



Electronically Filed

July 6, 2004

Magalie R. Salas, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

**Re: Motion to Intervene and Comments on the Application for Surrender of the
Dillsboro Project (p-2602) Submitted by American Rivers**

Dear Secretary Salas,

Enclosed for filing in the above referenced proceeding is American Rivers' Motion to Intervene and Comments. Below is the Certificate of Service for the above referenced matter. Copies of this filing have been served on all parties of record to this proceeding.

Thank you for your assistance. Please call if you have any questions or need additional information.

Sincerely,

Andrew Fahlund
Senior Program Director
American Rivers
(202) 347-7550, x3022

CERTIFICATE OF SERVICE

I hereby certify that I have this 6th day of July, 2004 served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Serena McClain
AMERICAN RIVERS

**UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION**

Duke Power
Dillsboro Project

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P-2602

**AMERICAN RIVERS' MOTION TO INTERVENE
AND COMMENTS, TERMS, AND CONDITIONS
ON APPLICATION FOR SURRENDER**

Pursuant to 18 C.F.R. § 384.214 and the “Notice of Application Accepted for Filing, Soliciting Motions to Intervene and Protests, and Soliciting Comments, Final Recommendations, Terms and Conditions, and Prescriptions” (June 4, 2004), American Rivers respectfully moves to intervene in this proceeding and offers the following comments and recommended terms and conditions.¹

I. DESCRIPTION OF MOVANTS

American Rivers, Inc. is a non-profit conservation organization with offices based in Washington, D.C., Chattanooga, Tennessee, and Columbia, South Carolina and several other locations throughout the nation. Our mission is to protect and restore our nation’s rivers and streams and to foster a river stewardship ethic. With over 35,000 members across the country, American Rivers is the nation’s leading river conservation group. Nearly 800 of American Rivers’ members reside in North Carolina. American Rivers is also chair of the Hydropower Reform Coalition, a consortium of more than 125 national, regional, and watershed groups from around the nation with involvement in more than 75% of the licensing and surrender proceedings before the Commission. The Coalition’s mission is the protection and restoration of rivers and streams impacted by the construction and operation of hydropower dams.

II. GROUNDS FOR INTERVENTION

¹ All correspondence for this proceeding should be directed to Serena McClain, Conservation Associate, American Rivers, 1025 Vermont Avenue NW, Suite 720, Washington DC, 20005.

The Little Tennessee River watershed is home to some of the greatest diversity of freshwater aquatic species in the world. A total of nineteen aquatic faunal species that live in the Little Tennessee River Basin are considered imperiled by the state of North Carolina. Three of those are federally-listed endangered species: the Spotfin chub, the Appalachian elktoe, and the Little-wing pearl mussel. This area of western North Carolina and East Tennessee is also home to some of the best outdoor recreational opportunities in the Eastern United States, including fishing, whitewater paddling, hiking, and wildlife viewing.

While participants in the cooperative relicensing process, American Rivers has chosen not to sign on to the underlying Nantahala Area settlement agreement because we feel it does not go far enough in protecting the Tuckasegee and its communities. However, we do recognize that Commission actions in this proceeding will significantly affect the health of the Tuckasegee River for decades. American Rivers is entitled to intervene in this proceeding because their members use and enjoy the Tuckasegee River for recreation and for the river's biological and aesthetic values and services. Therefore, American Rivers' members have a direct, immediate, and continuing interest in this surrender and the conditions that may be included with it.

American Rivers' participation in this proceeding also is in the public interest. As a national organization, with extensive experience in Commission licensing and surrender actions, and with dam decommissioning and removal, American Rivers will bring its experience and its interest in restoring and preserving diverse stream values to this proceeding on behalf of its members and members of the general public. Our participation will also help ensure that the recreational, biological, and aesthetic values of the Tuckasegee River are properly considered in this proceeding. American Rivers has a direct and substantial interest in the outcome of this proceeding, and its interests cannot be adequately represented by any other party.

III. POSITION ON NEW LICENSE APPLICATION

American Rivers supports the decommissioning and removal of the Dillsboro Dam. Although we are not signatories to the underlying settlement agreement, American Rivers strongly supports settlements in proceedings where such agreements, consistent with applicable law, can be reached between license applicants, federal and state agencies, environmental and other

interest groups, and local citizens and landowners, BUT THAT DID NOT HAPPEN HERE. Nonetheless, this particular element of the settlement has merit and we urge the Commission to support it under the following conditions.

A. Sediment

The amount of sediment present in the current impoundment and its potential mobilization continues to be a concern in engineering the removal of Dillsboro Dam. The Comments below seek to address the manner in which Duke Power deals with (1) the amount of sediment present in the impoundment; (2) sediment transport and dispersal once the dam is removed; and (3) the proposed decommissioning of the structure.

The potential impact to both species of concern and rare and endangered species from mobilization of large quantities of sediment in the impoundment is cause for concern particularly with respect to the Appalachian Elktoe Mussel. Contaminants, such as turbidity (from the release of excessive sediment) and other pollutants, can have devastating effects Appalachian Elktoe Mussel populations. The species is also sensitive to velocity of flow, preferring a swifter current; however, the license application fails to discuss how proposed flow increases required to flush the sediment downstream will impact the mussel populations. While relocation of the mussel species is important to consider, it is a bit ambitious given that the exact locations of all current populations appear unknown. In addition to this planned relocation of the mussel population, the decommissioning plan for the dam should be designed in such a way that impacts to downstream species from sediment dispersal are minimized.

It is critical that dam removals are designed to minimize impacts from sediment, so that people realize it is not dam removals that hurt mussels, only poorly managed projects. That said, we have found that many systems are able to handle more natural sediment dispersal with few short-term impacts. In order to minimize short- and long-term impacts resulting from the removal of Dillsboro Dam, the final order to decommission the dam should include the following:

- 1) further analysis of sediment quantity in the impoundment that includes the potential for deep pockets of sediment;

- 2) sediment transport modeling¹ that examines sediment dispersal at varying notch levels in the dam structure and the proposed flow velocities, including how deep temporary sediment deposits may be and how these temporary deposits may impact the Appalachian Elktoe Mussel; and
- 3) depending on the outcome of further sediment modeling, a phased-removal of the dam, which allows for a more measured and deliberate notching and dispersal of sediment. Assuming there are greater quantities of sediment in the impoundment than previously anticipated, an eight-foot by 40-foot initial notch could mobilize much of the impounded sediment, putting downstream aquatic communities at greater risk. Previous removals, such as Rains Mill Dam on the Little River in North Carolina, have successfully used a phased removal when endangered mussel populations were present downstream.

B. Aesthetics and Community Values

As dams are built and become part of the fabric of a community, it is important to recognize their aesthetic and emotional significance to communities when planning the removal of a dam.

Dillsboro Dam, built in 1927 to provide power to the young towns of Dillsboro and Sylva, is a source of community pride. The sound of water flowing over the dam provides cover for noisy highway traffic and lulls people to sleep most nights at the local Dillsboro Inn. The community does not want to see the history of the dam and what it meant to the new towns of Dillsboro and Sylva washed downstream and forgotten. While the removal of Dillsboro Dam will benefit the community and is an important step in the ecological restoration of the Tuckasegee River, it is also essential that the final decommissioning order address community concerns in some manner.

As mentioned above, the sound created by water flowing over the existing dam is very important to the local community. Preliminary studies indicate that removal of the dam will expose bedrock and a series of whitewater riffles and that the water flowing through the former dam site

¹ The Dam Removal Express Assessment Model (DREAM) is an example of one potential model that could be used to examine sediment transport and dispersal following dam removal. DREAM is a product of Stillwater Sciences and has been used in the proposed decommissioning of dams that include the Marmot and Little Sandy dams in Oregon.

will create as much ambient noise (albeit of a different quality) as that created by water flowing over the dam. In the event that removal of the dam reveals no whitewater riffles and decibel levels are not as expected, the decommissioning order should require Duke Power to create a series of riffle pools and whitewater by strategically placing rock boulders at the former dam site.

In order to mitigate for the historic role both the dam and powerhouse played in the development of the community, Duke Power should donate the land on which the powerhouse resides to the local community and assist in the development of an educational kiosk and display unit that commemorates the Dillsboro Dam and Powerhouse and the Tuckasegee River and their historic role in the community. The kiosk also represents an opportunity to educate the community and visitors on dam removal and its significance in river restoration.

C. General Decommissioning Proposal

Rivers are dynamic entities, and the riverbed elevation is likely to change over time. The current proposal calls for removal of the dam to the current riverbed. However, dams extend well below the riverbed, and if the removal stops at the riverbed, you could be creating a scouring problem in the near future, as well as limiting the rivers ability to create a thalweg. By removing the dam only to the riverbed, it is possible that, within the next 50 years, you will have a four-foot high dam here. We suggest removing the dam to a grade below (possibly two to four feet below) the grade of the river and then regrading the area to be consistent with the post-removal downstream and upstream riverbeds.

The proposed decommissioning plan also speaks of streambank armoring with rock **or bioengineering**. According to the report prepared by Milone & MacBroom, Inc. (MMI), downcutting is likely to occur. Though there will be periods when a steep eroded bank is visible, project managers should not use this as a reason to stabilize the banks prior to letting the sediment naturally transport downstream. Banks should only be stabilized when it appears they are eroding into historic riverbank material, not simply sediment that was deposited by the dam. Once bank stabilization begins, all efforts should be made to use bioengineering techniques referenced in the MMI report. By using bioengineering techniques and native vegetation for bank stabilization, vegetative buffers can be created or maintained, improving aquatic habitat by trapping polluted runoff and increasing shading potential for coldwater streams. This type of

natural streambank stabilization is also more aesthetically appealing to the community. Riprap should be avoided, and if used, it should be used sparingly and topped with a significant amount of topsoil and seed.

Post-dam removal monitoring is an important part of any removal project in that it allows project managers and interested parties to determine the dam removal's effect on water quality and aquatic life. It is especially important in a project aimed at recovering endangered and threatened species. Because impacts and benefits resulting from dam removal occur in both the short and long term, Duke Power's post-removal monitoring period should be extended from the proposed two years to five years.

IV. CONCLUSION

American Rivers respectfully requests that the Commission carefully consider our comments and recommended terms and conditions and grant our motion to intervene in this proceeding.

Dated: July 6, 2004

Respectfully submitted,

Andrew Fahlund
AMERICAN RIVERS

cc:

FERC Service List

Submission Contents

Motion to Intervene and comments by American Rivers on P-2602-007. DillsboroIntervention.doc.....	1-7
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