

# Division of Water Resources Update

Environmental Review Commission January 18, 2011

#### Overview

- Resolution of Supreme Court Lawsuit
- Implementation of SL 2010-143
  - Improve River Basin Modeling
- Update on Coastal Capacity Use Area

#### Settlement of Supreme Court Lawsuit

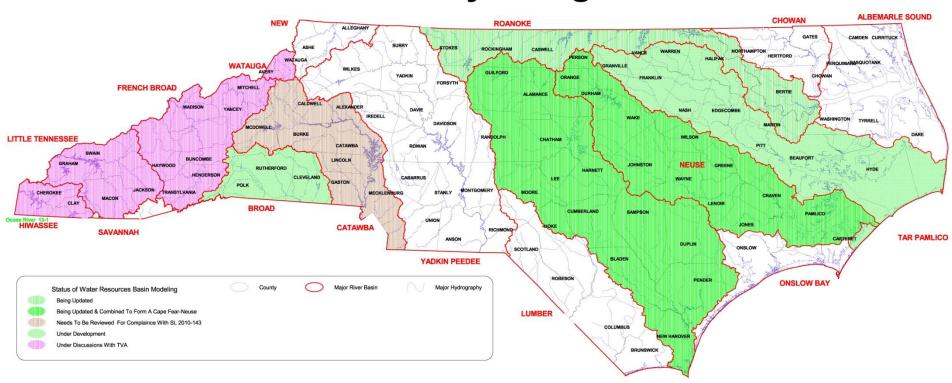
- Originally filed by SC in 2007
  - Disputed NC's use of Catawba River water
  - Precipitated by Concord-Kannapolis IBT
- Parties reached a settlement in December 2010
  - NC/SC/Duke Energy/Catawba River Water Supply Proj.
- Dismissed from Supreme Court on December 14
- Catawba-Wateree Bi-State Commission played a pivotal role in negotiating the settlement

#### What did NC give up to settle?

- Nothing that it is not already doing
- Agreed to abide by Comprehensive Relicensing Agreement for Duke Energy's FERC license
  - NC already a signatory to this agreement
  - Includes Low Inflow Protocol (LIP) for drought periods
- Agreed to abide by existing statutory requirements for approval & notice of future IBTs in the Catawba
  - New IBT statutory requirements adopted in 2007 & 2008
  - SC must adopt similar measures for their portion of basin
- Agreed to evaluate water supply needs in the Catawba-Wateree Basin every 10 years

- DENR to develop models for all 17 river basins
  - Mandated incorporation of ecological flows
- Establishment of eco-flows science advisory board
- Required approval of models by EMC

#### **Status of NC Hydrologic Basin Models**



- Hydrologic Models Completed or Under Development
  - Neuse Model: Completed
  - Cape Fear update/merger of Cape Fear/Neuse into 1 model
  - Roanoke Model: Underway
  - Tar Model: Underway
  - Broad Model: Underway
- Other Modeling Activity
  - Review of the existing Catawba Model w/Catw. WMG
  - Initiate discussions w/TVA about the Tennessee Basin

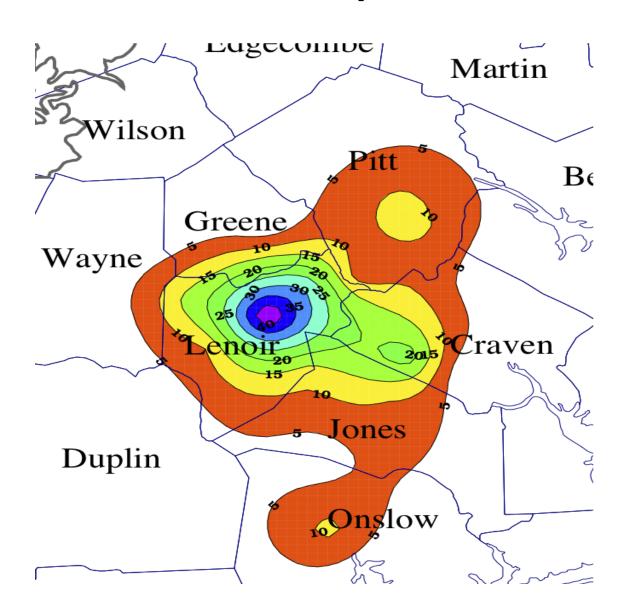
- Ecological-Flows Science Advisory Board
  - Established w/membership specified in Bill
  - Facilitated by Natural Resource Leadership Institute of NCSU
  - Process/meetings ongoing
    - Meetings broadcasted over internet
  - Goal is to conclude in 2-3 years

- Model Approval by EMC
  - EMC Technical Advisory Group established
  - Will oversee and guide model development
  - First model approval process in Fall 2011

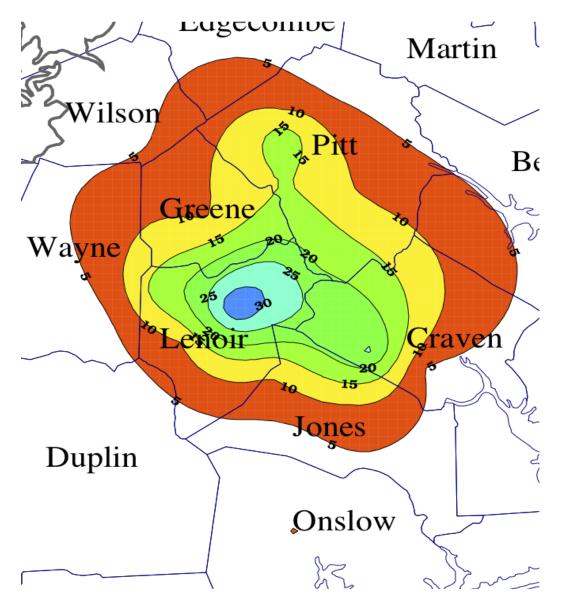
#### Update on Capacity Use Area

- Continued recovery of confined aquifers
- Approval of Greenville Utilities Comm. IBT request
  - GUC service area will switch to Tar surface water
- Termination of International Paper withdrawal in VA
  - Withdrawal in VA was extracting NC groundwater

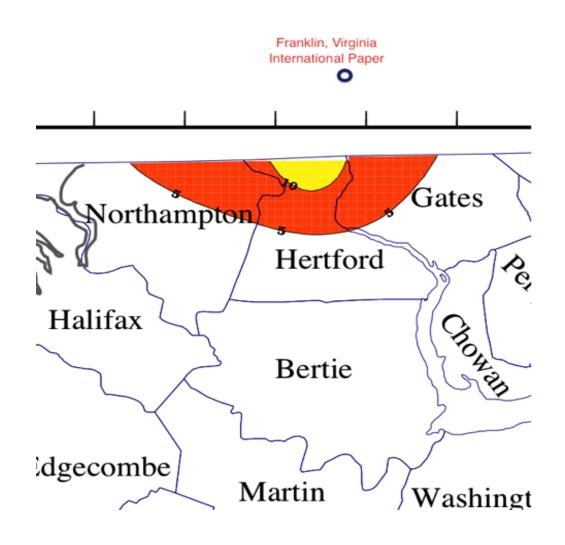
## Black Creek Aquifer in CUA



## Upper Cape Fear Aquifer in CUA



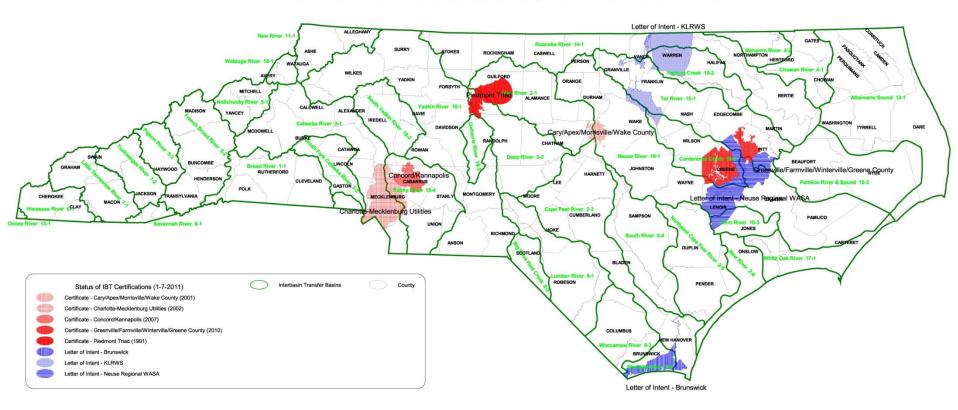
# Lower Cape Fear Aquifer



## Lessons Learned from Capacity Use Area

- Program is functioning as expected
- Difficulty in developing rules was worth it
- Long-term, proactive water resource planning is possible in North Carolina
- Buy-in/participation of major stakeholders in program development is critical
  - Local government/public utility input

#### **NC Interbasin Transfers**



## Major DWR Projects for 2011

- Allocation of Water Supply in Kerr Lake w/ VA
- Kerr Lake IBT request
- Little River Reservoir
- Jordan Lake Reallocation
- Continued development of hydrologic models
- Continued progress with Eco-Flows SAB

### Questions?

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