

An Overview of NC Water Service Providers

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For the NCGA Environmental Review Commission

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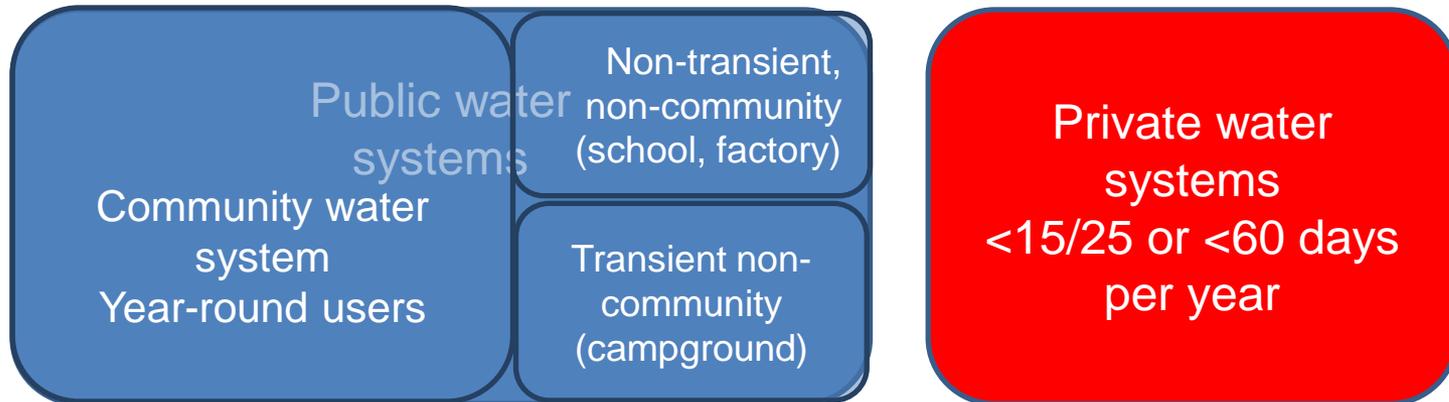
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What NC
community
has the
second-oldest
public water
supply system
in the U.S.A.?



Classifying water systems: Federal* view

- “public water system” could be either publicly or privately governed.
- main ways to classify systems are based on size (customers or connections), permanence of users (transient or non-transient) and source of water (surface, ground, or purchase).



*As a fully delegated State under the Safe Drinking Water Act, NC also has laws that use this view

Classifying water systems: State view

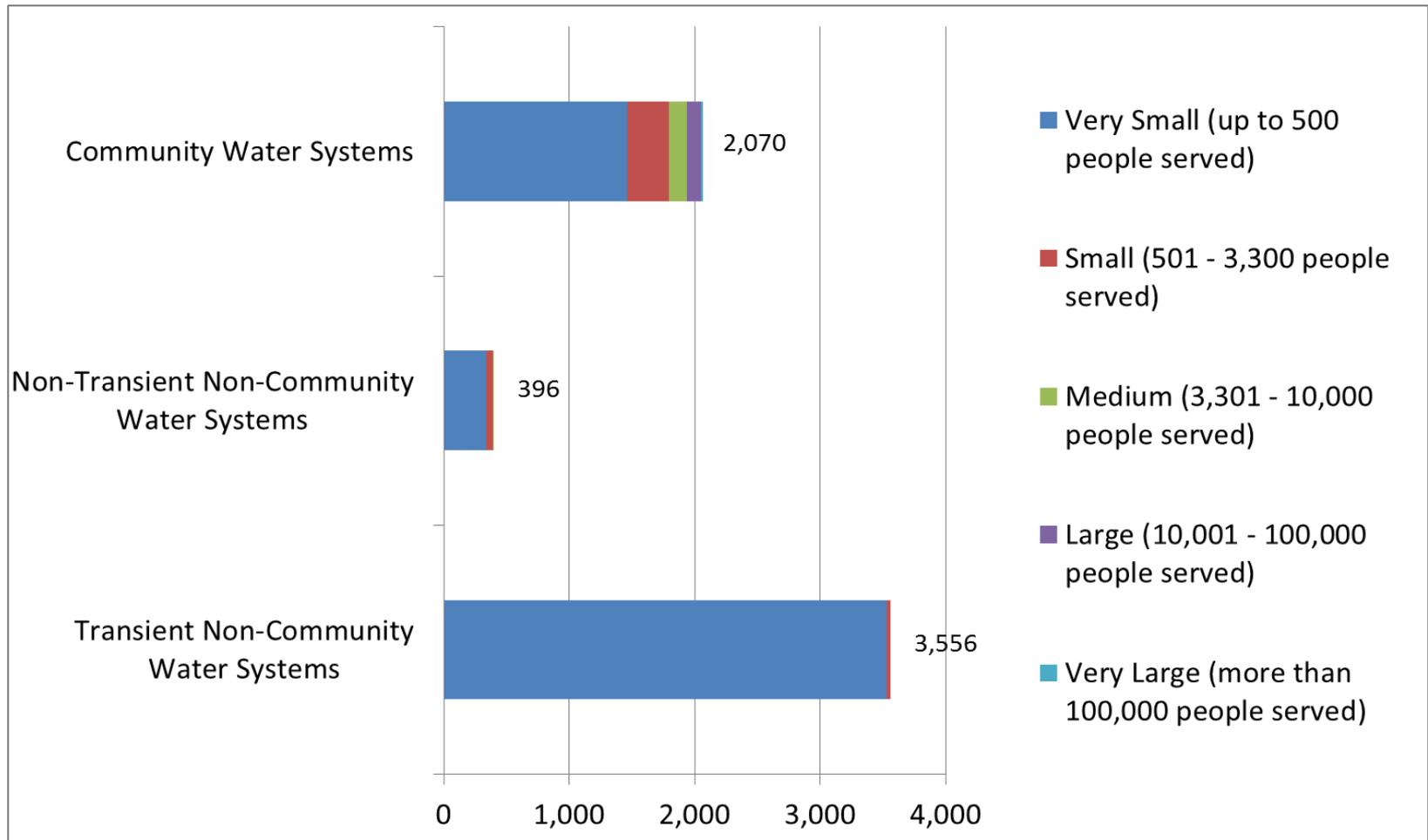
➤ main way to classify systems is by form of governance

- City/County
- Interlocal agreement
- Joint management agency
- County service district
- Sanitary district
- Water and sewer authority
- Metropolitan water district
- Metropolitan sewerage district
- County water and sewer district
- Private non-profit
- Private for-profit
 - Independently owned
 - Investor-owned

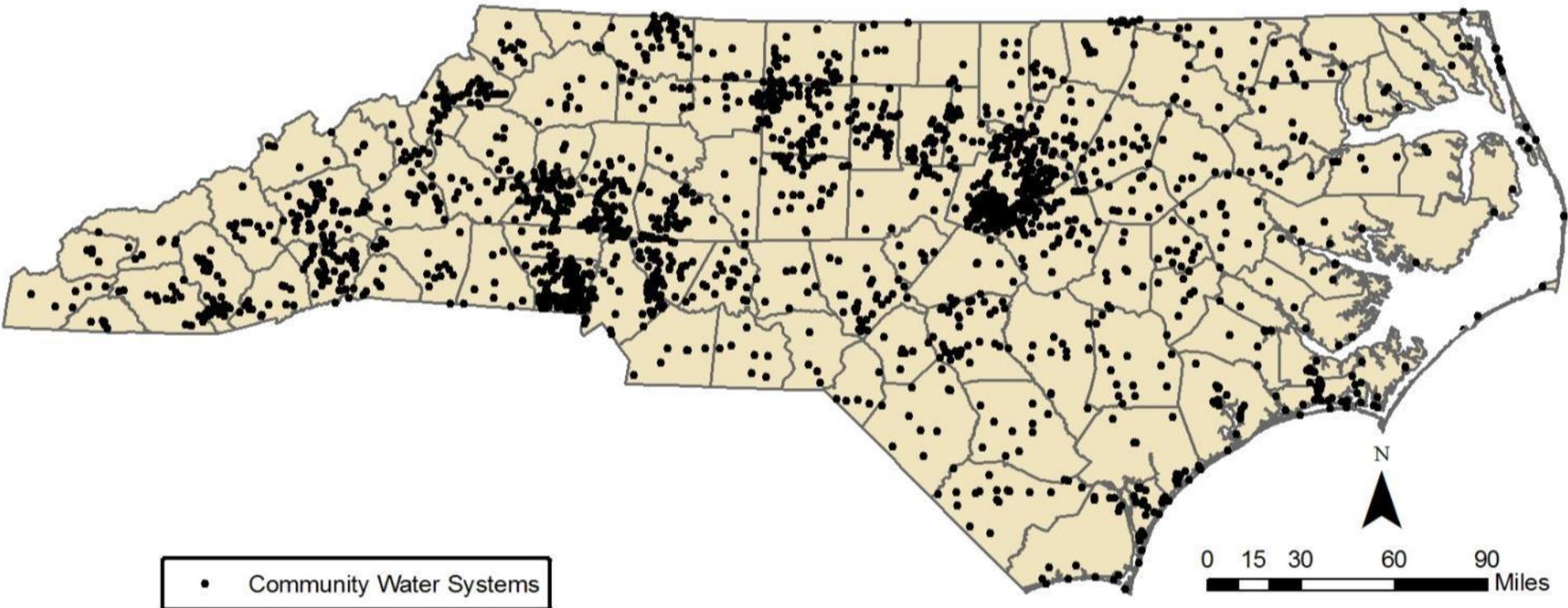
Powers, regulation, & review

- Powers (such as taxing, condemnation, police powers, required hookups) vary considerably
- Privately-governed entities are regulated by the Utilities Commission; others by DENR (historically also DHHS)/US EPA (HHS), Local Government Commission and local governing boards
- Enterprise systems are among the most important local government functions
- Operators also licensed and regulated by special licensing boards
- Policies of capital funding entities also regulate water system behavior
- Sources of info from review of systems include engineering & trade associations, SWIC/SWIA, UNC SOG/EFC

Public Water Systems in NC (as of October 2012)



Community Water Systems in NC



Who's in Charge of NC's Community Water Systems?

Local Government

Municipality (large and small)

Municipality serving regionally

County

County Districts

Authority

Sanitary District

Metropolitan Water/Sewerage District

Not-for-profit association

Resorts

Large, private corporations (Aqua NC & Utilities Inc.)

Smaller multi-system water companies (Corriher WS, Scientific W&S, A&D WS., etc.)

Mobile home park

Homeowners association

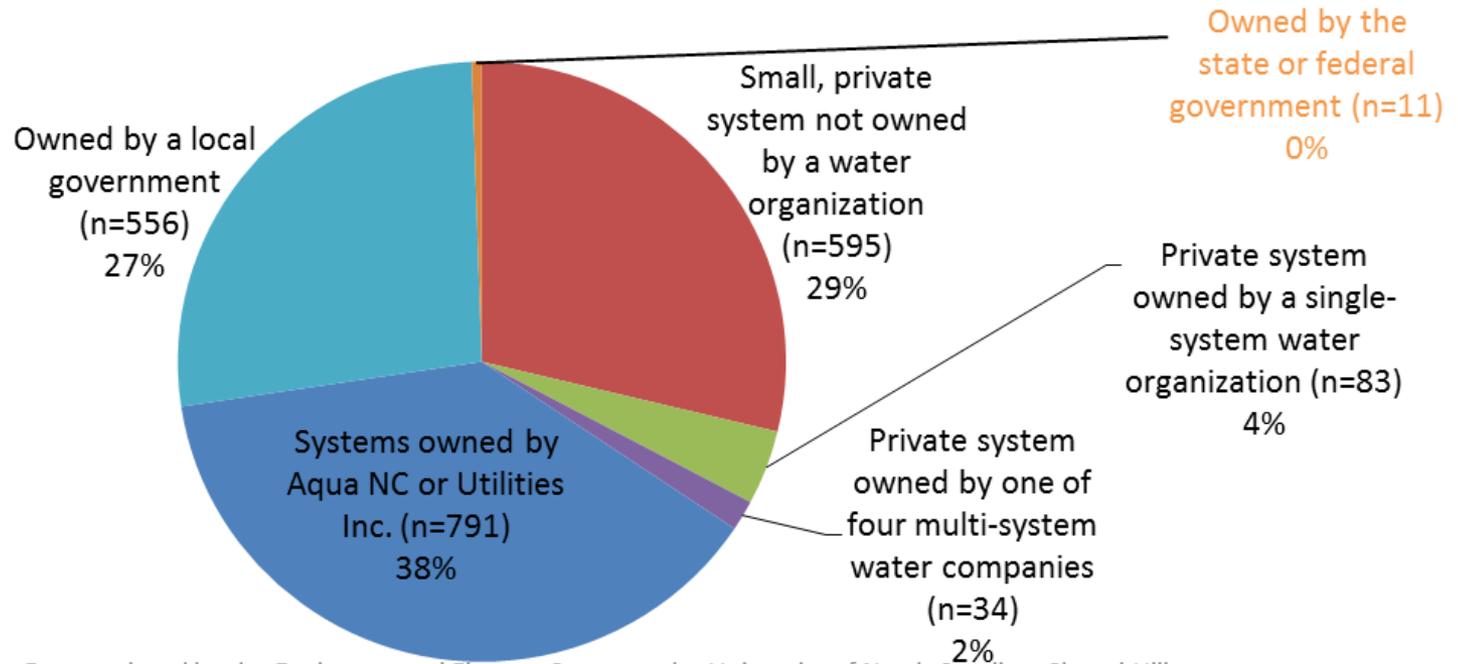
Independent private owner

State of NC

Federal Government (military bases)

Ownership of the Community Water Systems

The 2,070 Active Community Water Systems in NC by Owner Type



Data analyzed by the Environmental Finance Center at the University of North Carolina, Chapel Hill.
 Data source: Public Water Supply Section of the Division of Water Resources in NC DENR's SDWIS database, data as of October 23, 2012. A "water organization" is a for-profit or not-for-profit company whose primary responsibility is the ownership, management and operation of a community water system. A "multi-system water company" is one company that owns at least five community water systems in NC.

By the numbers...

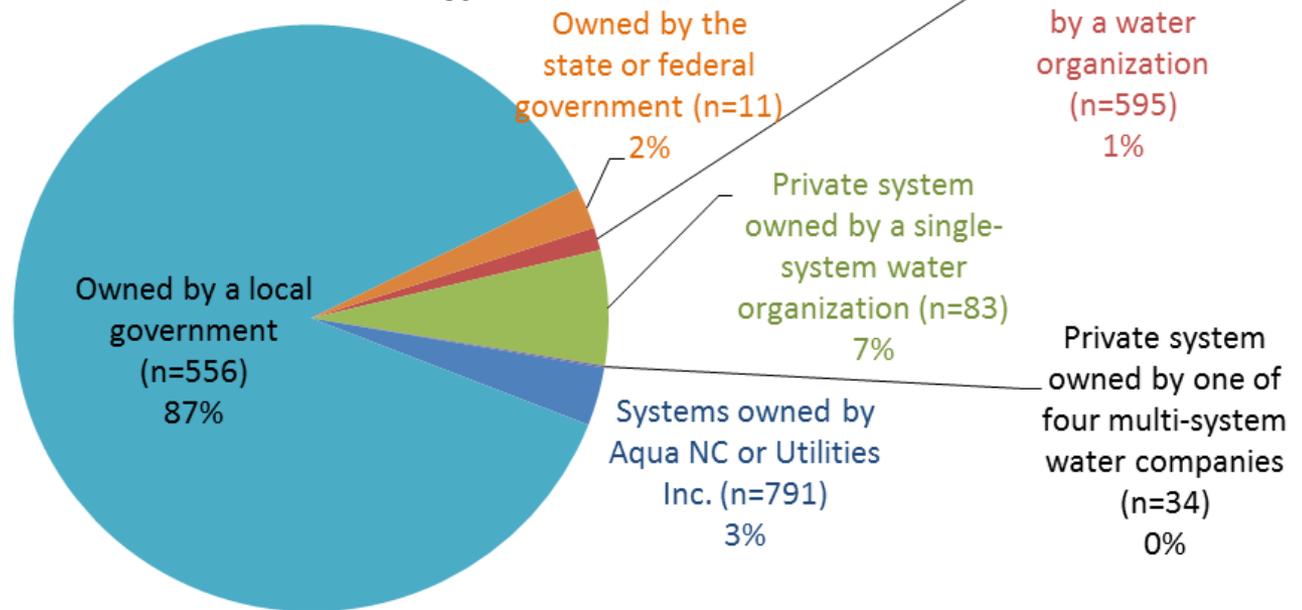
27% local government

73% private

<1% state/federal government

Ownership of the Community Water Systems

Population Served by Active Community Water Systems in NC by Owner Type



Data analyzed by the Environmental Finance Center at the University of North Carolina, Chapel Hill.
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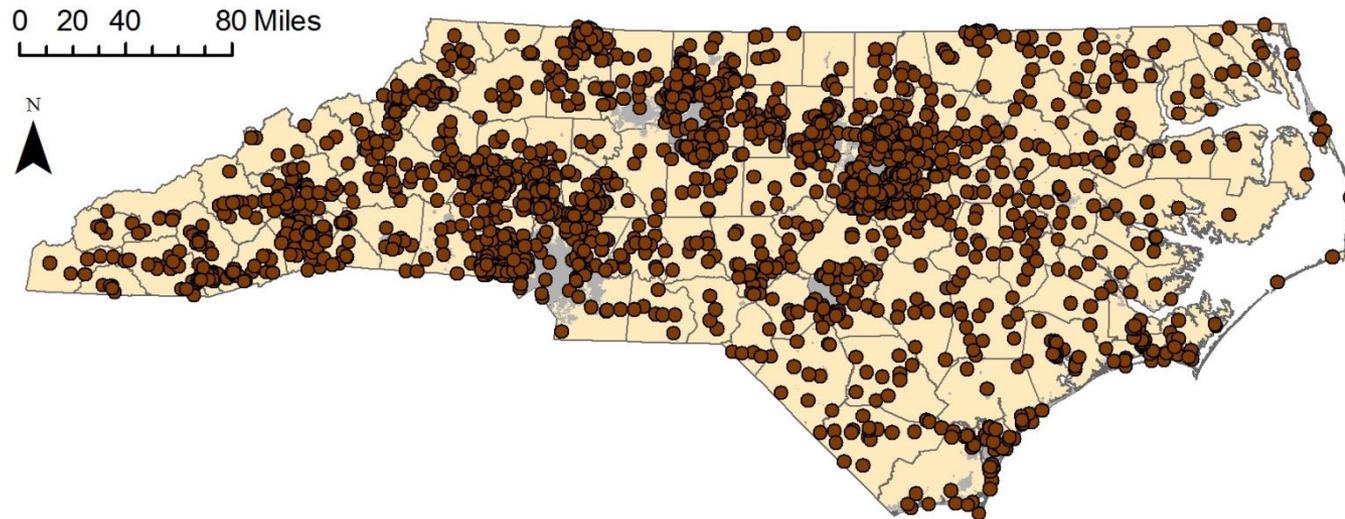
By people served...

87% local government

11% private

2% state/federal government

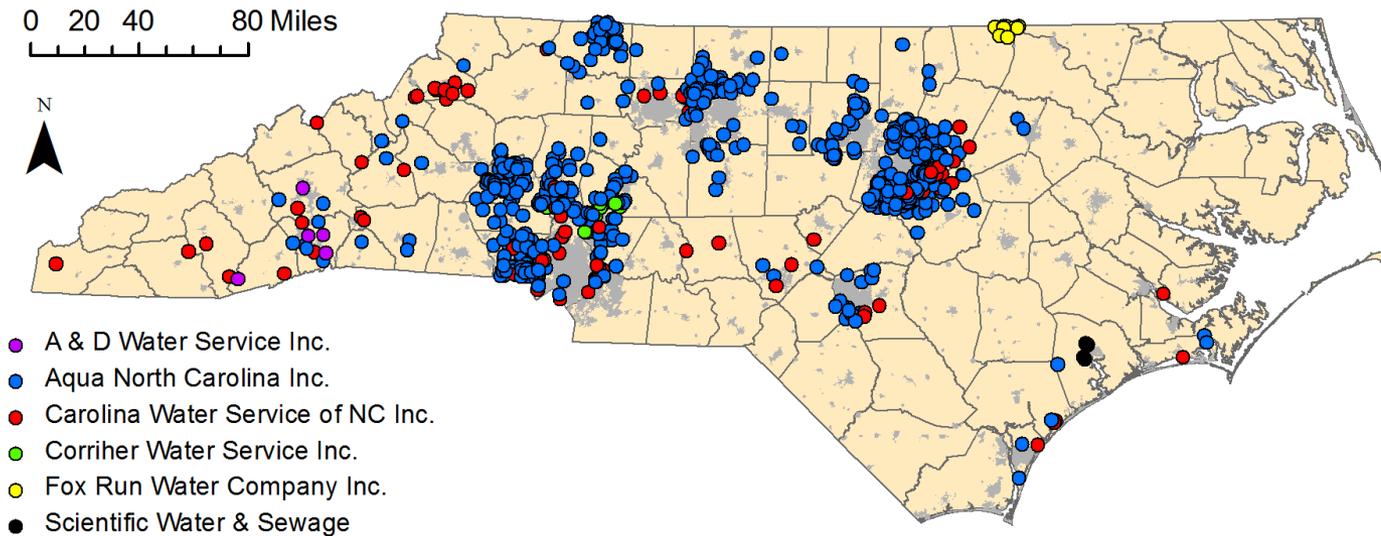
Active Community Water Systems in NC in October 2012



Map created by the Environmental Finance Center at the University of North Carolina, Chapel Hill.

Data sources: Public Water Supply Section of the Division of Water Resources in NC Department of Environment and Natural Resources. Geospatial locations determined by the EFC using secondary sources from NCOneMap (NC Center for Geographic Information and Analysis, NC Rural Economic Development Center, Public Water Supply Section of NC DENR) and primary sources (locating systems on Google Earth).

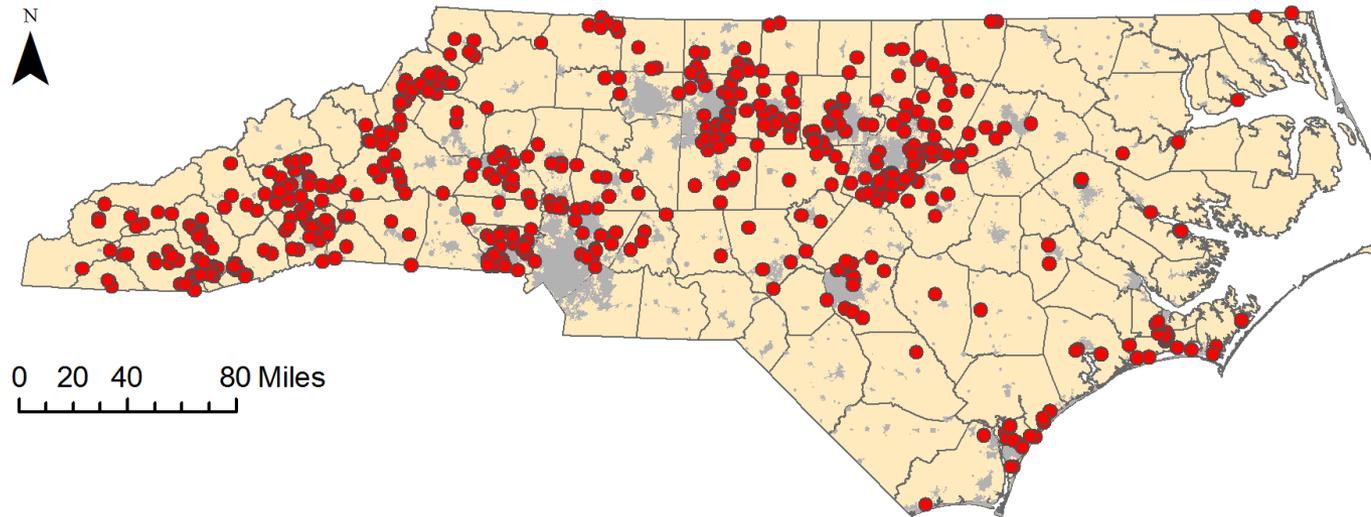
Community Water Systems Owned by Multi-System Water Companies



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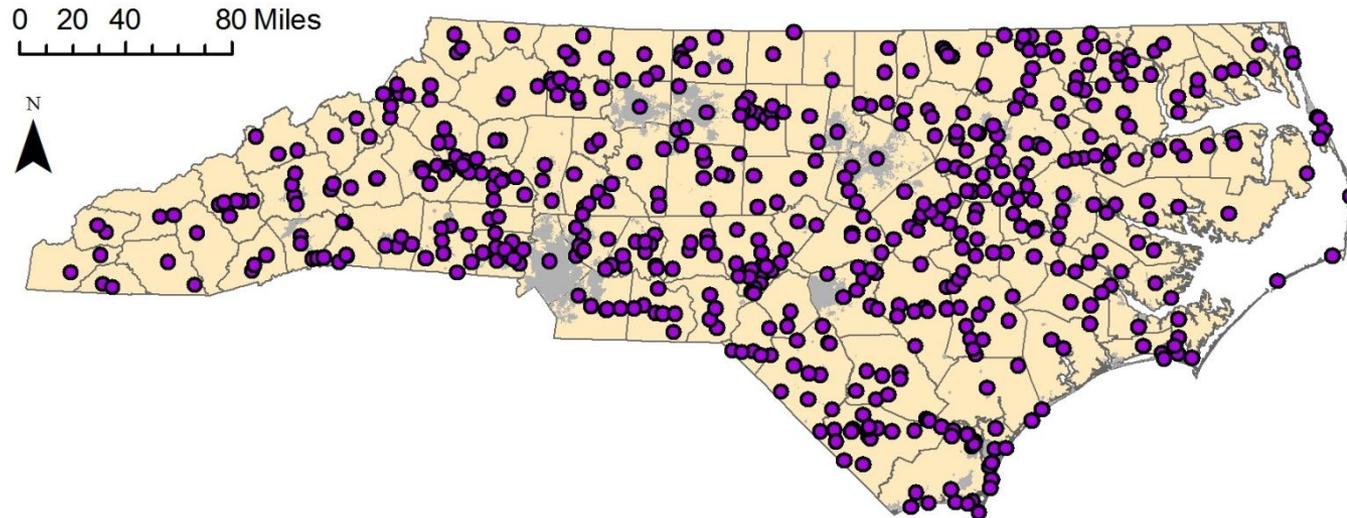
Community Water Systems Owned by MHPs, Apartment Complexes, HOAs, Individuals, etc.



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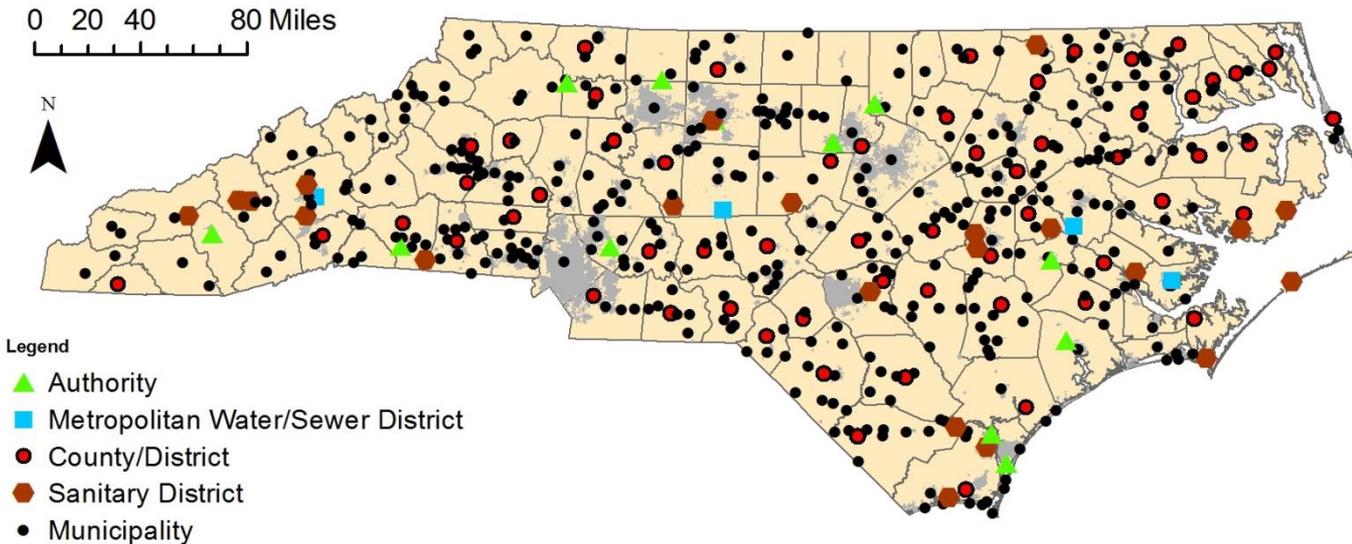
Community Water Systems Owned by Local Governments



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Utilities by Local Government Type



Map created by the Environmental Finance Center at the University of North Carolina, Chapel Hill.

Data sources: Public Water Supply Section of the Division of Water Resources in NC Department of Environment and Natural Resources. Geospatial locations determined by the EFC using secondary sources from NCOneMap (NC Center for Geographic Information and Analysis, NC Rural Economic Development Center, Public Water Supply Section of NC DENR) and primary sources (locating systems on Google Earth).

Local Government Water Systems

Type of Local Government	Number of Water/Wastewater Utilities	Had Lower Operating Revenues than Operating Expenditures + Debt
Authority	13	3 / 12 (25%)
County/District	62	18 / 46 (39%)
Metropolitan Water/Sewer District	4	2 / 3 (67%)
Municipality	400	93 / 337 (28%)
Sanitary District	22	4 / 16 (25%)

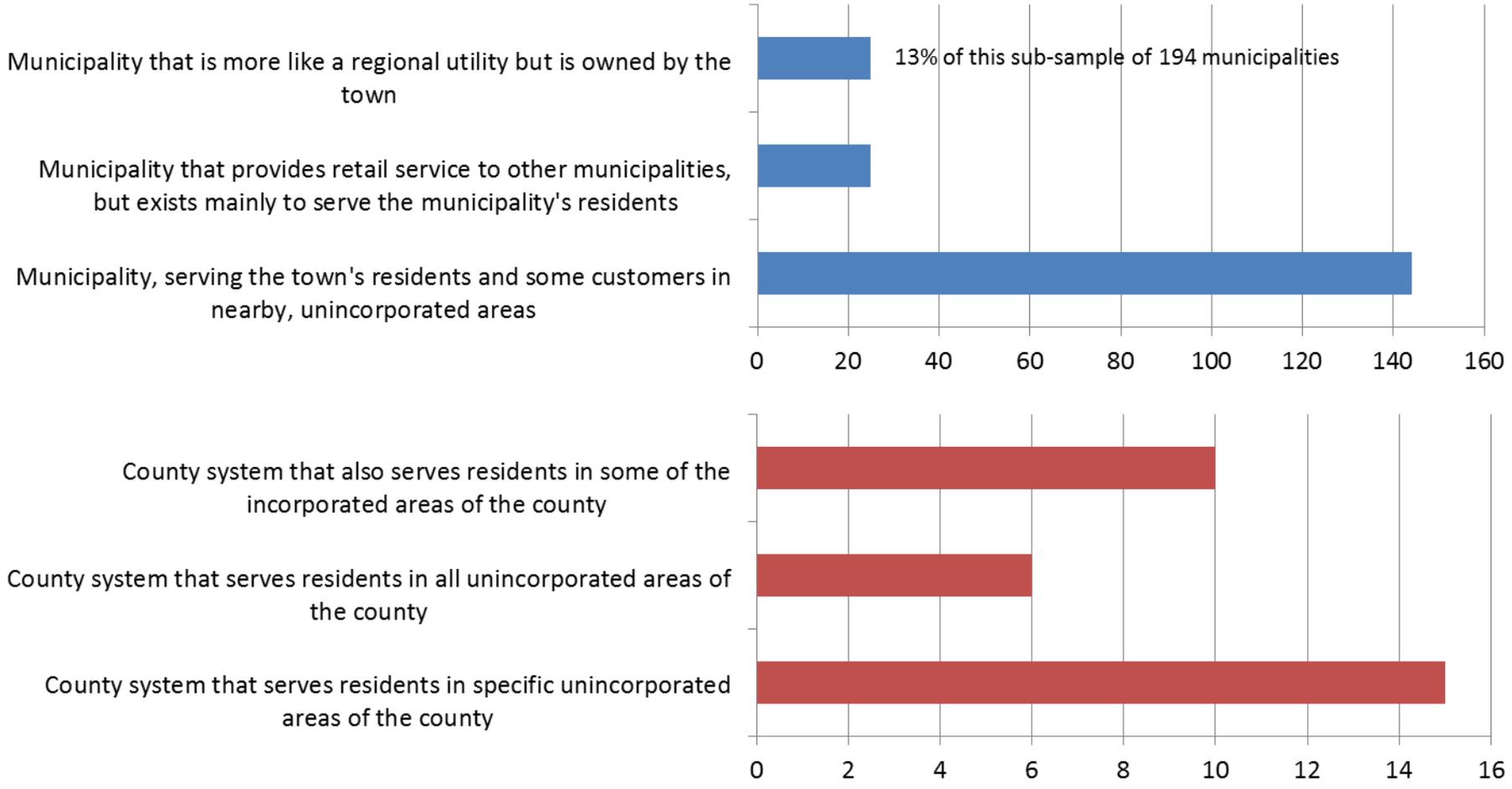
Sources: Classification by EFC (guided by LGC data); Financial data in FY2012 collected by Local Government Commission and analyzed by the EFC

Examples* of new regional utilities in recent years

*(not a complete list)

- LCFWSA (wholesale) – 2003
- ~~Lee County~~ (Sanford acquired) - 2005
- Neuse RWSA (wholesale) – 2008
- CFPUA (Wilmington & New Hanover County) – 2008
- YVSA – 2009
- Piedmont Triad RWA (wholesale) - 2010
- Two Rivers Utilities (Gastonia & Cramerton) – 2011
- MCRWSA (wholesale) – 2013?

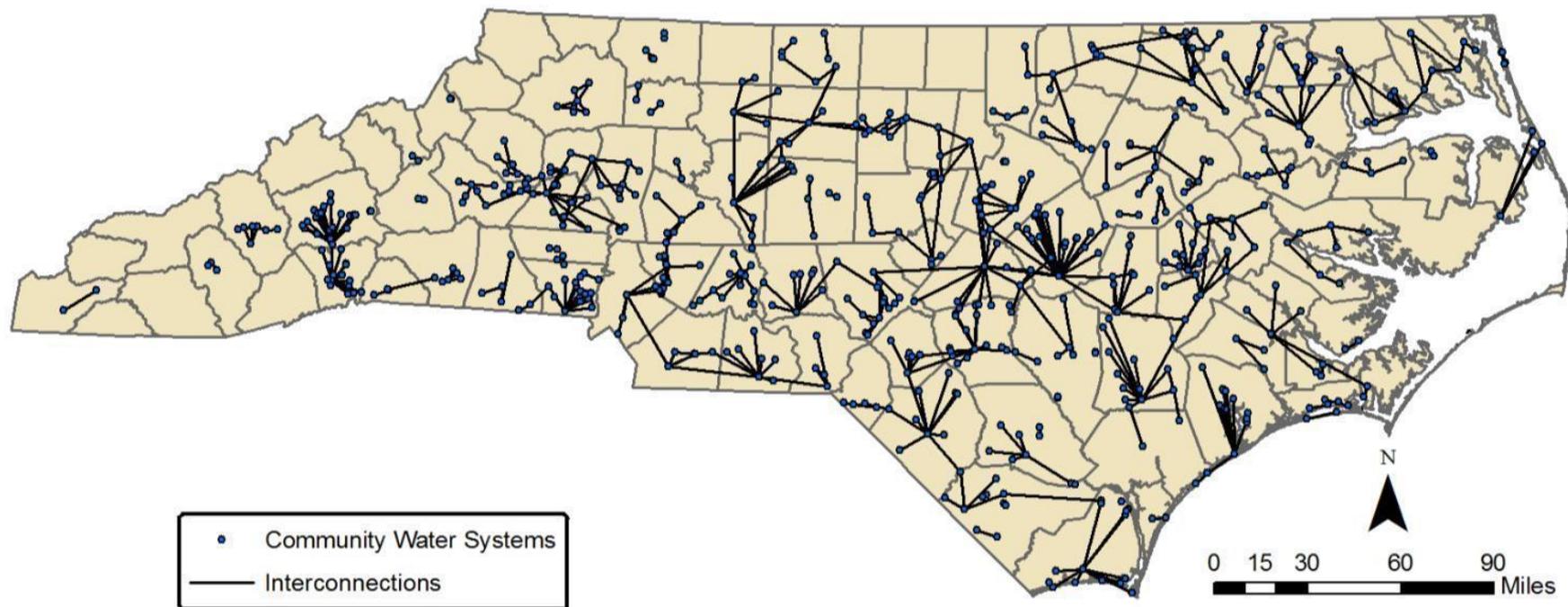
“Regional” Municipalities and Counties



Source: 2010 NCLM/EFC Water & Wastewater Utility Financial Practices and Policies Survey

Water System Interconnections

- ✓ 30% of CWS have an interconnection with another system
 - ✓ 26% can buy water from another system
 - ✓ 11% have interconnections to buy water in case of emergency



Sources:

List of Systems: Public Water Supply Section (PWSS) at the NC Department of Environment and Natural Resources.

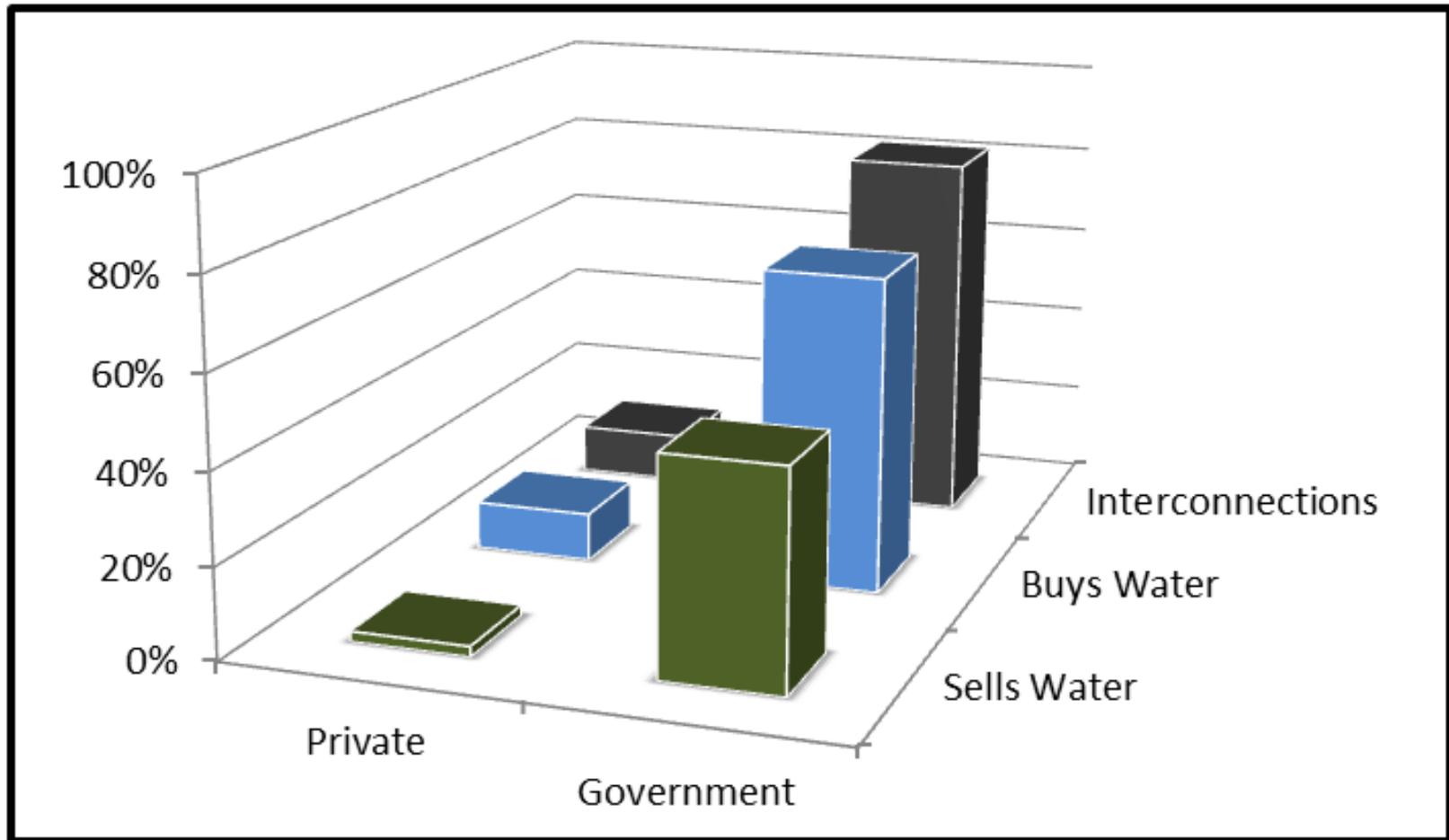
Locations: Environmental Finance Center (EFC) at the UNC School of Government and NC Center for Geographic Information and Analysis.

Interconnections: EFC compilation of data from PWSS (Sept. 2010) and primary data.

Map created in January 2011 by



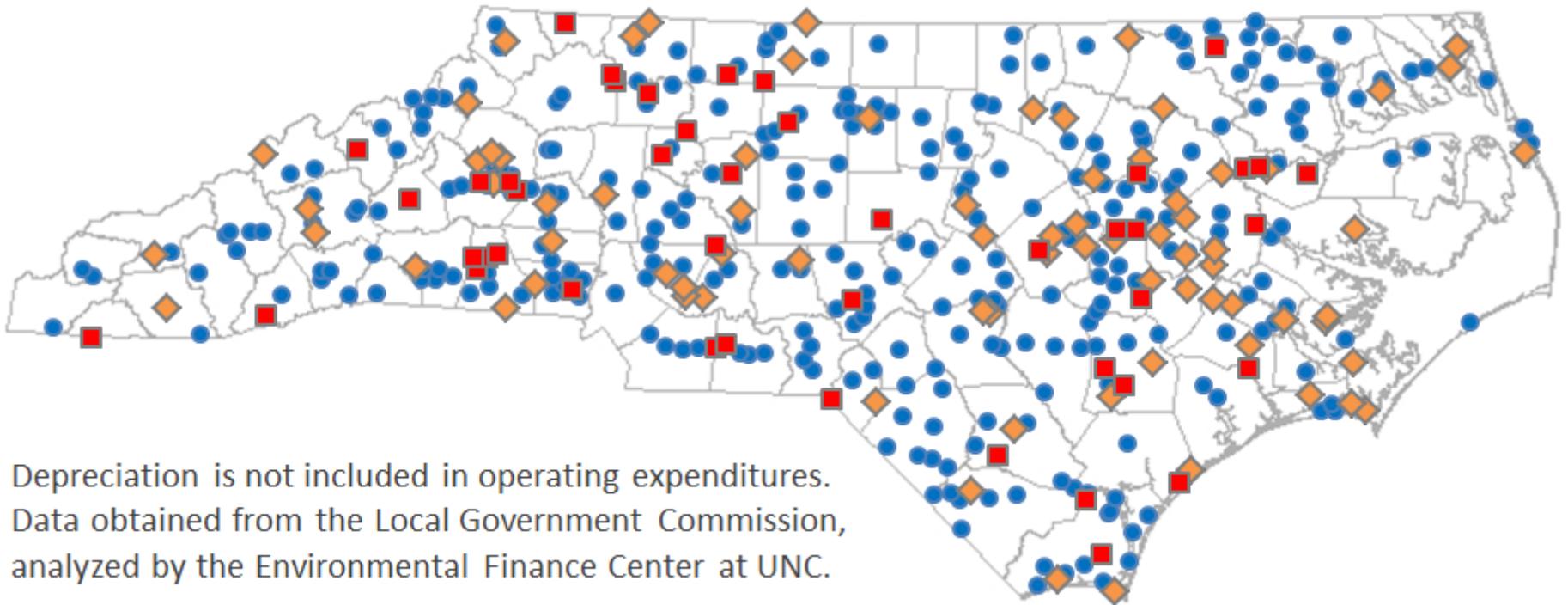
By Ownership Type



Do Water and Wastewater Rates Cover System Costs?

Local Government-Owned Water and Wastewater Utilities' Cost Recovery in FY 2012

- Operating revenues < operating expenditures (11%)
- ◆ Operating revenues < operating expenditures + principal + interest on long-term debt (19%)
- Operating revenues > operating expenditures + principal + interest on long-term debt (71%)



n = 420 (FY 2012)

Capital Needs for Utilities

- **More than \$10.0 billion** in 20 years for water systems (EPA DWNS 2011)
 - Excludes needs for growth, fire protection, watershed protection, and more
- **More than \$6.6 billion** in 20 years for wastewater systems (EPA CWNS 2008)
 - Excludes needs for stormwater

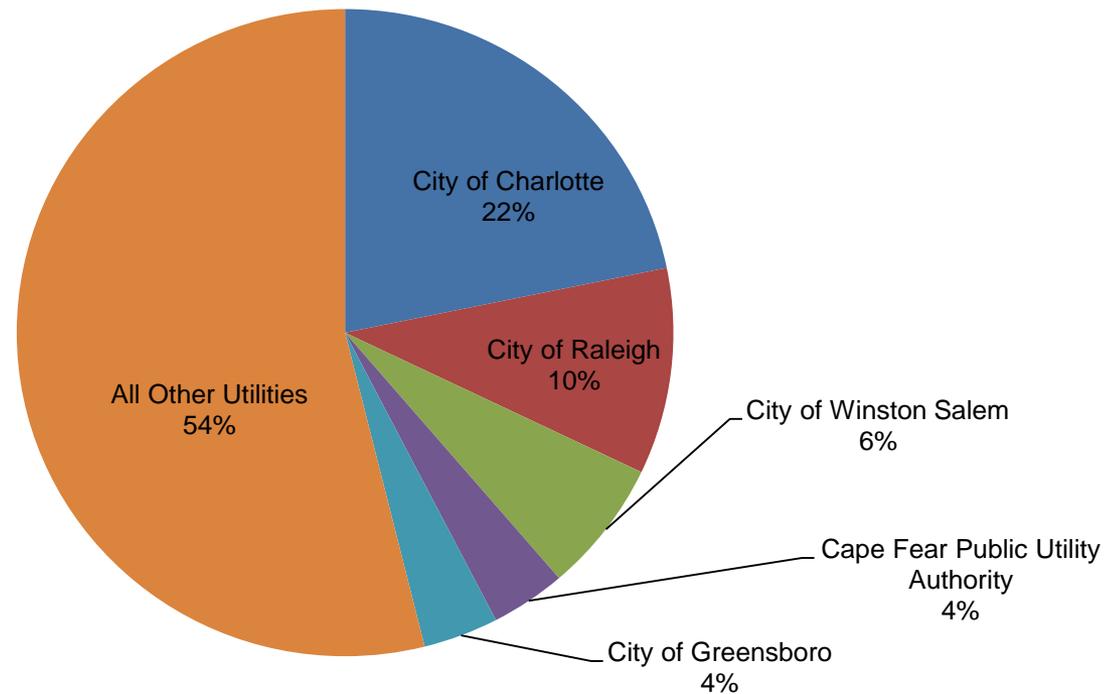
Existing Water & Wastewater Debt Among NC Local Government Utilities

- By end of FY2012, \$8.1 billion
(up from \$6.7 billion by the end of FY2008)
- Vast majority of utilities have debt less than \$2,000/account
- In FY2012, State funding agencies awarded >\$170 million in funds (\$143 in loans)

Sources: Financial data in FY2012 collected by Local Government Commission and analyzed by the EFC; Combined State Agency Water and Wastewater Funding Report SFY2012 (by NC Rural Economic Development Center)

NC water and sewer debt allocation among local governments with large outstanding debts* as of June 30, 2012

* Large debts = \$300 million or more



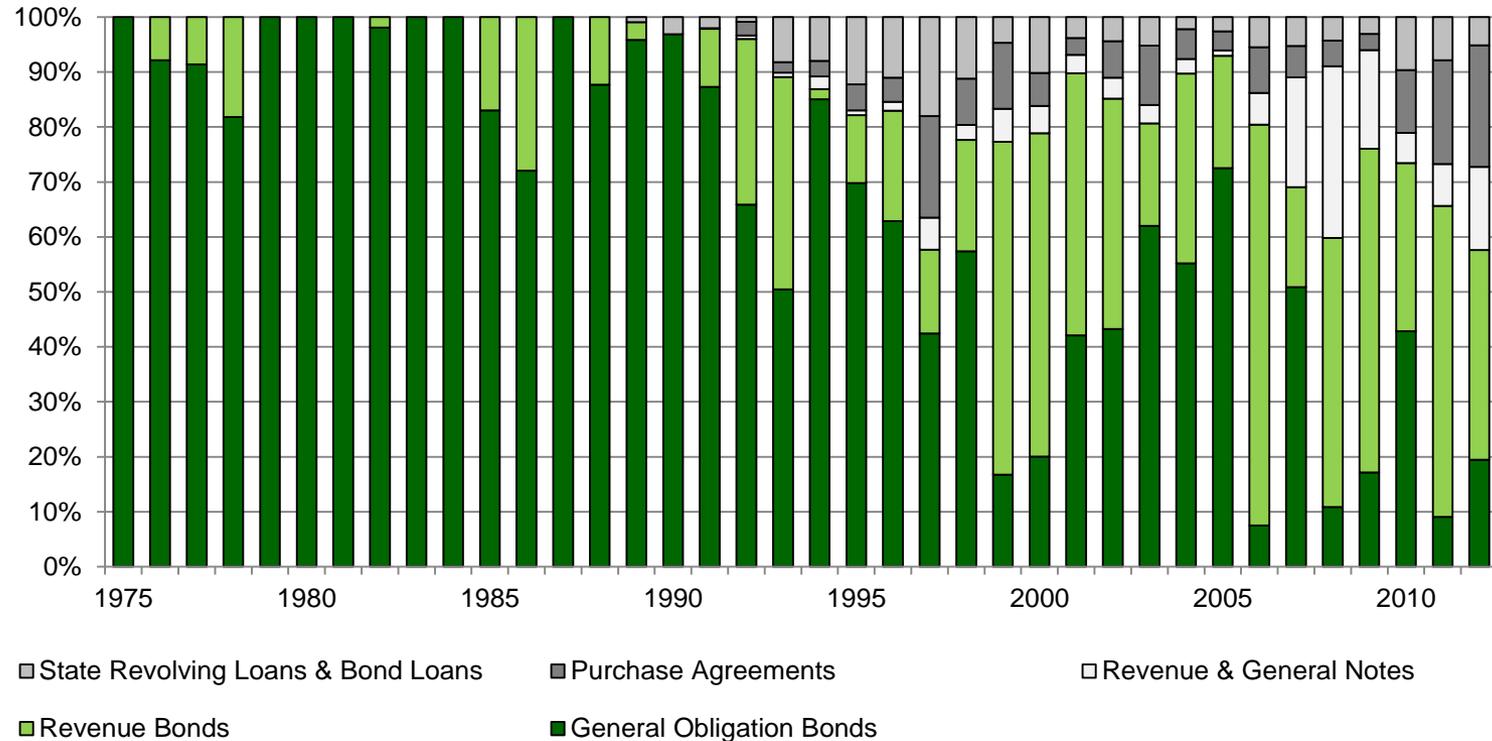
Data analyzed by the University of North Carolina Environmental Finance Center.

Data Source: North Carolina Department of State Treasurer State and Local Government Finance Division.

North Carolina State debt not included in debt totals.

Source: Financial data in FY2012 collected by Local Government Commission and analyzed by the EFC

Bond issuance type trends for NC local government water and wastewater utilities from 1975 – 2012



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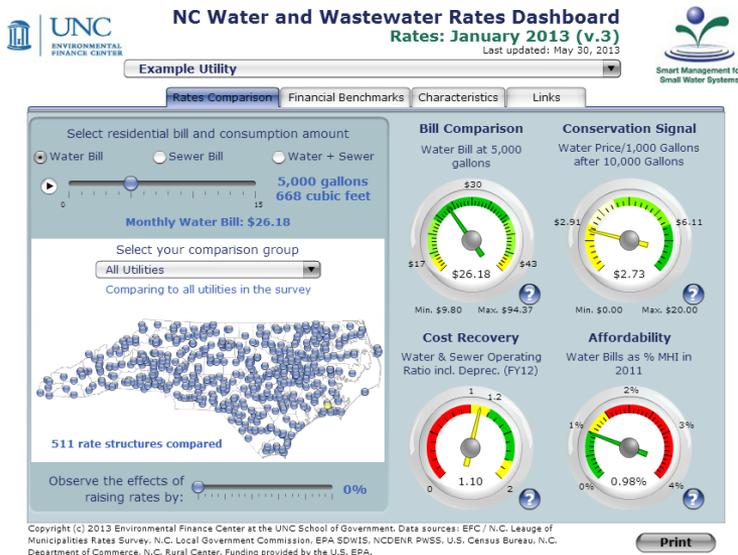
Source: Financial data in collected by Local Government Commission and analyzed by the EFC

EFC Resources for NC

<http://efc.sog.unc.edu/>

Please contact us for direct assistance or for data analysis/sharing

- Financial performance ratios for utilities
- All utilities' rates over time
- Assessment of affordability
- Financial practices and policies of utilities
- Water system partnerships
- And more...



Acknowledgements

- Public Water Supply Section
(Division of Water Resources,
NC DENR)



- Local Government Commission at the
Office of the State Treasurer

Thank You

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