Proposed
Kerr Lake Regional Water System
Interbasin Transfer Certificate

Roanoke River Basin Bi-State Commission
Henderson, NC
December 18, 2014
Hot Topic

• IBT Discussions began in the 1950’s.
• The NC General Assembly has made at least eight significant changes to the IBT Law since 1993.
• Six IBT Certificates have been issued.
Outline

• IBT Basics
  – What is a transfer?
• KLRWS IBT Project
  – Description
  – Timeline
  – Statutory Process
• Final Decision = EMC
Definition & Purpose

• The withdrawal of *surface water* from one river basin and discharge of all or any part of the water in a river basin different from the origin.

• The purpose of the Interbasin Transfer Law is to ensure it is good public policy to move water from one river basin into another.
Simplified View of IBT

- **Transfer = Withdrawal – Return**
- **Net Transfer, Not Gross**

The amount of a transfer is determined by the amount of water moved from the source basin to the receiving basin, less the amount of water returned to the source basin.
Statutory Thresholds for Certifications

• 2 million gallons per day (mgd) or more, calculated as a daily average of a calendar month.
  • Not to exceed 3 mgd maximum day.
• Increase the amount of an existing transfer (exceeding 2 mgd) by 25% or more above the average daily amount transferred as of July 1, 1993.
• Increase an existing/grandfathered transfer (exceeding 2 mgd) determined by the system capacity as of July 1, 1993.
Major River Basins & Sub-Basins in North Carolina
As defined in G.S. 143-215.22G

Legend
- Sub-Basin River Boundary
- Major River Basin Boundaries
- County Boundary

Division of Water Resources
919-733-4064
<table>
<thead>
<tr>
<th><strong>Primary Applicant:</strong></th>
<th>Kerr Lake Regional Water System</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Source Basin:</strong></td>
<td>Roanoke</td>
</tr>
<tr>
<td><strong>Receiving Basins:</strong></td>
<td>Tar, Fishing Creek, Neuse</td>
</tr>
<tr>
<td><strong>Grandfathered Allowance:</strong></td>
<td>10 MGD</td>
</tr>
</tbody>
</table>

Average Daily over Maximum Month IBT request is based on 2045 demand:

<table>
<thead>
<tr>
<th><strong>Total Requested IBT:</strong></th>
<th>14.2 MGD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roanoke to Tar:</td>
<td>10.7 MGD</td>
</tr>
<tr>
<td>Roanoke to Fishing Creek:</td>
<td>1.7 MGD</td>
</tr>
<tr>
<td>Roanoke to Neuse:</td>
<td>1.8 MGD</td>
</tr>
</tbody>
</table>
Kerr Lake Regional Water System

- Primary Partners
  - City of Henderson
  - City of Oxford
  - Warren County
- City of Henderson operates WTP.
- Water sales to 15 additional communities/water users in Vance, Warren, Granville, and Franklin Counties
KLRWS & USACE

- KLRWS Agreements with USACE
  - 1974 water use agreement for up to 20 mgd
  - 2005 allocation of 10,292 acre-feet of storage
    » Equivalent to 20 mgd average annual withdrawal
- USACE determined that there would be a slight reduction in the power generation
  - KLRWS is on an annual basis paying the USACE for water storage and power capability compensation
- Requested IBT is for utilization of the current USACE contracted amount.

There will be NO request to increase an allocation from John H. Kerr.
Summary of Modeling Scenarios

- Reduction of initial projected demands and IBT
- USACE Allocation of 20 mgd not projected to be exceeded by 2060
- Modeled results show no impact of transfer
  - Lake levels during extreme drought
  - Low flow duration
  - Hydropower
IBT Process § 143-215.22L.(w)
Requirements for Coastal Counties and Reservoirs Constructed by the United States Army Corps of Engineers

I. Applicant submits Notice of Intent to file a petition.

II. Applicant prepares environmental document (EA) pursuant to State Environmental Policy Act (SEPA).

III. NCDENR publishes a Petition in the NC Register.

- NCDENR submits document to State Clearinghouse for public comment (30-day period)
- Adequacy Determination

IV. Comments accepted for 30 days following hearing

V. NCDENR prepares written response to comments (i.e., hearing officers report)

- EMC ISSUES
- FINAL DETERMINATION
Hearing Officer Recommendations

Findings of Fact

• The EMC may grant a Petition in whole or in part, or deny it, and may require mitigation measures to minimize detrimental effects. In making this determination, the EMC is required to specifically consider:
  – The necessity, reasonableness, and beneficial effects of transfer amount
  – Detrimental effects on the source river basin
    • The cumulative effect of uses on the source major river basin
  – Detrimental effects on the receiving basin
  – Reasonable alternatives to the proposed transfer
  – Use of impounded storage
  – Purposes and water storage allocations in a US Army Corps of Engineers multipurpose reservoir
  – Compare the service area of the applicant to the locations of both the source and receiving basins?
  – Any other facts or circumstances
Contact Information

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