



Aquatic Resource Alteration Permit

NRS24.082

Pursuant to the *Tennessee Water Quality Control Act of 1977* (T.C.A. §§ 69-3-101 et seq.) and supporting regulations, a permit is required to alter the properties of waters of the state. Accordingly, the Division of Water Resources requires reasonable assurance that the activity will not violate provisions of the Tennessee Water Quality Control Act or provisions of sections 301, 302, 303, 306 or 307 of the Clean Water Act.

Subject to conformance with accepted plans, specifications, and other information submitted in support of the application, pursuant to T.C.A. § 69-3-108(b) the state of Tennessee hereby permits the activity described below:

PERMITTEE: South Blount Utility District
320 Partnership Parkway
Maryville, Tennessee 37932

AUTHORIZED WORK: The authorized alteration to waters is the withdrawal of up to 22.8 million gallons per day of water from Tellico Reservoir. The purpose of the withdrawal is for public water supply.

LOCATION: The activity is located in the Tellico Reservoir in Monroe County. Pursuant to T.C.A. § 10-7-504 and Rule 0400-01-01(4)(c)2, the precise location is confidential. Therefore, the exact locations of the intake site will not be disclosed in this permit or otherwise made available to the public.

EFFECTIVE DATE: draft

EXPIRATION DATE: draft

for April Grippo, Director
Division of Water Resources

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PART I

Authorized Alterations

The authorized alteration to waters is withdrawal of up to 22.8 million gallons per day (MGD) of water from Tellico Reservoir. The purpose of the withdrawal is for public water supply.

South Blount Utility District (SBCUD) is interested in obtaining an increase of their water withdrawal permit that will allow for proper sizing of necessary water infrastructure improvements for the existing treatment plant and distribution systems to improve their position as a regional water supplier over the next 20 years.

Currently, SBCUD’s peak daily withdrawal is 6.95 MGD and an average daily withdrawal of 4.3 MGD. As the population increases in and around Blount County, SBCUD is poised to become a regional water supplier due to its location on the Tellico Reservoir, with nearby utilities withdrawing water from sources with significantly lower water availability such as the Little River.

Average Daily and Peak Daily demand includes demand for SBCUD customers and existing interconnects with neighboring utilities.

Demand for the proposed interconnect with Tellico Area Service Systems is based on a formal request for SBCUD to supply up to 4.0 MGD. No assumptions for increased withdrawal were made.

Allotments for the City of Alcoa and Tuckaleechee Utility District are for proposed interconnects, currently in planning phases by others, that are anticipated to be completed by the end of 2025 and projected to grow at the same rate as regional population.

Emergency Allotment is allocated for SBCUD to be able to supply the City of Alcoa and the City of Maryville with water in the event of drought conditions.

The activity is located in the Tellico Reservoir in Monroe County. Pursuant to T.C.A. § 10-7-504 and Rule 0400-01-01(4)(c)2, the precise location is confidential. Therefore, the exact locations of the intake site will not be disclosed in this permit or otherwise made available to the public.

Special Conditions

1. The withdrawal rate shall not exceed 22.8 MGD.
2. Raw water withdrawal volumes shall be monitored and recorded daily.
3. Withdrawal data shall be reported to the Division on the corresponding comprehensive monthly operations reports for the Public Water Supply ID TN0000643.
4. The permittee shall provide annual water loss reporting using the American Water Works Association M36 Water Audits and Loss Control Programs free water audit software v6 to determine the amount of potentially recoverable leakage, with a goal of achieving a 25% unavoidable annual real loss.
 - a. If the unavoidable annual real loss is greater than 25%, it shall develop and implement a plan to reduce water loss based on the potentially recoverable leakage.
 - b. A plan that details the process and timelines by which the permittee would achieve this reduction shall be submitted to the Division for review and approval not later than 24 months after the effective date of this permit.
 - c. The annual water loss reporting shall be submitted by October 31 of each year.
5. The permittee shall comply with the provisions of its Drought Management Plan, including revisions. The provisions include, but are not limited to:
 - a. triggers for drought restrictions
 - b. water use restrictions for drought stages, and
 - c. levels of enforcement for drought management stages.

General Conditions

1. It is the responsibility of the permittee to convey all terms and conditions of this permit to all contractors. A copy of this permit, approved plans, and any other documentation pertinent to the activities authorized by this permit shall be maintained on site at all times during periods of construction activity.
2. All activities must be accomplished in conformance with the approved plans, specifications, data, and other information submitted in support of the ARAP application (form CN-1091) (except where no application is required as specified below) and the limitations, requirements, and conditions set forth herein. Failure to comply with the terms and conditions of this permit is a violation of the Act.
3. The permittee is responsible for obtaining the federal §404 permit from the U. S. Army Corps of Engineers and §26a permit from the Tennessee Valley Authority where necessary.
4. All work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in Rule 0400-40-03-.03 of the Rules of the Tennessee Department of Environment and Conservation. This consists of, but is not limited to, the prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of waters of the state for any of the uses designated by Rule 0400-40-04. These uses include fish and aquatic life (including trout streams and naturally reproducing trout streams), livestock watering and wildlife, recreation, irrigation, industrial water supply, domestic water supply, and navigation.
5. Adverse impact to formally listed state or federal threatened or endangered species or their critical habitat is prohibited.

6. This permit does not authorize adverse impacts to cultural, historical, or archeological features or sites.
7. This permit shall not be used incrementally to combine with other activities resulting in an appreciable permanent loss of water resource values.
8. This activity may not result in a disruption or barrier to the movement of fish or other aquatic life. The completed activities may not disrupt or impound stream flow.

PART II

Mitigation Requirements and Monitoring Procedures

Required Mitigation Activities

There are no mitigation requirements.

Monitoring Requirements and Procedures

Annual water loss reports shall be submitted by October 31 of each year.

Submission of Monitoring Results

All reports must be submitted in report form to the Division of Water Resources, Natural Resources Unit, Davy Crockett Tower, 9th Floor, 500 James Robertson Parkway, Nashville, TN 37243, via email at water.permits@tn.gov. Please be sure to indicate the ARAP permit number on your submittal.

Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation shall be retained for a minimum of five (5) years, or longer, if requested by the Division of Water Resources.

Falsifying Results and/or Reports

Knowingly making any false statement on any report required by this permit or falsifying any result may result in the imposition of criminal penalties as provided for in Section 309 of the Federal Water Pollution Control Act, as amended, and in Section 69-3-115 of the Tennessee Water Quality Control Act.

PART III

Duty to Reapply

The withdrawal of water from the Little Tennessee River beyond the expiration date of this permit is not authorized. If the permittee chooses to continue this activity, it must submit a complete application to the Division not later than 90 days prior to the expiration of the permit.

If any portion of the permitted activities, including the authorized impacts to water resources, compensatory mitigation requirements, or post-project monitoring is not completed before the expiration date of this permit **the permittee must apply for permit extension or re-issuance**. The permittee shall submit such information and forms as are required to the director of the Division of Water Resources at least ninety (90) days prior to its expiration date. Such applications must be properly signed and certified.

Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

Water Rights

The waters of Tennessee are the property of the state and are held in public trust for the use of the people of the state. This permit does not grant or convey any prescriptive rights, appropriation, or allocation of water, nor does it authorize any injury to the riparian rights of others.

Other Permits

This permit does not preclude requirements of other federal, state or local laws. This permit also serves as a state of Tennessee aquatic resource alteration permit (ARAP) pursuant to the Tennessee Water Quality Control Act of 1977 (T.C.A. §69-3-101 et seq.).

Other Information

If the permittee becomes aware that he/she failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the director, then he/she shall promptly submit such facts or information.

Changes Affecting the Permit Transfer/Change of Ownership

This permit may be transferred to another party, provided:

1. There are no activity or project modifications, no pending enforcement actions, or any other changes which might affect the permit conditions contained in the permit.
2. The permittee notifies the Director of the proposed transfer at least 30 days in advance of the proposed transfer date.
 - a. The notice consists of a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage, and contractual liability between them; and
 - b. The Director does not notify the current permittee and the new permittee, within 30 days of his or her intent to modify, revoke, reissue, or terminate the permit, or require that a new application be filed rather than agreeing to the transfer of the permit.
3. The permittee must provide the following information to the division in their formal notice of intent to transfer ownership:
 - a. the permit number of the subject permit,
 - b. the effective date of the proposed transfer,
 - c. the name and address of the transferor,
 - d. the name and address of the transferee,
 - e. the names of the responsible parties for both the transferor and transferee,
 - f. a statement that the transferee assumes responsibility for the subject permit,
 - g. a statement that the transferor relinquishes responsibility for the subject permit,
 - h. the signatures of the responsible parties for both the transferor and transferee, and,
 - i. a statement regarding any proposed modifications to the permitted activities or project, its operations, or any other changes which might affect the permit conditions contained in the permit.

Change of Mailing Address

The permittee shall promptly provide to the director written notice of any change of mailing address. In the absence of such notice the original address of the permittee will be assumed to be correct.

Noncompliance

Effect of Noncompliance

All discharges shall be consistent with the terms and conditions of this permit. Any permit noncompliance constitutes a violation of applicable state and federal laws and is grounds for enforcement action, permit termination, permit modification, or denial of permit reissuance.

Reporting of Noncompliance

24-Hour Reporting

In the case of any noncompliance which could cause a threat to public drinking supplies, or any other discharge which could constitute a threat to human health or the environment, the required notice of non-compliance shall be provided to the Division of Water Resources in the appropriate Environmental Field Office within 24-hours from the time the permittee becomes aware of the circumstances. (The Environmental Field Office should be contacted for names and phone numbers of environmental response personnel).

1. A written submission must be provided within five (5) days of the time the permittee becomes aware of the circumstances unless this requirement is waived by the director on a case-by-case basis. The permittee shall provide the director with the following information:
 - a. a description of the discharge and cause of noncompliance,
 - b. the period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue, and,
 - c. the steps being taken to reduce, eliminate, and prevent recurrence of the non-complying discharge.

Scheduled Reporting

For instances of noncompliance which are not reported under subparagraph a. above, the permittee shall report the noncompliance by contacting the permit coordinator and provide all information concerning the steps taken or planned to reduce, eliminate, and prevent recurrence of the violation and the anticipated time the violation is expected to continue.

Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the waters of Tennessee resulting from noncompliance with this permit, including but not limited to, accelerated or additional monitoring as necessary to determine the nature and impact of the noncompliance. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

Liabilities

Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Notwithstanding this permit, the permittee shall remain liable for any damages sustained by the state of Tennessee, including but not limited to fish kills and losses of aquatic life and/or wildlife, as a result of the discharge of pollutants to any surface or subsurface waters. Additionally,

notwithstanding this Permit, it shall be the responsibility of the permittee to conduct its discharge activities in a manner such that public or private nuisances or health hazards will not be created.

Liability under State Law

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or the Federal Water Pollution Control Act, as amended.

Reopener Clause

This permit may be modified, suspended, or revoked for cause, including:

1. Violation of any of the terms or conditions of this permit or of T.C.A § 69-3-101 et. seq.,
2. Obtaining the permit by misrepresentation or failing to disclose fully all relevant facts,
3. A change in any condition that requires either a temporary or permanent change in the conditions of this permit.

Appeal

An appeal of this action may be made as provided in T.C.A. § 69-3-105(i) and Rule 0400-40-07-.04(9) by submitting a petition for appeal:

1. The petition must be filed within 30 days after public notice of the issuance of the permit.
2. The petition must specify the basis for the appeal and state a claim for relief based on an alleged violation of the Tennessee Water Quality Control Act or the rules promulgated thereunder. Third parties shall specify facts sufficient to establish that they have satisfied the statutory and regulatory preconditions and otherwise have standing to appeal.
3. The petition should be addressed to the technical secretary of the Tennessee Board of Water Quality, Oil and Gas at the following address: Director, Division of Water Resources, Natural Resources Unit, Davy Crockett Tower, 9th Floor, 500 James Robertson Parkway, Nashville, TN 37243, or you may submit such petition electronically to TDEC.Appeals@tn.gov. Any hearing would be in accordance with T.C.A. §§ 69-3-110 and 4-5-301 et seq.

Site Maps and Design Drawings

Topographic Map



Aerial Image



APPENDIX

Draft Permit Rationale

NRS24.082

South Blount Utility District
320 Partnership Parkway
Maryville, Tennessee 37932

July 8, 2024

Permit Writer: Robert Baker

Summary

Permittee:	South Blount Utility District
Contact:	A. L. Scott District Manager 865-982-3560
Activity Location:	The activity is located in the Tellico Reservoir in Monroe County. Pursuant to T.C.A. § 10-7-504 and Rule 0400-01-01(4)(c)2, the precise location is confidential. Therefore, the exact locations of the intake site will not be disclosed in this permit or otherwise made available to the public.
Proposed Activity:	The alteration considered for authorization is the withdrawal of up to 22.8 million gallons per day of water from Tellico Reservoir. The purpose of the withdrawal is for public water supply.
Waterbody Name / ID:	Tellico Reservoir / TN06010204001_1000

Permit Status

Permit Type:	ARAP
Effective Date:	draft
Expiration Date:	draft

Status of Affected Waters

Tellico Reservoir / TN06010204001_1000
Ecoregion Southern Dissected Ridges and Knobs 67i, Monroe County
Hydrologic Unit Code – 06010204 Little Tennessee River

Designated Use	Use Support	Causes	Sources
livestock watering & wildlife	fully supporting		
irrigation	fully supporting		
recreation	not supporting	Polychlorinated biphenyls (PCBS)	Contaminated Sediments
fish and aquatic life	fully supporting		

industrial water supply	fully supporting		
domestic water supply	fully supporting		

Assessment Date: August 26, 2021

The affected waters have been determined to have available water withdrawal parameters.

The affected waters are designated as Exceptional Tennessee Waters. The basis for inclusion is presence of state endangered White-Leaved Leatherflower and Hiwassee Quillwort, state threatened Large-Leaf Pondweed and Tennessee Pondweed.

Proposed Alterations

The alteration to waters to be authorized consists of withdrawal of up to 22.8 million gallons per day of water from Tellico Reservoir. The purpose of the withdrawal is for public water supply.

South Blount Utility District (SBCUD) is interested in obtaining an increase of their water withdrawal permit that will allow for proper sizing of necessary water infrastructure improvements for the existing treatment plant and distribution systems to improve their position as a regional water supplier over the next 20 years.

Currently, SBCUD's peak daily withdrawal is 6.95 MGD and an average daily withdrawal of 4.3 MGD. As the population increases in and around Blount County, SBCUD is poised to become a regional water supplier due to its location on the Tellico Reservoir, with nearby utilities withdrawing water from sources with significantly lower water availability such as the Little River.

Average Daily and Peak Daily demand includes demand for SBCUD customers and existing interconnects with neighboring utilities.

Demand for the proposed interconnect with Tellico Area Service Systems is based on a formal request for SBCUD to supply up to 4.0 MGD. No assumptions for increased withdrawal were made.

Allotments for the City of Alcoa and Tuckaleechee Utility District are for proposed interconnects, currently in planning phases by others, that are anticipated to be completed by the end of 2025 and projected to grow at the same rate as regional population.

Emergency Allotment is allocated for SBCUD to be able to supply the City of Alcoa and the City of Maryville with water in the event of drought conditions.

Projected Water Withdrawal (MGD)							
Year	Average Daily	Peak Daily	TASS	Alcoa	TUD	Emergency Allotment	Peak Total
2024	4.4	7.1	--	--	--	--	7.1
2025	4.4	7.2	--	0.7	0.6	--	8.5
2026	4.5	7.3	4.0	0.7	0.6	5.7	18.3
2027	4.6	7.4	4.0	0.7	0.6	5.8	18.6
2028	4.6	7.5	4.0	0.8	0.6	5.9	18.8
2029	4.7	7.6	4.0	0.8	0.6	6.0	19.0
2030	4.8	7.7	4.0	0.8	0.6	6.1	19.2
2031	4.9	7.8	4.0	0.8	0.7	6.2	19.5
2032	4.9	8.0	4.0	0.8	0.7	6.3	19.7
2033	5.0	8.1	4.0	0.8	0.7	6.4	19.9
2034	5.1	8.2	4.0	0.8	0.7	6.5	20.2
2035	5.2	8.3	4.0	0.8	0.7	6.6	20.4
2036	5.3	8.5	4.0	0.9	0.7	6.7	20.7
2037	5.3	8.6	4.0	0.9	0.7	6.8	20.9
2038	5.4	8.7	4.0	0.9	0.7	6.9	21.2
2039*	5.5	8.9	4.0	0.9	0.7	7.0	21.5
2040	5.6	9.0	4.0	0.9	0.8	7.1	21.7
2041	5.7	9.1	4.0	0.9	0.8	7.2	22.0
2042	5.8	9.3	4.0	0.9	0.8	7.3	22.3
2043	5.8	9.4	4.0	0.9	0.8	7.4	22.6
2044	5.9	9.6	4.0	1.0	0.8	7.5	22.8

Alternatives Analysis and Selection of Least Impactful Practicable Alternative

The stated purpose of the withdrawal is for public water supply. The applicant has submitted an analysis of potentially practicable alternatives to the proposed activity and provided the following discussion of those alternatives:

1. GROUNDWATER AUGMENTATION

Another alternative would be for SBCUD to establish groundwater wells and use groundwater to augment their existing water supply. TDEC’s Water Well Desktop Application indicates that water wells for residential and irrigation use in Blount County can often exceed 400 feet in depth for a yield of 20 gpm. Due to the wide availability of surface water and the high costs associated with drilling wells through rock, this alternative is not feasible.

2. WHOLESALE PURCHASE FROM NEIGHBORING UTILITIES

As discussed, many neighboring utilities currently purchase water from SBCUD, and additional interconnects and increased purchase limits are regularly requested. SBCUD has only purchased water from another utility twice in the last five years due to emergency outages. Additionally, neighboring utilities would only be able to provide limited amounts of water to SBCUD. The Little River provides limited water supply to the City of Alcoa and the City of Maryville, and therefore TUD. TASS has a reliable water source but is limited by treatment plant capacity and is currently requesting 4 MGD of water from SBCUD. Purchasing water from neighboring utilities would induce unnecessary increased strain on the neighboring systems that are currently wholesale customers of SBCUD.

3. INCREASE WITHDRAWAL LIMIT AND TREATMENT CAPACITY

With peak daily withdrawals anticipated to be 8.4 MGD by the end of 2024, SBCUD is approaching 80% of the treatment capacity of their water treatment plant. Increasing SBCUD’s withdrawal limit to be in

line with 20-year projected demands and increasing treatment plant capacity will allow SBCUD to effectively plan for required updates to their treatment capacity in a manner that allows them to provide water to neighboring utilities with limited water sources.

Based on the available information, the Division has made the preliminary determination that there is no practicable alternative to the proposed activity to accomplish the project's purpose and goals that would have less adverse impact on resource values.

Existing Conditions/Proposed Loss of Resource Values

Classified uses of Tellico Reservoir are supported with the exception of recreation, which is not supported because of Polychlorinated biphenyls (PCBS) in sediment. The affected waters (Little Tennessee River/Tellico Reservoir- 06010204) are designated as Exceptional Tennessee Waters for State endangered Hiwassee Quillwort, state threatened Large-Leaf Pondweed.

SBCUD's raw water source is the Tellico Reservoir with their raw water intake being located approximately 4.5 miles below the Chilhowee Dam. The Tellico Reservoir is impoundment of the Little Tennessee River and has a surface area of approximately 15,560 acres. The Chilhowee Dam is operated for power generation and flow from the dam varies with power generation.

Chilhowee Dam was completed in 1957. The USGS Flow Duration and Low Flows of Tennessee Streams through 1992 shows the 7Q10 at the intake for the period of record 1959-79 to be 1350 cubic feet per second (CFS).

The Division has made a preliminary determination that the activity will not result in an appreciable permanent loss of resource values.

Antidegradation

The Department's rules state a single water withdrawal will be considered de minimis if it removes less than five percent of the minimum 7-day average streamflow with a 10-year recurrence interval (7Q10) flow of the stream. If more than one withdrawal has been authorized or proposed in a segment and the total of the authorized and proposed withdrawals uses no more than 10% of the assimilative capacity, or 7Q10 low flow, they are presumed to be de minimis.

The published 7Q10 for the period of record from July 1, 1958 – March 31, 1979, at the gage 03518300 Little Tennessee River Below Chilhowee Dam, TN in this river segment is 1350 CFS.

The withdrawal rate authorized by this permit is 22.8 MGD for public water supply. Tellico Area Services System also withdraws water from Tellico Reservoir. They are seeking to withdraw 10 million gallons per day. Together the two withdrawals are 3.76 % of the 7Q10 of the Little Tennessee River, Tellico Reservoir.

In accordance with the Tennessee Antidegradation Statement (Rule 0400-40-03-.06), the Division has made the preliminary determination that the proposed withdrawals will not exceed more than 10% of the 7Q10 low flow, and therefore will result in no more than de minimis degradation of an ETW.

For more information, please reference Tennessee's Antidegradation Statement which is found in Chapter 0400-40-03 of the Rules of the Tennessee Department of Environment and Conservation.