



“Water Supply Planning in North Carolina”

- **Where and when is water used?**
- **How much water will be used in the future?**
- **How will future demands be managed?**



NCGS 143-355 (m)

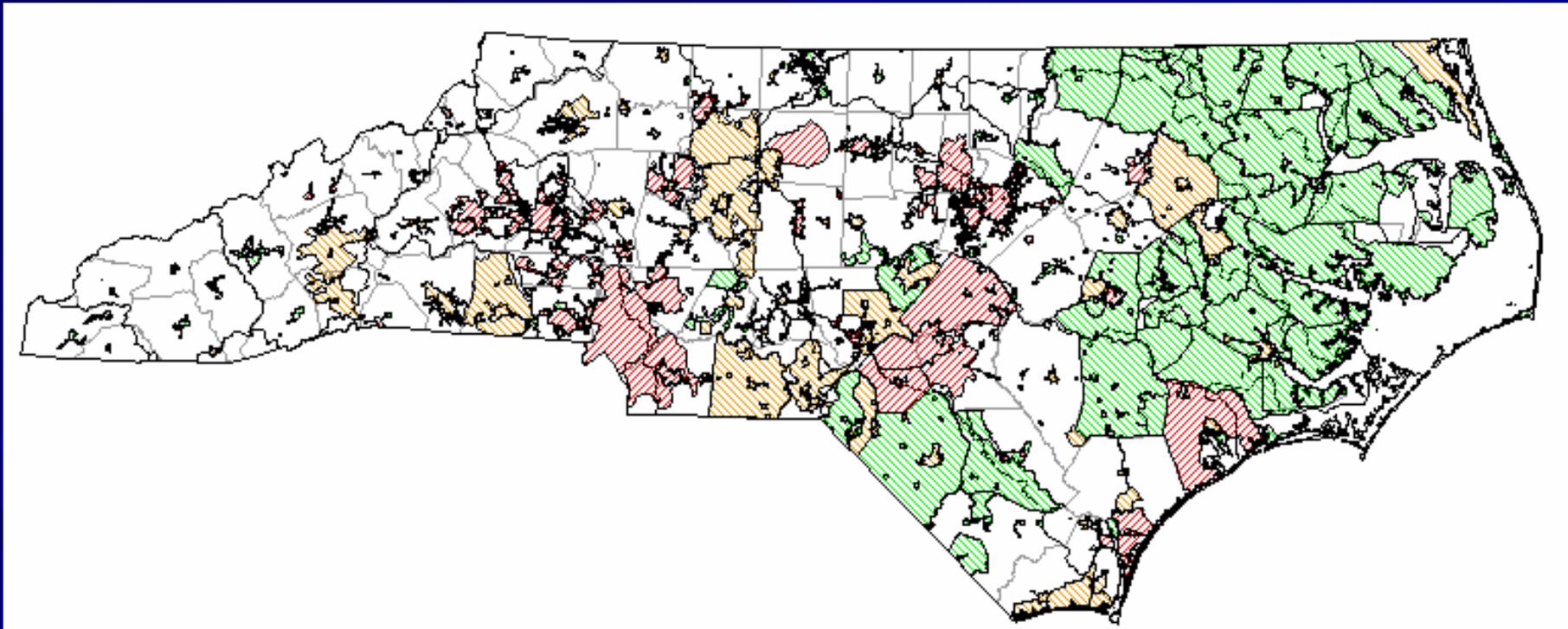
In order to assure the availability of adequate supplies of good quality water to protect the public health and to support desirable economic growth, the Department shall develop a State water supply plan.



Local Water Supply Plans

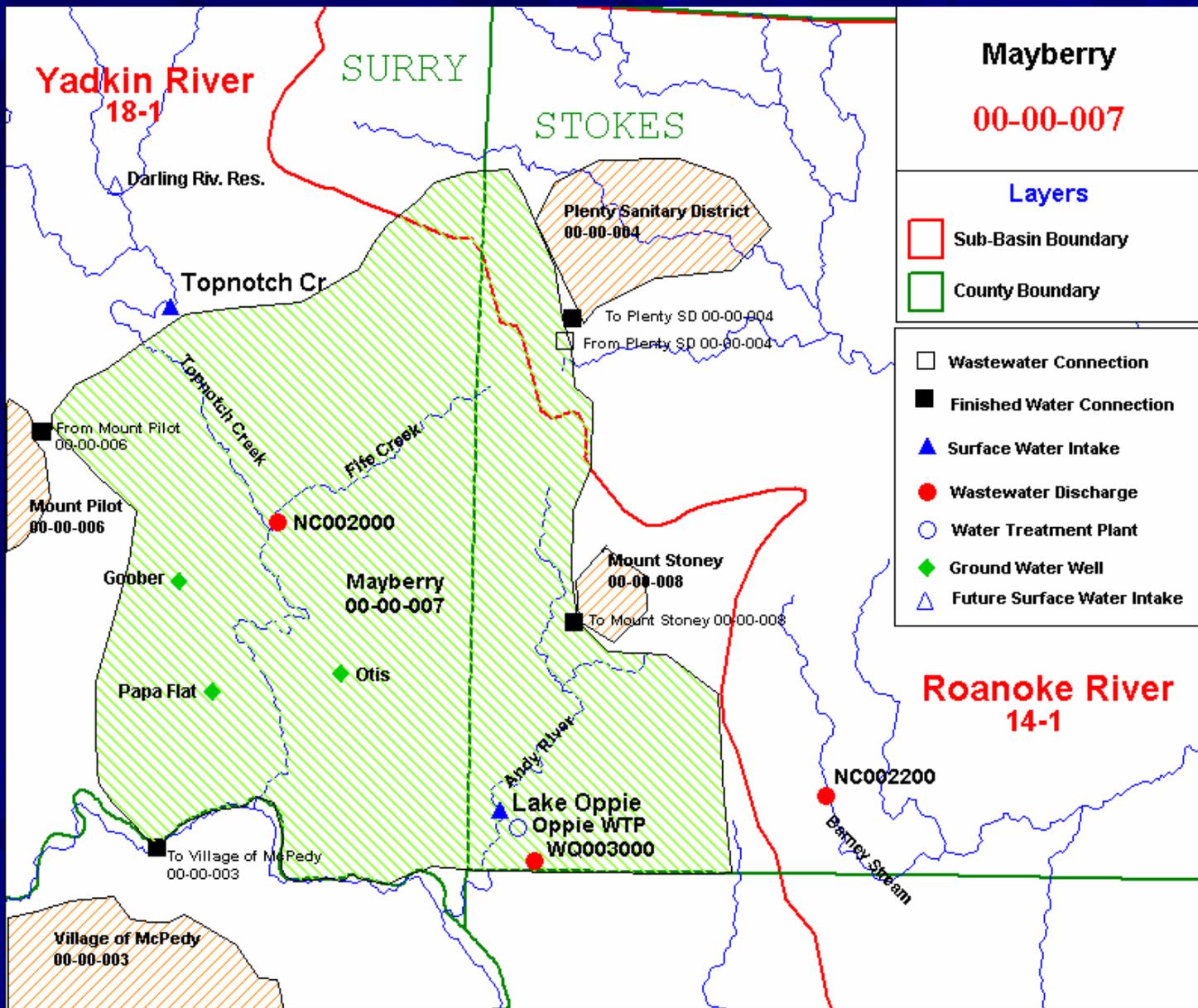
- Units of local government that provide or plan to provide public water service
- Community water systems that regularly serve 1,000 or more service connections or 3,000 or more individuals
- 645 Plans submitted
- Revised every 5 years
- 5,937,000 persons served (2002)
- 71% of NC residents (2002)

Service Areas





Division of Water Resources





Annual Average and Monthly Water Use Data

Water Use by Type

Type of Use	Metered		Non-Metered	
	Connections	Average Use (MGD)	Connections	Estimated Use (MGD)
Residential				
Commercial				
Industrial				
Institutional				

How much water was used for system processes in 2007? _____ MGD

Monthly Withdrawals and Purchases

Month	Average Daily (MGD)	Maximum Day (MGD)	Month	Average Daily (MGD)	Maximum Day (MGD)
Jan			Jul		
Feb			Aug		
Mar			Sep		
Apr			Oct		
May			Nov		
Jun			Dec		



Estimates of Future Demands

Projections					
Type of Population	2010	2020	2030	2040	2050
Year-Round					
Seasonal (if applicable)					
Type of Use	2010	2020	2030	2040	2050
Residential					
Commercial					
Industrial					
Institutional					
System Process Water					
Unaccounted-for Water					



Water Withdrawal Registration

- 143-215.22H. Registration of water withdrawals and transfers
- Non-agriculture threshold 100,000 gallons per day or more of water from the surface or ground waters of the State
- Agriculture threshold 1,000,000 gallons per day or more of water for activities directly related or incidental to the production of crops, fruits, vegetables, ornamental and flowering plants, dairy products, livestock, poultry, and other agricultural products



Annual Average and Monthly Water Use

2-A. Type of Water Use(s): Public Water Supply (PWSID: _____)
 Industrial (NAICS / SIC Code: _____)
 Hydroelectric Power Thermal Electric Power Golf Course Mining
 Non-Agricultural Irrigation Agricultural Irrigation
 Aquaculture Livestock Other: _____

Note to Irrigation Water Users: Please use the Irrigation Worksheet to help you determine the values to report in Table 2-B.

2-B. Average daily withdrawal and maximum day withdrawal by month in million gallons per day (MGD):

Month	# of Days Used	Average Daily Withdrawal (MGD)	Maximum Day Withdrawal (MGD)	Month	# of Days Used	Average Daily Withdrawal (MGD)	Maximum Day Withdrawal (MGD)
Jan				July			
Feb				Aug			
Mar				Sep			
Apr				Oct			
May				Nov			
Jun				Dec			



Registrations as of 2004

- Agriculture 192
- Aquaculture 54
- Industrial 117
- Golf 71
- Mining 136
- Public Water Systems 719
- Thermoelectric 15



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Water use data are combined with water resources data in a river basin model.

