



**US Army Corps  
of Engineers®**  
Wilmington District

## **PUBLIC NOTICE**

Issue Date: April 7, 2008  
Comment Deadline: May 7, 2008  
Corps Action ID #: SAW-2003-30194-1

### **Scoping Meeting: Corps seeks comments on proposed First Broad River Reservoir**

**Lawndale, NC-** All interested parties are hereby advised that the Wilmington District, Corps of Engineers (Corps) is holding a scoping meeting on Cleveland County Water's proposal to construct a dam and water supply reservoir on the First Broad River, near Lawndale, in Cleveland County, North Carolina. The proposed construction of the dam and reservoir will require filling and flooding of jurisdictional wetlands and waters of the United States and will require a permit pursuant to Section 404 of the Clean Water Act. In accordance with the National Environmental Policy Act (NEPA), a Draft Environmental Impact Statement (DEIS) will be prepared to evaluate and compare alternatives for increasing water supply and to assess associated impacts.

A scoping meeting for drafting the Environmental Impact Statement (EIS) will be held at the Keeter Auditorium, Cleveland Community College, on April 17, 2008 at 6:00 P.M. The purpose of the scoping meeting is to solicit comments from the public; Federal, state and local agencies and officials; and other interested parties regarding the proposed project and identify issues and concerns they would like to see addressed in the EIS document.

The following description of the proposed dam and reservoir is subject to change as analysis and additional designs are completed. Initial feasibility estimates indicate that an earth-filled dam across the First Broad River may be approximately 83 feet high and 1,245 feet wide at the base. The associated emergency spillway, located south of the dam, would be approximately 1,000 feet wide. The dam would create a reservoir with a surface area of approximately 1,300 acres, impounding those areas below 860-foot mean sea level. A 100-foot buffer would likely surround the reservoir. Flooding impacts would potentially include the loss of approximately 24 miles of river and stream habitat and roughly 1,200 acres of forested and agricultural land. The project would likely inundate less than one acre of wetland, subject to field verification.

A Notice of Intent to prepare a Draft EIS was published in the Federal Register on July 12, 2006. The notice can be found on the Federal Register website, <http://edocket.access.gpo.gov/2006/pdf/06-6139.pdf>. Please note that the surface area of the

proposed project has change from 2,245 acres to 1,300 acres and flooding of forested and agricultural land has changed from 1400 acres to 1,200 acres.

Through the NEPA process, a number of potential alternatives to meeting future water supply demands will be considered. It is anticipated that those potential solutions could include, but are not limited to, the following:

**Conserve Water** – Per capita water usage could be decreased through the implementation of a water conservation program. CCW has a voluntary water conservation program and enforces a mandatory program of water conservation during periods of drought. According to CCW, an aggressive water conservation plan will not negate the demand for an additional water supply in the future.

**Utilize Groundwater** – Smaller communities and residences could be served by individual groundwater wells. However, there are no aquifers of large enough capacity to serve large municipal systems in the Cleveland County area.

**Purchase Water from other Sources** – Under this alternative, water would be purchased from an existing municipal source, such as the City of Shelby, the Town of Kings Mountain, the Broad River Water Authority (BRWA), the Town of Forest City, or the City of Hickory.

**Shelby** – The City of Shelby utilizes the First Broad River as its water source. CCW has an emergency use agreement and pipeline connection in place with the City of Shelby. The volume of water available to CCW is limited.

**Kings Mountain** – Moss Lake provides potable water to the Town of Kings Mountain. In 2002, an emergency pipeline connection with the City of Shelby was constructed to supplement the city's water supply during the drought.

**Broad River Water Authority (BRWA)** – The BRWA utilizes the Broad River as its water source with an intake near the Town of Rutherfordton and a 12.0 MGD water treatment plant. CCW has an emergency use agreement and pipeline connection in place with the BRWA.

**Town of Forest City** – The Town of Forest City utilizes the Second Broad River as its water source with an intake located north of the town and a 12.0 MGD water treatment plant. CCW does not currently have a connection in place with the Town of Forest City.

**Hickory** – The City of Hickory uses the Catawba River (Lake Hickory) as a raw water supply. The city potentially has available excess capacity to meet the projected future CCW demands. This alternative would require permission from the North Carolina Environmental Management Commission to transfer the required amount of flow from the Catawba River basin to the Broad River basin.

**Other Regional Sources** – Other feasible regional sources of water to meet future demands, including during emergency situations, would be explored.

**Increase Withdrawal at Existing Intake Site** – Withdrawals at the existing intake site are constrained by normal flows of the First Broad River and the required instream flow requirements established by the North Carolina Division of Water Resources. The projected safe

yield of the First Broad River at the existing CCW intake is 10.0 MGD. However during the 2002 drought the available supply dropped to less than 4.0 MGD.

### **Construct a Reservoir (no pumped storage)**

**First Broad River** – A reservoir on the First Broad River would consist of an impoundment of the river to meet the needs of CCW to provide a reliable water source. Preliminary studies on several sites were performed to consider the volume; surface area; shoreline; safe yield; and number of roads, bridges, cemeteries and schools that would potentially be affected (McGill, 1997, Feasibility Study, First Broad River Reservoir).

**Other Rivers in the Region** – Other rivers may not be feasible due to size constraints, cost estimates, existing water demands on the system (such as the Broad River), distance to the CCW water treatment facility, or location within other regional utility service areas.

**Construct Several Reservoirs** - This alternative would construct several reservoirs in the First Broad River watershed instead of one main impoundment.

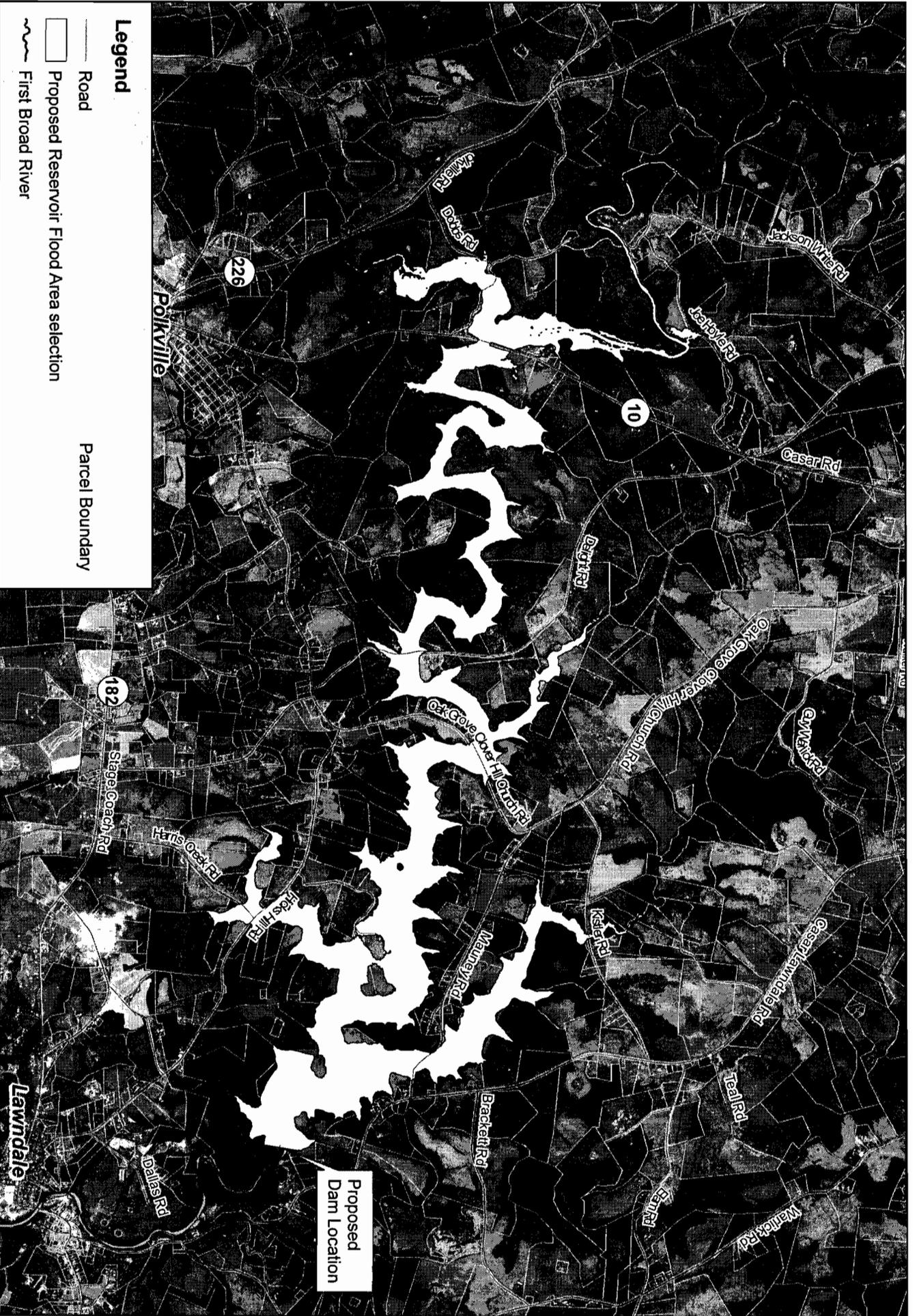
**Intake System on the Broad River (no storage reservoir)** – This alternative would consist of construction of a new run of the river type intake on the Broad River and the utilization of the river for a raw water supply in addition to the First Broad River. This alternative would require the classification of the river and a portion of the watershed for use as a water supply. Several other municipalities have expressed interest in future utilization of the Broad River for water supply and have commenced the reclassification process for a portion of the river. Other demands for water from the river will impact the amount of water available for CCW.

**Construct an Intake System on the First Broad River with one Storage Reservoir** – This alternative would consist of the construction of an “off-stream reservoir.” The reservoir would be maintained at full pool elevation during periods of normal to high flows by pumping water from the First Broad River to the reservoir. During periods of low flow in the First Broad River, raw water would flow from the “off-stream reservoir” through a water line to the water treatment plant.

**No Action** – Under the no-action alternative, CCW would continue to take water from the current intake on the First Broad River.

After an evaluation of such potential alternatives, a determination will be made as to the Reasonable Alternatives to be fully evaluated in the DEIS.

Questions can be directed to Mr. Wicker at telephone (910) 251-4930, Wilmington Regulatory Division Office. Written comments pertinent to the proposed work, as outlined above, must be submitted by 4:15 p.m., May 7, 2008 to this office, Attention: Henry Wicker, P.O. Box 1890, Wilmington, North Carolina 28402-1890. Comments will be used in the preparation of the Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA).



**Legend**

- Road
- Proposed Reservoir Flood Area selection
- First Broad River
- Parcel Boundary



N

0 0.25 0.5 1 Miles

1 inch equals 0.65 miles

**Proposed First Broad River Reservoir**  
**Cleveland County, NC**

Date: Apr 2008

Sources: Cleveland County Water, U.S. Army Corps of Engineers

Proposed  
 Dam Location