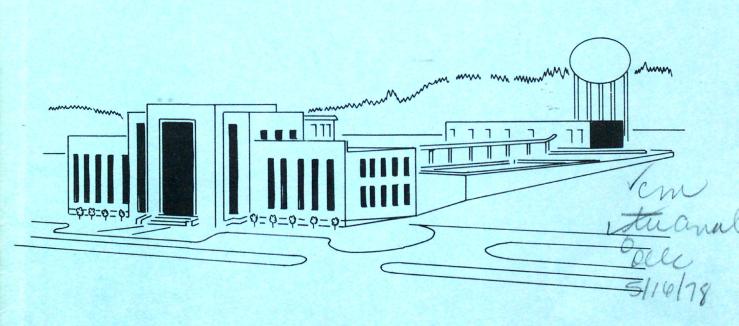
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PUBLIC WATER SUPPLIES
OF NORTH CAROLINA

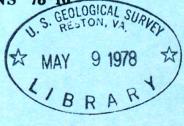
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A summary of water sources, use, treatment, and capacity of water-supply systems



U. S. GEOLOGICAL SURVEY
WATER RESOURCES INVESTIGATIONS 78-16





PREPARED IN COOPERATION

WITH THE NORTH CAROLINA DEPARTMENT

OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

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15. Supplementary Notes

Prepared in cooperation with the North Carolina Department of Natural Resources and Community Development.

16. Abstracts

Data on 224 public water supply systems in North Carolina with 500 or more customers was gathered during 1970-76. This report summarizes these data that were previously published in five separate regional reports.

The data are presented in order of Council of Government region, county, and water system name and include population served, average and maximum daily use, industrial use, water source, allowable draft of surface-water supplies, raw water pumping capacity, raw and finished water storage, type of water treatment, treatment plant capacity, and a summary of the chemical quality of finished water. Tables and maps provide cross references for system names, counties, Council of Government regions and water source.

17. Key Words and Document Analysis. 17a. Descriptors

*Water supply, *Water treatment, *Aquifers, *Water distribution, *North Carolina, Reservoir yield

17b. Identifiers/Open-Ended Terms

Average water use, Maximum water use, Industrial water use, Pumping capacity, Water storage, Source of supply

17c. COSATI Field/Group

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A summary of water sources, use, treatment, and capacity of water-supply systems

By
L. T. Mann, Jr.

U.S. GEOLOGICAL SURVEY WATER RESOURCES INVESTIGATIONS 78-16



Prepared in cooperation with the North Carolina Department of Natural Resources and Community Development

UNITED STATES DEPARTMENT OF THE INTERIOR CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY
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CONVERSION FACTORS TO INTERNATIONAL SYSTEM UNITS

For use of those readers who may prefer metric units rather than U.S. customary units, the conversion factors for the terms used in this report are listed:

Multiply U.S. customary unit	by	to obtain metric units
million gallons (Mgal)	3.785×10^3	cubic meters (m ³)
million gallons per day (Mgal/d)	4.381×10 ⁻²	cubic meters per second (m^3/s)

PUBLIC WATER SUPPLIES OF NORTH CAROLINA, A SUMMARY OF WATER SOURCES, USE, TREATMENT, AND CAPACITY OF WATER-SUPPLY SYSTEMS

By L. T. Mann, Jr.

ABSTRACT

A study of the public water-supply systems in North Carolina with 500 or more customers provides information needed to aid the planning, development, and utilization of the public water supplies of the State. Water use, sources of water, water quality, water treatment and capacity of 224 public-water-supply systems were investigated during 1970-76, and the findings of the investigation, which were published in five reports, are summarized in this report.

INTRODUCTION

North Carolina is a water-rich State. The public water-supply systems of the State have done an excellent job of supplying their customers with an adequate supply of safe water. Occasionally, water use has been curtailed during very dry years, but these instances have been relatively rare. To maintain this fine record, there is a need for local managers to evaluate continuously their water systems, anticipate future requirements, and plan and pursue any required expansion. Even though the State is water rich, the supply is not limitless, and a need exists for regional planners to ensure that the available water resources are properly developed and wisely used.

To aid in the planning, development, and utilization of the water supplies in the State, an inventory of the public water supplies in North Carolina with 500 or more customers was undertaken in 1970 as a part of the cooperative program between the U.S. Geological Survey and the North Carolina Office of Water and Air Resources, now the North Carolina Department of Natural Resources and Community Development.

This effort resulted in five published reports, each of which describe the public water-supply systems in a specific part of the State as shown on figure 1. The five reports cover areas as follows: Part 1, northern Piedmont (Jackson, 1972); Part 2, southern Piedmont (Jackson, 1973); Part 3, mountains and western Piedmont (Jackson, 1974); Part 4, northern Coastal Plain (Robison, 1977); and Part 5, southern Coastal Plain (Robison and Mann, 1977). Information in the five regional reports is presented on a county basis and includes a general appraisal of the surface-water and ground-water resources and a map showing the approximate area served by public water-supply systems. The surface-water appraisals contain information on streams draining the county, including estimates of average and minimum flows. The ground-water appraisals include a summary of the ground-water conditions, data on reported well depths and yields, and a general statement on the chemical quality of ground water.

The inventory of the public water-supply systems with 500 or more customers includes information on the population served, source of supply, raw-and finished-water storage, estimated allowable draft, total use, industrial use, pumping capacity, type of water treatment and treatment-plant capacity, and an appraisal of the surface-water and ground-water resources in the immediate vicinity of the municipality. Chemical analyses of raw and treated water include the results of an analysis of the chemical constituents most commonly found in water and an analysis for a selected group of minor elements (principally trace metals).

The five reports also include a discussion of the method of investigation, brief descriptions of water-treatment processes, the significance of the data as related to planning, and general comments concerning problems noted.

This report is a summary of the data contained in the five regional reports. It presents data in two major tables on the 224 public water—supply systems in North Carolina that had 500 or more customers at the time of the investigation. The first table is an alphabetical listing of water—supply systems cross referenced to an index map and a data table. The second is the data table which is organized by counties within each council of government region and contains information on water use, sources of water, water treatment, and the capacity of each water—supply system investigated during 1970—76.

COOPERATION AND ACKNOWLEDGMENTS

The study of the public water supplies in North Carolina is being made by the U.S. Geological Survey in cooperation with the Division of Environmental Management, North Carolina Department of Natural Resources and Community Development. The inventory data were reviewed by personnel of the Department of Natural Resources and Community Development and by the Division of Health Services of the North Carolina Department of Human Resources. Needless to say, most of the data contained in this report could not have been collected without the generous cooperation of municipal officials and engineering consultants who supplied information on the water-supply installations.

LIST OF PUBLIC-WATER-SUPPLY SYSTEMS

All the public water-supply systems in North Carolina with 500 or more customers are listed alphabetically in table 2. For each system, the list includes the county, the part number of the regional report which contains detailed data on the system, the Council of Government and map number of the system shown on figure 2, and the page number of table 3 of this report that includes summary data on the supply.

SUMMARY OF WATER-SUPPLY SYSTEM DATA

A summary of data for each water-supply system is given in table 3. The systems are arranged in alphabetical order first by council of government region, then by county, and finally by the community name. This order determines the map number as listed in tables 2 and 3 and shown on figure 2. Data in line with the community name apply to the entire system, and data in line with the water source apply to that source only.

Map number. -- The letter, identifying the Council of Government region, and the sequential number of the system as described in the preceding paragraph.

Community (owner).--Principal city, town, subdivision, military base, or name of system. Owner is identified in parentheses by name or as: M, municipal; P, private; or F, Federal Government.

<u>Population served.</u>—Population served, usually estimated. Seasonal varia-tions indicated by letter preceding figure: w for winter and s for summer.

Water use.—Reported in millions of gallons per day (Mgal/d). Total: all water distributed by the system, including that sold to industries. Avg: daily average based on latest available data at the time of the investigation (usually, the daily average for 12 months

(prior to date of visit). Max: maximum daily use; the peak use of record. Ind: amount sold to industries.

<u>Water source.</u>—When the source is a stream without a reservoir, the name of the stream is given. When the source is a reservoir the name of the principal stream feeding the reservoir is given. The name(s) of the reservoir(s) follows beneath. For ground water, the number of wells, followed by the name of the principal aquifer being tapped in parentheses.

Allowable draft.--Reported in millions of gallons per day (Mgal/d). This is an estimate of the maximum rate at which water can be withdrawn continuously, either from the stream or from raw-water storage, without exhausting the supply. This estimated rate is based on minimum streamflows than can be expected to occur once in 20 years on the average. Thus, the flow of the stream or the flow supplemented by storage should provide the estimated draft rate 19 years out of 20, on the average.

Raw-water pumping capacity.—Reported in millions of gallons per day (Mgal/d). For ground water, it is the combined rated capacities of all well pumps supplying the system. Well yields based on 24-hour aquifer tests are used where pump-capacity data are not available. For surface water, it is the raw-water pumping capacity. "Gravity" indicates flow from impoundment at a higher elevation than treatment plant, and the maximum flow is unknown or not reported.

<u>Water storage</u>. -- Reported in millions of gallons (Mgal). Raw: untreated water. Fin: treated water.

Treatment. -- Physical and chemical adjustments to water to improve its quality. The codes for the types of treatment are as follows:

a - chlorination

b - aeration

c - coagulation

d - sedimentation

e - taste and odor control

f - filtration

g - softening

h - corrosion control

i - adjustment of pH

j - fluoridation

k - ammoniation

none - no treatment

Treatment-plant capacity.—Reported in millions of gallons per day (Mgal/d). Capacity of the plant to produce treated water. Many ground-water supplies have no treatment plants as such, but water from individual wells may be treated by automatic demand-type feeders.

Finished-water quality. -- Reported in milligrams per liter, except pH, which is reported in pH units. This is a listing of the highest values for key constituents and properties from analyses of samples of water entering the distribution system. This water may or may not be treated. The most current finished-water analyses are used. surface-water sources included in this summary received some degree of treatment. Untreated water from ground-water sources entering the distribution system are considered finished. Some of the ground-water analyses were on samples containing water from several wells in the system. Data from individual wells are underlined. Values of dissolved solids, hardness, and iron are reported for each system. The column labeled "other" contains values for other constituents or properties exceeding recommended limits; the chemical symbol precedes the value. Table 1 lists the chemical constituents and properties of water, their symbols, limits recommended by the National Academy of Sciences and National Academy of Engineering (1973), and their significance with respect to public water supplies.

Table 1.--Significance of mineral constituents and physical properties of water and maximum recommended limits

(National Academy of Sciences and National Academy of Engineering, 1973)

Constituent or property	Maximum recommended limit	Significance
Arsenic (As)	0.1 mg/L	Adverse physiological effects on humans.
Barium (Ba)	1.0 mg/L	Do.
Cadmium (Cd)	.01 mg/L	Do.
Chloride (C1)	250 mg/L	Imparts salty taste.
Chromium (Cr)	.05 mg/L	Adverse physiological effects on humans.
Copper (Cu)	1.0 mg/L	Imparts taste to water. In concentrations in excess of 0.1 mg/L, it may cause corrosion of aluminum.
Dissolved solids (D.S.).	No limit	High concentrations may result in possible physiological effects, mineral taste and economic consequences.

Table 1.--Significance of mineral constituents and physical properties of water and maximum recommended limits--Continued

Constituent or property	Maximum recommended limit	Significance
Flouride (F)	Variable	Has potential beneficial effect of reducing tooth decay. Excessive amounts can result in dental fluorosis. Maximum recommended limits based on annual average of maximum daily air temperature. In North Carolina the maximum recommended limits range from 1.6 mg/L in the southeast to 2.0 mg/L in the northwest.
Hardness, as CaCO3 (Hard.)	No limit	Acceptable levels based on consumer preference.
Iron (Fe)	0.3 mg/L	Imparts taste to water, can cause staining of plumbing fixtures and clothing, and can cause accumulation of deposits in distribution system.
Lead (Pb)	0.05 mg/L	Toxic to humans.
Manganese (Mn)	0.05 mg/L	Imparts taste to water, can cause staining of plumbing fixtures and clothing, and can cause accumulation of deposits in distribution systems.
Mercury (Hg)	0.002 mg/L	Adverse physiological effects on humans.
Nitrate Nitrogen (NO3. as N)	10 mg/L	Adverse physiological effects on infants.
Nitrite Nitrogen (NO2 as N)	1 mg/L	Similar to nitrate nitrogen, but effect is more pronounced.
рН	Above 9.0	Corrosion of distribution system.
	Below 5.0	Limits based on economic aspects of treatment processes.

Table 1.--Significance of mineral constituents and physical properties of water and maximum recommended limits--Continued

Constituent or property	Maximum recommended limit	Significance
Sodium	No limit	Persons on very restricted sodium diets should not consume water with sodium concentrations greater than 20 mg/L; concentrations should not exceed 270 mg/L for persons on a moderately restricted sodium diet.
Sulfate (SO ₄)	250 mg/L	Affects taste and has laxative effect.
Zinc (Zn)	5.0 mg/L	Imparts taste to water.

REFERENCES CITED

- Jackson, N. M., Jr., 1972, Public water supplies of North Carolina, part 1, northern Piedmont: North Carolina Dept. Nat. and Econ. Resources, Office of Water and Air Resources, 277 p.
- 1973, Public water supplies of North Carolina, part 2, southern Piedmont: North Carolina Dept. Nat. and Econ. Resources, Office of Water and Air Resources, 255 p.
- 1974, Public water supplies of North Carolina, part 3, Mountains and western Piedmont: North Carolina Dept. Nat. and Econ. Resources, 232 p.
- National Academy of Sciences and National Academy of Engineering, 1973, Water quality criteria 1972: Washington, D.C., U.S. Govt. Printing Office, 594 p.
- Robison, T. M., 1977, Public water supplies of North Carolina, part 4, northern Coastal Plain: North Carolina Dept. Nat. and Econ. Resources, 218 p.
- Robison, T. M., and Mann, L. T., Jr., 1977, Public water supplies of North Carolina, part 5, southern Coastal Plain: North Carolina Dept. Nat. Resources and Community Devel., 333 p.

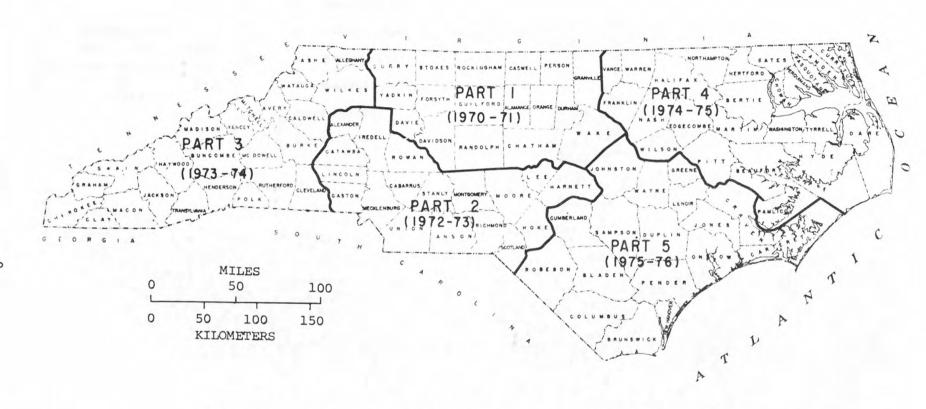


Figure 1.—Areas covered by the five regional Public Water-Supply reports.

Dates indicate years the studies were in progress.



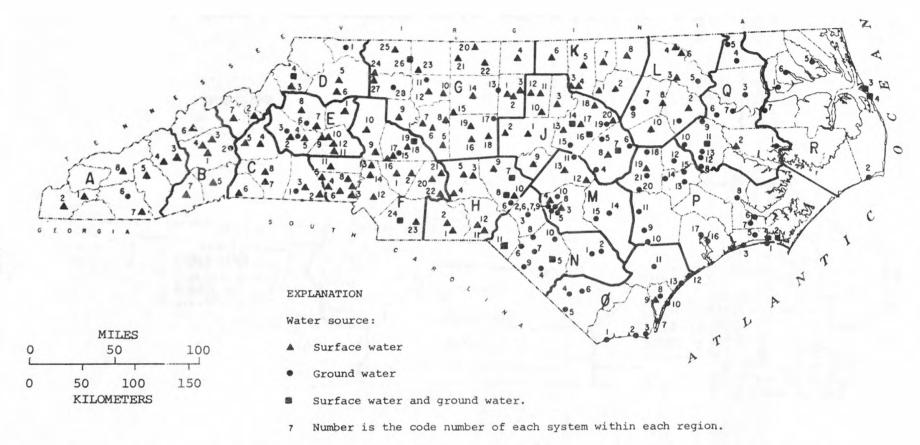


Figure 2. -- Council of Government regions, location of water-supply systems, and sources of water.

Table 2.—Public-water-supply systems in North Carolina having 500 or more customers

Water-supply system	County	Regional report number	Map number on figure 2	Data on page
Aberdeen	Moore	2	Н6	31
Ahoskie	Hertford	4	Q4	48
Albemarle	Stanly	2	F20	26
Alexander County Water Corporation	Alexander	2	E1	22
Andrews	Cherokee	3	A1	18
Angier	Harnett	2	M11	40
Anson County Water System	Anson	2	H1	31
Apex	Wake	1	J13	34
Asheboro	Randolph	1	G16	29
Asheville	Buncombe	3	B1	19
Atlantic Beach	Carteret	5	P1	45
Ayden	Pitt	4	Q8	49
Badin	Stanly	2	F21	26
Baton Water Corporation	Caldwell	3	E6	22
Beaufort	Carteret	5	P2	45
Belhaven	Beaufort	4	Q1	48
Belmont	Gaston	2	F3	24
Benson	Johnston	5	J4	33
Bessemer City	Gaston	2	F4	24
Bethel	Pitt	4	Q9	49
Biscoe	Montgomery	2	Н3	31
Black Mountain	Buncombe	3	B2	19
Blowing Rock	Watauga	3	D3	21
Bogue Banks Water Association	Carteret	5	Р3	45
Boiling Springs	Cleveland	3	C1	20
Boone	Watauga	3	D4	21
Brevard	Transylvania	3	В7	19
Brookwood Water System	Cumberland	5	M1	39
Bryson City	Swain	3	A8	18
Burgaw	Pender	5	Ø11	44
Burlington	Alamance	1	G1	27
Burnsville	Yancey	3	D7	21
Butner	Granville	1	КЗ	36

Table 2.—Public-water-supply systems in North Carolina having 500 or more customers—Continued

Water-supply system	County	Regional report number	Map number on figure 2	Data on page
Camp Lejeune	Onslow	5	P16	47
Canton	Haywood		A3	18
Cape Hatteras Water Association	Dare	4	R2	50
Carolina Beach	New Hanover	5	Ø7	44
Carthage	Moore	2	H7	31
Cary	Wake	1	J14	34
Chadbourn	Columbus	5	Ø4	43
Chapel Hill	Orange	1	J10	34
Charlotte-Mecklenburg Utility Department	Mecklenburg	2	F12	25
Cherry Point Marine Crops Air Station	Craven	5	P6	45
Cherryville	Gaston	2	F5	24
China Grove	Rowan	2	F15	25
Clayton	Johnston	5	J5	33
Clinton	Sampson	5	M14	40
Concord	Cabarrus	2	F1	24
Cottonade-Summer Hill Water System	Cum berland	5	M2	39
Creedmoor	Granville	1	K4	36
Davidson	Mecklenburg	2	F13	25
Denton	Davidson	1	G5	27
Dunn	Harnett	2	M12	40
Durham	Durham	1	J3	33
Eden	Rockingham	1	G20	29
Edenton	Chowan	4	R1	50
Elkin	Surry	1	G24	30
Blizabeth City	Pasquotank	4	R5	51
Elizabethtown	Bladen	5	N1	41
Enfield	Halifax	4	L3	37
Fairmont	Robeson	5	N4	41
Farmville	Pitt	4	Q10	49
Fayetteville	Cumberland	5	мз	39
Forest City	Rutherford	3	C7	20
Fort Bragg	Cumberland	5	M4	39
Franklin	Macon	3	A6	18
Franklinton	Franklin	4	K1	36
Fremont	Wayne	5	P18	47
Fuquay-Varina	Wake	1	J15	34

Table 2.--Public-water supply systems in North Carolina having 500 or more customers--Continued

Gibsonville Guilford 1 G13 28 Goldsboro Wayne 5 P19 47 Graham Alamance 1 G2 27 Granite Falls Caldwell 3 E7 22 Greensboro Guilford 1 G14 28 Greenville Pitt 4 Q11 49 Grifton Pitt 4 Q12 49 Hamlet Richmond 2 H11 32	Water-supply system	County	Regional report number	Map number on figure 2	Data on page
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Graham Alamance 1 G2 27 Granite Falls Caldwell 3 E7 22 Greensboro Guilford 1 G14 28 Greenville Pitt 4 Q11 49 Grifton Pitt 4 Q12 49 Hamlet Richmond 2 H11 32 Hawlet Richmond 2 H11 32 Henderson 5 P7 45 Henderson 3 B5 19 Hendersonville Henderson 3 B5 19 Hartford Perquimans 4 R6 51 Hickory Catawba 2 E9 23	Gibsonville	Guilford	1	G13	28
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Hartford Perquimans 4 R6 51 Hickory Catawba 2 E9 23 Highlands Macon 3 A7 18 High Point Guilford 1 G15 29 Hillsborough Orange 1 J11 34 Huntersville Mecklenburg 2 F14 25 Jacksonville Onslow 5 P17 47 Jonesville Yadkin 1 G27 30 Kannapolis Rowan 2 F16 25 Kenly Johnston 5 J6 33 Kernersville Forsyth 1 G10 28 Kill Devil Hills Dare 4 R3 50 King District Water Stokes 1 G23 30 System, Inc. New Hanover 5 Ø8 44 Kings Mountain Cleveland 3 C2 20	Henderson	Vance	1	K7	36
Hickory Catawba 2 E9 23 Highlands Macon 3 A7 18 High Point Guilford 1 G15 29 Hillsborough Orange 1 J11 34 Huntersville Mecklenburg 2 F14 25 Jacksonville Onslow 5 P17 47 Jonesville Yadkin 1 G27 30 Kannapolis Rowan 2 F16 25 Kenly Johnston 5 J6 33 Kernersville Forsyth 1 G10 28 Kill Devil Hills Dare 4 R3 50 King District Water Stokes 1 G23 30 System, Inc. New Hanover 5 Ø8 44 Kings Mountain Cleveland 3 C2 20	Hendersonville	Henderson	3	85	19
Highlands Macon 3 A7 18 High Point Guilford 1 G15 29 Hillsborough Orange 1 J11 34 Huntersville Mecklenburg 2 F14 25 Jacksonville Onslow 5 P17 47 Jonesville Yadkin 1 G27 30 Kannapolis Rowan 2 F16 25 Kenly Johnston 5 J6 33 Kernersville Forsyth 1 G10 28 Kill Devil Hills Dare 4 R3 50 King District Water Stokes 1 G23 30 System, Inc. New Hanover 5 Ø8 44 Kings Mountain Cleveland 3 C2 20	Hartford	Perquimans	4	R6	51
High Point Guilford 1 G15 29 Hillsborough Orange 1 J11 34 Huntersville Mecklenburg 2 F14 25 Jacksonville Onslow 5 P17 47 Jonesville Yadkin 1 G27 30 Kannapolis Rowan 2 F16 25 Kenly Johnston 5 J6 33 Kernersville Forsyth 1 G10 28 Kill Devil Hills Dare 4 R3 50 King District Water Stokes 1 G23 30 System, Inc. New Hanover 5 Ø8 44 Kings Mountain Cleveland 3 C2 20	Hickory	Catawba	2	E9	23
Hillsborough Orange 1 J11 34 Huntersville Mecklenburg 2 F14 25 Jacksonville Onslow 5 P17 47 Jonesville Yadkin 1 G27 30 Kannapolis Rowan 2 F16 25 Kenly Johnston 5 J6 33 Kernersville Forsyth 1 G10 28 Kill Devil Hills Dare 4 R3 50 King District Water Stokes 1 G23 30 System, Inc. New Hanover 5 Ø8 44 Kings Mountain Cleveland 3 C2 20	Highlands	Macon	3	A7	18
Huntersville Mecklenburg 2 F14 25 Jacksonville Onslow 5 P17 47 Jonesville Yadkin 1 G27 30 Kannapolis Rowan 2 F16 25 Kenly Johnston 5 J6 33 Kernersville Forsyth 1 G10 28 Kill Devil Hills Dare 4 R3 50 King District Water Stokes 1 G23 30 System, Inc. New Hanover 5 Ø8 44 Kings Mountain Cleveland 3 C2 20	High Point	Guilford	1	G15	29
Jacksonville Onslow 5 P17 47 Jonesville Yadkin 1 G27 30 Kannapolis Rowan 2 F16 25 Kenly Johnston 5 J6 33 Kernersville Forsyth 1 G10 28 Kill Devil Hills Dare 4 R3 50 King District Water Stokes 1 G23 30 System, Inc. New Hanover 5 Ø8 44 Kings Mountain Cleveland 3 C2 20	Hillsborough	Orange	1	J11	34
Jonesville Yadkin 1 G27 30 Kannapolis Rowan 2 F16 25 Kenly Johnston 5 J6 33 Kernersville Forsyth 1 G10 28 Kill Devil Hills Dare 4 R3 50 King District Water Stokes 1 G23 30 System, Inc. New Hanover 5 Ø8 44 Kings Grant New Hanover 5 Ø8 44 Kings Mountain Cleveland 3 C2 20	Huntersville	Mecklenburg	2	F14	25
Kannapolis Rowan 2 F16 25 Kenly Johnston 5 J6 33 Kernersville Forsyth 1 G10 28 Kill Devil Hills Dare 4 R3 50 King District Water Stokes 1 G23 30 System, Inc. Stokes 1 G23 30 Kings Grant New Hanover 5 Ø8 44 Kings Mountain Cleveland 3 C2 20	Jacksonville	Onslow	5	P17	47
Kenly Johnston 5 J6 33 Kernersville Forsyth 1 G10 28 Kill Devil Hills Dare 4 R3 50 King District Water Stokes 1 G23 30 System, Inc. System, Inc. New Hanover 5 Ø8 44 Kings Grant New Hanover 5 Ø8 44 Kings Mountain Cleveland 3 C2 20	Jonesville	Yadkin	1	G27	30
Kernersville Forsyth 1 G10 28 Kill Devil Hills Dare 4 R3 50 King District Water Stokes 1 G23 30 System, Inc. New Hanover 5 Ø8 44 Kings Grant New Hanover 5 Ø8 44 Kings Mountain Cleveland 3 C2 20	Kannapolis	Rowan		F16	
Kill Devil Hills Dare 4 R3 50 King District Water Stokes 1 G23 30 System, Inc. Kings Grant New Hanover 5 Ø8 44 Kings Mountain Cleveland 3 C2 20	Kenly	Johnston			
King District Water Stokes 1 G23 30 System, Inc. Kings Grant New Hanover 5 Ø8 44 Kings Mountain Cleveland 3 C2 20	Kernersville	Forsyth	1	G10	28
System, Inc. Kings Grant New Hanover 5 Ø8 44 Kings Mountain Cleveland 3 C2 20	Kill Devil Hills	Dare	4	R3	50
Kings Grant New Hanover 5 Ø8 44 Kings Mountain Cleveland 3 C2 20		Stokes	1	G23	30
Kings Mountain Cleveland 3 C2 20		New Hanover	5	Ø8	44
		Cleveland		C2	20
		Lenoir		P13	46

Table 2.--Public-water supply systems in North Carolina having 500 or more customers--Continued

Water-supply system	County	Regional report number	Map number on figure 2	Date on page
LaFayette Village- Sherwood Water System	Cumberland	5	М5	39
La Grange	Lenoir	5	P14	46
La Grange Water System	Cumberland	5	M6	39
Landis	Rowan	2	F17	26
Laurinburg	Scotland	2	N11	42
Lenoir	Caldwell	3	E8	22
Lexington	Davidson	1	G6	27
Liberty	Randolph	1	G17	29
Lillington	Harnett	2	M13	40
Lincolnton	Lincoln	2	F11	25
Loch Lomond-Devonwood Water System	Cumberland	5	м7	39
Long Beach	Brunswick	5	Ø1	43
Longview	Catawba	2	E10	23
Louisburg	Franklin	4	K2	36
Lumberton	Robeson	5	N5	41
Maiden	Catawba	2	E11	23
Marion	McDowell	3	C4	20
Mars Hill	Madison	3	В6	19
Marshville	Union	2 5	F23	26
Maxton	Robeson	5	N6	41
Mayodan-Madison	Rockingham	1	G21	29
Mebane	Alamance	1	G3	27
Mocksville	Davie	1	G9	28
Monroe	Union	2	F24	26
Montclair Water System	Cumberland	5	M8	39
Mooresville	Iredel1	2	F9	25
Morehead City	Carteret	5	P4	45
Morganton	Burke	3	E2	22
Mount Airy	Surry	1	G25	30
Mount Gilead	Montgomery	2	H4	31
Mount Holly	Gaston	2	F7	24
Mount Olive	Wayne	2 5	P20	47
Mount Pleasant	Cabarrus	2	F2	24
Murfreesboro	Hertford	4	Q5	48
Murphy	Cherokee	3	A2	18

Table 2.--Public-water supply systems in North Carolina having 500 or more customers--Continued

Water-supply system	County	Regional report number	Map number on figure 2	Date on page
Nags Head	Dare	4	R4	50
Nashville	Nash	4	L7	38
New Bern	Craven	5	P8	45
Newport	Carteret	5	P5	45
Newton	Catawba	2	E12	23
North Davidson Water, Inc.	Davidson	1	G7	27
North Lenoir Water Association	Lenoir	5	P15	46
North Wilkesboro	Wilkes	3	D5	21
Norwood	Stanly	2	F22	26
Oak Hill Water Corporation	Burke	3	E3	22
Ocean Isle Beach	Brunswick	5	Ø2	43
Old Fort	McDowell	3	C5	20
Orange-Alamance Water System, Inc.	Orange	1	J12	34
Oxford	Granville	1	K5	36
Pembroke	Robeson	5	N7	41
Pilot Mountain	Surry	1	G26	30
Pinehurst	Moore	2	Н8	31
Pinetops	Edgecombe	4	L1	37
Pittsboro	Chatham	1	J1	33
Plymouth	Washington	4	R7	51
Ponderosa Water System	Cumberland	5	м9	40

Table 2.--Public-water-supply systems in North Carolina having 500 or more customers--Continued

Water-supply system	County	Regional report number	Map number on figure 2	Data on page
Raeford	Hoke	2	N3	41
Raleigh	Wake	1	J17	35
Ramseur	Randolph	1	G18	29
Randleman	Randolph	1	G19	29
Reidsville	Rockingham	1	G22	29
Red Springs	Robeson	5	N8	42
Roanoke Rapids	Halifax	4	L4	37
Robbins	Moore	2	Н9	31
Robersonville	Martin	4	Q6	48
Rockingham	Richmond	2	H12	32
Rocky Mount	Nash	4	L8	38
Roseboro	Sampson	5	M15	40
Rose Hill	Duplin	5	P9	46
Rowland	Robeson	5	N9	42
Roxboro	Person	1	K6	36
Rural Hall Sanitary District	Forsyth	1	G11	28
Ruth, Rutherfordton, Spindale	Rutherford	3	C8	20
Saint Pauls	Robeson	5	N10	42
Salisbury	Rowan	2	F18	26
Sanford	Lee	2	J9	34
Scotland Neck	Halifax	4	L5	37
Selma	Johnston	5	J7	33
Seymour Johnson Air Force Base	Wayne	5	P21	47
Shelby	Cleveland	3	C3	20
Siler City	Chatham	1	Ј2	33
Smithfield	Johnston	5	Ј8	33
Snow Hill	Greene	5	P12	46
Southern Pines	Moore	2	H10	31
Southport	Brunswick	5	Ø3	43
Sparta	Alleghany	3	D1	21
Spencer	Rowan	3 2	F19	26
Spindale, Ruth, Rutherfordton	Rutherford	3	C8	20
Spring Hope	Nash	4	L9	38
Spring Lake	Cumberland	5	M10	40
Spruce Pine	Mitchell	3	D2	21
Stanley	Gaston	2	F8	24
Statesville	Iredell	.2	F10	25
Surf City	Pender	5	Ø12	44
Sylva	Jackson	5	A5	18

Table 2.--Public-water-supply systems in North Carolina having 500 or more customers--Continued

Water-supply system	County	Regional report number	Map number on figure 2	Data on page
Tabor City	Columbus	5	Ø 5	43
Tarboro	Edgecombe	4	L2	37
Thomasville	Davidson	1	G8	27
Topsail Beach	Pender	5	Ø13	44
Triple Communities Water Corporation	Burke	3	E4	22
Troy	Montgomery	2	Н5	31
Tryon	Po1k	3	C6	20
Valdese	Burke	3	E5	22
Wadesboro	Anson	2	Н2	31
Wake Forest	Wake	1	J18	35
Wallace	Duplin	5	P10	46
Warrenton	Warren	4	K8	36
Warsaw	Duplin	5	P11	46
Washington	Beaufort	4	Q2	48
Waynesville	Haywood	3	A4	18
Weaverville	Buncombe	3	В3	19
Weldon	Halifax	4	L6	37
Wendel1	Wake	1	J19	35
White Lake	Bladen	5	N2	41
Whiteville	Columbus	5	Ø6	43
Wilkesboro	Wilkes	3	D6	21
Williamston	Martin	4	Q7	48
Wilmington	New Hanover	5	Ø9	44
Wilson	Wilson	4	L10	38
Windsor	Bertie	4	Q3	48
Winston-Salem	Forsyth	1	G12	28
Winterville	Pitt	4	Q13	49
Woodfin Sanitary Water and Sewer District	Buncombe	3	В4	19
Wrightsville Beach	New Hanover	5	Ø10	44
Yadkinville	Yadkin	1	G28	30
Yanceyville	Caswell	1	G4	27
Zebulon	Wake	1	J20	35

				use (M	1		Allow-	Raw-water				Treatment			l-water	
Map	Community (Owner)	Pop.	_	tal	Ind.	Water source	able draft	pumping capacity	(Mga		Treatment	plant	-	-	(mg/1)	
umber		served	Avg.	Max.			(Mgal/d)	(Mgal/d)	Raw	Fin.		capacity (Mgal/d)	D.S.	Hard.	Iron	Other
						CHEROKEE	COUNTY									
A 1	Andrews (M)	3,900	0.35	-	0.05	Beaver Creek: Andrews Reservoir	0.4	gravity	1.0	0.6	af	0.576	15	14	0.050	
A 2	Murphy (M)	2,500	.45	0.73	.15	Hiwassee River	80	1.0	0	.9	acdfi	1.0	33	16	.000	
		- 1				Marble Creek: Fain Mountain Res.	.24	gravity	1.8		af	.43	20	4	.05	
						CLAY CO	UNTY									
						GRAHAM C	OUNTY									
						HAYWOOD O	OUNTY									
A 3	Canton (M) ²	9,000	1.12	1.82	.15	Pigeon River	25	2.0	0	1.85	acdfij	2.0	32	16	.040	
A 4	Waynesville (M)	20.000	4 00		2.3	Rough Creek	.2	.6	0		afj	.6	36	13	.01	
	waynesville (m)	20,000	4.22	5.77	2.3	Rocky Branch Allen Creek	3.0	gravity gravity	.3	1.45	acdfhij	8.0	22	11	.050	
						JACKSON (OUNTY									
A 5	Sylva (M)	2,550	.20	.22	.10	East Fork Fisher Cr West Fork Fisher Cr Dills Creek	.65	gravity	1.0	.375	af	.4	15	4	.050	
						MACON CO	UNTY									
A 6	Franklin (M)	3,500	. 39	-	.04	ll wells (bedrock)	-	4.74	.953	-	none	-	99	59	.65	n 0.0
A 7	Highlands (M)	3,500	.35	.44	0	Houston Branch: Houston Lake Big Creek	.09	gravity	2 0	. 36	a acdfi	.5	16 87	2 16	.10	
						SWAIN	OUNTY									
A 8	Bryson City (M)	3,000	0.22	0.45	0.08	Lands Creek	0.17	gravity	0.1	1.5	ad	1.5	18	8	0.000	

Table 3.--Water-supply system data; Region B

				use (M	gal/d)		Allow-	Raw-water				Treatment			d-wate	
Map	Community (Owner)	Pop.	То	tal	Ind.	Water source	able	pumping	(Mga	_	Treatment		qu	ality	(mg/1)
number		served	Avg.	Max.	_		draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		capacity (Mgal/d)	D.S.	Hard.	Iron	Other
						BUNCOMBE	OUNTY	+								
B 1	Asheville (M) ⁵	105,000	20.9	24.2	4.7	N Fork Swannanoa River:				21.2						
						Burnett Lake Beetree Creek:	24	gravity	5,500		ahij	(⁶)	20	6	0.080	Mn 0.3
						Beetree Res. 7	-	-	500		-	-	-	-	-	
B 2	Black Mountain (M)	5,000	.42	.48	0	springs	.3	gravity	25	.23	a	-	27	5	.110	
В 3	Weaverville (M)	3,500	.35	-	.03	Eller Cove Creek: Eller Cove Res. Ox Creek	.2	gravity gravity	.6	1.1	ahi	(⁶)	44	11	.140	
B 4	Woodfin Sanitary Water and Sewer District	6,050	.70	.96	. 25	Sugar Camp Fork Laurel Fork	.4	gravity gravity	30 0	1.0	ai	-	21	4	.070	
						HENDERSON	COUNTY									
B 5	Hendersonville(M) ⁸	25,000	4.5	5.9	2.0	N Fork Mills River Bradley Creek Mills River	2.7 2.1 15.3	gravity gravity 3.6	3.5 3 0	10.2	a a acdf	- - 3.0	17 - 50	4 - 9	.01	
						MADISON C	OUNTY									
В 6	Mars Hill (M)	3,300	.10	-	.01	Big Laurel Creek: Mars Hill Res.	.30	gravity	9	.71	ad	-	22	8	.080	
						TRANSYLVANI	A COUNTY									
в 7	Brevard (M)	7,000	.8	1.5		King Creek Brushy Creek	.7	gravity	.27	2.0	adh	-	15	4	.630	

	The second second			r use (M	gal/d)		Allow-	Raw-water				Treatment		nished		
Map	Community (Owner)	Pop.	To	otal	Ind.	Water source	able	pumping	(Mga	1)	Treatment	plant	-	ality	_	
umber		served	Avg.	Max.			draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		capacity (Mgal/d)	D.S.	Hard.	Iron	Cther
						CLEVELAND	COUNTY -	_								
C 1	Boiling Springs (M) 9	2,500	0.15	-	0	3 wells (bedrock)	-	40.6	0	0.48	ah	_	116	49	0.510	Mn 0.1
C 2	Kings Mountain (M)	8,600	2.68	5.64	1.5	Buffalo Creek: John Henry Moss	(10)			3.8						
						Reservoir Davidson Creek:		4.0	12,700		acdefij	4.0	124	17	.040	
						Davidson Lake King Creek trib:		112.5	180		acdefij	2.0	72	20	.44	
						City Lake		-	96		-	-	-	-	-	
C 3	Shelby (M)	20,000	4.27	6.3	3.0	First Broad River: 3 off-river reservoirs	30	14.1	25	10.9	acdefij	10.0	52	24	.030	
						McDOWELI	COUNTY -									
C 4	Marion (M) 12	10,000	2.2	-	1.0			1.0		1.32						
						Mackey Creek Clear Creek	.5	131.0 13.4	0		a	-	20	4 2	.00	
						Buck Creek	4.1	1.6	0		acdfi	2.0	43	8	.010	
C 5	Old Fort (M)	1,200	.57	.75	.05	Jarretts Creek: Jarretts Cr. Res.	.8	gravity	10	0	a	-	24	5	.140	
						POLK O	OUNTY									
C 6	Tryon (M)	6,000	.58	1.0		Big Fall Creek: Town Lake Colt Creek Fork Creek Little Fall Creek	2.9	gravity	10	.75	acdfi	1.0	36	18	.080	
						Vaughn Creek										
						RUTHERFORD	COUNTY									
C 7	Forest City (M) 14	8,000	1.80	2.50	0.8	Second Broad River	13	2.4	0	2.32	acdefij	152.0	58	18	0.080	
	Ruth ¹⁶ Rutherfordton	8,000	3.02	5.57	2.4	Cathous Creek				3.65	acdfij	7.0				
-	Spindale (Duke Power Co.)					Catheys Creek: Duke Power Res. Hollands Creek ¹⁷	10	5.7	113				42	16	.040	

				use (M	gal/d)		Allow-	Raw-water				Treatment			d-wate	
Map	Community (Owner)	Pop.	To	tal	Ind.	Water source	able	pumping	(Mga.	1	Treatment				(mg/1	
umber		served	Avg.	Max.			draft (Mgal/d)	(Mgal/d)	Raw	Fin.		(Mgal/d)	D.S.	Hard.	Iron	Other
						ALLEGHANY	COUNTY -		,							
D 1	Sparta (M)	1,750	0.16	-	0.02	6 wells (bedrock)	-	40.4	0.3	-	none	-	109	54	0.16	Mn 0.
						ASHE (OUNTY									
						AVERY O	OUNTY									
						MITCHELI	COUNTY -									
D 2	Spruce Pine (M)	3,000	.75	-	.15	Beaver Creek:				1.7	af	-	18	8	.070	
						Beaver Cr. Res. Crystal Falls Cr: Crystal Falls Cr.	0.8	gravity	12							
						Res.	.3	.7	5							
						WATAUGA	COUNTY -	-								
D 3	Blowing Rock (M) summer winter	7,000 1,000	.21	0.44	0	Flat Top Branch	.4	13<1.0	20	:48	acdef	0.5	38	21	.010	
D 4	Boone (M)	8,700	1.3	-	.1	5 wells (bedrock)	-	.9	0	1.75	none	-	113	<u>58</u>	.37	
						Winkler Creek	.5	gravity	39		a	-	51	24	.10	
						WILKES	COUNTY	-								
D 5	North Wilkesboro ¹⁸	17,500	1.25	2.43	.15	Reddies River	21	6.0	50	1.77	acdfhij	3.0	51	27	.020	
D 6	Wilkesboro (M) 19	2,000	2.74	4.24	2.3	Yadkin River	(²⁰)	5.0	0	1.95	acdfi	5.0	66	9	.030	
						YANCEY	COUNTY -									
D 7	Burnsville (M)	2,100	0.50	-	0.15	Bowlens Creek Bowlens Cr trib.	0.6	gravity	0	2.28	acdfi	0.5	- 16	- 4	0.040	

Table 3.--Water-supply system data; Region E

				r use (M	gal/d)		Allow-	Raw-water	Water s	storage		Treatment	F	nishe	d-water
Map	Community (Owner)	Pop.	To	otal	Ind.	Water source	able	pumping	(Mga	1)	Treatment	plant	qu	ality	(mg/1)
umber ——		served	Avg.	Max.			draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		(Mgal/d)	D.S.	Hard.	Iron Othe
	o la				- 1	ALEXANDER	COUNTY -								
E 1	Alexander County ²¹ Water Corporation (P)	4,500	0.71	-	0.5	South Yadkin River	3.8	1.0	0	1.5	acdi	1.0	37	9	0.118
						BURKE (OUNTY								
E 2	Morganton (M)	18,000	8.9	10.6	6.7					3.82					
	Also supplies:					Catawba River	56	6.5	0		acdfij	6	108	11	0.050
	Brentwood Water Corporation					Warrior Fork Henry Fork:	7.9	4.2	0		acdfij	2	60	8	.04
	corporation					Henry Fork Res.	.9	131.3	5.0		aj	1.3	22 21	€	.00
E 3	Oak Hill Water Corporation (P)	2,400	.12	-	0	6 wells (bedrock)	-	.34	0	.22	a	-	2364	30	.010
E 4	Triple Communities Water Corp. (P)	3,000	.2	.23	0	3 wells (bedrock)	-	.32	0	.3	afij ²⁴	.32	96	34	.060Mn 0.
E 5	Valdese (M) 25	4,700	3.0	6.25	2.6	Catawba River: Rhodhiss Lake	(26)	12.1	23,800	2.5	acdefij	8.0	51	18	.010Mn .0
1						CALDWELL	COUNTY -								1
						Cribbinata	0001111								
6	Baton Water ²⁷ Association (P)	1,800	.15	-	0	3 wells (bedrock)	-	. 29	0	.15	a	-	89	31	33 Mn 1.
7	Granite Falls (M)	2,800	.32	.53	.03	Catawba River: Rhodhiss Lake	(²⁶)	.6	23.8	.64	acdfhi	.6	55	22	.010
E 8	Lenoir (M) ²⁸	22,000	3.21	4.7	1.2	Catawba River: Rhodhiss Lake Zacks Fork Creek	(²⁶)	4.5	23.8	3.15	acefhij acefhij	3.0 1.5	66 66	40 32	.020

Table 3.--Water-supply system data; Region E--Continued

Map	Community (Owner)	Pop.		use (Me	Ind.	Water source	Allow- able	Raw-water pumping	Water s (Mga	_	Treatment	Treatment plant	1		d-water (mg/l)	
umber		served	Avg.	Max.			draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		capacity (Mgal/d)	D.S.	Hard.	Iron	Other
						CATAWBA	COUNTY									
E 9	Hickory (M) ²⁹	30,000	4.5	5.25	2.8	Catawba River: Lake Hickory	(26)	15.2	41,500	2.75	acdfij	7.35	56	25	.0351	Mn 0.0
E10	Longview (M)	3,800	1.0	1.26	.6	Catawba River: Lake Hickory	(²⁶)	2.0	41,500	1.15	acdfhi	2.0	47	19	.049	
E11	Maiden (M)	2,400	. 86	1.28	.6	Maiden Creek: Maiden Lake	2.7	2.0	50	1.36	acdefi	2.0	36	8	.022	
E12	Newton (M) ³⁰	9,000	2.1	2.9	.8	Jacob Fork: 1 off-river res.	3115.5	3.0	25	2.0	acdefij	3.0	53	11	.000	

Table 3. -- Water-supply system data; Region F

Мар	Community (Owner)	Pop.		r use(M	1		Allow-	Raw-water				Treatment			d-water
umber	Community (Owner)	served		1	Ind.	Water source	able draft	pumping capacity	(Mga	T -	Treatment	plant capacity	-	-	(mg/l)
		502.00	Avg.	Max.			(Mgal/d)	(Mgal/d)	Raw	Fin.		(Mgal/d)	D.S.	Hard.	Iron Oth
						CABARRUS	COUNTY	-							
F 1	Concord (M) 32	26,000	6.2	8.45	3.6	Chambers Branch; Lake Concord Coddle Creek	(³³)	16.0	350	5.6	acdefhijk	12.0	95	32	0.000
						Cold Water Creek: Lake Fisher	(33)		1,100						
F 2	Mount Pleasant (M)	1,600	.3	-	.25	Dutch Buffalo Cr.	.4	.7	0	.44	acdfi	.34	146	54	.000
						GASTON	COUNTY	-							
	Belmont (Belmont Converting Co.)	7,500	2.67	3.68	1.3	Catawba River: headwaters of Lake Wylie	3451.7	10.4	(35)	2.5	acefhij	6.5	47	16	.052
F 4	Bessemer City (M)	5,800	³⁶ 1.06	1.28	0.4	Long Creek and Long Creek trib: City Lake 37	2.5	1.7	100	.4	abcdfi ²⁴	1.0	78	18	.093
F 5	Cherryville (M)	5,500	. 81	1.36	.5	Indian Creek: off-river storage	5.2	1.5	17.5	.89	acefhi	1.5	58	17	.008
F 6	Gastonia (M) ³⁸	75,000	14.9	19.9	6.0	S Fork Catawba R. and Long Creek:	60	14 14		9.0	acdefhij	21	68	32	.000
	100					2 off-river reserve Lake Rankin and unnamed	irs:	28	280 60						
	to the first					GASTON COUNT	YContin	ned							
A	ount Holly (M) lso supplies: atawba Heights	7,500	1.33	1.92	.3	Catawba River: headwaters of Lake Wylie	3451.7	2.0	(³⁵)	1.03	acefi	2.0	279	14	.022 pH 1
F 8 S	tanley (M)	2,350	.8	-	.6	Hoyles Creek	1.5	.8	1.5	1.32	acfhi	.8	78	17	.037

Table 3.--Water-supply system data, Region F--Continued

			-	r use (M	T		Allow-	Raw-water				Treatment			d-wate	
Map	Community (Owner)	Pop.	To	otal	Ind.	Water source	able	pumping	(Mga		Treatment		-	1	(mg/1	
number		served	Avg.	Max.			draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		(Mgal/d)	D.S.	Hard.	Iron	Othe
						IREDELL	COUNTY -	-								
F 9	Mooresville (M)	9,000	3.0	3.7	2.1	Catawba River: Lake Norman Reservoir at plan	(²⁶)	4.0	356,000	2.6	abcdfhij	6.0	70	16	0.000	
F10	Statesville (M) Also supplies: Barium Spring Community	27,000	5.5	6.0	2.0	S Yadkin River Fourth Creek	13.5	7.3 3.4	0	5	acdfhij	15	45	14	.000	
						LINCOLN	COUNTY -									
F11	Lincolnton (M)	9,000	2.39	-	1.8	S Fork Catawba River Walker Branch	39	2.0	0 7	1.72	acdefi	2.0	71	24	.000	
						MECKLENBU	RG COUNTY									
	Charlotte (M) Also supplies: Matthews Pineville	280,000	33.8	48.2	11.3	Catawba River: Mountain Island L 2 off-river res.	(²⁶)	90	18,700 100	37.75	acdefijk	61	45	28	.000	
F13	Davidson (M) 39	4,400	.44	.71	.15	Catawba River: Lake Norman	(26)	1.0	356,000	.56	acdfij	.75	63	31	.018	
F14	Huntersville (M) 40	2,000	.13	.18	0	Catawba River: Lake Norman	(26)	1.0	356,000	.32	acdfi	.5	49	24	.000	
						ROWAN	COUNTY	- 1								
F15	China Grove (M)	2,500	.13	-	0	5 wells (bedrock)	-	4.3	0	.075	none	-	311	207	.15	
	Kannapolis (Cannon Mills) Also supplies: Kannapolis Sanitary District	28,400	12.4	17.6	8.1	Irish Buffalo Cr: Lake Kannapolis Coddle Creek ⁴² Second Creek ⁴²	(³³) 1.6 4.7	gravity 3.0 7.2	1,350 0 0	15.7	acefhi	15.0	78	26	.000	

				use (M	gal/d)		Allow-	Raw-water				Treatment			l-wate	
Map	Community (Owner)	Pop.	To	tal	Ind.	Water source	able	pumping	(Mga	1)	Treatment	plant	qu	ality	(mg/1)
umber		served	Avg.	Max,			draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		(Mgal/d)	D.S.	Hard.	Iron	Othe
						ROWAN COUNTY	Continu	ed								
F17	Landis (M)	3,150	0.88	1.23	0.65	Grants Creek: Lake Wright	1.2	3.0	36.8	1.49	acdefhij	1.0	63	14	0.037	
						Flat Rock Branch: Lake Corriher reservoir 43		flow 2.2	47.2 14.2							
F18	Salisbury (M) 44	33,500	7.31	9.09	4.0	Yadkin River: 2 off-river res.	400	12.0	28	5.0	abcdefhij	12.0	65	28	0.000	
F19	Spencer (M)	3,100	.4	-	0	4 wells (bedrock) City of Salisbury	=	45.1	0	.18	none	-	243	168	.21	NO ₃ <u>1</u>
						STANLY	COUNTY -									
	Albemarle (M) Also supplies: North Stanley Water Organization	12,000	5.87	8.32	4.1	Yadkin River: Badin Lake Plant reservoir	(⁴⁶)	8.0	(⁴⁷) 30	5.4	acdfhij	8.0	61	21	.000	
	Badin (Aluminum Co. of America)	2,200	1.04	1.5	.8	Yadkin River: Badin Lake	(⁴⁶)	2.7	78.5	1.5	abcdfijk	1.5	71	28	.000	
F22	Norwood (M)	2,600	.28	.37	.05	Pee Dee River: Lake Tillery	(46)	.6	54,400	.29	acdfi	.5	90	57	.129	
						UNION	OUNTY									
F23	Marshville (M)	2,500	.6	-	.2	Lanes Creek: 2 lakes Town of Wingate and Anson County ⁴⁸	1.1	.5	60	.7	acdefhij	.5	102	52	.733	
F24	Monroe (M) Also supplies: Sun Valley Water Association Wingate	16,000	3.2	3.8	2.5	Richardson Creek: Lake Lee Lake Monroe 1 well (bedrock	6.5	5.0	25C 475 0	3.15	acdefhij ²	3.0	98	58	.119	

	Community (Owner)		Water use (Mgal/d) Total Ind.			-	Allow-		Water storage			Treatment		Finished-water			
Мар		Pop.		Total		. Water source	able	pumping	(Mgal)		Treatment		quality		1		
umber		served	Avg.	Max.			draft (Mgal/d)	(Mgal/d)	Raw	Fin.		capacity (Mgal/d)	D.S.	Hard.	Iron	Other	
						ALAMANCE	COUNTY -	-									
G 1	Burlington (M)	37,000	9.8	14.7	5.5		25.0	32		8.4	acdefhi	16.0	82	47	0.017		
	Also supplies: Haw River Sanitary District					Stony Creek: Stony Creek Lake Lake Burlington Haw River ⁴⁹			3,200 400 0								
G 2	Graham (M) Also supplies: Green Level Community	10,000	1.6	2.0	.2	Back Creek: Graham City Lake Quaker Creek Res.	6.1	3.2	50 500	1.18	acdefhi	2.0	104	66	.034		
G 3	Mebane (M)	2,800	.60	.82	.15	Mill Creek: Lake Michael	(33)	1.3	217	.62	acdfhi	1.0	69	40	.017	Mn 0.0	
						CASWELL	COUNTY -	-									
G 4	Yanceyville (Yanceyville	1,500	.18	.20	.03	Fullers Creek:				.34	acdefhi	.50	114	65	.069		
	Sanitary District)					Yanceyville Res. County Line Cr. 50	.16	.50	10								
						DAVIDSON	COUNTY -	_									
G 5	Denton (M)	1,075	.23	.33	.08	Yadkin River	465	1.0	0	.6	acdefhi	1.0	78	22	.017		
G 6	Lexington (M)	25,000	4.10	5.57	2.0	Abbotts Creek:				5.0	abcdefhij	9.0					
1						Thomasville Res.51	16	gravity	1,800				94	50	.034		
						Leonards Creek: Old City Res.	1.4	5.0	165								
	North Davidson Water, Inc. (P)	19,200	.70	1.15	0	Yadkin River: off-river reservoi	380 r	2.1	10	2.75	acdeti	2.0	79	41	.034		
G 8	Thomasville (M)	18,500	2.41	3.24	.85	Abbotts Creek: Lexington- Thomasville Res. ⁵¹	16	3.3	1,800	2.5	acdefij	3.0	88	48	.052		

Table 3. -- Water-supply system data; Region G--Continued

Map	Community (Owner)	Pop.	-	Water use (Mga. Total		-	Allow- able	Raw-water pumping	Water s		Treatment	Treatment	Finished-water quality (mg/l)			
number		served	Avg	Max.	Ind.		draft (Mgal/d)	capacity	Raw	Fin.	rreatment	capacity (Mgal/d)	-	Hard.		
						DAVIE	COUNTY	-								
, G 5	9 Mocksville (M)	4,500	0.40	0.70	0.12	Hunting Creek Bear Creek: Mocksville Res. 52	31	2.5	100	0.45	acfhij	2.0	78 118	17 38	0.027	
						FORSYTH	COUNTY -	-								
G10	Kernersville (M)	5,000	.80	1.16	.53	Belews Creek:	22	4.1		.9	acdfi	1.5	77	50	.00	
						New Town Lake Harmon Mill Creek: Old Town Lake	(33)		125				-	-	.014	
G11	Rural Hall Sanitary District	2,300 (P)	.13	-	.10	3 wells (bedrock)	-	. 39	.3	-	none	-	132	84	.13	
G12	Winston-Salem (M) Also Supplies: Forsyth County Water System	140,000	32.3	32.8	17.1	Yadkin River: 2 off-river res. Salem Creek:	340	27	(⁵³) 30	21.0	acdefhij	24	-	-	.000	
	water system					Salem Lake	11.7	1317	1,160			20	69	34	.017	
						GUILFORD	COUNTY -	_								
G13	Gibsonville (M)	2,500	.3	-	.2	6 wells (bedrock)	-	4.7	0	. 35	ah ⁵⁴	(55)	264	191	.42	Mn 0.
G14	Greensboro (M)	160,000	21.0	28.5	3.5	Reedy Fork:	37.4			31.2	acdefhij					
						Lake Townsend Reedy Fork and Horsepen Creek:		40	6,500			20				
						Lake Brandt Brush Creek: Lake Higgins ⁵⁶		46	2,200 800			24	96	65	.010	рН 9.6

	Community (Owner)	Pop.	Water use (Mgal/d) Total			Water source	Allow- able	Raw-water pumping	Water s		Treatment	Treatment	Finished-water quality (mg/l)			
Map number		served	Avg.	Max.	Ind.	water source	draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.	Treatment	capacity (Mgal/d)	_	Hard.		
						GUILFORD COUN	YConti	nued								
G15	High Point (M)	61,000	8.40	11.2	2.9	Deep River: High Point Municipal Lake W Fork Deep River: new reservoir ⁵⁷	30	16.0	1,250	13.0	acdefhij	12.0	77	44	0.010	
						RANDOLPH	COUNTY -									
G16	Asheboro (M)	18,000	2.64	3.30	1.1	Back Creek: Lake Lucas Back Creek tribs: Lake Ross and Lake McCrary and Lake Bunch	(³³)	9.0	1,250 160	4.6	acdefhij	3.0	63	36	.017	
G17	Liberty (M)	2,250	.34	. 37	.15	7 wells (bedrock)	-	4.86	.28	-	none	-	131	80	.08 Mn 0	
G18	Ramseur (M)	1,500	. 28	. 35	.19	Sandy Creek Deep River ⁴⁹	.6	1.4	0	.8	acdfhi	50	63	29	.117	
G19	Randleman (M)	3,000	. 29	. 58	.15	Polecat Creek: Randleman City Lake	.7	.65	40	.4	acdfi	.50	93	52	.017	
						ROCKINGHA	COUNTY									
G20	Eden ⁵⁸ (Municipal and Fieldcrest Mills,	20,000 Inc.)	3.78	5.65	-	Dan River Smith River	116 77	3.7 8.6	9.0	1.72	acdfj acefij	2.0 4.0	73 72	18 22	.017	
G21	Mayodan - ⁵⁹ Madison (Washington Mills Company)	5,700	1.0	-	.5	Mayo River	46	2.5	0	1.0	acdfi	1.0	82	20	.014	
G22	Reidsville (M)	15,000	1.75	2.73	.8	Troublesome Cr: Lake Hunt ⁶⁰	2.7 2.2	7.0	700	2.48	acdefhij	3.0	80	40	.028	

Table 3.--Water-supply system data; Region G--Continued

			Water	use (M	gal/d)		Allow-	Raw-water	Water s	torage		Treatment	Fi	nished	d-wate	r
Map	Community (Owner)	Pop.	To	tal	Ind.	Water source	able	pumping	(Mga	1)	Treatment		qu	ality	(mg/1)
umber		served	Avg.	Max.		t	draft (Mgal/d)	(Mgal/d)	Raw	Fin.		(Mgal/d)	D.S.	Hard.	Iron	Other
						STOKES	COUNTY									
	King District ⁶¹ Water Systems, Inc.	6,300	0.20	-	0	Yadkin River	285	1.5	0	1.05	acdfi	1.5	57	24	0.279	
						SURRY	COUNTY	-								
G24	Elkin (M)	3,000	.63	1.27	.15	Elkin River: off-river res.	13.5	6.0	62	2.42	acdefij	3.0	27	10	.000	
G25	Mount Airy (M)	7,000	2.73	3.7	2.0		18.0			1.52	acdfhij					
						Lovills Creek: Stewarts Creek		5.0 6.0	8 25			2.5 6.0	55	24	.048	
G26	Pilot Mountain (M)	1,600	.75	1.0	.55	Toms Creek:	31 2.7	3.0		.8	abcfi	1.5	56	28	.000	
						off-river res. 1 well (bedrock) ¹⁷		4.25	70				110	60	1.0	Mn 0.1
						YADKIN	COUNTY -	-								
G27	Jonesville (M)	2,200	.22	. 49	•04	Yadkin River	175	1.0	0	.84	acdefi	.5	91	55	.017	
G28	Yadkinville (M)	3,000	.12	.14	.003	8 wells (bedrock) 62	-	.72	.1	-	none	-	126	72	1.5	Mn 0.1

				use (Mo			Allow-	Raw-water				Treatment			d-wate	
Map	Community (Owner)	Pop.	То	tal	Ind.	Water source	able	pumping	(Mga	1)	Treatment			_	(mg/1	_
umber		served	Avg.	Max.			draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		capacity (Mgal/d)	D.S.	Hard.	Iron	Othe
						ANSON O	OUNTY									
н 1	Anson County ⁶³ Water System		1.34	2.38	1.0	Pee Dee River: Blewett Falls Lake	(64)	3.7	31,600	1.5	acdefhij	4.0	87	38	0.000	
Н 2	Wadesboro (M)	5,000	1.35	-	.9	N. Fork Jones Cr: City Pond Anson County Water System	1.5 (⁶⁶)	65 1.7 1.25	120	1.24	acefhij	1.25	59	32	.000	
						MONTGOMER	COUNTY .									
н 3	Biscoe ⁶⁷ (Montgomery County)	1,600	.4	1.46	.1	Little River: off-river res.	1.3	1.4	10	.81	acdefi	1.5	92	20	.000	
1 4	Mount Gilead (Montgomery County)	1,400	.5	-	.2	Pee Dee River: Lake Tillery	(46)	.5	54,400	.65	acdefi	.48	157	20	.000	
1 5	Troy (Montgomery County)	3,000	.5	.76	.1	Densons Creek: City Reservoir Plant reservoir	.8	.75	40	.85	acdefi	.75	64	12	.000	
						MOORE	COUNTY	-								
16	Aberdeen (M)	3,300	.3	-	.06	7 wells (Cretaceous sands	-	41.9	0	.5	aj	(55)	<u>6</u>	21	.12	
H 7	Carthage (M)	1,200	.15	.18	.03	Springs:				1.4	acdefi	. 35				
						Town Pond No. 1 Nicks Creek 17	1.8	1.0	22				65	41	.000	
н 8	Pinehurst (Pinehurst, Inc.)	1,200	36	-	0	Rattlesnake Creek 2 wells (Cretaceous sands)	-5	gravity .4	0	.92	afhi ah	unknown (55)	12 22 13	7	.06	
н 9	Robbins (M)	1,100	. 49	1.01	.20	Bear Creek	1.7	2.0	20	.74	acdfi	1.0	70	35	.000	
н10	Southern Pines (M)	9,000	1.06	1.98	.15	Mill Creek: Southern Pines Lak	(³³)	2.0	175	1.3	acdefhij	2.0	27	18	.000	

Table 3.--Water-supply system data; Region H--Continued

			Water	use (Mo	gal/d)		Allow-	Raw-water	Water s	torage		Treatment		nished		
Map	Community (Owner)	Pop.	To	tal	Ind.	Water source	able	pumping	(Mga	1)	Treatment	plant	qu	ality	(mg/1)
umber		served	Avg.	Max.			draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		capacity (Mgal/d)	D.S.	Hard.	Iron	Othe
	Table 1	1 -0				RICHMOND	COUNTY -									
Hll	Hamlet (M) ⁶⁸	10,000	1.8	2.56	0.6	Marks Creek: 2 lakes	(33)	3.5	141	0.75	acdefhi	3.0	48	6	0.000	
н12	Rockingham (M)	7,200	1.3	2.1	91.3	Falling Creek: City Lake Hitchcock Creek: Roberdell Lake	(⁷⁰)	3.5	5	1.18	acdfhij	2.5	63	38	.000	

Table 3.--Water-supply system data; Region J

Map	Community (Owner)	Pop.		use(M	gal/d)	Water source	Allow- able	Raw-water pumping	Water s		Treatment	Treatment plant		nished		
number		served	Avg.	Max.	1		draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		capacity (Mgal/d)	-	Hard.		
1						СНАТНАМ	COUNTY									
J 1 Pi	ttsboro (M)	1,550	0.90	1.06	0.25	Robeson Creek: 2 reservoirs Haw River	0.30 15	0.75 .75	20 0	0.39	acdfh	0.50	121 146	31 31	.007	Mn 0.2
J 2 Si	ler City (M)	5,000	1.9	2.48	.6	Rocky River: Rocky River Lakes Lacey Creek Lake Aaron Fox Lake	1.9	2.5	160 50 60 20	1.4	acdefhi	2.5	64	38	.000	
						DURHAM	COUNTY									
J 3 Du	urham (M) ⁷¹	100,000	13.1	18.9	4.5	Flat River: Lake Michie	30.0	36.0	4,600	9.35	abcdefij	22.0	88	51	.000	
						JOHNSTON	COUNTY -	-								
J 4 Ве	enson (M)	2,400	.3	.4	.01	6 wells (Cretaceous sands) 3 wells (bedrock)	-	.55	0	.4	abdgh	(72)	166	64	.03	Mn 0.1
J 5 Cl	ayton (M)	4,300	.45	-	.05	16 wells (bedrock)	-	.72	0	.95	a 73		2367	110	.00	NO ₃ 20
J 6 Ke	enly (M)	1,400	.10	.18	.01	5 wells (bedrock)	-	.63	0	.3	afi ⁷⁵	(74)	104	54	.03	ĺ
J 7 Se	lma (M)	4,200	.4	-	.01	4 wells (bedrock) Smithfield, N.C.	⁷⁶ 0.1- 0.2	0.8	0	.2	afgj	1.0	182	77	.01	Mn 0.8
J 8 Sm	ithfield (M) 77	15,000 ⁷	81.1	⁷⁹ 1.8	.27	Neuse River: off-river res.	40	8.0	23	1.65	acdfhij	4.0	112	34	05	

Table 3.--Water-supply system data; Region J--Continued

Map	Community (Owner)	Pop.		use (M	1	-1	Allow- able	Raw-water pumping	Water s	-	Treatment	Treatment		nished	-	
mber		served	Avg.	Max.	Ind.	water source	draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.	reachene	capacity (Mgal/d)	-			Other
						LEE CX	UNTY						İ			
J 9	Sanford (M)	12,500	2.63	3.72	1.1	Cape Fear River	17	6.0	0	3.82	acdfhij	6.0	123	29	0.031	
						ORANGE	COUNTY	- 1								
J10	Chapel Hill (University of North Carolina) Also supplies Carrboro	30,000	4.2	6.68	0	Morgan Creek, Neville Creek, and Price Creek: University Lake City of Durham	6.0 80 2.0	6.7	730	2.75	acdefhijk	5.0	80	41	.059	Mn 0.
J11	Hillsborough (M)	3,500	.62	.76	.40	Eno River: Ben Johnson Res.	1.6	1.3	30	-4	acdefhij	.50	86	53	.007	Mn 0.
J12	Orange-Alamance 81 Water Systems, Inc. (P)	3,000	.20	.82	0	Eno River: Corporation Lake	1.3	2.0	30	.9	acdefhi	1.0	99	26	.017	
						WAKE 0	OUNTY									
713	Apex (M)	2,000	.28	.62	.15	Williams Creek: Williams Cr. Res.	(33)	1.4	90	.6	acdefhij	.72	82	46	.000	
114	Cary (M)	7,430	.64	-	.007	City of Raleigh 1 well (bedrock)	?	17	0	.9	none	_ 8	² <u>175</u>	⁸² 96	.000	
15	Fuquay-Varina (M)	3,500	. 33	. 46	.03	8 wells (bedrock) 83	-	831.6	.06	.3	abfg	.58	154	66	1.2	Mn 0.5
116	Garner (M)	8,000	.4	-	.01	12 wells (bedrock) City of Raleigh	- 2	.86	.62	-	none	-	188	105	.46	Mn 0.0

Table 3.--Water-supply system data; Region J--Continued

Map	Community (Owner)	Pop.		use (Mo	Ind.	Water source	Allow- able	Raw-water pumping	Water s		Treatment	Treatment			d-wate (mg/l	
umber		served	Avg.	Max.	ind.		draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		capacity (Mgal/d)				Other
						WAKE COUN	TYCONTI	NUED								
J17	Raleigh (M) ⁸⁴	130,000	18.7	26.6	2.0	Walnut Creek: Lake Johnson Lake Raleigh Swift Creek: Lake Wheeler Lake Benson Neuse River: off-river res.	⁸⁵ 21.7	31	740 107 2,000 1,000	23.4	acfhij	⁸⁵ 13	100	22	0.040	cd<0.0
J18	Wake Forest (M)	2,500	.38	.75	.10	Smith Creek: Wake Forest Lake	.9	3.0	200	.92	acdf	2.0	79	17	.000	
J19	Wendell (M)	2,200	.19	.30	.02	Lake Johnson ⁸⁷ l well (bedrock)	(⁸⁸)	1.0	200	.60	acf none	.30	101	51	.000	
J20	Zebulon (M)	2,300	. 30	- 1	.02	Little River	.6	1.4	0	.58	acefi	1.5	89	49	.000	

Wan	Community (Owner)	Don		use (M	1		Allow-	Raw-water				Treatment			d-wate	
Map		Pop.		otal	Ind.	Water source	able	pumping	(Mga	11)	Treatment	plant	qu	ality	(mg/1)
- unwer		Serveu	Avg.	Max.			draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		(Mgal/d)	D.S.	Hard.	Iron	Oth
						FRANKLI	COUNTY									
K 1	Franklinton (M)	4,000	0.42	0.52	0.14			1.0		0.4	acdefi	1.0				
						Taylors Creek: Old Franklin Lake	0.2		6.0				67	29	0.000	
						Cedar Creek: New Franklin Lake	.6		6.0							
K 2	Louisburg (M)	3,100	.50	. 89	.27	Tar River	7.0	1.0	0	1.07	acdfi	1.0	81	42	.010	
						GRANVIL	E COUNTY									
к 3	Butner (N.C. Dept. of Mental Health)	5,000	1.8	2.66	1.2	Knap of Reeds Cr: Lake Butner	13.8	8.0	2.2	3.0	abcfhij	4.0	73	45	.025	
K 4	Creedmoor (M)	2,200	.25	. 30	.04	Ledge Creek: Rogers Lake	.8	.58	120	.25	acdefi	.35	142	86	.034	
к 5	Oxford (M)	8,100	2.0	2.65	1.5	Tar River and Hachers Run:	2.0	⁸⁹ 1.5		1.4	acdefhi	3.2	72	24	.007	
						Lake Devin		2.7	413					1 (
						PERSON	COUNTY									
к 6	Roxboro (M)	10,000	3.5	5.6	2.6	Satterfield Creek: Roxboro Lake	(33)	5.8	800	3.5	acdfhij	4.5	- 68	- 16	.000	
						Hyco River: Hyco Lake		902.0								
-		20, 200	2.0	2.45	10		3.6	8.0		1 67	abcdefhi	3.0	99	14	.010	
7 H	Menderson (M)	20,000	3.0	3.45	1.0	Sandy Creek: Ayscue Pond Faulkner Pond Foxes Pond	3.6	8.0	50 5 42.5	1.67	abcdeini	3.0	99	14	.010	
						Rowlands Pond Southerlands Pond			20.7							
						WARREN	COUNTY -	-								
8 W	arrenton (M)	1,650	0.28	0.58	.005	Fishing Creek	0.75	0.6	0	0.55	acdefhi	0.5	105	22	0.000	

Table 3.--Water-supply system data; Region L

Мар	Community (Owner)	Pop.	_	use(M	gal/d)	Water source	Allow- able	Raw-water pumping	Water s		Treatment	Treatment plant			d-wate	
number		served	Avg.	Max.	1		draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.	1				Iron	
						EDGECOME	E COUNTY									
L 1	Pinetops (M)	1,500	0.12	0.15	0.02	2 wells (Cretaceous sands)	-	0.56	0	0.28	ah	(74)	143	73	.060	
L 2	Tarboro (M)	10,000	1.29	2.18	.50	Tar River	35	3.0	0	2.0	acdfij	3_0	106	26	.010	
						HALIFAX	COUNTY	_								
L 3	Enfield (M)	3,100	.4	.5	.08	Fishing Creek	17	1.6	0	.62	acdfi	.5	87	46	.010	
5 4	Roanoke Rapids (Roanoke Rapids Sanitary District)	16,000	5.5	8.3	4.5	Roanoke River: Roanoke Rapids Lad	(²⁶)	12	25,000	3.75	acdefij	12.0	89	26	.020	
L 5	Scotland Neck (M)	3,000	.38	. 45	.02	9 wells (shallow and Cretaceous sands) 2 wells (Cretaceous sands)	-	.68		0.71	abfhi	1-44	232 <u>34</u>	40 993	.000	
L 6	Weldon (M)	3,200	.3	.35	04	Roanoke River	(91)	1.6	.1	.63	acdefi	1.0	112	28	.010	

Table 3.--Water-supply system data; Region L--Continued

Мар	Community (Owner)	Pop.	-	use (Mo	1		Allow-	Raw-water				Treatment	1		d-wate	
nap	community (owner)	served	Avg.	Max.	Ind.	Water source	able draft (Mgal/d)	pumping capacity (Mgal/d)	(Mga Raw	Fin.	Treatment	plant capacity (Mgal/d)			(mg/l Iron	Other
						NASH						(11942) 47				
L 7	Nashville (M)	2,500	.18	-	0	6 wells (bedrock)	-	.83	11	.3	a	(^{9 2})	114	66	.010	
L 8	Rocky Mount (M)	40,000	9.98	15.6	5.0	Tar River: Tar River Reservo.	r 37.0	11 24	04,300	7.5	acdefhij acdefhij	11 12	76 88	36 16	.020	
L 9	Spring Hope (M)	1,400	.08	-	.005	4 wells (bedrock)	-	.63	.3	-	none	-	124	75	<u>•17</u>	Mn 0.
						NORTHAMP	ON COUNT	·								
1						WILSON	COUNTY									
L10	Wilson (M)	32,000	4.7	7.6	1.5	Contentnea Creek: Buckhorn Res. Wiggins Mill Res. Toisnot Swamp: Lake Toisnot Lake Wilson	(^{9 3}) ^{9 4} 3.2 5.2	6.7 5.2	1,000 525 35 119	5.0	acdefij acdefijk	4 6	60 58	30 33	0.020	Mn 0.

Table 3.--Water-supply system data; Region M

	Community (Owner)	Don		use (M	1		Allow-	Raw-water				Treatment			d-wate	
Map	Community (Owner)	Pop.		tal	Ind.	Water source	able draft	pumping capacity	(Mga	T	Treatment	plant			(mg/	
		Jerrea	Avg.	Max.			(Mgal/d)	(Mgal/d)	Raw	Fin.		(Mgal/d)	D.S.	Hard.	Iron	Othe
						CUMBERLA	ND COUNTY									
M 1	Brookwood Water System (P)	7,000	0.4	-	0	16 wells (Cretaceous sands) 2 wells (bedrock)	-	3.12	0	.66	£ 5	(74) 9	6 29	2 .	0.07	рн· <u>4.</u>
M_2	Cottonade-Summer Hill Water System (LaFayette Water Corporation)	3,700	.29	-	0	14 wells (Cretaceous sands)	-	2.0	0	.25	i	(⁷⁴)	19	1	.00	Cu 1.
м 3	Fayetteville (M) Also supplies: Hope Mills	70,000	10.8	14.9	2.5	Cape Fear River Little Cross Creek: Boonie Doone Lake Kornbow Lake Mintz Pond Glenville Lake Cross Creek (4)	96 5.6	18.0 22.0	0 75 150 25 125	11.0	acdefhij acdefhij	8 12	96 62	11 34	.04	
			7		0.0.											
M 4	Fort Bragg (F)	46,995	7.3	-	(98)	Little River	20	11.0	40	5.1	acdfhijk	11.8	47	24	.07	
м 5	LaFayette Village 99 Sherwood Water System (LaFayette Water Corporation)	12,800	.76	-	0	17 wells (Cretaceous sands)	-	2.7	0	.62	i	(74)	111	9	.00	
						CUMBERLAND COU	NTYCont	inued								
	LaGrange Water ¹⁰⁰ System (P)	3,600	. 28	-	0	12 wells (Cretaceous sands)	-	.73	0	.21	ai	(74)	22 23	1	.06	
	Loch Lomond - 101 Devonwood Water System (Montclair Water Corporation)	2,600	.14	-	o	6 wells (Cretaceous sands) 5 wells (bedrock)	-	.66	.32	-	none	-	27	1	.05	
	Montclair Water 102 System (P)	4,600	. 25	-	0	5 wells (Cretaceous sands)	-	.8	0	.53	i 103	(74)	9 649	5	.04	

Table 3.--Water-supply system data; Region M--Continued

			Water	use (M	gal/d)		Allow-	Raw-water	Water s	torage		Treatment	Fi	nishe	d-wate	r
Map	Community (Owner)	Pop.	To	tal	Ind.	Water source	able	pumping	(Mga	1)	Treatment	plamt	dr	ality	(mg/1	.)
mber		served	Avg.	Max.			draft (Mgal/d)	(Mgal/d)	Raw	Fin.		(Mgal/d)	D.S.	Hard.	Iron	Othe:
						CUMBERLAND C	COUNTYCU	ntinued								
м 9	Ponderosa Water System (Cumberland Water Company)	5,800	0.48	-	0	10 wells (Cretaceous sands)	-	1.5	0	0.6	i	(74)	24	1	0.01	рн 4.9
MlO	Spring Lake (M)	11,000	.6	-	0	6 wells (Cretaceous cands)	-	1.3	0	.78	hi 104	(74))	97	12	.01	
						HARNET	T COUNTY									
Mll	Angier (M)	1,500	.15	-	.005	4 wells (bedrock)	-	.33	0	.85	abdf	. 22	59	28	.326	Mn 0.
M12	Dunn (M) 105	13,500	1.05	2.58	.30	Cape Fear River	20	2	4	3.0	acdefhij	4.0	138	48	.000	F 2.8
M13	Lillington (M) 106	2,150	.22	. 75	0	Cape Fear River	19	1.15	0	1.08	acdefhij	.5	171	34	.155	
						SAMPSON	COUNTY	_								
14	Clinton (M)	8,600	1.5	-	1.0	5 wells (Cretaceous sands)	-	3.0	0	.95	aj	(74)	168	<u>70</u>	.26	Mn 0.
15 F	Roseboro (M)	1,400	. 23	-	.02	3 wells (Cretaceous sands)	-	1.2	0	.20	abf	-44	372	12	.77	

Table 3.--Water-supply system data; Region N

Мар	Community (Owner)	Pop.		use (M	Ind.	Water source	Allow- able	Raw-water pumping	Water s		Treatment	Treatment plant			d-wate	
umber		served	Avg.	Max.	7		draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		capacity (Mgal/d)		Hard.		Othe
						BLADEN	COUNTY									
N 1	Elizabethtown (M)	3,800	0.41	-	0.15	2 wells (Cretaceous sands)	-	1.16	0	0.38	abef	(55)	263	12	0 12	
1.4	White Lake (M) summer winter	3,000 350	.12	1.4	0	2 wells (Cretaceous sands)	-	1.6	0	.08	a	(74))	22464	<u>58</u>	.10	
		1				ноке	COUNTY	-								
N 3	Raeford (M)	3,000	2.04	-	1.5	ll wells (Cretaceous sands)	-	42.9	0	.80	abhi ¹⁰⁷	0.5	108 28	10	¹⁰⁹ 083	
						ROBESON	COUNTY -									
N 4	Fairmont (M)	3,100	.1	-	.015	2 wells (Cretaceous sands)	-	.3	0	.36	abfj	?	22110	17	.31	
N 5	Lumberton (M)	18,500	3.5	5.2		Lumber River 1 well ⁴⁹ (Cretaceous sands)	47	10.0 41.0	0	6.05	acdfhij	10.0	39 108 160	15 96	.00	
N 6	Maxton (M)	2,000	.18	1.0	.001	2 wells (Cretaceous sands)	-	.7	.2	.1	bi ¹¹⁰	1.0	52	8	.18	
N 7	Pembroke (M)	2,900	.28	.4		3 wells (Cretaceous sands)	-	1.7	0	.52	abfgi	.50	²² 37	15	.75	

Table 3. -- Water-supply system data; Region N--Continued

Мар	Community (Owner)	Pop.	-	use (Mo	gal/d) Ind.	Water source	Allow- able	Raw-water pumping	Water s		Treatment	Treatment plant		nished		
number		served	Avg.	Max.			draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		capacity (Mgal/d)	D.S.	Hard.	Iron	Other
						ROBESON COUN	TYConti	nued								
N 8	Red Springs (M)	3,300	.6	.8	.15	4 wells (Cretaceous sands)	-	2.6	0	.475	abcdfij	1.0	64	3711	1.42	
N 9	Rowland (M)	1,400	.18	.3	.003	2 wells (Cretaceous sands)	-	1.15	0	.30	abfhi	? 2	100	65	3.5	Mn 0.0
N10	Saint Pauls (M)	2,500	.3	.4	.07	3 wells (Cretaceous sands)	-	1.3	0	.275	bfij ^{ll0}	.5	49	15	.04	
						SCOTLANI	COUNTY -									
N11	Laurinburg Also supplies: East Laurinburg	10,200	1.47	2.35	0.7	Jordon Creek 4 wells (Cretaceous sands)	1.7	1.0	0	0.8	acdefhij abhij	1.0 (⁵⁵)	80	42	0.02	

Table 3.--Water-supply system data; Region \emptyset

Map	Community	(Owner)	Pop.		use(M tal	gal/d) Ind.	Water source	Allow- able	Raw-water pumping	Water s		Treatment	Treatment plant			d-wate (mg/l	
umber			served	Avg.	Max.			draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		capacity (Mgal/d)	D.S.	Hard.	Iron	Othe
							BRUNSWIC	K COUNTY									
ø 1	Long Beach	(M)	5,000	0.7	-	0	4 wells (Castle Hayne limestone)	-	^{6 5} 0.96	0	0.03	ai	(55)	108518	280	2.7	
Ø 2	Ocean Isle	Beach (M) summer winter	3,000	.15	0.2	0	4 wells (surficial sands)	-	65.3	0	.2	a	(55) 1	12484	210	.02	
øз	Southport	(M)	3,500	.25	.3	.01	3 wells (Castle Hayne limestone)	-	1.15	0	.25	a	(⁵⁵)	205	160	.36	
							COLUMBUS	COUNTY -									
ø 4	Chadbourn	(M)	2,600	.5	.75	.31	3 wells (Cretaceous sands)	-	1.4	.06	0	none	-	214	87	.02	
ø 5	Tabor City	(M)	2,500	.25	-	.04	3 wells (Cretaceous sands)	-	1.9	.3	0	none	-	291	2	.05	
ø 6	Whiteville	(M)	5,500	.23	.5	.04	4 wells (Cretaceous sands)	-	652.24	.1	.6	a	(74)	253	110	.02	

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Table 3.--Water-supply system data; Region Ø

				use (M	1		Allow-	Raw-water				Treatment			d-wate	
Map number	Community (Owner)	Pop. served	Avg.	Max.	Ind.	Water source	able draft	pumping capacity	(Mga Raw	Fin.	Treatment	capacity	-		(mg/l	Othe
		-	+	-	-		(Mgal/d)	(Mgal/d)	-	-		(Mgal/d)	-		-	-
						NEW HANOV	ER COUNTY									
ø 7	Carolina Beach (M)	5,000	.4	1.0	0	6 wells (Castle Hayne limestone)	-	1.3	1.0	.1	à	(113)	310	200	.21	
Ø 8	Kings Grant (P)	2,800	.22	-	0	3 wells (Castle Hayne limestone and Cretaceous sands)	-	1.1	0	.21	a	(74)	271	200	.00	
Ø 9	Wilmington (M)	47,000	8.5	12.7	2.0	Cape Fear River: Kings Bluff intak Toomers Cr. intak N.E. Cape Fear Rive	e49	12.0	0	20.5	acdefhij	12.0	97	38	.08	
Ø10	Wrightsville Beach (M)	3,800	.5	.75	0	8 wells (Castle Hayne limestone)	-	1.6	0	.38	a	(⁵⁵)	499	180	.03	
						PENDER	COUNTY -									
Ø11	Burgaw (M)	3,000	0.23	-	0	3 wells (Cretaceous sands)	-	1.1	0.175	-	none	-	407	8	0.02	
Ø12	Surf City (M) 114	3,000	.25	0.5	0	2 wells (Castle Hayne limestone)	-	1.1	0	0.2	a	(⁷⁴) ²	2194	150	.29	
Ø13	Topsail Beach (M) summer winter	5,000 150	.07	-	0	Purchased from Surf City(115)		-	-	.18	ab	?	-	-	-	

Table 3.--Water-supply system data; Region P

				use (M	gal/d)		Allow-	Raw-water	Water s	torage		Treatment			d-wate	_
Map	Community (Owner)	Pop.	To	tal	Ind.	Water source	able	pumping	(Mga	1)	Treatment		qu	ality	(mg/1)
umber		served	Avg.	Max.			draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		capacity (Mgal/d)	D.S.	Hard.	Iron	Othe
						CARTER	T COUNTY									
P 1	Atlantic Beach (S. A. Horton)	2,000	?	?	0	8 wells (Castle Hayne limestone)		-	0.011	-	none	-	371	290	0.17	
P 2	Beaufort (M)	3,500	0.30	-		2 wells (Castle Hayne limestone)	-	1.1	.01	0.3	ab	1.4	22366	280	.12	
P 3	Bogue Banks Water Association (P) summer winter	5,000	.22	0.07	0	2 wells (Castle Hayne limestone)	-	⁶⁵ .63	0	.12	a	(⁵⁵)	²² 289	230	.30	
P 4	Morehead City (M)	5,400	.68	.91	.15	2 wells (Castle Hayne limestone)	-	1.3	0	.18	a	(74)	335	-	.06	
P 5	Newport (M)	1,900	.16	.31	.004	3 wells (Castle Hayne limestone)	-	.56	0	.1	a ¹¹⁰	(⁵⁵)	22294	260	.29	
	_					CRAVEN	COUNTY -									
P 6	Cherry Point M.C.A.S. (F)	13,000	2.8	-	(⁹⁸)	23 wells (Castle Hayne limestone)	-	6.6	0	3.9	abcdefij	4.5 1	16 130	54	2.9	
P 7	Havelock (M)	5,000	. 46	0.71	0	2 wells (Castle Hayne limestone)	-	1.1	0	.3	abfg	1.6	22 257	210	2.1	
P 8	New Bern (M)	17,000	3.13	-	,73	3 wells (Cretaceous sands)	-	6.0	0	2.3	aj	(74)	22 329	3	.00	

Table 3.--Water-supply system data; Region P--Continued

				use (M	gal/d)		Allow-	Raw-water	Water s	torage		Treatment	Fi	nishe	i-wate	r
Map	Community (Owner)	Pop.	To	tal	Ind.	Water source	able	pumping	(Mga	1)	Treatment	plant	qu	ality	(mg/1)
number		served	Avg.	Max.			draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		(Mgal/d)	D.S.	Hard.	Iron	Other
						DUPLIN	COUNTY -									
r 9	Rose Hill (M)	1,800	.11	.125	.006	2 wells (Cretaceous sands)		.6	.80	-	none	-	155	130	.21	
P10	Wallace (M)	3,100	3.8	-	3.5	10 wells (Cretaceous sands)	-	6.0	1.6	-	none	_ 1	¹⁷ 194	96	.01	
P11	Warsaw (M)	3,000	.28	-	0	3 wells (Cretaceous sands)	-	1.1	0	.38	a	(74)	18106	51	1.3	Mn 0.1
						GREENI	COUNTY									
P12	Snow Hill (M) 119	3,500	0.35	-	0.04	2 wells (Cretaceous sands)	-	1.5	0.65	-	none	-	230	24	0.01	
						JONES	COUNTY									
						LENOI	COUNTY									
P13	Kinston (M)	25,000	4.7	-	2.0	11 wells (Cretaceous sands)	-	12.2	3.5	-	none	-	145	4	.03	
P14	LaGrange (M)	3,000	.35	-	.11	2 wells (Cretaceous sands)	-	1.0	0	0.3	abhi	0.72	105	30	12008	
P15	North Lenoir Water Association (P)	4,000	-	-	0	7 wells (Cretaceous sands)	-	1.2	.122	-	none	-	134	11	.00	

Table 3.--Water-supply system data; Region P--Continued

Мар	Community (Owner)	Pop.		use(N	Ind.	. Water source	Allow- able	Raw-water pumping	Water (Mga		Treatment	Treatment	1	nishe		
umber		served	Avg.	Max.			draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		capacity (Mgal/d)		Hard.	_	
						ONSLOW	COUNTY -									
P16	Camp Lejeune: Hadnot Point Water System (F)	(121)	3.41	3.89	(98)	35 wells (Castle Hayne limestone)	-	5.5	.5	3.28	acdfgij	5.0	107	72	12000	
P17	Jacksonville (M) Also supplies Brynn Marr subdivision	17,000	1.87	2.35	0	9 wells (Cretaceous sands) 1 well (Castle Hayne limestone)	-	3.9	0	2.95	a	? 12	2427	21	.03	
						PAMLICO	COUNTY									
						WAYNE	COUNTY -	-								
P18	Fremont (M)	1,600	0.11	-	0.007	4 wells (bedrock)	-	0.26	0.18	0	none	-	829	240	0.19	Mn 0.08
P19	Goldsboro (M)	31,000	4.0	5.0	.55	Neuse River Little River	56 3.2	10	35	6.5	acdefhij	10	95 2255		1 ² .31	
P20	Mount Olive (M)	6,500	1.0	-	.16	3 wells (Cretaceous sands)	-	1.9	.13	.5	abfij	?	76	20	.67	
P21	Seymour Johnson AFB (F)	8,800	1.28	2.10	(⁹⁸)	14 wells (Cretaceous sands and bedrock)	ī	2.3	0	2.0	abdfij	2.0	121	59	.01	

Table 3.--Water-supply system data; Region Q

				use (M	(gal/d)		Allow-	Raw-water	Water s	torage		Treatment	Fi	nishe	d-wate	r
Map	Community (Owner)	Pop.	To	tal	Ind.	Water source	able	pumping	(Mga	1)	Treatment		qu	ality	(mg/1	.)
umber		served	Avg.	Max.			draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		capacity (Mgal/d)	D.S.	Hard.	Iron	Other
						BEAUP	DET COUNTY									
Q 1	Belhaven (M)	2,400	0.3	0.48	0.1	2 wells (shallow sands)	-	1.0	0.018	0.28	abfg	0.5	496	56	0.100	
Q 2	Washington (M)	10,000	1.6	2.24	.35	Tranters Creek	2.6	2.8	0	1.7	acdefhij	2.2	133	78	.000	
						BERT	E COUNTY									
Q 3	Windsor (M)	3,000	.17	.2	.095	3 wells (Cretaceous sands)	-	1.4	.30	-	none	-	572	33	.24	F 2.6
						HERTF	DED COUNTY									
Q 4	Ahoskie (M)	5,000	.5	.6	.02	5 wells (Cretaceous sands)	-	1.7	0	.81	b(123)	(⁵⁵)	592	66	.010	1 1.9
Q 5	Murfreesboro (M)	4,000	.3	.36	.05	2 wells (Cretaceous sands)	-	2.0	.08	-	none		292	4	.020	
						MART	IN COUNTY									
Q 6	Robersonville (M)	2,600	1.0	1.2	.7	4 wells (Cretaceous sands)	-	2.1	0	.48	a	(⁵⁵)	1005	36	.070	
Q 7	Williamston (M)	7,000	.67	1.1	.22	4 wells (Cretaceous sands)	-	2.3	0	.98	a(124)	(⁵⁵)	664	32	.070	F 1.9

Table 3.--Water-supply system data; Region Q--Continued

Map	Community (Owner)	Pop.	-	use (Mo	gal/d)	Water source	Allow- able	Raw-water pumping	Water s (Mga		Treatment	Treatment plant	1		d-wate (mg/l	
umber		served	Avg.	Max.	1		draft (Mgal/d)	capacity (Mgal/d)	Raw	Fin.		capacity (Mgal/d)	D.S.	Hard.	Iron	Other
						PITT	COUNTY -	-								
Q 8	Ayden (M)	4,000	0.36	-	0.015	2 wells (Cretaceous sands)	-	2.0	0.3	-	none	-	274	8	0.030	
Q 9	Bethel (M)	2,000	.24	-	.001	3 wells (Cretaceous sands)	-	1.84	0	0.78	a	(⁵⁵) ²	22578	25	.450	
Q10	Farmville (M)	6,000	1.56	-	1.20	8 wells (Cretaceous sands)	-	4.39	0	1.38	a(125)	(55) 12	499	1124	.22	
Q11	Greenville (M)	32,000	4.65	6.7	2.8	Tar River 6 wells (Cretaceous sands)	35	9.0 4.1	0	2.8	acdefhij a	6.0	104 18296	58 16	1	Cd 0.0 F <u>1.8</u>
Q12	Grifton (M)	2,200	.2	.29	.003	2 wells (Cretaceous sands)	-	.67	0	.06	a	(55)	183	4	.000	
Q13	Winterville (M)	1,500	.18	-	.037	2 wells (Cretaceous sands)	-	.72	.08	-	none	-11	250	29	.020	

Table 3.--Water-supply system data; Region R

				use (M	gal/d)		Allow-	Raw-water				Treatment		inished		
Map umber	Community (Owner)	Pop. served	Avg.	Max.	Ind.	Water source	able draft (Mgal/d)	pumping capacity (Mgal/d)	(Mg:	Fin.	Treatment	plant capacity (Mgal/d)		Hard.		Other
						CAMDEN	COUNTY -	-								
						CHOWAN	COUNTY -									
R 1	Edenton (M)	5,000	0.5	-	0.13	3 wells (Castle Hayne limestone)	-	2.16	0.13	0.8	abdghi	1.61	653	73	0.030	
						CURRITU	K COUNTY									
						DARE	OUNTY									
R 2	Cape Hatteras Water Association (P) summer winter	3,600	.19	0.41	0	20 wells (shallow sands)	-	.5	.2	.5	abcdfg	1.0	359	200	.060	Mn 0.1
R 3	Kill Devil Hills (M) summer winter	6,000 400	. 34	.77	.033	Fresh Pond and 18 wells ¹²⁷ (shallow sands)	(127)	.72	96	.42	abcdfi	.72	126	69	.000	
R 4	Nags Head (M) summer winter	6,000 550	.27	-	.003	(¹²⁷) 1 well (shallow sands)	(¹²⁷)	(¹²⁷) .36	(¹²⁷)	.8	(¹²⁷)	(¹²⁷)	123 536	65 79 ³	.000 28280	Mn 0.4

Table 3.--Water-supply system data; Region R--Continued

			Water	use (M	igal/d)		Allow-	Raw-water	Water st	orage		Treatment	Fi	nished	d-wate	r
Мар	Community (Owner)	Pop.	To	tal	Ind.	Water source	able	pumping	(Mga)	.)	Treatment	plant	qu	ality	(mg/1)
umber		served	Avg.	Max.			draft (Mgal/d)	(Mgal/d)	Raw	Fin.		capacity (Mgal/d)	D.S.	Hard.	Iron	Othe
	Sal .	200				GATES	COUNTY	- 1								
	STATE OF THE STATE OF		1200	10 11		HYDE C	OUNTY									
	Coronel Trans					PASQUOTA	NK COUNTY									
R 5	Elizabeth City (M)	20,000	2.12	2.63	.8	230 well points (shallow sands) 4 wells (shallow sands)	-	129 1.75 2.25	3.03	2.0	acdfhj	2.0	277	100	.010	рН 9.
						PERQUIMA	NS COUNT									
R 6	Hertford (M)	2,000	0.22	0.3	0.005	2 wells (shallow sands)	-	0.7	0	0.75	acd	0.5	177	78	0.180	
						TYRREI	L COUNTY									
						WASHINGTO	N COUNTY									
R 7	Plymouth (M)	5,000	.43	.67	0	3 wells (Castle Hayne limestone)	-	2.0	0	.82	abg	2.2	704	200	.010	

Footnotes for Table 3.

- 1 See page 4 for explanation of codes.
- ²Also supplies Clyde and six water associations.
- ³Also supplies Assembly, Hazelwood, Junaluska Sanitary District, and Lake Junaluska.
- 4Combined reported yield of wells, not based on capacity of pumps.
- ⁵Also serves Biltmore, Enka, Royal Pines, Skyland, and Swannanoa.
- ⁶Chemicals fed directly into water line.
- ⁷Discontinued June 1963. Could be put back into service if needed.
- ⁸Also supplies Balfour, Flat Rock, Laurel Park, Mills River, Mountain Home, Saluda, and Valley Hill.
- 9Also supplied Gardner-Webb College.
- 10Carry-over storage involved. Allowable draft probably in excess of 30 Mgal/d.
- 11Water from Davidson and City Lakes are combined and treated at the same plant.
- 12 Also supplies Clinchfield, Crossmill, East Marion, Mackeys Creek, and Pleasant Gardens.
- 13Gravity flow, estimate based on capacity of the line.
- ¹⁴Also supplies Sandymush Water District.
- $^{15}\mathrm{Treatment}$ plant scheduled for expansion to 8.0 Mgal/d by March 1974.
- ¹⁶ Also supplies Broyhill Community Water System.
- ¹⁷Supplementary source.

- ¹⁸Also supplies Blue Ridge Water Association, Crickett-Millers Creek Water Association, and Mulberry-Fairplains Water Association.
- ¹⁹Occasionally supplements Moravian Falls Water Association, Inc.
- ² OYadkin River natural flow augmented by releases from W. Kerr Scott Reservoir. Ample water is available to meet any foreseeable demand.
- ²¹Supplies part of rural Alexander and Iredell Counties, Hiddenite, Stony Point, and Taylorsville.
- ²²Dissolved-solids, hardness, and iron concentrations from analysis of raw water which is treated before it enters the distribution system.
- ²³Dissolved-solids, hardness, and iron concentrations from analysis of water combined from two wells.
- ²⁴Addition of potassium permanganate to remove iron and(or) manganese.
- $^{25}\mathrm{Also}$ supplies Rutherford College Water Corporation.
- 26 Not determined. There are no contractual restrictions on the amount that can be withdrawn.
- ²⁷Also supplies North Catawba Community.
- ²⁸Also supplies Harpertown Water District, Hudson, Saw Mill, and Whitnel.
- ²⁹Also supplies Brookford and Conover.
- 30Also supplies Claremont.
- 31 This amount available without storage.

- 32Also supplies Jackson Park Sanitary District, Parkland Sanitary District, Parkwood Sanitary District, and South Concord Sanitary District.
- ³³Not determined because analysis of carry-over storage is required.
- 34Minimum release from Mountain Island Dam as required by the Federal Power Commission.
- ³⁵Raw-water storage available, but none controlled by this system.
- ³⁶Total water-use data does not include 0.3 to 0.5 Mgal/d of untreated water furnished to industry; however, industry uses about 0.4 Mgal/d of treated water which is included in the data on total water use.
- ³⁷City Lake is on Long Creek tributary. Filled by pumping from Long Creek.
- ³⁸Also supplies Cramerton, Dallas, Lowell, McAdenville, and Ranlo.
- ³⁹Also supplies Cornelius and Davidson College.
- ⁴⁰Also supplies the community of Pottstown.
- ⁴¹Includes 10.2 Mgal reserved for industrial use only.
- ⁴²Supplementary supply. Water is pumped from creek to Lake Kannapolis.
- ⁴³Water is pumped from Lake Wright to Lake Corriber. Water flows from Lake Corriber to this storage reservoir where it is pumped to the treatment plant.
- 44Also supplies East Spencer, part of Granite Quarry, and supplements Spencer.
- 45 Combined reported yield of only three wells, not based on capacity of pumps.

- 46 Not determined. Ample water supply.
- ⁴⁷Storage available to Albemarle not determined.
- 48 Marshville purchases an average of 1 million gallons per month from Wingate and purchases a minimum of 5 million gallons per month and can purchase as much as 10 million gallons per month from the Anson County Water System.
- 49 Emergency supply.
- ⁵ OSupplements Yanceyville Reservoir.
- 51Lexington-Thomasville Reservoir has an allowable draft of 16 Mgal/d and is shared by Lexington and Thomasville.
- ⁵²Bear Creek is a supplementary source of water, and its flow is supplemented by flow from Mocksville Reservoir when needed.
- 5311,000 Mgal of water storage in W. Kerr Scott Reservoir on Yadkin River also is reserved for Winston-Salem.
- $^{54}\mathrm{A}$ chelating agent is added to hold iron and manganese in suspension
- ⁵⁵Treatment at each well.
- ⁵⁶Supplements Lake Brandt.
- ⁵⁷Supplements High Point Municipal Lake.

- ⁵⁸Also supplies a rural water system, Dan River, Inc.
- ⁵⁹Distribution systems owned by Mayodan and Madison.
- 60 Impounded on an upstream tributary to Troublesome Creek.
- 61 Supplies King, Pinnacle, Tobaccoville, and parts of rural Stokes County.
- 62One well used as a supplementary supply.
- 63Serves Anson County, McFarlan, Morven, and Peachland. Supplements Ansonville, Marshville, Polkton, and Wadesboro. Connected to Lilesville.
- ⁶⁴Restricted to 12 Mgal/d by contract with Carolina Power and Light Company.
- 65Total finished-water pumping capacity.
- ⁶⁶Additional water needed purchased as finished water from Anson County Water System.
- 67Also supplements Star.
- 68Also supplies East Rockingham.
- 69Includes approximately 0.7 Mgal/d of untreated water furnished to industry. Average and maximum use values do not include this 0.7 Mgal/d of untreated water.
- 70 Not determined because raw-water storage data not available.
- ⁷¹Also supplements Chapel Hill water supply during dry periods.

- ⁷²Not rated; maximum rate of filter system is 0.72 Mgal/d.
- 73Only water from three wells is chlorinated.
- ⁷⁴Demand-type feeders, not rated.
- ⁷⁵All wells are chlorinated. Four wells have adjustment of pH. One well has a filter for iron removal.
- 76 Estimated daily purchase of finished water from the town of Smithfield.
- 77 Also supplies Four Oaks, Selma, and West Smithfield Sanitary District.
- 78 Does not include an estimated 0.1 Mgal/d purchased by Selma.
- 79 Does not include an estimated 0.2 Mgal/d purchased by Selma during peak usage.
- 80 Connection to the Durham supply has a capacity of 2.0 Mgal/d of finished water.
- ⁸¹Serves some rural areas in Alamance and Orange Counties including the town of Efland.
- ⁸²Finished water from 17 wells in use in 1965. Water was chlorinated and treated with phosphate compounds for corrosion control.
- 83Includes two auxiliary wells yielding about 0.8 Mgal/d.
- $^{84}\text{Also}$ supplements the water supplies of Cary and Garner.
- 85Water from Walnut and Swift Creeks is combined.
- 86 Not determined because of many upstream diversions.

- 87An abandoned rock quarry fed by ground water.
- 88Pumpage data from Lake Johnson indicates the allowable draft (or yield) from that source is in excess of 0.15 Mgal/d.
- ⁸⁹Raw water is pumped from Tar River to Lake Devin.
- 90Hyco Lake is a supplementary supply. Approximately 2.0 Mgal/d are pumped from Hyco Lake to Roxboro Lake.
- 91Weldon' ntakes are below the Roanoke Rapids Lake dam where the minimum release is 646 Mgal/d.
- 92Chlorinata n at each well except two. Water from these two wells is chlorinated after storage.
- 93January 1977, data: minimum release from Buckhorn Reservoir to downstream Wiggins Mill Reservoir is 0.34 Mgal/d.
- 94 Allowable draft for Wiggins Mill Reservoir computed before construction of Buckhorn Reservoir.
- $^{95}\text{Demand-type}$ feeders for nine wells; not rated. Other wells not treated.
- 96All values from analyses of raw water entering distribution system without treatment.
- 97Treated at Glenville Treatment Plant along with water from Little Cross Creek.
- 98There are industrial-type operations on the base, but water is not metered.
- ⁹⁹Service area includes Ashton Forest, Barwin Estates, Darwindale, Drake Park, Evergreen Estates, Gallup Acres, Iris Gardens, LaFayette Village, Pleasant Valley, Quail Ridge, Queensdale, Sedgefield, Sherwood, and Sunny Acres subdivisions, and Montclair subdivision (sections 1-4).

- 100 Service area includes Deerwood, LaGrange, Murray Fork, Northshore Estates, and Valley Forge subdivisions.
- 101Service area includes Devonwood, Gardens of Loch Lomond, and Loch Lomond subdivisions.
- 102Service area includes Brittany Place, Chestnut Hill, Leisureburg, and Woodstream subdivisions, and part of Montclair subdivision.
- 103 Adjustment of pH with soda ash by demand-type feeders at all wells except well No. 5.
- 104 Treatment at well No. 9 by demand-type feeder. Other wells receive no treatment.
- 105 Also supplies Erwin.
- 106 Also supplies Shawtown.
- 107 Water from wells 3, 8, 9, and 12, approximately 0.87 Mgal/d, is furnished untreated to industrial users.
- $^{10\,8}$ Dissolved-solids and hardness concentrations from analysis of raw water, which is treated before it enters the distribution system.
- 109Finished water from wells 1-9.
- 110 Addition of phosphate compounds to suspend iron.
- 111Hardness and iron concentrations from analysis of raw water, which is treated before it enters the distribution system.

- $^{112}\mathrm{All}$ values from analysis of finished water from wells 3 and 4.
- 113 Chlorination at each well during off-season. Chlorination at tank reservoir during busy season. Not rated.
- $^{114}\mathrm{Also}$ supplies Topsail Beach with partially treated water.
- ¹¹⁵New well scheduled to be in operation November 1975.
- ¹¹⁶Dissolved solids and hardness from a combined finished-water sample from wells 1, 3, 6, 8, 18, 22, and 23, and iron from a combined raw-water sample from the same seven wells.
- 117 All values from a combined water sample from wells 5, 6, 7, 8, and 9.
- 118 All values from analyses of raw water which is treated before it enters the distribution system.
- 119 Also supplies South Greene County Water Association.
- 120 Iron concentration from analysis of raw water which is treated before it enters the distribution system.
- 121The population served by all nine water systems on the base was 34,549 in 1970. The Hadnot Point water system provides almost half of the base's water needs.
- 122Dissolved-solids and hardness from a combined sample from wells 1-4, and iron from a combined sample from wells 1-5.
- 123 Aeration at wells 3, 4, and 5. Water from other wells is untreated.

- 12 Water from well 206 is chlorinated at the well. Water from other wells is untreated.
- 125Water from wells 6, 7, and 9 is chlorinated, and that from wells 4, 6, and 7 is treated with polyphosphate. Treatment at each well. Water from other wells is not treated.
- 126Dissolved-solids concentration from analysis of raw water entering system without treatment.
- 127Fresh Pond is the source of water for both Kill Devil Hills and Nags Head and is inadequate to meet their needs. Eighteen shallow, driven wells supply 0.5 Mgal/d to Fresh Pond during the peak seasons. A single water-treatment plant serves both towns.
- 128Iron and manganese concentrations from analyses of raw water which is treated before entering the distribution system.
- 129 Reported maximum pumping rate. Usual production rate 1.0 Mgal/d.



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