

# State Water Infrastructure Commission Report 2008

## Recommendations on Water Efficiency

Presentation to Environmental Review Commission

November 25, 2008

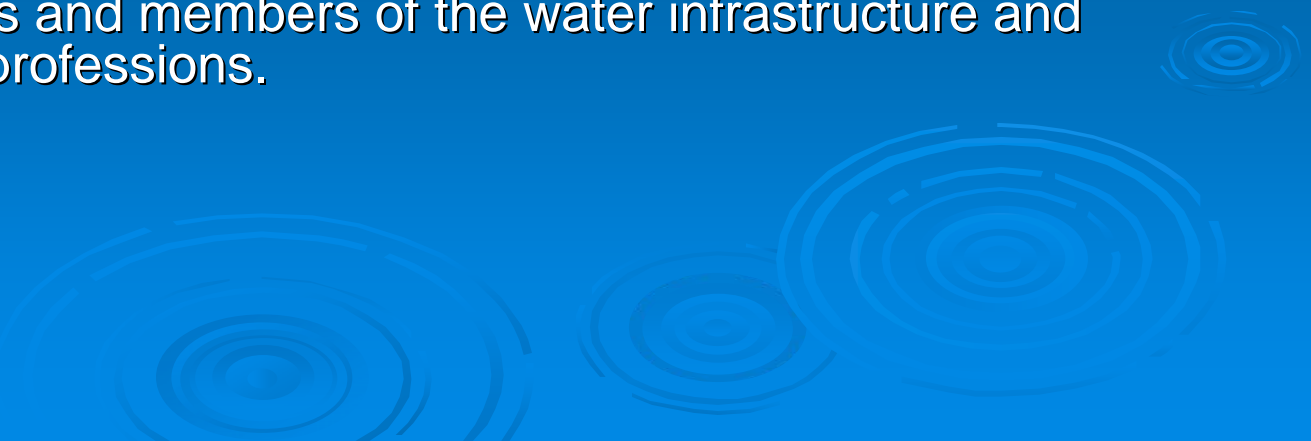


# *State Water Infrastructure Commission*

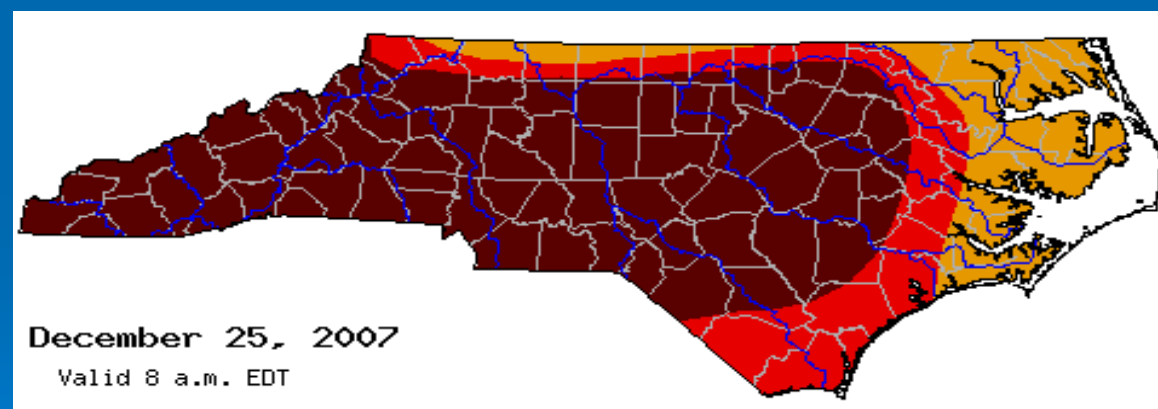
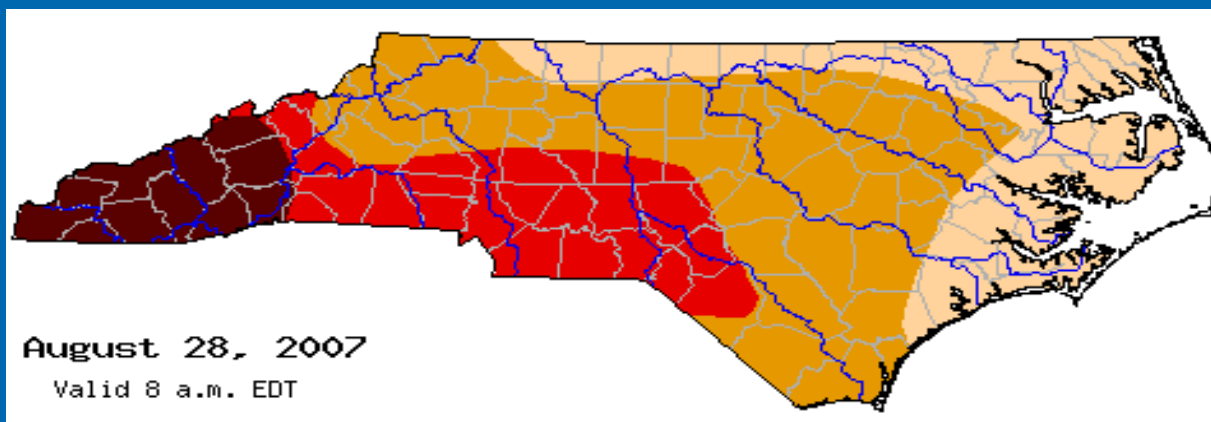
The State Water Infrastructure Commission (SWIC) was created by act of the North Carolina General Assembly in 2005.

The purpose of the SWIC is to identify the State's water infrastructure needs, develop a plan to meet those needs, and monitor implementation of the plan.

The Commission is comprised of 13 members representing State agencies and non-profits, organizations representing North Carolina local governments and members of the water infrastructure and water resources professions.



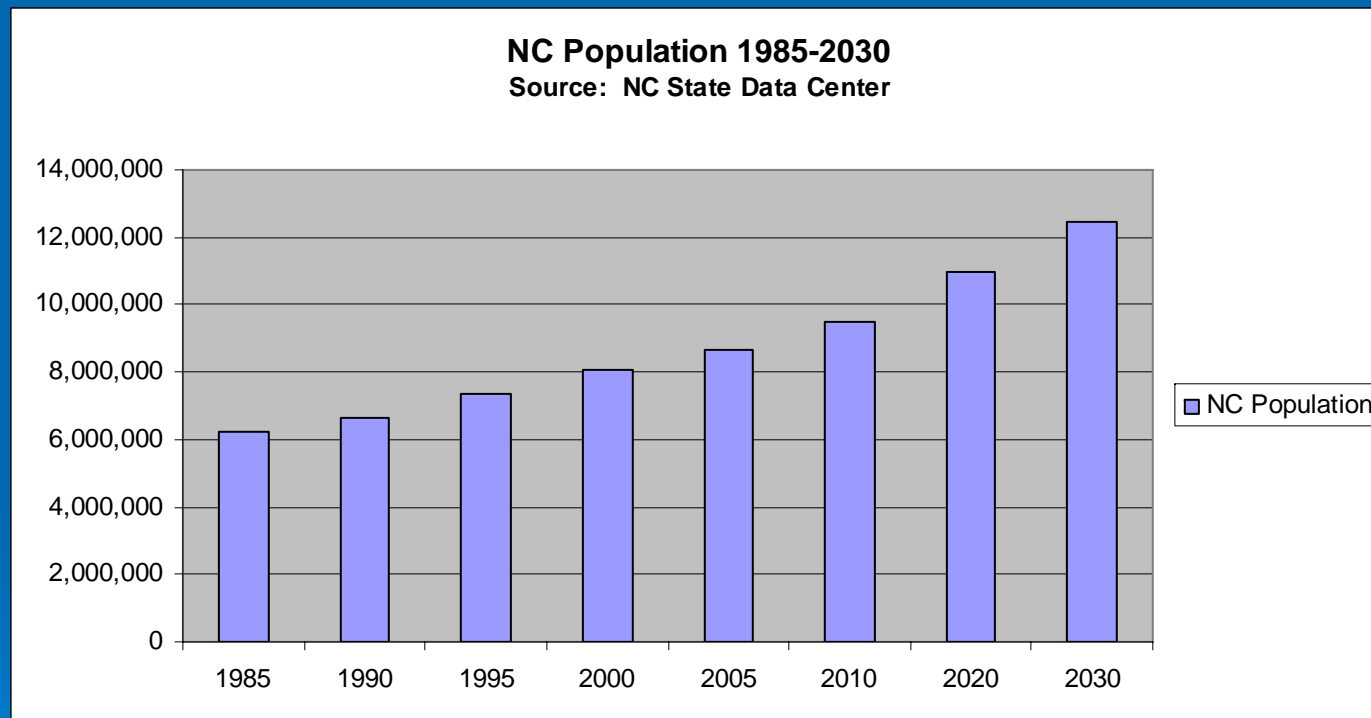
# Drought Status



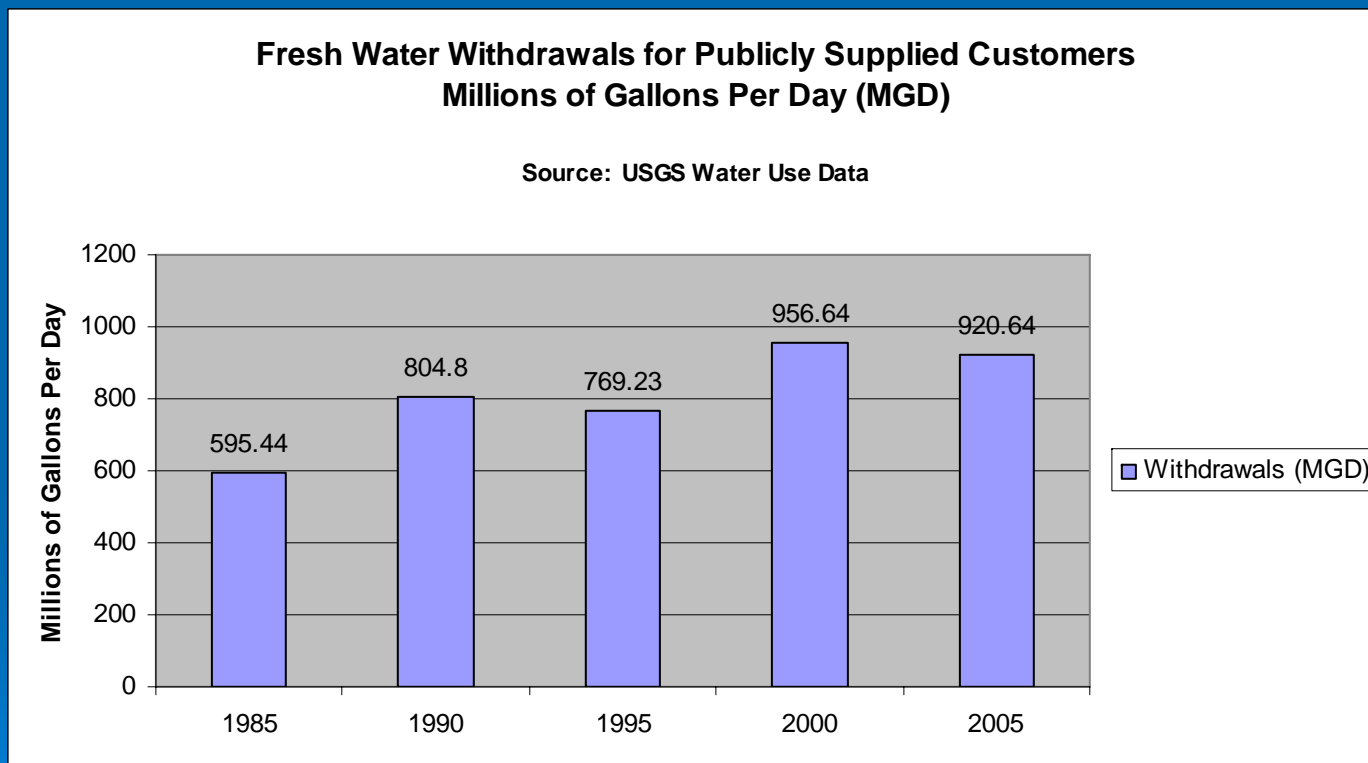
# *Falls Lake - Winter 2007*



# *Population Growth – 39 Percent Increase*



# *Water Use – 55 Percent Increase*



# *What is Water Efficiency?*

- ***Water Conservation*** is “any beneficial reduction in water loss, waste or use” means reducing the amount of water used.
- ***Water Efficiency*** is “an indicator of the relationship between the amount of water required for a particular purpose and the amount of water used or delivered”.

• Source: Handbook of Water Use and Conservation for Homes, Landscapes, Businesses, Industries and Farms, Amy Vickers. 2001,

# *Just in Public Water Systems...*

Each year public water systems loose more than 35 billion gallons of drinking water they pay to treat. That is enough water to supply the entire Charlotte- Mecklenburg region for one year.

- Water 2030 Report, 2006



# *Water Efficiency Measures Selected for Study by SWIC*

- Water Audits and Leak Detection
- Reclaimed Water
- Rates and Rate Setting



# *Water Efficiency Measures Selected for Review by SWIC*

- Provide near-term benefits
  - Help local systems stabilize costs and enhance revenues
  - Reduce wasteful use of water
  - Defer/Replace development of new supplies
- Compliment the work of the State in Session Law 2008-143, the “Drought Bill” (H2499)
- Require policy support by the State

# *Recommendations*

- Infrastructure Financing
- Drought Preparation and Water Resource Management
- Water Audits
- Reclaimed Water
- Regionalization
- Continued Funding for the SWIC

## *Recommendation on Water Audits*

Create and adopt a format for conducting a water audit that works in conjunction with the Local Water Supply Plans.



# *Recommendation on Reclaimed Water*

The use of reclaimed water, gray water, harvested rain water and stormwater should be expanded subject to adequate provisions to protect public health.

The proposed rule enhancements for reclaimed water which are currently being considered by the EMC are supported by SWIC.


The inconsistencies in regulatory treatment of gray water, harvested rainwater, stormwater and reclaimed water were noted with concern. SWIC supports the timely reconciliation of these differences.



# *Recommendation on Water Rates and Rate Structures*

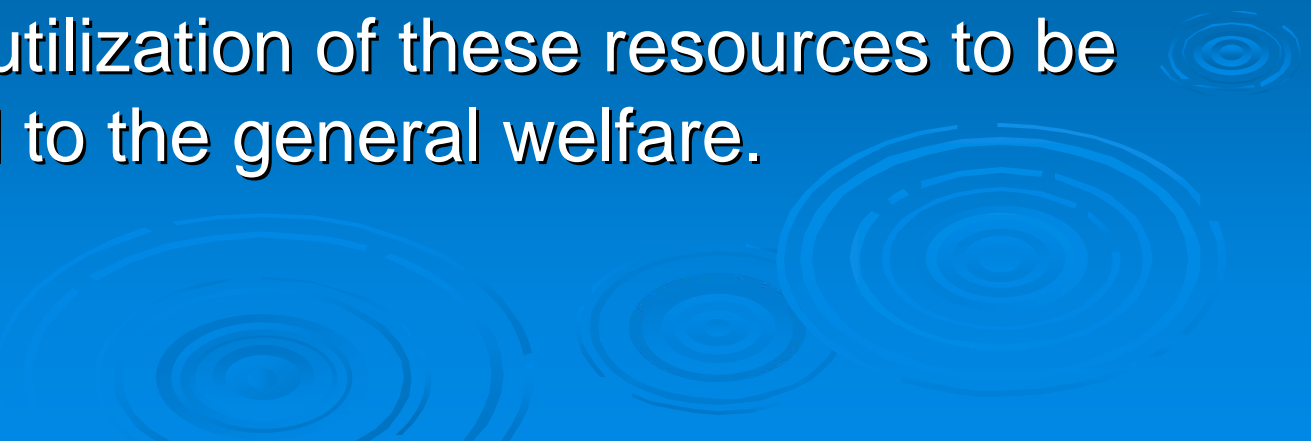
## Drought Bill - Section 17 : SWIC Charge

A research effort is underway which has been designed to study the relationships between water usage for specific utilities and 1) pricing signals, 2) the application of conservation policies, 3) utility demographic data, 4) climate data and 5) other factors that are likely to influence water usage. Progress report January 2009.



# *North Carolina General Statutes Article 21, Section 143-211(a)*

Recognizing that the water and air resources of the State belong to the people, the General Assembly affirms the State's ultimate responsibility for the preservation and development of these resources in the best interest of all its citizens and declares the prudent utilization of these resources to be essential to the general welfare.

The background of the slide features a solid blue color. In the lower half, there are several faint, concentric circular ripples, resembling water droplets or rain, which are lighter in shade than the background.