



February 16, 2016

*Department of Environmental Quality*



*Developing and Ensuring Future Supplies and Considerations for Proper Planning*

Tom Fransen  
Division of Water Resources  
Department of Environmental Quality

Freshwater in North Carolina Coastal Plain  
*Understanding and Preparing for 21<sup>st</sup> Century Challenges*  
February 16, 2016



## *Division of Water Resources*

We protect, enhance and manage North Carolina's surface water and groundwater resources for the health and welfare of the citizens of North Carolina, and the economic well-being of the state.

The Division accomplishes our mission by administering:

- Safe Water Drinking Act – Protection of Public Health
- Clean Water Act – Environmental Protection
- State Water Rights – Long-Term Economic Viability

The resources we protect or regulate for the 9.5 million people of NC, growing by approximately 2 million every 20 years, include:

- Streams, rivers and creeks – ~ 63,000 miles
- Lakes, ponds & reservoirs – ~ 260,000 acres
- Estuaries – ~ 2 million acres
- Over 6,000 Public Water Systems with over 77,661 miles of water distribution lines
- 38,000 miles of Sewer serving 5.34 million customers with centralized sewage treatment
- License 15,743 water and wastewater operators
- Animal Feeding Operations – ~ 9,700,000 hogs, 93,000 cattle, 6,700,000 head of poultry



## KEY ISSUES THAT SHAPE CURRENT NC WATER SUPPLY PLANNING

### Drought of 1998-2002

#### Towns desperate for water



#### *Interbasin Transfer*

#### *South Carolina vs. North Carolina - Key Facts*

- Case originates in the Supreme Court. South Carolina seeks an equitable apportionment of the Catawba River, which starts in North Carolina and flows into South Carolina.
- Granted – October, 2007
- Dismissed – December, 2010

#### Session Law 2015-90 (House Bill 795)

An Act to Reform and Amend the State Environmental Policy Act

New Thresholds

1. Greater than \$10 Million in State Funds
2. Greater than 10 acres of substantial permanent changes

Except for Interbasin Transfer Certifications.

### 2007-08 Drought Fontana Lake (Sept 9-10, 2007)



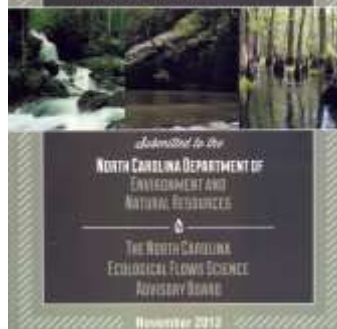
## Planning Can Help Prevent This



Central Coastal Plain Capacity Use Area (CCPCUA) 15A NCAC 15A.0500

- Became effective in 2002 and is limited to a 15 county area in the eastern portion of NC.
- Contains permitting and registration requirements for withdrawals from surface and groundwater sources. Annual water use reporting is also required.

## Planning Can Help Prevent This



**... If Instream Flows  
and Uses  
are Included  
in the Equation**

*Environmental Management Commission's Water Allocation Committee  
Review of Challenges Developing New Water Sources*

- **Recommendations from Utilities**

(slides used from original presentations as much as possible)

1. AWWA
2. City of Raleigh
3. Catawba-Wateree Management Group
4. Cape Fear Public Utility Authority
5. Greenville Utilities Commission



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## *AWWA Overview of Recommendations*

- Regulated Riparianism/permitted water withdrawal
  - Support legislation
- The EMC should make more Capacity Use Area designations for surface water as appropriate
- Encourage State Regional Water Planning by Basin
- No stand-alone ecological flows component
  - Unless as a function of withdrawal permitting
- Interbasin Transfer
  - Needed updated review of laws, especially in terms of emergency transfers and more fully addressing future water needs of all utilities in source basin
- Continued cooperation between state government and utilities



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## *City of Raleigh* *Processes, Challenges and Hurdles*

- Federal
  - Clean Water Act
  - The National Environmental Policy Act
  - The Endangered Species Act
  - EPA Region 4 Guidelines on Water Efficiency Measures for Water Supply Projects
  - National Case Law
  - Well Established Opposition or Guidance Groups
  
- State
  - State Delegation of Components of the Clean Water Act
  - Interbasin Transfer Law & Rule
  - L&S Water Power v. Piedmont Triad Rural Water Authority decision
  - Ecological Flows and the EFSAB Recommendations
  - Well Established Opposition or Guidance Groups

## *City of Raleigh* *Processes, Challenges and Hurdles*

- EPA Region 4 Guidelines on Water Efficiency Measures for Water Supply Projects.
  
- National Case Law
  - 25-year Tri-State “Water Wars” of Georgia, Alabama and Florida.
  
- Well Established Opposition or Guidance Groups
  - American Rivers, Center for Biological Diversity, Southern Environmental Law Center, Riverkeepers Alliance, Environmental Defense Fund, upstream and down stream users including Cities, agriculture etc...
  
- City Identified 2 Major Hurdles
  - Interbasin Transfer Law & Rule
  - Ecological Flows and the EFSAB Recommendations

## *Catawba-Wateree Mgmt Group Reliable Water Supply Critical to Economy*

- Risk of overbuilding during normal conditions
- Avoid drought driven disruptions to business, quality of life
- Confidence to make long-term investments in the region
- Sustainable environment, economy, quality of life
- Continued cooperation with Duke Energy



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## *Catawba/Wateree Water Mgmt Group Key Recommendations*

- Increase water use efficiency
- Lower critical water intakes/elevations
  - Power plant
  - Public water supply
- Raise target lake levels during summer months
- Enhance drought responsiveness through Low Inflow Protocol



## *Cape Fear Public Utility Authority (CFPUA) Requests to Remove Regulatory Impediments*

### Surface Water Withdrawals

- Need Surface Water Allocation Permitting

### Groundwater Withdrawals

- Need Coastal Capacity Use Area Permitting

### Aquifer Storage and Recovery

- Need ASR Protection Zone from Incursion by Other Wells

### Direct Potable Reuse

- Need Regulatory Path and Attainable Permits

### Conservation

- Hope for the Best but Plan for the Worst

Introduction

Interbasin  
TransferTar River  
Flow StudyHouse Bill 1743  
Ecological  
FlowHouse Bill  
609 Process

Summary

## *Greenville Utilities Commission Impediments and Challenges of Permitting Water Supply*

- What are we disputing?
  - Regulatory process is flawed
  - Policy and/or rules change frequently
  - Lack of decision-making authority
- What are action items?
  - Find a conclusion to GUC's water supply planning effort





Introduction

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## *Greenville Utilities Commission Impediments and Challenges of Permitting Water Supply*

- Greenville Utilities lends support to NC AWWA-WEA and NC League of Municipalities proposal
- Emphasis on increased cooperation with state agencies
  - Decision-making authority
  - Regulatory support
  - Accountability

### *Summary of Recommendations made to the EMC by the Water Systems*

- Support legislation for a water withdrawal permitting program
  - *EMC decision. Not supported by DEQ.*
- Create more Capacity Use Area designations
  - *EMC can direct DEQ to work on.*
- Encourage river basin-based water supply planning
  - *Now part of the basinwide plans, which the EMC approve.*
- No stand-alone ecological flows requirements
  - *EMC has directed DEQ to work with the General Assembly.*





## Summary of Recommendations

- Encourage revisions to the Interbasin Transfer statutes with respect to the challenges of the individual service areas and regional water suppliers.
  - *General Assembly typical introduces a bill every session.*
  - *Certificate conditions are imposed by the EMC based upon the Findings of Fact.*
- Encourage cooperation between state agencies and water supply utilities
  - *DWR is already doing this. We're open for suggestions on how to improve.*



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## Regional Planning

Jordan Lake Regional  
Water Supply Partnership



Catawba Waterree Water  
Management Group



*THE ENVIRONMENTAL REVIEW COMMISSION TO CONDUCT A STUDY OF WATER RESOURCES AVAILABILITY IN THE CAPE FEAR RIVER BASIN*  
*Session Law 2015-196 (House Bill 186)*  
*Amended by the Technical Corrections Act Session Law 2015-264 (Senate Bill 119)*

**SECTION 86.2.** Section 1 of S.L. 2015-196 reads as rewritten:

**"SECTION 1.** The Environmental Review Commission, with the assistance of the Department of Environment and Natural Resources, shall study the aggregate uses of groundwater and surface water in or affecting the Cape Fear River Basin by all users, including, but not limited to, public water systems, industrial facilities, and agricultural operations. The study shall include all of the following elements:

(i) a summary of the current and 50-year projected water-use demands along with the available water supplies within the Cape Fear River Basin;

(ii) an evaluation of the adequacy of currently available supplies to meet the expected long-term needs for all water demands, including the identification of those areas of the basin that do not have a sustainable long-term water supply for the anticipated growth of that area;

(iii) the identification of potential conflicts among the various users and recommendations for developing and enhancing coordination among users and groups of users in order to avoid or minimize those conflicts; and

**(iv) an enhanced review of the portions of the Cape Fear River Basin within Brunswick, New Hanover, and Pender counties addressing the increased demands on groundwater and limited surface water options in that area.**

All the information and any analytical tools, such as models, employed in the conduct of the study shall be made available electronically for public review and use on the Web site of the Department's Division of Water Resources.

The Environmental Review Commission may submit an interim report to the 2016 Regular Session of the 2015 General Assembly and shall submit a final report of its findings and recommendations, including any legislative proposals, to the 2017 General Assembly."

Jordan Lake Water Supply Allocation – Round 4 - [www.ncwater.org/?page=624](http://www.ncwater.org/?page=624)



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## Contact Information



Tom Fransen  
 Chief, Water Supply Planning  
 Section  
 Division of Water Resources  
 919-707-9015  
[tom.fransen@ncdenr.gov](mailto:tom.fransen@ncdenr.gov)

[DWR - deq.nc.gov/about/divisions/water-resources](http://DWR - deq.nc.gov/about/divisions/water-resources)

[Planning Section - deq.nc.gov/about/divisions/water-resources/planning](http://Planning Section - deq.nc.gov/about/divisions/water-resources/planning)

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