Application for Exemption for Tellico Dam and Reservoir Project

United States. Endangered Species Committee
ENDANGERED SPECIES COMMITTEE:

APPLICATION FOR EXEMPTION FOR

TELLICO DAM AND RESERVOIR PROJECT

DECISION: Exemption denied.

PROPOSED AGENCY ACTION:

The Tellico Project is located on the Little Tennessee River near the convergence of that stream with the Big Tennessee River. It is to consist of a concrete dam and an adjacent earth dam (both of which are substantially complete) and a 16,000 acre reservoir. As part of the Project, the TVA has acquired 38,000 acres of land, 16,000 acres of which will be permanently inundated by the reservoir.

The Tellico Project was justified by TVA on the basis of a distribution of benefits among recreation (38 percent), shoreline development (19 percent), fish and wildlife enhancement (6 percent), hydroelectric power and navigation (each 11 percent), flood control (13 percent) and water supply (2 percent).

The Project is described in further detail in the Introduction to the staff report to the Committee. Documents in the record which describe the Project and its history include:

Tennessee Valley Authority, Alternatives for Completing the Tellico Project (December 1978).


Tennessee Valley Authority Environmental Statement: Tellico Project, February 10, 1972, Vols. I and II.

BASIS FOR DECISION:

Acting pursuant to the Endangered Species Act Amendments of 1978, the Endangered Species Committee proceeded to consider an exemption for the Tellico Dam and Reservoir Project on December 8, 1978, and on January 23, 1979, decided to deny the exemption at a public meeting in Washington, D.C.
The decision, based on a motion to deny an exemption, was carried by unanimous vote, with all seven committee members present and voting in person. The decision was made on a record composed of testimony taken at hearings in Knoxville, Tennessee and Washington, D.C. on January 8, 1979, and on other evidence submitted to the committee and placed in the record on or before January 10, 1979. It is based on a determination by the committee that:

1. There is a reasonable and prudent alternative to the agency action, and

2. The benefits of the proposed agency action do not clearly outweigh the benefits of alternative courses of action which are consistent with conserving the snail darter or its critical habitat.

That determination is based on findings made on the record and stated below:

I. Alternatives. (A) River Development. The TVA report Alternatives for Completing the Tellico Project devotes considerable attention to the alternative of River Development. This alternative involves removal of a portion of the earthen dam and development of the Little Tennessee River Valley around a free-flowing river. Development possibilities suggested in the record include agriculture and forestry, recreation, industrial and other development. River Development could involve a range of combinations of public and private ownership of the land acquired by TVA for the Tellico Project.

(B) Other Alternatives. Other suggested alternatives are canvassed in the staff report to the committee. These include construction of a 2,500 acre reservoir on the Tellico River, a tributary of the Little Tennessee, and the alternative of leaving the reservoir area behind the Tellico Dam unflooded, but keeping the dam intact and operating it for flood control.

II. Analysis of Alternatives. Based on the complete record, the River Development alternative, which would make productive use of a significant portion of the investment in the dam and reservoir, is technically feasible and would be prudent to implement. Further, this alternative would maintain the critical habitat of the endangered snail darter, and partial removal of the earthen dam would allow yearling darters to migrate upstream to spawning areas.

TVA analyzed the tributary reservoir alternative for flood control and hydropower and found it infeasible. Some commenters, however, view this as a reasonable and prudent alternative. Some commenters have
also suggested that the dry dam is a reasonable and prudent alternative, but retention of the dam would continue to impede migration of yearling darters, and there is no assurance that this alternative would permit continued viability of the Little Tennessee snail darter population.

III. Comparison of Costs and Benefits. The record contains detailed information on costs and benefits of the Tellico Project and of its alternatives, particularly the River Development alternative. Based on the record, it is not possible to find that the benefits of completing the Tellico Project clearly outweigh the benefits of alternatives consistent with conserving the snail darter.

The benefits of the Tellico Project include power production, flood control, recreation, navigation and water supply. The benefits of the Project are discussed in Chapter 2 of the staff report.

Benefits of the River Development alternative which can be quantified include agricultural and forestry production and recreation. Benefits of the alternative which cannot be measured in dollar terms include preservation of archaeological, cultural and historic sites; preservation of customary fish and wildlife values, including trout fishing; and ecological, esthetic and scenic values associated with preservation of the snail darter. The benefits of the River Development alternative are discussed in Chapters 2 and 3 of the staff report.

The TVA Alternatives Report places the total monetized benefits of completion of the Tellico Project at $6.3 - 7.4 million annually; the benefits of River Development are placed at $3.4 - 6.1 million annually. Capital, operating and maintenance costs total $3.2 and $2.3 million annually, respectively.

The staff report estimates the total monetized benefits of reservoir development at $6.5 million annually; the benefits of River Development are estimated to total $5.1 million annually. The TVA's capital, operating and maintenance costs of $3.2 million for the Tellico Project and $2.3 million for River Development are accepted by the staff report. The staff report also points out that both the Project and River Development alternative involve opportunity costs of approximately $4.0 million for the land acquired for the Tellico Project. Finally, the staff report finds unmeasured benefits accruing to the River Development alternative relative to the reservoir development alternative in the form of cultural, archaeological, historical and fish and wildlife preservation.
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1. There is a reasonable and prudent alternative to the agency action, and
2. The benefits of the proposed agency action do not clearly outweigh the benefits of alternative courses of action which are consistent with conserving the snail darter or its critical habitat.
That determination is based on findings made on the record and stated below.

BASIS FOR DECISION:

I. Proposed Agency Action. The Tellico Project is located on the Little Tennessee River near the convergence of that stream with the Big Tennessee River. It is to consist of a concrete dam and an adjacent earth dam (both of which are substantially complete) and a 16,000 acre reservoir. As part of the Project, the TVA has acquired 38,000 acres of land, 16,000 acres of which will be permanently inundated by the reservoir.

The Tellico Project was justified by TVA on the basis of a distribution of benefits among recreation (38 percent), shoreline development (19 percent), fish and wildlife enhancement (6 percent), hydroelectric power and navigation (each 11 percent), flood control (13 percent) and water supply (2 percent).

The Project is described in further detail in the Introduction to the staff report to the committee. Documents in the record which describe the Project and its history include:

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(B) Other Alternatives. Other suggested alternatives are canvassed in the staff report to the committee. These include construction of a 2,500 acre reservoir on the Tellico River, a tributary of the Little Tennessee, and the alternative of leaving the reservoir area behind the Tellico Dam unflooded, but keeping the dam intact and operating it for flood control.

III. Analysis of Alternatives. Based on the complete record, the River Development alternative is technically feasible and would be prudent to implement. Further, this alternative would maintain the critical habitat of the endangered snail darter and partial removal of the earthen dam would allow yearling darters to migrate upstream to spawning areas.
TVA analyzed the tributary reservoir alternative for flood control and hydropower and found it infeasible. Some commenters, however, view this as a reasonable and prudent alternative. Some commenters have also suggested that the dry dam is a reasonable and prudent alternative, but retention of the dam would continue to impede migration of yearling darters and there is no assurance that this alternative would permit continued viability of the Little Tennessee snail darter population.

IV. **Comparison of Costs and Benefits.** The record contains detailed information on costs and benefits of the Tellico Project and of its alternatives, particularly the River Development alternative. Based on the record, it is not possible to find that the benefits of completing the Tellico Project clearly outweigh the benefits of alternatives consistent with conserving the snail darter.

The benefits of the Tellico Project include power production, flood control, recreation, navigation and water supply. The benefits of the Project are discussed in Chapter 2 of the staff report.

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Although both the TVA and staff calculations show somewhat greater net benefits for the Tellico Project, these benefits do not clearly outweigh those of the River Development alternative, particularly when unmeasured benefits are also considered. Further, neither the TVA nor the staff includes potential benefits and return of project land to private ownership or operation in calculating the benefits of the River Development alternative; doing so would increase the net benefits of the River Development alternative.
ORDER

On the basis of the findings stated above, the committee denies an exemption for the Tellico Dam and Reservoir Project from the requirements of the Endangered Species Act.

Signed: