

Approval To Initiate Round 4 Jordan Lake Water Supply Allocation

January 14, 2010

Environmental Management Commission

Tom Fransen

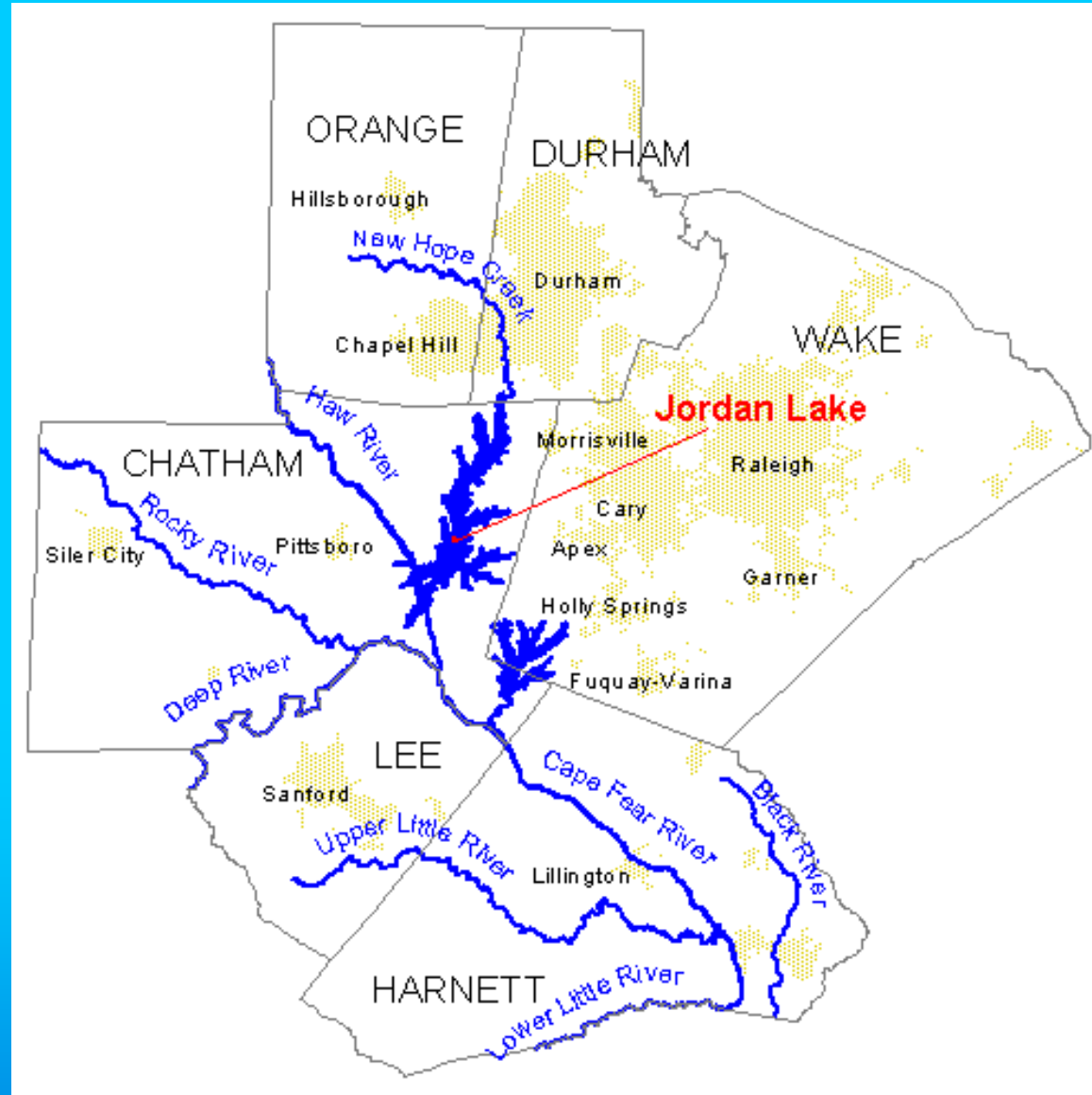
Division of Water Resources

NC Department of Environment and Natural Resources

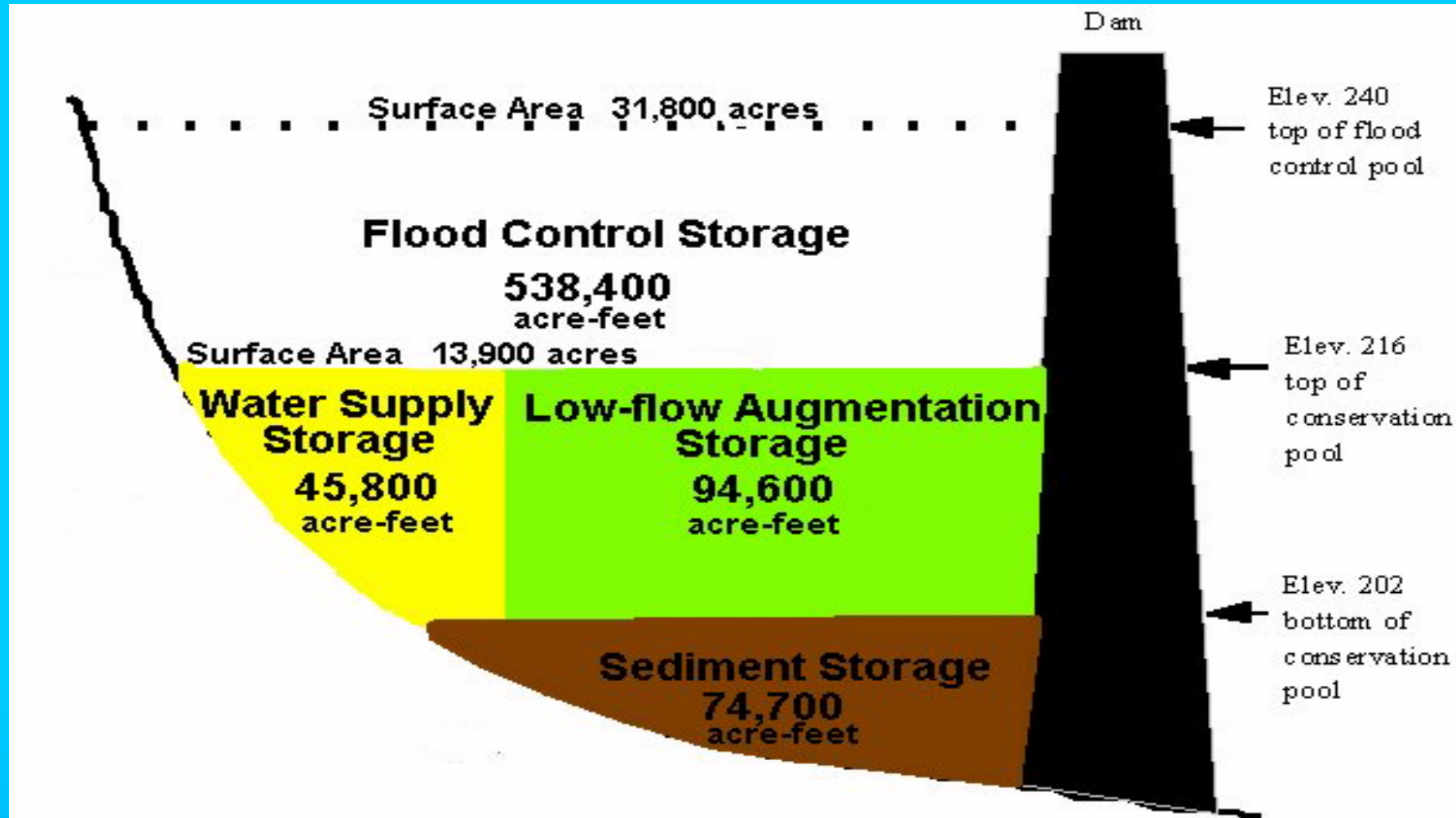
Staff Recommendation

- **Approve the Jordan Lake Regional Water Supply Partnership request to initiate the Jordan Lake Water Supply Allocation process.**
- ***Approve staff's recommendations for the water supply allocation process as outlined in attachment A.***

Jordan Lake Background



Reservoir Operations



Water Supply allocations are a percentage of the water supply pool and not a rate of withdrawal. However, for convenience allocations are frequently expressed in MGD, since 100 percent of water supply storage has an estimated yield of 100 MGD.

EMC's Authority

- **G.S. 143-354(a)(11) gives the EMC responsibility to allocate this storage to units of local government having a need for water supply storage.**
- **15A NCAC 2G.0500 (attachment C) describes the specific procedures to be used in allocating the Jordan Lake water supply storage.**

Water Supply Allocations

- **Level I allocations are made based on 20-year water need projections *and* when withdrawals are planned to begin within five years of receiving the allocation.**
- **Level II allocations are made based on longer term needs of up to 30 years.**
- **Cape Fear Water Supply Plan is based on a 50-year planning horizon.**

Costs & Repayment

- **Jordan Lake was financed and constructed by the Federal government. G.S. 143-215.38 authorizes the State, acting through the EMC, to assume repayment responsibilities for these costs.**
- **Level I Allocation cost is the capital cost, interest, and O&M.**
- **Level II Allocation cost is interest plus O&M.**

Allocation Chronology

- **1967 – Jordan Lake construction begins.**
- **1982 – Lake filled to normal water level for the 1st time.**
 - **Water supply allocation rule making is started.**
 - **1st round of water supply allocations is started.**
 - **1988 – EMC approves 1st round of water supply allocations.**
- **1996 – 2nd round of allocations are started.**
 - **1997 – EMC approves 2nd round of allocations that did not need an IBT certification.**
 - **2000 – EMC approves 2nd round of allocations that needed an IBT certification.**
- **2000 – 3rd round of allocations started.**
 - **2002 – EMC approves 3rd round of allocations.**
- **11/20/2009 – Received request to start 4th round of allocations.**

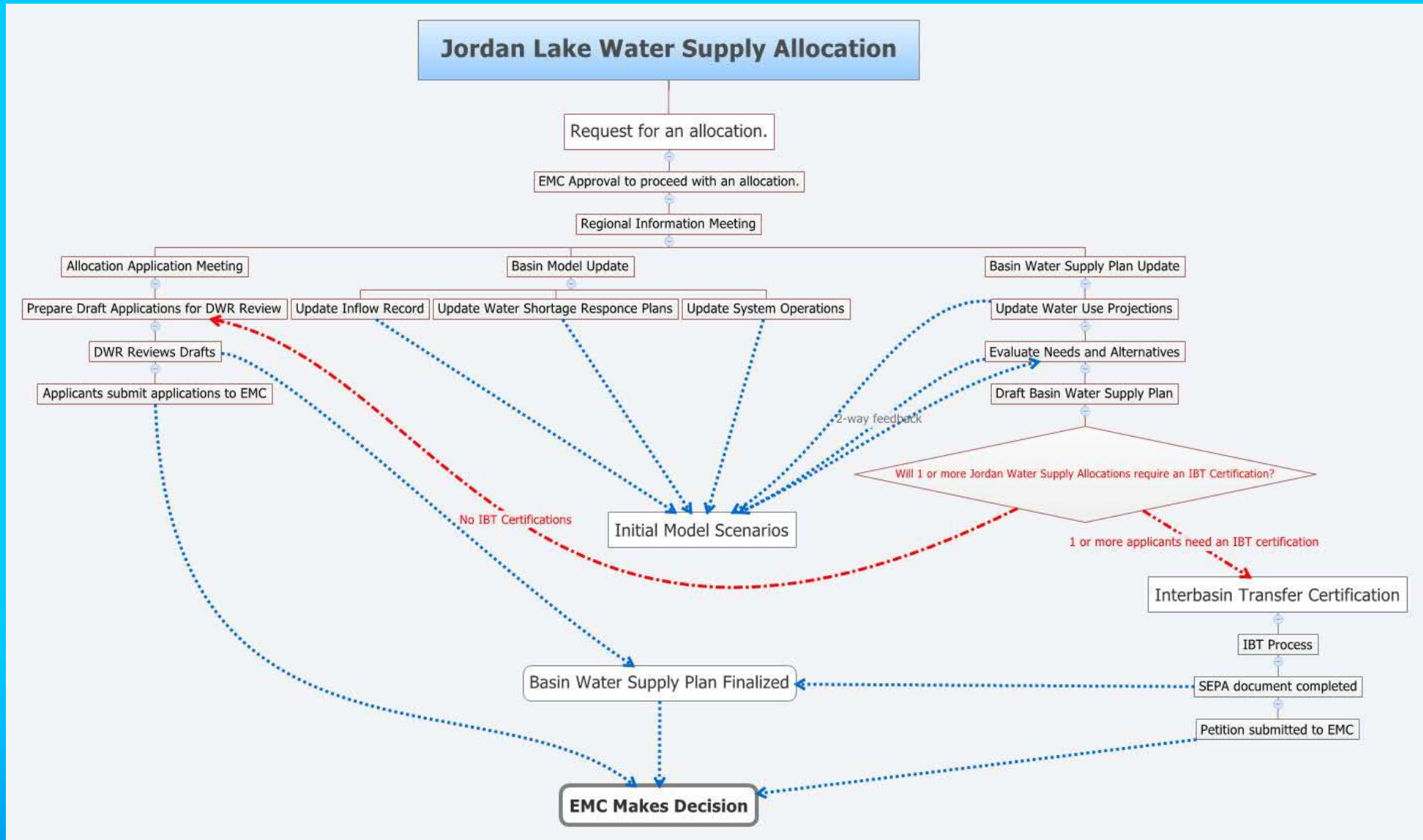
Summary of Jordan Lake Supply Allocations

| | Round 3 Current 2002 | Round 2b 2000 | Round 2a 1997 | Round 1 1988 |
|--------------------------|----------------------------|--------------------|--------------------|--------------------|
| | Total (percent) | Total (percent) | Total (percent) | Total (percent) |
| <i>Cary and Apex</i> | 32.0 | 21.0 | 16.0 | 16.0 |
| <i>Chatham County</i> | 6.0 | 6.0 | 6.0 | 6.0 |
| Durham | 10.0 | 0.0 | 0.0 | 0.0 |
| Holly Springs | 2.0 | 2.0 | 2.0 | 0.0 |
| <i>Morrisville</i> | 3.5 | 2.5 | 0.0 | 0.0 |
| Orange County | 1.0 | 1.0 | 1.0 | 1.0 |
| OWASA | 5.0 | 10.0 | 10.0 | 10.0 |
| <i>Wake County - RTP</i> | 3.5 | 1.5 | 0.0 | 0.0 |
| Hillsborough | 0.0 | 0.0 | 0.0 | 5.5 |
| Orange-Alamance | 0.0 | 0.0 | 0.0 | 3.5 |
| Total | 63.0 | 44.0 | 35.0 | 42.0 |

Jordan Lake Watershed Diversions

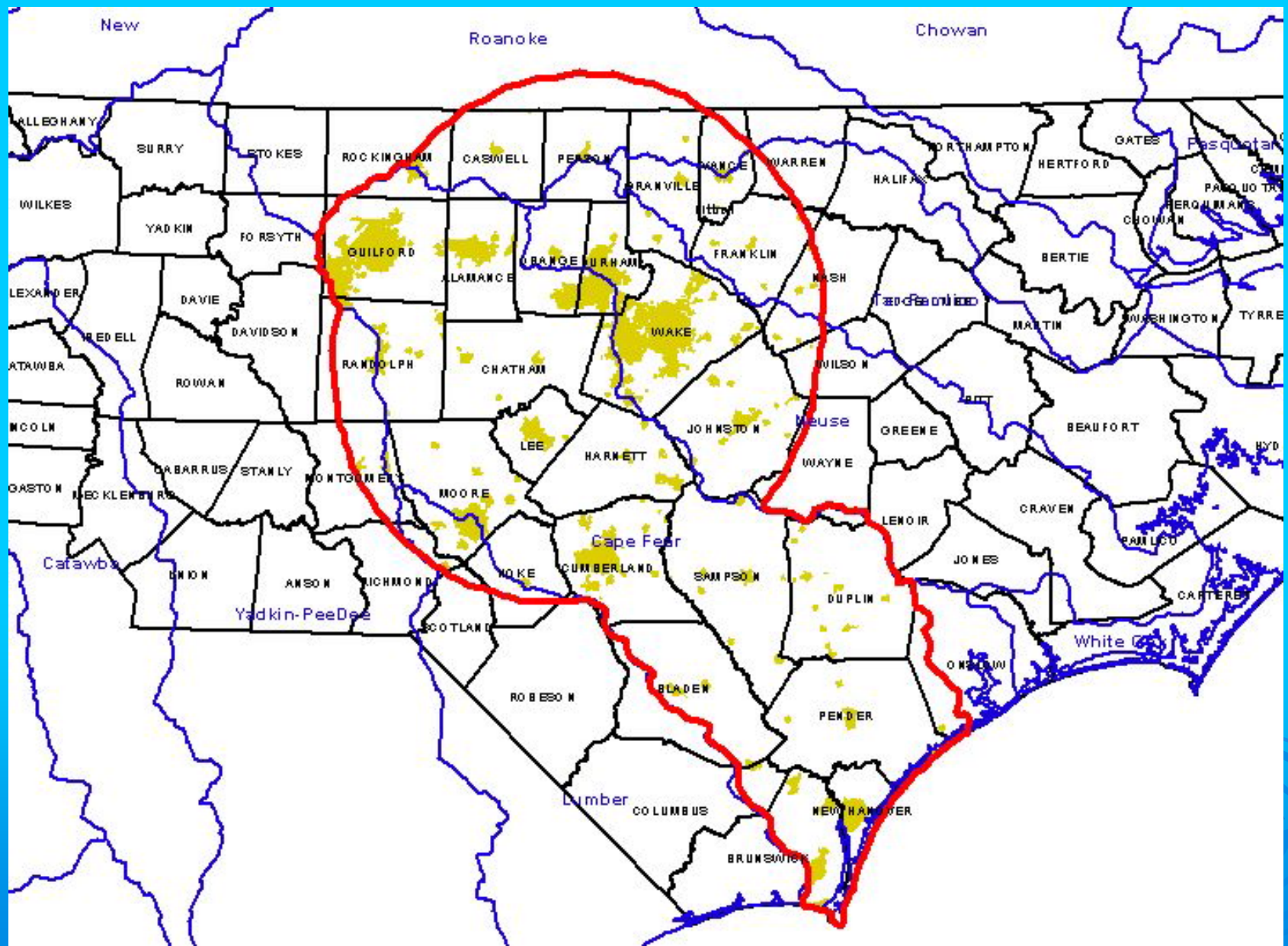
- **15A NCAC 02G .0504 (h) To protect the yield of Jordan Lake for water supply and water quality purposes, the Commission will limit water supply allocations that will result in diversions out of the lake's watershed to 50 percent of the total water supply yield. The Commission may review and revise this limit based on experience in managing the lake and on the effects of changes in the lake's watershed that will affect its yield.**
- **Watershed diversions are about protecting the lake's yield not regulating interbasin transfers.**
- **40% is currently approved to be diverted out of the watershed.**

Allocation Process



If approved to proceed staff estimates the EMC will make a decision in 2012 if no IBT certifications are needed. If one or more applicants need an IBT certification the decision will be made in 2016 or 2017.

Regional Approach



Round 4 Differences

- **The planning process will be done first and the allocation requests will be based on the results of the long-range basin water-supply evaluation.**
- **Staff recommends not splitting the non-IBT and IBT decisions.**
- **All existing allocation holders submit an application justifying their existing allocation levels even if they do not plan on requesting a change.**
- **As part of the update for the Cape Fear Water Supply Plan the staff will review the 50% diversion requirement and make a recommendation if a change to the rule is warranted.**

Staff Recommendation

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Questions

Contact Information

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