



12 August 2011

United States Army Corps of Engineers  
Charleston District  
69A Hagood Avenue  
Charleston, South Carolina 29403-5107

SC Dept of Health and Environmental Control  
Office of Environmental Quality Control  
2600 Bull Street  
Columbia, South Carolina 29201

**RE: P/N #SAC-2009-00369-5IK**

Dear Mr. Parker:

Upon review of the Revised Joint Public Notice and the Individual Permit Environmental Assessment for the raw water reservoir expansion and river intake upgrade by the Catawba River Water Treatment Plant in Lancaster County, South Carolina, Catawba **RIVERKEEPER**<sup>®</sup> Foundation, Inc. (CRF) and American Rivers (AR) respectfully submit these comments for your consideration and, in addition, request a full environmental assessment of alternatives and a public hearing.

Catawba Riverkeeper Foundation, Inc. is a non-profit conservation organization and has been registered as a 501(c)(3) in North and South Carolina since 1997. CRF's mission is to advocate for the protection, enhancement and enjoyment of the Catawba River and its entire watershed. With approximately 1200 members throughout the 17 counties that span the Catawba River basin, CRF is the only river conservation and advocacy organization solely focused on the protection and enhancement of the Catawba River.

American Rivers is a national non-profit conservation organization fighting for clean water and healthy rivers. For almost 40 years we have protected and restored rivers, scoring victories for communities, fish and wildlife, and future generations. American Rivers has offices in the Columbia, South Carolina, Durham, North Carolina, Washington, DC and 10 other locations nationwide, and more than 100,000 supporters and volunteers.

Our purpose for providing joint comments on and requesting a full environmental assessment of alternatives as part of an Environmental Impact Statement and a public hearing for the Joint Public Notice of Lancaster County Water & Sewer District and Union County, North Carolina Catawba River Water Supply Project in Lancaster County, SC (hereinafter the applicants) is for the protection of the Catawba River and its tributaries. Furthermore, CRF and AR submit these comments to protect the rights of citizens upstream and downstream to access clean, abundant water resources through the implementation of U.S. Environmental Protection Agency Region 4 (EPA) Guidelines on Water Efficiency Measures for Water Supply Projects in the Southeast (6-21-2010). In order to protect this water body and the citizens' right to clean water, CRF and AR

respectfully submit these comments on behalf of the Catawba River, its watershed, CRF members and AR members.

CRF and AR do not believe the alternative selected by the applicant avoids and minimizes probable and cumulative impacts of the activity requested. In addition, CRF and AR do not believe the current environmental assessment document submitted with this application explores all alternatives available to the applicant to avoid and minimize the impacts of the activity.

### **Applicant's Justification**

Under this notice, the applicant seeks to construct a new  $\pm 1$  billion gallon, 92-acre, 40 MGD for 30 days reservoir and expand its river intake infrastructure to accommodate this reservoir. The applicant's justification for the need of such a reservoir is to provide "a safe, reliable, drought resistant supply of drinking water" for its customers during stage 4 drought conditions. The applicant indicates that under stage 4 drought conditions it requires 40MGD additional capacity to provide water supply to their customers.

The applicant explains that Duke Energy's implementation of the Low Inflow Protocol (LIP) under its federal license to operate dams along the Catawba-Wateree eliminated the applicant's ability to negotiate additional water releases with Duke Energy during drought periods. With this option eliminated, the applicant believes that additional storage capacity of  $\pm 1$  billion gallon is necessary.

### **Least Damaging Practicable Alternative: Water Efficiency**

Currently, the applicant operates a water treatment facility with a capacity of 36 million gallons per day and has a  $\pm 14$ -acre on-site reservoir of 100 million gallons that provides roughly a three-day supply of water at full treatment capacity. This calculation by the applicant takes full treatment capacity into account, but does not indicate how much water is actually consumed/ delivered on a daily basis. In fact, according to the applicant, their average water usage is currently approximated at 17 MGD. This current average daily use in non-drought period is less than half the amount suggested for use in drought conditions under this request. Moreover, the applicant's water resource capacity description does not include drought mitigation, evaporative loss prevention and water efficiency measures which would result in the increased lifespan of the current reservoir supply.

In order to ensure that a robust alternatives analysis is conducted and that water efficiency measures are appropriately addressed by the applicant, CRF and AR believe the Corps of Engineers should ensure that the applicant has thoroughly examined, explored and implemented water efficiency as an alternative to the proposed reservoir. EPA Region 4's Guidelines on Water Efficiency Measures For Water Supply Projects in the Southeast (Appendix A) should be implemented prior to approving an application for the construction of additional storage capacity. Currently, CRF and AR do not believe this applicant meets the requirements of these EPA guidelines:

1. *Effective management.*
  - a. While Union County, North Carolina, one of the two applicants, has an approved water conservation ordinance (Appendix B), Lancaster County, South Carolina, the second applicant, does not.
  - b. Second, the applicants explain the target goals for water conservation under Duke Energy's LIP, but does not elaborate on how such goals are or will be met and tracked.

- c. The applicant also does not explain how it will increase public understanding and formally involve the public in water use decisions. This highlights CRF's and AR's belief that a public hearing is necessary to allow and facilitate the public's involvement in this water use decision-making process.
2. *Pricing for efficiency.* The applicant does not demonstrate that the full cost of operating, maintaining and improving their existing system is accounted for in the rate structure. Evidence of a rate structure that encourages water conservation and efficiency is not provided by the applicant.
3. *Efficient water use.* The applicant does not describe active efforts to detect, stop and eliminate leaks in their distribution system. The applicant does not provide an AWWA-IWA standard water industry audit of the water resources currently managed. The applicant does not provide information on programs that require individual metering of multi-family residential units and individual commercial operations. The applicant does not provide information on requirements for water efficiency in new buildings and new landscapes, nor incentive programs that encourage the installation of WaterSense fixtures and efficient irrigation systems and rainwater harvesting and xeriscaping for new and existing facilities.
4. *Watershed approaches.* The applicant does not include any information regarding the potential for reducing water demand in its service area through the implementation of water-reuse and groundwater recharge. Contrary to this, the applicant highlights its interbasin transfer of up to 20 million gallons a day, a potentially damaging watershed management practice. The applicants inter-basin transfer certificate which moves water from the Catawba River basin to the Yadkin-Pee Dee River basin will expire in 2012.

Furthermore, the applicant acknowledges that the water quality of Fishing Creek Reservoir is poor and therefore unusable by the applicant at its facility. While the applicant acknowledges this fact, the applicant does not currently ensure the protection of this viable water source, and water source for downstream users, with stream and river buffers. Best management practices for watershed protection of source water would require stream buffers throughout the applicants' service area.

### **Alternatives Analysis**

CRF and AR do not believe the environmental assessment documentation provided by the applicant sufficiently explores all alternatives available to the applicant to avoid and minimize the impacts of the activity. For example, Section 4.1.1 of the environmental assessment document does not outline goals and measures that would tap into a major potential source of water that could be obtained by the applicant through the implementation of the EPA's guidelines for water efficiency measures as previously discussed.

Another alternative unexplored in Section 4.1.2 and unmentioned throughout entire document involves additional water supply connections with other neighboring utilities such as the Town of Fort Mill or the City of Rock Hill. In a conversation with Paul Mitchell, Engineering Director with the Town of Fort Mill, on 20 July 2011, Catawba Riverkeeper David Merryman was told that a 24" water main that supplies water from the City of Rock Hill to the Town of Fort Mill would be maintained and available for additional water supplies from Lake Wylie despite the Town of Fort

Mill's efforts to pump water directly from the Catawba River below Lake Wylie. While the applicant may have discussed emergency relief with neighboring utilities, the applicant should fully explore this alternative water supply from Lake Wylie and potential interconnections with the Town of Fort Mill and the City of Rock Hill since it could be used by the applicant during stage 4 conditions as a supplemental water supply. According to this same Town of Fort Mill official the applicant had not approached or discussed potential interconnections with the Town as the applicant's Environmental Assessment suggests in the second paragraph of Section 4.1.2.

### **Reservoir Size Proposed**

CRF and AR do not believe the applicant's justification for this reservoir is sufficient to provide evidence for a reservoir of such capacity. With the implementation of water efficiency measures and potential water supply alternatives available to the applicant, CRF and AR feel the proposed reservoir of 92 acres and  $\pm 1$  billion gallons is drastically over estimated and could be obviated with water efficiency measures and supply alternatives.

Compensatory mitigation options for a reservoir of this magnitude are also currently unavailable to the applicant. As proposed, the applicant requires a total of 51,374 mitigation credits with 32,703.38 of those credits coming from stream restoration. While the applicant states that 14,035 stream restoration credits can be obtained from a mitigation site at Big Dutchman's Creek, the applicant does not provide any details regarding the restoration work that would provide 43% of the restoration credits necessary for the project.

### **Conclusion**

CRF and AR would like to thank the U.S. Army Corps of Engineers for extending the comment period because the complexity and size of this project require diligent review by all of the stakeholders submitting comments appropriate and applicable to this matter.

Catawba Riverkeeper Foundation, Inc. and American Rivers appreciate the opportunity to comment on P/N # SAC-2009-00369-5IK, a request by Lancaster County Water and Sewer District and Union County, North Carolina to construct a new 92 acre reservoir and expand its intake infrastructure in the Catawba River, and respectfully request that you deny this permit request and require a complete environmental impact statement that explores all alternatives, including water efficiency and conservation, for any subsequent application.

Respectfully submitted,



C. David Merryman  
Catawba **RIVERKEEPER**<sup>®</sup>  
Catawba Riverkeeper Foundation, Inc.  
421 Minuet Lane, Ste. 205  
Charlotte, NC 28217  
david@catawbariverkeeper.org  
704-679-9494



Jenny Hoffner  
Director, Water Supply  
American Rivers  
501 Dancing Fox Road  
Decatur, GA 30032  
jhoffner@americanrivers.org  
404-373-3602