North Carolina Department of Environment and Natural Resources

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FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Kerr Lake Regional Water System Interbasin Transfer (IBT) Request
Warren, Vance, Franklin, Granville Counties, North Carolina

The North Carolina Environmental Policy Act (G.S. §113A) requires that the Division of Water Resources determine whether a proposed major agency action will significantly affect the environment. The Kerr Lake Regional Water System (KLRWS) Interbasin Transfer (IBT) is such a major action. The proposed project will transfer 14.2 million gallons of water per day (mgd), calculated as the average day of a (maximum) calendar month, from the Roanoke River IBT basin to the Tar River (10.7 mgd), Fishing Creek (1.7 mgd), and Neuse River (1.8 mgd) IBT basins. This transfer volume represents the projected 2045 demands of the existing customer base and anticipated growth of the service area. The current grandfathered IBT for the KLRWS is 10 mgd, calculated as a maximum day, which is equivalent to 9.7 mgd, calculated as the average of a calendar month.

The KLRWS is a large regional system that currently provides water directly or indirectly to municipal and county systems in northeastern North Carolina. The water supply for the system is John H. Kerr Reservoir (Kerr Lake) on the Roanoke River. The owners of the KLRWS and primary bulk customers served by the system are the City of Henderson, the City of Oxford, and Warren County, known as the "Partners." The City of Henderson is the majority partner and operates and manages the water treatment plant for the water system. The City of Henderson also currently sells water to secondary bulk customers that include communities in Warren, Vance, Franklin, and Granville Counties. These include Stovall, Warrenton, Norlina, Vance County, Kittrell, and Franklin County. Future sales will occur from Oxford to South Granville Water and Sewer Authority (SGWSA) for use by Creedmoor and its customer, Wilton. Franklin County now owns the Youngsville water system and also sells water to Bunn and Lake Royale.

Kerr Lake is managed by the United States Army Corps of Engineers (USACE) for many purposes including water supply. In 2005, the USACE granted KLRWS a 20 mgd annual average day storage allocation in Kerr Lake. This demand is not projected to be exceeded by the water system through 2060.

In order to determine whether the KLRWS IBT will cause significant environmental impacts, an environmental assessment has been prepared. The environmental assessment is attached. It contains detailed information on the key issues, including a detailed description of the proposed project, and potential environmental impacts with proposed mitigation measures. The following is a summary of the environmental impact analysis conducted:

- No direct impacts to any land or water resources are anticipated from this proposed project because no construction activities or additional infrastructure are needed for the proposed IBT. A summary of secondary and cumulative impacts (SCI) are included in Chapter 5 and mitigation efforts associated with any potential secondary and cumulative impacts are detailed in Chapter 6.

- The source and receiving basins detrimental cumulative effects were analyzed using a hydrologic model developed for the Roanoke River basin. The model is used to assess the potential effects of any water withdrawal, discharge or transfer activity. Water supply data related to water systems in these models is sourced from the Division of Water Resources Local Water Supply Plans (LWSP). The applicants have all submitted updated LWSPs and this data was used in the hydrologic model.

- Hydrologic modeling results presented in the EA effectively demonstrate that the proposed water supply project will have no significant detrimental effects on the water levels in Kerr Lake. These modeling efforts included agricultural, recreational, and industrial uses, as well as upstream and downstream water supply demands from water systems. The results from the hydrologic modeling also demonstrate that the proposed project will cause no significant alterations of releases into the Roanoke River downstream of John H. Kerr Reservoir Dam. No operational changes will be needed on any of the downstream reservoirs to maintain minimum flow targets. Due to these results, the proposed project is not expected to effect downstream flows in the Roanoke River. Therefore, no direct impacts are expected from the preferred alternative as described above.

As evidenced in the environmental assessment, the KLRWS has been in full compliance with their current grandfathered allowable IBT. The preferred alternative was selected because it meets the demonstrated water supply needs while minimizing any potential impacts resulting from the IBT. On the basis of the analysis conducted for the environmental assessment, it has been concluded that the KLRWS IBT Certificate will not have a significant adverse effect on the quality of the environment. No environmental impact statement (EIS) will be prepared and this FONSI completes the environmental review record. The FONSI and environmental assessment shall be available for inspection and comment for 30 days at the State Clearinghouse.

Summary of FONSI for publication in the Environmental Bulletin: After completion of an environmental assessment under G.S. 113A, a FONSI has been made in the case of the Kerr Lake Regional Water System Interbasin Transfer Certificate. Information supporting the need for the proposed project was reviewed, along with relative impacts, other alternative approaches and mitigating measures.

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