# **Appendix H**

## **Results of Consultation Performed under**

## the National Historic Preservation Act

Tennessee Valley Authority Reservoir Operations Study – Final Programmatic EIS



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#### DRAFT

#### PROGRAMMATIC AGREEMENT AMONG THE TENNESSEE VALLEY AUTHORITY AND THE ALABAMA, GEORGIA, MISSISSIPPI, NORTH CAROLINA, TENNESSEE, AND VIRGINIA STATE HISTORIC PRESERVATION OFFICERS Revised 2/11/2004

WHEREAS, the Tennessee Valley Authority (TVA) operates a system of dams and reservoirs on the Tennessee River and its tributaries; and

WHEREAS, TVA proposes to revise its reservoir operating policy ("Undertaking") to provide greater overall public benefit as more fully described in Appendix A to this agreement; and

WHEREAS, the reservoirs affected by the undertaking are Watauga, South Holston, Boone, Cherokee, Douglas, Norris, and Pickwick in the state of Tennessee; Fontana, Chatuge and Hiwassee in the state of North Carolina; Chatuge, Nottely, and Blue Ridge in the state of Georgia; Wheeler and Pickwick in the State of Alabama; Pickwick in the state of Mississippi; and South Holston in the state of Virginia; and

WHEREAS, TVA has consulted with the State Historic Preservation Officers (SHPO) for the states of Alabama, Georgia, Kentucky, Mississippi, North Carolina, Tennessee and Virginia, and has determined the Area of Potential Effect (APE) for the Undertaking which consists of two parts, the shoreline erosion zone (direct APE) and the private development zone (indirect APE); and

WHEREAS, TVA has performed historic property identification surveys of portions (Appendix B) of the APE and has identified numerous historic properties eligible for listing in the National Register of Historic Places (Historic Properties); and

WHEREAS, TVA has determined that the revised reservoir operating policy could have an adverse effect on Historic Properties pursuant to 36 CFR Part 800, regulations effective January 11, 2001, implementing Section 106 of the National Historic Preservation Act (16 USC 470f); and

WHEREAS, TVA has invited the Cherokee Nation, Eastern Band of Cherokee Indians, United Keetoowah Band, Muscogee (Creek) Nation of Oklahoma, Kialegee Tribal Town, Thlopthlocco Tribal Town, Alabama Quassarte Tribal Town, Alabama-Coushatta Tribe, Chickasaw Nation, Poarch Band of Creek Indians, Choctaw Nation of Oklahoma, Jena Band of Choctaw Indians, Seminole Nation of Oklahoma, Seminole Indian Tribe, the Shawnee Tribe, and the Eastern Shawnee Tribe of Oklahoma to be consulting parties; and

WHEREAS, the Eastern Band of Cherokee Indians has requested to be a concurring party to this agreement;

NOW THEREFORE, TVA and the Alabama, Georgia, Mississippi, North Carolina, Tennessee and Virginia SHPOs agree that the Undertaking shall be implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on National Register listed or eligible historic properties, and that these stipulations shall govern the Undertaking and all of its parts until this Programmatic Agreement expires or is terminated.

#### **STIPULATIONS**

TVA will ensure that the following measures are carried out:

#### I. Identification of Historic Properties

**A. Identification Plan.** In consultation with the SHPOs, TVA will develop and implement a Historic Property identification plan ("Identification Plan") for evaluating TVA-managed shoreline property within the APE not yet investigated for the presence of historic properties. The Identification Plan shall specify a schedule for investigation of affected reservoirs in consultation with the appropriate SHPOs and other signatories. Contingent upon availability of funds, TVA will seek to complete the survey of affected reservoir shorelines within five years after execution of this agreement. TVA shall submit the Identification Plan to the signatories for review and comment within six (6) months of execution of this agreement or implementation of the undertaking, whichever occurs later.

**B. Identification Reports.** Reports documenting the results of identification surveys will be submitted to the appropriate SHPOs and other signatories annually along with an annual assessment of erosion activity (see Stipulation II).

#### **II. Erosion Monitoring and Assessment**

**A. Monitoring Plan.** In consultation with the SHPOs, TVA will develop and implement a plan ("Monitoring Plan") to monitor the rate of shoreline erosion at sites on affected TVA reservoirs where historic properties are located. This plan would help monitor any increased rate of erosion resulting from this undertaking's incremental operational changes. The Monitoring Plan shall specify a schedule for inspecting affected reservoirs at an interval of no greater than five years to determine the condition of Historic Properties within the APE. The Monitoring Plan will specify criteria for assessing the incremental erosion impacts on historic properties. TVA shall submit the Monitoring Plan to the signatories for review and comment within six (6) months of execution of this agreement or implementation of the undertaking, whichever occurs later.

**B. Erosion Assessment.** Under the Monitoring Plan, TVA will conduct an inspection of Historic Properties on the affected reservoirs to further assess the impacts of the

incremental changes in reservoir operations. Sites determined to be adversely affected by increased erosion will be evaluated to determine an appropriate treatment measure. A report of these investigations will be prepared and sent to all signatories for review. Erosion assessments will be made in consultation with the appropriate SHPO and other consulting parties.

#### **II. Erosion Treatment**

- **A. Treatment Criteria.** Historic Properties identified as being adversely affected by erosion will be evaluated to determine an appropriate treatment measure. Site-specific treatment measures will be reviewed and commented upon by the appropriate SHPO and other signatories. TVA will take these comments into account as it addresses appropriate treatment.
- **B. Treatment Alternatives.** In consultation with the appropriate SHPO and other signatories, TVA will determine the appropriate treatment measure to be applied to Historic Properties found to be adversely affected by reservoir shoreline erosion. Treatment alternatives include but are not limited to:
  - 1. Shoreline stabilization using riprap, bio-engineering, or other methods as determined appropriate
  - 2. Data recovery excavations

#### III. Treatment of Human Remains:

TVA shall ensure that the treatment of any human remains and associated funerary objects discovered within the project area complies with all applicable state and federal laws, including the Native American Graves Protection and Repatriation Act (NAGPRA), concerning treatment of human remains. Should human remains be encountered on federal land during monitoring investigations, TVA shall immediately notify federally recognized Indian tribes that may have a cultural affiliation with the remains pursuant to the provisions of NAGPRA. TVA will consult with these tribes regarding the appropriate disposition of these remains.

#### **IV. Historic Properties on Private lands**

Although TVA has no control over adjacent private lands where reservoir-related development may occur, TVA has authority under Section 26a of the TVA Act to regulate activities that could affect flood control, navigation or public lands. To the extent allowable under this authority, TVA will seek to assist private developers to avoid adversely affecting historic properties within the indirect APE of the ROS.

#### V. Reports

TVA shall prepare an annual report on its Historic Property identification and shoreline erosion monitoring activity, and shall submit this report to the SHPOs and other signatories for review and comments. This report will include a description of all shorelines surveyed and monitored, and of any assessments conducted of the conditions of historic sites existing within these areas. The assessment will compare site condition to previously reported assessments of site condition, and will include a rating of treatment need according to criteria established in the monitoring plan. All parties shall be afforded thirty (30) days to review and comment on these reports.

#### VI. Administrative Conditions

- 1. If the commencement of implementation of Stipulations I-IV has not occurred within one (1) year from the date of this agreement's execution or implementation of the undertaking, whichever occurs later, TVA, the SHPOs, and other signatories shall review the agreement to determine whether the agreement should be extended. If an extension is deemed necessary, TVA, the SHPOs, and other signatories will consult to make appropriate revisions to the agreement in accordance with 36 CFR § 800.6(c).
- 2. If the commencement of implementation of Stipulations I-IV has not occurred within three (3) years from the date of this agreement's execution or implementation of the undertaking, whichever occurs later, this agreement shall be considered null and void, unless the signatories have agreed in writing as provided in Paragraph VI (1) above to an extension for carrying out its terms. Upon the agreement's becoming null and void, TVA, the SHPOs, and the consulting parties will resume consultation pursuant to 36 CFR § 800.
- 3. The signatories to this agreement may agree to amend the terms of the agreement. Such amendment shall be effective upon the signatures of all signatories to this agreement, and the amendment shall be appended to the agreement as an attachment.
- 4. Should any signatory object within thirty (30) days after receipt of any plans, specifications, contracts, or other documents provided for review pursuant to this agreement, TVA shall consult with the objecting party to resolve the objection.
- 5. If any signatory to this agreement determines that the terms of the agreement cannot be or are not being carried out, the signatories shall consult to seek an amendment to the agreement. If the agreement is not amended, TVA or any individual SHPO may terminate the agreement, except that termination by an individual SHPO shall only terminate the application of the agreement within the jurisdiction of that SHPO.

**EXECUTION** of this Programmatic Agreement by the Tennessee Valley Authority and the Alabama, Georgia, Mississippi, North Carolina, Tennessee and Virginia State Historic Preservation Officers, the submission of documentation and filing of this Agreement with the Advisory Council, and implementation of its terms evidence that TVA has, in accordance with Section 106 of the National Historic Preservation Act, taken into account the effects of this undertaking on historic properties and afforded the Advisory Council an opportunity to comment.

#### **SIGNATORY PARTIES:**

TENNESSEE VALLEY AUTHORITY	
By: Kathryn J. Jackson, Executive Vice President, River S	Date: System Operations and Environment
ALABAMA STATE HISTORIC PRESERVATION	OFFICER
By:	Date:
GEORGIA STATE HISTORIC PRESERVATION O	DFFICER
By:	Date:
MISSISSIPPI STATE HISTORIC PRESERVATION	OFFICER
By:	Date:
NORTH CAROLINA STATE HISTORIC PRESERV	VATION OFFICER
By:	Date:
TENNESSEE STATE HISTORIC PRESERVATION	N OFFICER
By:	Date:
VIRGINIA STATE HISTORIC PRESERVATION C	DFFICER
By:	Date:

### **CONCURRING PARTIES:**

#### EASTERN BAND OF CHEROKEE INDIANS

By:	Date:
Title:	
By:	Date:
Title:	
By:	Date:
Title:	
By:	Data
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Title:	

### Appendix A Preferred Reservoir Operating Policy Alternative

**Purpose.** The purpose of the Preferred Alternative is to capture the balance of public benefits that would result if the reservoir system is operated to increase both reservoir and tailwater recreational opportunities. This alternative was created after extensive public review of the Draft Environmental Impact Statement (DEIS) and additional analyses. The goal was to enhance public value while minimizing impacts to the environment and to other operating objectives. The alternative combines and adjusts desirable features of the alternatives identified in the DEIS to create a more feasible, publicly responsive alternative.

A central component in formulating the Preferred Alternative was flood risk. With the exception of the No Action Alternative (Base Case), detailed analyses indicated that all of the alternatives evaluated in the DEIS would result in unacceptable increases in the risk of flooding at one or more critical locations in the Tennessee Valley. Addressing flood risk was the first step in creating the Preferred Alternative.

DEIS Reservoir Recreation A Alternative was used as a baseline for developing the first in a series of eight Preferred alternatives. TVA used this series of alternatives to eliminate increases in average annual flood damages at critical locations. TVA also used this series of alternatives to develop a more equitable way of balancing pool levels among the tributary reservoirs. Each successive alternative included modifications to individual project flood guides and/or regulating zones that were intended to address problem areas while providing changes in reservoir pool levels that would enhance a range of benefits. Changes to individual project guide curves were made both to resolve flood damage issues immediately downstream from that project, as well as downstream at damage centers such as Chattanooga and Savannah, Tennessee. As the flood risk issues were addressed, TVA included enhancements to reservoir and tailwater recreation and navigation, while considering impacts to low-cost/reliable electricity, water quality, and water supply. As part of these simulations, TVA investigated using both flow constraints and target reservoir elevation constraints as the mechanism for restricting drawdown from June through Labor Day. Based on the results of these simulations, TVA has determined that operating objectives could best be met by using flow constraints that reduce impacts to water quality and power system costs. Flood risk

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considerations indicated that earlier fill of tributary and main river projects was not feasible. No changes in seasonal water levels on Kentucky Reservoir were included as part of this alternative, responding to concerns expressed by the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, state agencies, and some members of the public.

**Changes in Operations.** Under the Preferred Alternative, tributary reservoir drawdown would be restricted June 1 through Labor Day, summer operating zones would be maintained through Labor Day at four additional main river projects, and higher winter pool operating ranges would be established at 10 tributary reservoirs. Base Case minimum flows, except for the increases noted below, and the dissolved oxygen (DO) targets adopted following completion of the 1990 Lake Improvement Plan would continue to be met.

Subject to flood control operations or extreme drought conditions, scheduled releases would be provided at five additional tributary projects to increase tailwater recreational opportunities. (Under the No Action Alternative, recreational releases are not formally scheduled at these five projects and are made only after other operating requirements have been met.)

Subject to each project meeting its own minimum flow requirements and a proportionate share of the system minimum flow requirements, elevations on 10 tributary reservoirs would be maintained as close as possible to the flood guides from June 1 through Labor Day. When the volume of water in storage is more than the system minimum operations guide curve, the weekly average system minimum flow requirement measured at Chickamauga Dam would be increased each week from 14,000 cubic feet per second (cfs) the first week of June to 25,000 cfs the last week of July. Beginning August 1 and continuing through Labor Day, the weekly average flow requirement would be 29,000 cfs. If the volume of water in storage is less than the system minimum operations guide (MOG) curve, only 13,000 cfs weekly average minimum flows would be released from Chickamauga Dam between June 1 and July 31, and only 25,000 cfs weekly average minimum flows would be released from August 1 through Labor Day. Continuous minimum flows would be provided in the Apalachia bypass reach from June 1 through November 30.

Under the Preferred Alternative, the winter flood guide levels would be raised on 10 tributary reservoirs based on flood risk analysis. On Wheeler Reservoir, the minimum winter elevation would be raised by 0.5 foot to better ensure an 11-foot minimum depth in the navigation channel. Steady water releases up to 25,000 cfs of flow would be

provided as necessary at Kentucky Dam to maintain a tailwater elevation of 301. Great Falls Reservoir would be filled earlier to reach full summer pool by Memorial Day. On Fort Loudoun, Watts Bar, and Chickamauga reservoirs, the fill period would follow the Base Case fill schedule during the first week in April. The fill schedule on these three reservoirs then would be delayed to reach summer operating zone by mid-May. Specific details of the Preferred Alternative are presented in Tables 1 and 2.

During critical power system situations, reservoir operations may temporarily deviate from these operating guidelines to meet power system needs. In such situations, water stored in the reservoirs would be used to preserve the reliability of the power system.

Achievement of Objectives. The Preferred Alternative was developed to combine the desirable features of the alternatives identified in the DEIS. Responding to the values and objectives expressed by the public during the EIS review process, this alternative was designed to re-balance operating system priorities to achieve TVA's goal of increasing the overall public value of the reservoir system consistent with, but not limited to, the operating priorities established by the TVA Act.

Under the Preferred Alternative, TVA would preserve the primary reservoir system operating objectives of flood control, navigation, and power generation. It would increase reservoir and tailwater recreation opportunities. This alternative would not increase annual average flood damages at any critical location within the Tennessee Valley, including Chattanooga. Adoption of the Preferred Alternative would increase the minimum depth of the Tennessee River navigation channel at two locations and would maintain power system reliability while lessening impacts to delivered cost of power compared to other alternatives. This alternative also would maintain tailwater minimum flows and dissolved oxygen targets while minimizing impacts on reservoir water quality, and would provide for more balanced tributary reservoir levels across the system.

Policy Alternative		Changes to Reservoir Operating Guidelines (Guide Curves)		Changes to Water Release Guidelines
Preferred Alternative	•	Subject to each project meeting its minimum flow requirements and a proportionate share of the system minimum flow requirements, maintain tributary reservoir elevations as close as possible to the flood guides during the summer (June 1 through Labor Day)	•	If above system MOG curve, increase weekly average minimum flow from Chickamauga each week during June and July (beginning with 14,000 cfs the 1 <sup>st</sup> week in June increasing to 25,000 the last week in July)
	• •	Begin unrestricted tributary reservoir drawdown after Labor Day Maintain Base Case summer operating zone through Labor Day	•	If below system MOG curve, release 13,000 cfs weekly average minimum flow from Chickamauga during June and July
	• •	for 10 tributary reservoir projects Great Falls—Fill reservoir to summer pool by Memorial Day	•	Release 29,000 cfs weekly average minimum flow from Chickamauga from August 1 through Labor Day if above system MOG or 25,000 cfs if below system MOG curve
	• •	Raise minimum winter pool elevation by 0.5 foot at Wheeler Follow the Base Case fill schedule during the first week in April for	•	Provide continuous minimum flows up to 25,000 cfs at Kentucky, as needed, to maintain minimum tailwater elevation of 301
		Fort Loudoun, Watts Bar, and Chickamauga. Then, delay the till to reach summer operating zone by mid-May	•	Maintain Base Case minimum flow commitments with additional scheduled tailwater recreation releases
			•	Provide 25 cfs in Apalachia bypass reach from June 1 through November 1

Table 1. General description of operations under the Preferred Alternative. [to be incorporated into EIS Table 3.3-01]

Mainstem Reservoirs	<ul> <li>Maintain Base Case summer operating zone through Labor Day for Chickamauga, Guntersville, Pickwick, and Wheeler</li> <li>Eliminate 1 foot drawdown from August 1 to November 1 for Watts Bar</li> <li>No changes to the following reservoirs for the reasons described</li> <li>Fort Loudoun—maintains summer operating zone through October 31</li> <li>Nickajack—run-of-river project</li> <li>Wilson—maintains summer operating zone through November 30</li> <li>Kentucky – potential resource and flood risk impacts</li> </ul>
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Tributary Reservoirs	<ul> <li>Subject to each project meeting its minimum flow requirements, mainta proportionate share of the system minimum flow requirements, mainta elevations as close as possible to the flood guides during the summer (June 1 through Labor Day) for Blue Ridge, Chatuge, Cherokee, Doug Fontana, Nottely, Hiwassee, Norris, South Holston, and Watauga</li> <li>No changes to the following reservoirs for the reasons described:</li> <li>Apalachia—run-of-river project</li> <li>Bear Creek—maintains summer elevations through October 31 Fort Patrick Henry—run-of-river project</li> <li>Cedar Creek—maintains summer elevations through October 31 Fort Patrick Henry—run-of-river project</li> <li>Melton Hill—run-of-river project</li> <li>Normandy—subject to meeting downstream minimum flows sum elevations are maintains summer elevations through October 31 Tittle Bear Creek—maintains summer elevations through October 31 Creat Falls—maintains summer elevations through October 31 Tittle Bear Creek—maintains summer elevations through October 31 Utill—run-of-river project</li> <li>Welton Hill—run-of-river project</li> <li>Wilbur—run-of-river project</li> <li>Wilbur—run-of-river project</li> <li>Wilbur—run-of-river project</li> </ul>
Alternative Characteristics	Modify summer reservoir elevations and/or drawdown dates

Table 2. Components of the Preferred Alternative. [to be incorporated into EIS Appendix B]

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Alternative Characteristics	<ul> <li>Tributary Reservoirs</li> </ul>	Mainstem Reservoirs
Modify winter reservoir elevations and/or fill dates	<ul> <li>Raise winter flood guide to elevations based on flood risk analysis for Boone, Chatuge, Cherokee, Douglas, Fontana, Hiwassee, Norris, Nottely, South Holston, and Watauga</li> <li>Great Falls—Fill reservoir to summer pool by Memorial Day</li> </ul>	<ul> <li>Raise minimum winter pool elevation by 0.5 foot at Wheeler</li> <li>Follow the Base Case fill schedule during the first week in April for Fort Loudoun, Watts Bar, and Chickamauga. Then, delay the fill to reach summer operating zone by mid-May</li> </ul>
Modify drawdown restrictions	<ul> <li>Restrict drawdown June 1 through Labor Day and proportion withdrawals to meet system minimum flows to keep tributary reservoir pool elevations as close as possible to the flood guides</li> </ul>	<ul> <li>Maintain Base Case summer operating zone at Chickamauga, Guntersville, Wheeler and Pickwick through Labor Day</li> </ul>
Modify water releases	<ul> <li>Same as Base Case minimum flow commitments except for additional scheduled tailwater recreation releases as shown below</li> <li>Apalachia provide 25 cfs continuous minimum flow in bypass reach from June 1 through November 30</li> </ul>	<ul> <li>If above system MOG curve, increase weekly average minimum flow from Chickamauga each week during June and July (beginning with 14,000 cfs the 1<sup>st</sup> week in June increasing 1,000 cfs each week for the next 3 weeks, then increasing 2,000 cfs each week for the next 4 weeks and ending with 25,000 the last week in July)</li> <li>If below system MOG curve, release 13,000 cfs weekly average minimum flow from Chickamauga during June and July</li> <li>Release 29,000 cfs weekly average minimum flow from Chickamauga from Chickamauga from August 1 through Labor Day if above system MOG or 25,000 cfs if below system MOG curve</li> <li>Provide continuous minimum flows up to 25,000 cfs at Kentucky, as needed, to maintain minimum tailwater elevation of 301</li> </ul>

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Alternative Characteristics	Tributary Reservoirs	Mainstem Reservoirs
Modify tailwater recreation	<ul> <li>No change in tailwater recreation releases below Great Falls, Ocoee #2, Ocoee #3, Tims Ford, and Upper Bear Creek reservoirs</li> </ul>	No change
releases	<ul> <li>Provide tailwater recreation flows for the projects as described below:</li> <li>Apalachia May 1 through October 31 (Saturdays and Sundays only)</li> </ul>	
	Minimum flow only prior to 10 a.m. Memorial Day through Labor Day (7 days per week) 1 unit use from 10 a.m. – 11 a.m.	
	2 unit use from 11 a.m. – 7 p.m. (8 hours) Labor Day through October 31 (Saturdays only) 1 unit use from 10 a.m. – 11 a.m. 2 unit use from 11 a m. – 3 n.m. (4 hours)	
	Norris	
	May 1 through October 31 (Saturdays and Sundays only) Minimum flow only prior to 10 a.m. Memorial Dav through Labor Dav (Saturdays and Sundays only)	
	1 unit use from 10 a.m. – 2 p.m. (4 hours) 2 unit use from 2 p.m. – 6 p.m. (4 hours)	
	Labor Day through October 31 (Saturday only) 1 unit use from 10 a.m. – 1 p.m. (3 hours)	
	2 unit use from 1 p.m. – 4 p.m. (3 hours) • Occeee #1	
	June 1 through August 31 (Tuesdays and Wednesdays only) Minimum flow only until 11 a.m.	
	Minimum 2 unit use from11 a.m. to 5 p.m. (6 hours) • South Holston	
	April 10 through October 31 Increase minimum flow balow the weir to 150 of	
	<ul> <li>Watauga operation for recreation flows below Wilbur</li> <li>Memorial Dav through Labor Dav</li> </ul>	
	Mondays – Fridays - Lunit use from 1 p.m. – 6 p.m. (5 hours) Saturdays – 1 unit use from 12 p.m. – 1 p.m.	
	2 unit use from 1 p.m. – 5 p.m. (4 hours)	
	1 unit use from 5 p.m. – 6 p.m.	
	Labor Day unougn October 31 Saturdays only - 1 unit use from 1 p.m. – 6 p.m. (5 hours)	

Table 2. (Continued)

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#### Appendix B Status of Archaeological Survey of the Area of Potential Effect

Reservoir	Surveyed*	Unsurveyed**	Total***	% Surveyed
Blue Ridge	51.2	16.9 (1)	68.1	75.2%
Chatuge	39.9	88.1	128	31.2%
Cherokee	199.4	195.1	394.5	50.5%
Fontana	26.8	211	237.8	11.3%
Hiwassee	126.1	55.4 (1)	181.5	69.5%
Norris	223	585.4	808.4	27.6%
Nottley	49.3	52.8	102.1	48.3%
Pickwick	293.9	196.7	490.6	59.9%
South Holston	48.6	133.3	181.9	26.7%
Watuaga	41.7	63.3	105	39.7%
Wheeler	566.9	470.3	1027.2	55.2%
Total	1756.1	2105.6	3851.7	45.6%

#### Status of Affected Reservoir Shoreline Survey.

Numbers reflect mileage along shoreline per reservoir

\*This survey data was based on the shoreline information coded 1, 2 and 3 in the database. This data includes buffers for protection/reliability of original recordation. Therefore includes some areas that have not been considered surveyed, but should not be of an amount that would dramatically effect these numbers.

\*\*This data was obtained by subtracting Surveyed from Total.

\*\*\*Shoreline mileage obtained from Shoreline Management Initiative Table.

(1) Approximately 90% of the unsurveyed shorelines on these two reservoirs consist of slopes greater than 20% and are therefore regarded to have a very low potential to contain archaeological resources.

Reservoir	Total Miles	Surveyed	Unsurveyed	% Surveyed
Chatuge	GA	GA	GA	GA
J	70.6	35.5	35.1	50.3%
	NC	NC	NC	NC
	57.4	4.8	52.6	8.4%
Pickwick	TN	TN	TN	TN
	48.8	41.8	6.9	85.8%
	MS	MS	MS	MS
	71.7	48.7	22.9	68.0%
	AL	AL	AL	AL
	370.1	203.4	166.9	55.0%
South Holston	TN	TN	TN	TN
	134.2	10.9	123.3	8.1%
	VA	VA	VA	VA
	47.7	37.7	10	79.0%

#### Status of Shoreline Survey on Multi-State Reservoirs

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