

## **FINDING OF NO SIGNIFICANT IMPACT (FONSI)**

### **LONE MOUNTAIN SHORES CORPORATION REQUEST FOR APPROVAL OF SHORELINE MANAGEMENT PLAN (SMP) FOR TRACT NOS. XNR-836 AND XNR-837 AND SECTION 26A APPROVAL FOR COMMUNITY DOCK AND BOAT RAMP AT CLINCH RIVER MILE (CRM) 131.6, RIGHT BANK NORRIS RESERVOIR CLAIBORNE COUNTY, TENNESSEE**

#### **Background**

In 1998, TVA received an inquiry from Tennessee Lone Mountain Shores Corporation about the process that would be required to apply for shoreline development permits to build community facilities and individual private docks along 10.5 linear miles of TVA-owned shoreline fronting Norris Reservoir. This shoreline development activity would be in association with the development of a residential and retirement community on 2400 acres of adjoining private land fronting TVA Tract Nos. XNR-836 and -837. Because of the length of the shoreline affected and the potential for impacts to known sensitive biological and cultural resources along the shoreline, TVA requested that the applicant, Red Creek Ranch, submit environmental information which could be used by TVA for an environmental assessment (EA) and SMP. While EA preparation was underway, the applicant requested, through an additional application, approval of a community dock and boat ramp at Clinch River Mile 131.6R. The applicant-prepared EA, which was independently evaluated and used for preparation of the TVA EA, assesses the impacts of the community dock and boat ramp proposals before TVA, as well as the SMP. The TVA EA is attached and incorporated by reference.

The proposed shoreline management plan and Section 26a application for the community facilities were announced through U.S. Army Corps of Engineers Public Notice 99-62, dated October 12, 1999. In addition, TVA circulated a draft EA to 12 federal and state agencies on October 27, 1999. Responses to the two notices were received from the East Tennessee Development District, Tennessee Historical Commission (THC), Tennessee Commission of Indian Affairs, Tennessee Wildlife Resources Agency (TWRA), and the U.S. Fish and Wildlife Service (FWS). TWRA and FWS supported Alternative 2 in the EA, which contained shoreline management standards that would not allow individual private docks. TVA also conducted informal consultation with FWS on measures to protect potential Indiana bat habitat, and FWS agreed that implementation of measures to restrict vegetation removal and a limitation on tree removal to the period October 15 to March 31 would prevent adverse impacts to the species. The Tennessee Commission of Indian Affairs requested a copy of the archaeological survey, which was subsequently provided. The East Tennessee Development District found no conflicts with regional plans or programs.

THC requested phase II archaeological testing of sites on the TVA land. TVA replied by submitting additional information about one site, and requesting that it be allowed to proceed with the current shoreline management plan approval using the phased identification and evaluation approach in 36 CFR Section 800.4(b)(2) of the National Historic Preservation Act Regulations. Under this approach, TVA would seek to



completely avoid the archaeological sites. However, if that was not possible, a Phase II archaeological survey would be conducted at that time. By letter of December 28, 1999, THC concurred in the phased identification approach.

### **Alternatives**

Under all alternatives, the TVA-owned shoreline is considered residential access property and will be identified as such in the Norris Reservoir Land Management Plan that is currently being prepared by TVA. As part of the ongoing reservoir planning process, TVA will categorize all residential access shoreline as described in the SMI EIS.

The EA prepared for the proposed SMP and Section 26a approval of the community water use facility application evaluates the potential environmental impacts of four alternatives for responding to residential shoreline development applications. Under Alternative 1, TVA would consider permits from individuals for private water use facilities using guidelines, standards, or regulations in effect at the time of the application. An SMP would not be prepared, and the community dock and boat ramp would not be approved; however, the shoreline fronting Long Mountain Shores would ultimately be categorized by TVA and included in the Norris Reservoir Land Management Plan. Applications for community docks could be considered later for those property owners which have physical or environmental constraints that would preclude the development of individual docks, in accordance with Shoreline Management standards previously adopted in 1999. Alternative 1 is considered the No Action Alternative because it represents a continuation of current TVA shoreline management direction.

Under Alternative 2, only community docks would be considered. The two proposed community dock locations would be at reservoir embayments opposite Clinch River Miles (CRM) 128.7R and 131.6R. No individual boat docks or other private shoreline alterations would be permitted under Alternative 2.

Under Alternatives 3 and 4, the SMP presented in the EA would be adopted, categorizing the TVA-owned shoreline in front of Lone Mountain Shores into shoreline protection, residential mitigation, and managed residential. This SMP could be updated when the Reservoir Land Plan is considered for approval.

Under Alternatives 3 and 4, TVA would consider a combination of private water use facilities and two community areas. The SMP would categorize shoreline into protected shoreline, residential mitigation shoreline, and managed residential shoreline zones. No docks or private water use facilities would be allowed in protected shoreline, which would be so classified because of the presence of wetlands. Applications for docks and vegetation management in residential mitigation shoreline would be considered only if sensitive resources such as archaeological sites could be avoided or the impacts mitigated to insignificant levels. Applications for docks and vegetation management would generally be considered in managed residential shoreline reaches, unless TVA's review of individual permit applications reveals new information about previously unidentified resources that need to be avoided, protected, or mitigated to insignificant levels.



The community dock at CRM 131.6R would be approved under both alternatives. Alternative 3 would allow two community boat launching ramps and courtesy piers, while Alternative 4 would allow boat launching ramps and community boat slips for interior property owners. Alternative 4 also differs from Alternative 3 in that additional mitigation measures would be included for private property and TVA property to enhance water quality protection, aesthetics and recreation, and to protect sensitive habitats. This includes the prohibition of individual boat ramps throughout the development, and limiting the number of private water use facilities for Area 4 (an area of steep slopes) to a maximum of three.

### **Impacts Assessment**

TVA concluded that implementation of any of these alternatives would result in insignificant environmental impacts. Under Alternative 1, No Action, applications for individual docks and community docks could be considered in the future. With the absence of a coordinated SMP, there would be more potential for shoreline disturbance as the buildout of Lone Mountain Shores approaches the projected 575 residences. Implementation of Alternative 2 would likely slow lot sales and eventual development, as well as negatively affect lakefront property values because individual docks would not be considered. Under alternative 3, the inability of interior lot owners to have water access would reduce the impacts to the reservoir from recreational boat traffic, but may increase impacts to aesthetics because no mitigation measures would apply on the private property. Under Alternative 4, additional environmental safeguards would be incorporated into the proposal to protect scenic quality and water quality from residential development activities.

Approval of the boat ramp at CRM 131.6R under Alternatives 3 or 4 would result in 0.06 acres of impact to jurisdictional wetlands. To mitigate this impact, the applicant would plant 400 trees or shrubs consisting of 100 willow oak, 100 black willow, 100 button bush, and 100 common persimmon in a wetland at CRM 133R. Ten wood duck boxes also would be installed in this area. By letters of December 17, 1999 and January 10, 2000, the U.S. Army Corps of Engineers indicated their concurrence in the wetland mitigation plan.

Approval of the SMP under Alternatives 3 or 4 also could have the potential to affect cultural resources potentially eligible for the National Register of Historic Places. Accordingly, the applicant would avoid disturbing archaeological sites and cemeteries if possible. If the archaeological resources cannot be avoided, the lot owners would be required to pay for Phase II site evaluation of the archaeological site.


Approval of the SMP under Alternatives 3 or 4 also would affect potential summer habitat for the endangered Indiana bat. To reduce the potential for impact, live or dead hardwood trees greater than 6 inches diameter at breast height can only be removed with TVA approval between October 15 and March 31 when Indiana bats are not present.



The EA found that impacts to other resources from adoption of the proposed SMP and approval of the community dock and boat ramp would be insignificant. The resources evaluated included traffic congestion, socioeconomic conditions, recreation, terrestrial and aquatic ecology, air quality, water quality, public utilities, and floodplains. These resources would not be significantly affected on an individual or cumulative basis. TVA prefers Alternative 4, as it protects sensitive shoreline resources, provides additional mitigation measures to reduce impacts, and allows reasonable access to the water for all potential lot owners.

#### Conclusion and Findings

After review of the EA, TVA finds that the impacts of adopting the SMP and approving the community dock and boat ramp for the Lone Mountain Shores development would not have a significant impact on the quality of the environment, as the attached commitments are implemented. Accordingly, an environmental impact statement is not required.

*for*   
Jon M. Lohey  
Manager, NEPA Administration  
Environmental Policy and Planning  
Tennessee Valley Authority

3-7-00  
Date



**LONE MOUNTAIN SHORES  
NORRIS RESERVOIR  
CLAIBORNE COUNTY, TENNESSEE**

**Commitment List**

1. Private Water Use Facility Restrictions. No individual ramps will be allowed adjacent to lakefront lots. The total number of private water use facilities in Area 4 will be limited to 3. Where permitted by TVA, shoreline stabilization will be accomplished by riprap and/or shoreline vegetation plantings with native vegetation (willows, buttonbush, etc). No retaining walls would be allowed. For all other facilities, a Section 26a permit must be obtained by the purchaser of lakefront lots for any and all improvements made to their property below the 1044-foot contour line. Improvements shall include, but are not limited to, docks, boathouses, shoreline maintenance, walkways, etc.
2. Use of SMI Vegetation Management Standards. Any cutting, trimming, or other alteration or removal of vegetation below the 1044-foot contour line cannot be undertaken without approval from TVA under Section 26a of the TVA Act. All such vegetation management practices shall be in accordance with the provisions of Section 2.8.3 of the SMI FEIS. Pathways will be permitted across the TVA public lands only in accordance with approved vegetation management plans to access TVA-approved private or communal dock facilities.
3. Community Docks. At community docks, fuel sales, boat/motor repair or sales, materials or provisions sales and other amenities typically provided by commercial marinas will be prohibited.
4. Wetland Mitigation. The loss of a 0.06-acre portion of Wetland 1, located in the Community Dock I area, will be mitigated by LMS as outlined in the mitigation plan in Appendix 3 of this EA. No additional disturbance to wetland areas 2-7 (including construction of pathways or private use facilities) will be permitted. The mitigation plan will include a combination of 400 woody tree species and placement of 10 wood duck boxes in and around Area 1 Wetland 8, specifically in the Protected Shoreline and Managed Residential shoreline of the cove. The plantings would include four species: 100 Willow Oak, 100 Black Willow, 100 Button Bush, and 100 Common Persimmon. LMS will schedule joint pre-construction site inspections with TVA and USACE at a mutually agreeable time prior to initiation of on-the-ground construction at Community Dock I to ensure minimal additional direct effects on remaining wetland areas.
5. Endangered Species Protection. Live or dead hardwood trees greater than 6 inches in diameter at breast height (dbh) shall be removed from TVA lands only after receipt of TVA approval of a vegetation management plan and between October 15 and March 31.
6. Stream Obstructions. No roads, bridges, or culverts or any obstruction will be constructed over tributary streams of the Clinch River or below the 1044-foot contour elevation without prior review and Section 26a approval by TVA.
7. Cemeteries. LMS will provide for easements to the 1044-foot contour to allow for public access to Lewis Cemeteries #41 and #42 (40CE96-97). LMS will construct appropriate fencing for protection of these cemeteries.



8. Archaeological Sites. Shoreline above archaeological sites potentially eligible for listing on the National Register of Historic Places (NRHP) will be categorized within Residential Mitigation shoreline. LMS will identify the areal extent to lot purchasers and educate them on the importance of avoiding effects to these areas. In reviewing the lot owner's Section 26a application for activities to be conducted below the 1044-foot contour line, if impacts to the archaeological sites cannot be avoided, TVA would conduct a Phase II survey of the sites that would be impacted. The cost of the Phase II survey would be borne by the lot owner.



# **ENVIRONMENTAL ASSESSMENT**

## **SHORELINE MANAGEMENT PLAN, COMMUNITY DOCK, AND BOAT LAUNCHING RAMP LONE MOUNTAIN SHORES NORRIS RESERVOIR CLAIBORNE COUNTY, TENNESSEE**

**TENNESSEE VALLEY AUTHORITY  
RESOURCE STEWARDSHIP  
CLINCH-POWELL WATERSHED TEAM  
MARCH 2000**

**For More Information, Please Contact:**

Stanford E. Davis  
Environmental Scientist, Northeast Region  
Resource Stewardship  
2611 West Andrew Johnson Highway  
Morristown, Tennessee 37814  
(865) 632-3792  
sedavis2@tva.gov

Harold M. Draper  
NEPA Specialist  
Environmental Policy and Planning  
400 West Summit Hill Drive  
Knoxville, Tennessee 37902  
(865) 632-6889  
hmdraper@tva.gov

**Environmental Information Submitted by:**

Barge, Waggoner, Sumner and Cannon, Inc.  
BHE Environmental, Inc.  
Dinkins Biological Consulting  
TRC Garrow Associates, Inc.  
University of Tennessee, Botany Department

**EXTRA COPY**

**Index No: 560**

Title: Lone Mountain Shores Shoreline  
Management Plan, Claiborne County,  
Tennessee, Norris Reservoir, Section 26a



## TABLE OF CONTENTS

Abbreviations .....	v
1.0 Purpose and Need For Action .....	1
1.1 Introduction.....	1
1.2 Purpose and Proposed Action .....	1
1.3 The Decision .....	4
1.4 Necessary Federal Permits .....	4
2.0 Alternatives .....	6
2.1 Introduction.....	6
2.2 Alternative 1.....	6
2.3 Alternative 2.....	6
2.4 Alternative 3.....	6
2.5 Alternative 4.....	7
2.6 Mitigation Measures Incorporated in the SMP .....	7
2.7 Comparison of Alternatives .....	8
2.7.1 Alternative 1 .....	8
2.7.2 Alternative 2 .....	8
2.7.3 Alternative 3 .....	9
2.7.4 Alternative 4 .....	9
2.8 Preferred Alternative.....	10
3.0 Affected Environment .....	11
3.1 Introduction.....	11
3.2 Transportation System .....	11
3.2.1 Highways .....	11
3.2.2 Navigation and Rail Access.....	11
3.3 Socioeconomic Conditions .....	11
3.4 Recreation .....	12
3.5 Biological Setting.....	12
3.5.1 Terrestrial Biology.....	12
3.5.2 Aquatic Biology.....	15
3.5.3 Wetlands.....	16
3.6 Air Quality .....	17
3.7 Water Quality.....	17
3.7.1 Norris Reservoir Water Quality .....	17
3.7.2 Groundwater .....	17
3.8 Utilities and Services .....	18
3.8.1 Water Supply .....	18
3.8.2 Wastewater Treatment.....	18
3.8.3 Solid Waste Disposal.....	18
3.8.4 Fire and Police Protection and Emergency Medical Services .....	19
3.8.5 Electrical Service .....	19
3.8.6 Schools .....	19
3.9 Cultural Resources .....	19
3.10 Floodplains.....	19
3.11 Prime Farmland.....	19
3.12 Visual Setting.....	20
4.0 Environmental Consequences .....	21



4.1 Introduction .....	21
4.2 Effects on Transportation .....	21
4.2.1 Highways .....	21
4.2.2 Navigation .....	22
4.3 Effects on Socioeconomic Conditions .....	22
4.3.1 Alternative 1 .....	23
4.3.2 Alternative 2 .....	23
4.3.3 Alternative 3 .....	23
4.3.4 Alternative 4 .....	23
4.4 Effects on Recreation .....	23
4.4.1 Alternative 1 .....	24
4.4.2 Alternative 2 .....	24
4.4.3 Alternative 3 .....	24
4.4.4 Alternative 4 .....	25
4.5 Effects on Biological Resources .....	25
4.5.1 Terrestrial Effects .....	25
4.5.2 Aquatic Effects .....	27
4.5.3 Effects on Wetlands .....	28
4.6 Effects on Air Quality .....	30
4.7 Effects on Water Quality .....	30
4.7.1 Alternative 1 .....	30
4.7.2 Alternative 2 .....	30
4.7.3 Alternative 3 .....	30
4.7.4 Alternative 4 .....	31
4.8 Effects on Utilities and Services .....	31
4.8.1 Potable Water Supply and Wastewater Treatment .....	31
4.8.2 Solid Waste Disposal .....	31
4.8.3 Fire and Police Protection and Emergency Medical Services .....	32
4.8.4 Electrical Service .....	32
4.8.5 Schools .....	32
4.9 Effects on Cultural Resources .....	32
4.9.1 Alternative 1 .....	32
4.9.2 Alternative 2 .....	32
4.9.4 Alternatives 3 and 4 .....	33
4.10 Effects on Floodplains .....	33
4.11 Effects on Prime Farmland .....	33
4.12 Effects on Aesthetics .....	33
4.12.1 Alternative 1 .....	33
4.12.2 Alternative 2 .....	33
4.12.3 Alternative 3 .....	34
4.12.4 Alternative 4 .....	34
4.13 Unavoidable Adverse Impacts .....	34
4.14 Relationship of Short-Term Uses and Long-Term Productivity .....	34
4.15 Irreversible and Irretrievable Resource Commitments .....	34
5.0 Commitment List .....	36
6.0 Agencies, Persons, and References Consulted .....	37



## Appendices

1. Detailed Plan for Community Dock I
2. Declaration of Covenants, Restrictions, and Easements
3. Wetland 1 Mitigation Plan
4. Letter from TDEC
5. Letter From Tennessee Historical Commission
6. Economic Impact Analysis
7. Miscellaneous Correspondence



## **Abbreviations**

ADT	average daily traffic
ARAP	Aquatic Resource Alteration Permit
EA	Environmental Assessment
gpd	gallons per day
LMS	Lone Mountain Shores
MPI	minutes per inch
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRPA	National Recreation and Park Association
SMI FEIS	Shoreline Management Initiative Final Environmental Impact Statement
SMP	Shoreline Management Plan
SR	State Route
TDEC	Tennessee Department of Environment and Conservation
TN SHPO	Tennessee State Historical Preservation Office
TVA	Tennessee Valley Authority
TVARHP	TVA Regional Heritage Project
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service



## **1.0 Purpose and Need For Action**

### ***1.1 Introduction***

In 1998, Tennessee Lone Mountain Shores Corporation (LMS) acquired 1200 acres of private, undeveloped land on the Norris Reservoir in Claiborne County, Tennessee, for the purpose of developing a residential/retirement community. The property fronts Tennessee Valley Authority (TVA) Tract Nos. XNR-836 and -837 and lies between Clinch River miles 127.5 and 133R. Figure 1 provides a location map. LMS owns Areas 1 and 2 and approximately half of area 5. LMS is negotiating the acquisition of an additional 1200 acres which would be incorporated into the project as Areas 3, 4, and the balance of Area 5. Effects of LMS activities over the entire 2400-acre project site are addressed in this review.

In April 1999, the TVA Board of Directors decided to adopt the preferred alternative (Blended Alternative) identified in SMI. The Board's decision modified the Blended Alternative by increasing the shoreline management zone from 25 to 50 feet. The Blended Alternative emphasizes protection of important public shoreline values and includes a shoreline categorization system and shoreline development standards to protect sensitive resources. On November 1, 1999, TVA began implementation of the Blended Alternative as its official Shoreline Management Policy for permitting actions associated with residential shoreline development on all TVA reservoirs. The LMS EA incorporates practices consistent with the SMI Record of Decision and the associated Shoreline Management Policy. The shoreland abutting the project site is TVA-owned residential access shoreland under the SMI decision. The total acreage of the TVA-owned land is 161.4 acres. The width from the shoreline to the backlying property ranges from 15 feet to 450 feet with an average width of approximately 115 feet.

This Environmental Assessment (EA) is being prepared to assess the impact of future activities on TVA-owned land adjacent to LMS's 2400-acre project site described above. The EA incorporates by reference the findings, policy, standards, and decisions adopted in the Shoreline Management Initiative (SMI) Final Environmental Impact Statement (EIS).

### ***1.2 Purpose and Proposed Action***

This EA documents the potential environmental impacts of future activities on TVA-owned land adjacent to LMS's 2400-acre project site. At this time, TVA proposes to a) adopt the categorization system depicted in the LMS Shoreline Management Plan (SMP) for Alternative 4 to guide permit reviews of future potential activities on 161 acres of TVA-owned residential access land and b) approve a Section 26a permit application submitted by LMS for the construction of one community dock (Community Dock I) and an associated boat ramp.

TVA's assessment of the impacts of this shoreline management plan contemplates that prospective landowners in the development would submit individual Section 26a application to TVA for building private water use facilities and vegetation management across TVA land between the 1044-foot and 1020-foot elevation contours. In addition, TVA anticipates that the



developer would submit a Section 26a application for additional community facilities at Community Dock II.

Approval of the SMP does not constitute approval to build the private water use facilities, additional community facilities other than the Community Dock I facilities included in the pending Section 26a permit application, or to conduct vegetation management activities in the TVA-owned residential access zones. All such future activities would be individually reviewed by TVA under Section 26a of the TVA Act. In conducting these future 26a reviews, TVA may choose to tier off this EA in assessing the environmental impacts of these activities. The completion of the various environmental inventories and evaluations and the development of the SMP as a part of this EA would facilitate and expedite TVA's review of individual 26a applications.

LMS has presented TVA with a conceptual residential development plan for its 2400-acre development (Figure 2). The plan, although broadly conceptual, presents the type and scope of development planned by LMS. The entire 2400-acre development is expected to comprise approximately 575 homesites, two community use docks with a total of approximately 120 slips, open space, and two launch ramps.

The 575 homesite development includes a mix of 175 waterfront lots and 400 interior lots. This equates to an overall density of 0.24 dwelling units per acre. Waterfront lots would range from 0.6 to 3 acres, depending upon soils and slopes, with an average of 258 linear feet of reservoir frontage. Typical interior lots would average 3 acres. The overall average lot size is 4.2 acres, which is in keeping with the rural character and development densities of the surrounding area.

Due to the nature of the development, it is projected that approximately 50% of the lot purchasers would be seasonal, not permanent residents. This projection is based upon the previous experience of LMS's developers in constructing other similar communities and trends that have been documented for lot sales at LMS to date.

Section 2.8.3 of the SMI FEIS provides that when community facilities are requested at jointly owned community lots, the plans must be submitted by a developer of the subdivision or by a state-chartered homeowner's association that represents everyone with an interest in the community lot where the facilities are proposed. The size and number of community slips permitted would be determined by the size of the community lot, the amount of parking it could accommodate, the amount of shoreline frontage available for the facilities, the number of property owners with access rights to be accommodated, and other site-specific conditions.

The two community dock facilities envisioned in this SMP are expected to serve the interior lot owners. Access to and use of this facility would be provided by LMS on a first-come first-served daily use basis, and no individual slip would be owned or otherwise exclusively controlled by any individual interior lot owner. A detailed plan for Community Dock I has been prepared and can be found in Appendix 1. This dock would be affixed to the shoreline and would be for seasonal use only. The slips "hinge" towards the walkway for storage during periods of low water. A plan for Community Dock II has not yet been prepared. In order to limit potential environmental and aesthetic impacts, LMS proposes no individual ramps for waterfront lots.



Instead, LMS proposes to provide for a community use ramp at both of the above community dock locations.

LMS has recorded a Declaration of Covenants, Conditions, Restrictions, and Easements with Claiborne County for the initial development on the project site (refer to Appendix 2). LMS intends to file substantially similar covenants and restrictions for the balance of the development. These covenants and restrictions are intended to impose mutually beneficial restrictions for all property owners to guide the quality of the development and preserve and enhance current and future aesthetic quality and property values. They include provisions for minimum square footage of waterfront and interior lot homes, restrictions as to the types of exterior building materials, and exclusion of modular, mobile and manufactured homes as well as travel trailers and motor homes as permanent residences. Overall, these restrictions are crafted to ensure that the development would have a high-quality residential appearance.

Shoreline along the entire project area is proposed to be categorized by TVA as (1) Shoreline Protection, (2) Residential Mitigation, or (3) Managed Residential. These categories are described below, and their locations are depicted on Figure 2.

The **Shoreline Protection** category would be applied to shoreline segments that support sensitive ecological resources, such as wetlands with high function and value, and archaeological or historical sites of national significance. No disturbance to these areas (including construction of pathways or private use facilities) would be permitted. Shoreline protection areas for LMS are primarily those above wetland areas and in areas adjacent to the community dock locations. Shoreline below the 1044-foot contour elevation and adjacent to wetlands 2-7 is placed in this shoreline protection category (Figure 2). Protected areas would be delineated on the ground and marked by TVA and LMS personnel within 60 days of the completion of this environmental assessment. If deemed necessary by TVA as a result of changing resource conditions, TVA would work with LMS to reevaluate delineated protected areas. Approximately 2,580 linear feet of the shoreline along the project site (about 5 percent) would be placed in the Shoreline Protection category.

**Residential Mitigation** shoreline includes segments where resource conditions would require special analysis of individual development proposals, and perhaps specific mitigation measures, before a permit decision could be made. This category also includes shoreline segments where additional data (such as a Phase II archaeological survey) about resource conditions would be needed before a permit decision could be made.

For the purposes of categorization of the shoreline along the project site, Residential Mitigation shoreline consists primarily of steep slopes and areas where archaeological sites that are potentially eligible for listing on the National Register of Historic Places are known to occur. The purpose of mitigation shoreline is to protect these steep slopes from aesthetic and physical degradation due to clearing and construction activity and to ensure no disturbance to important cultural and archaeological resources. Approximately 9,440 linear feet of shoreline falls under this category (about 17 percent).

Shorelines where no sensitive resources are known to exist are allocated to a **Managed Residential** category. TVA would review permit applications for private water use facilities,



vegetation management, and other shoreline alterations to ensure that the proposal does not adversely affect navigation, flood control, or public lands; to ensure that it meets the requirements of TVA's Shoreline Management Policy and meets the commitments outlined in this EA; and to determine if resource conditions had changed subsequent to this assessment. Applications conforming to TVA requirements would likely be permitted on shoreline in this category unless the review reveals new information about previously unidentified resources that need to be protected, avoided, or mitigated. Vegetation within the Residential Mitigation and Managed Residential areas would be managed according to the provisions of Section 2.8.3 of the SMI FEIS. The majority of the shoreline, approximately 43,610 linear feet, would be allocated to this category.

Because of steep topography, the presence of sensitive resources, and other development constraints, the developers propose and TVA concurs that the number of waterfront lots in Area 4 eligible to apply for Section 26a approval will be limited to a maximum of 3. Prohibitions on the building of water use facilities at other waterfront lots in Area 4 would be included in the Vital Information Sheet for the development that will be provided by LMS to prospective lot owners. Further, the Declaration of Covenants, Conditions, Restrictions, and Easements ("Declaration of Covenants") or Warranty Deed prepared and recorded for the development of Area 4 will contain the restrictions and commitments in this EA.

Approximately 25 miles of roadway would be constructed to serve the lots in the development and provide access to the community use facilities. These roads would be constructed to Claiborne County standards and would be dedicated to the County as public roads after their eventual inspection and acceptance. The County would assume maintenance of the roads.

### ***1.3 The Decision***

Following completion of this EA, TVA will decide whether to adopt the SMP as proposed under Alternative 4 and whether to issue a Section 26a approval for Community Dock I and associated facilities. Any additional TVA actions related to LMS would be subject to additional review and approval processes.

### ***1.4 Necessary Federal Permits***

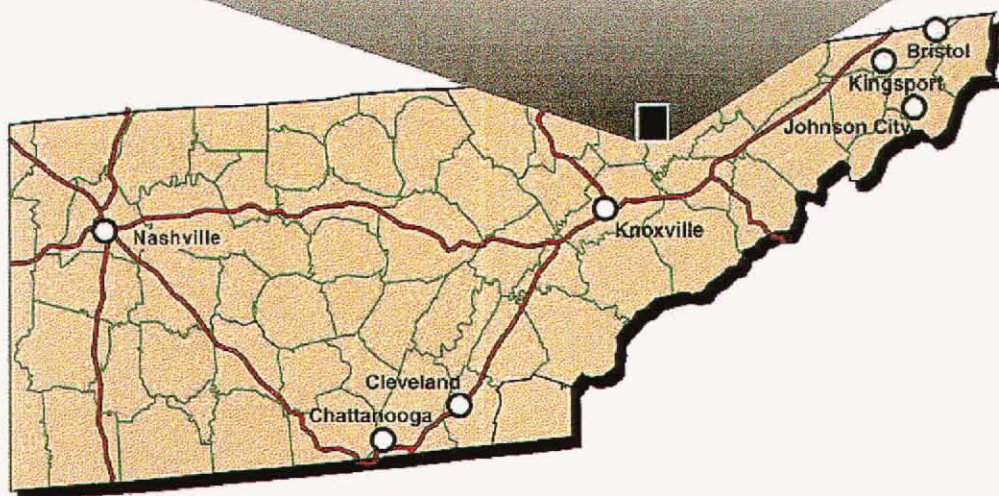
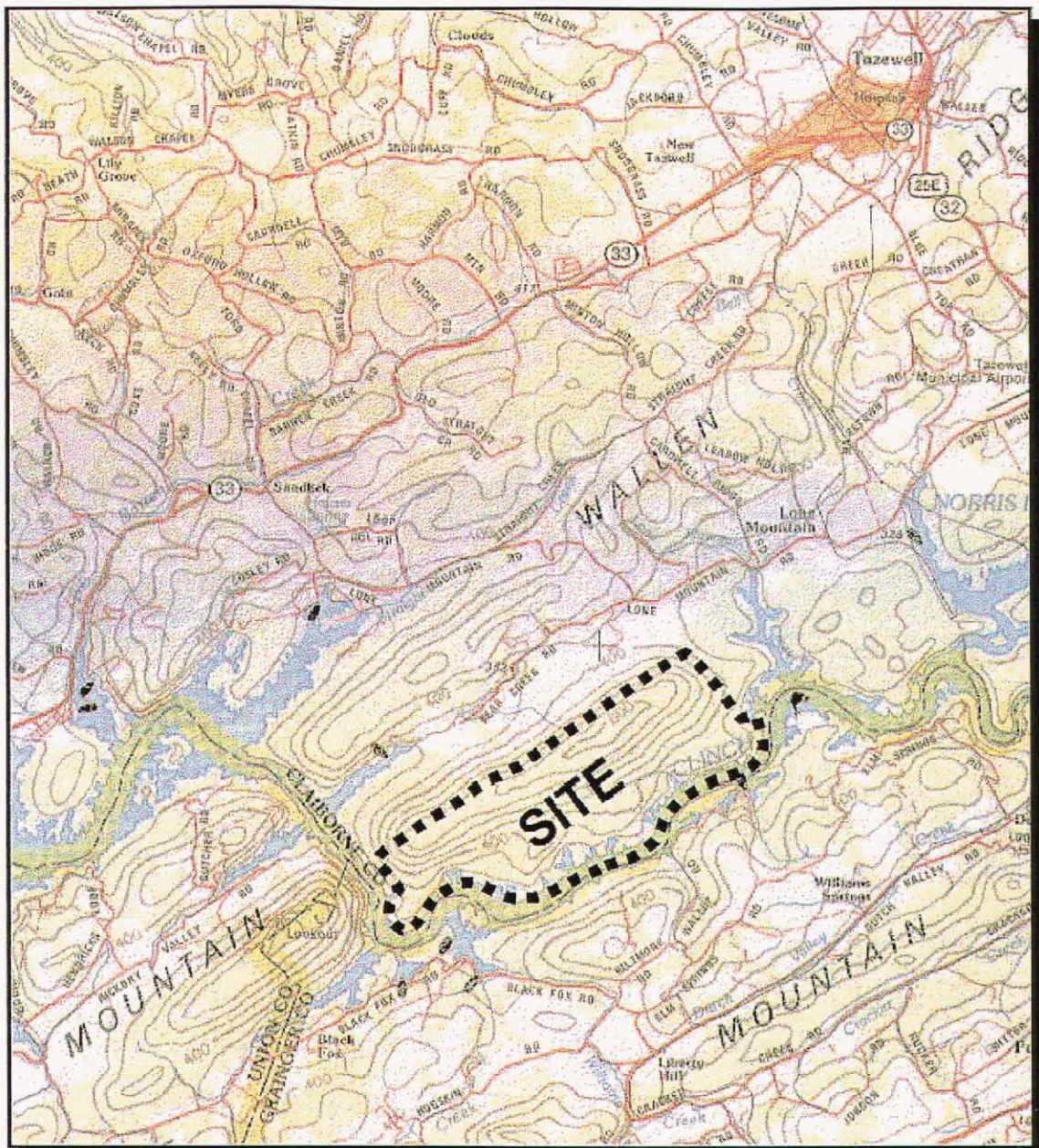
Approval under Section 26a of the TVA Act of 1933, as amended, is required for the construction of private water use facilities, community docks, ramps, roads crossing perennial streams, and other obstructions. TVA approval is also required for any earth disturbing or construction activities on TVA land. LMS has submitted a Section 26a permit for one of the community docks proposed to be located below the 1044-foot contour. Individual lot owners would submit 26a permits for individual docks. Physical alterations including such activities as filling, draining, relocation, channelization, damming and culverting of streams, and excessive shoreline and/or streambank disturbance would also require a Section 26a permit from TVA. If any future roads are constructed over tributaries of the Clinch River or below the 1044-foot contour line, additional Section 26a review and approval would be needed.

Depending upon the nature of the action, some activities associated with residential development of the site could require approval by the U. S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act or Section 10 of the River and Harbors Act of 1899. A Section 401 Water Quality Certification from the Tennessee Department of Environment and Conservation



(TDEC), Division of Water Pollution Control may be required for some development activities. Any physical alteration of waters of the State, including wetlands (as defined by the USACE), requires an Aquatic Resource Alteration Permit (ARAP), unless the activity is covered under 401 certification of a federal permit. An example of such a 401 certification would be minor road crossings of waters of the State that would be required for this project.





**Figure 1.** Vicinity Map of Lone Mountain Shores Property



LEGEND OF SHORELINE CATEGORIZATION  
ON TVA PROPERTY

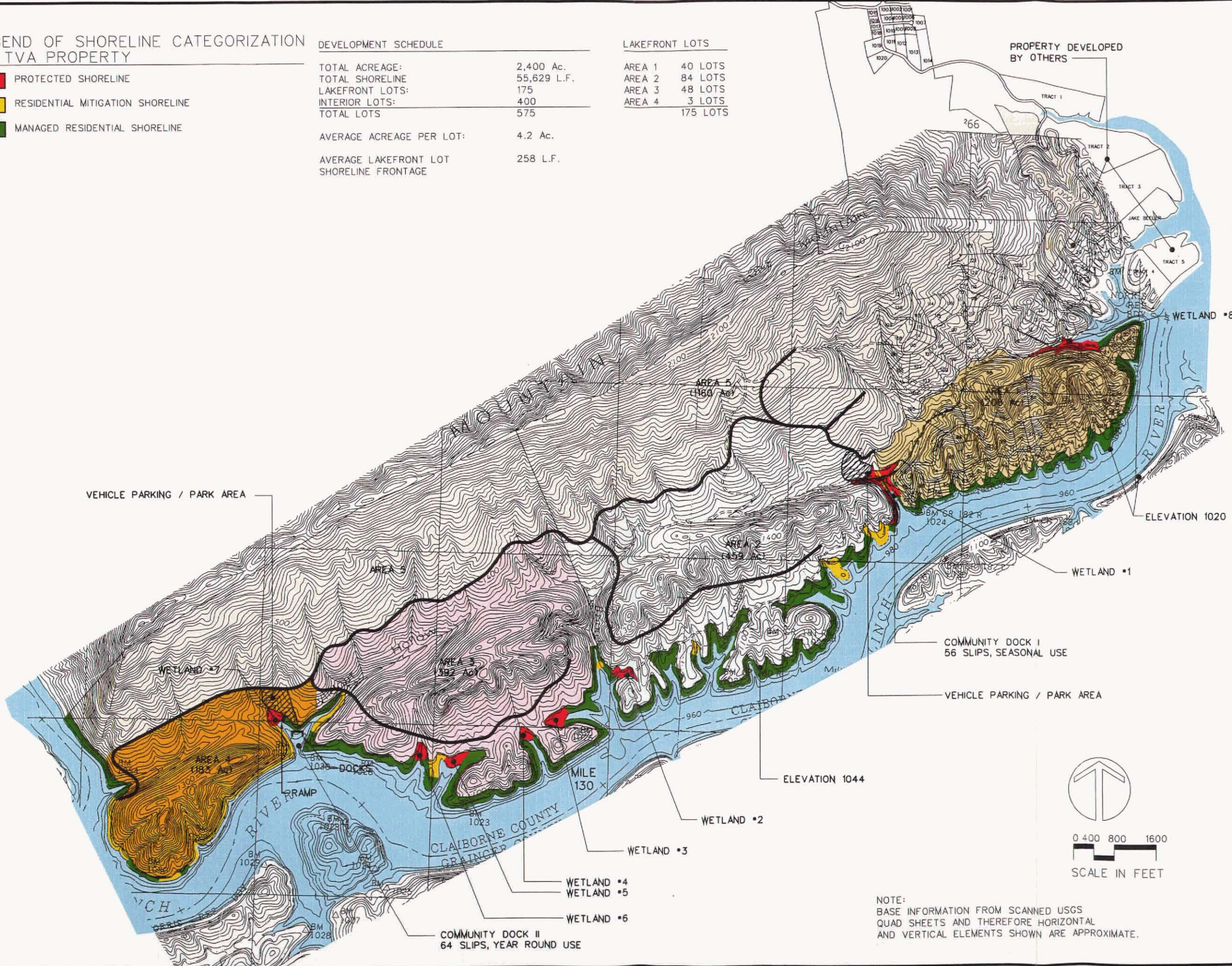
- PROTECTED SHORELINE
- RESIDENTIAL MITIGATION SHORELINE
- MANAGED RESIDENTIAL SHORELINE

DEVELOPMENT SCHEDULE

TOTAL ACREAGE:	2,400 Ac.
TOTAL SHORELINE	55,629 L.F.
LAKEFRONT LOTS:	175
INTERIOR LOTS:	400
TOTAL LOTS	575
AVERAGE ACREAGE PER LOT:	4.2 Ac.
AVERAGE LAKEFRONT LOT SHORELINE FRONTAGE	258 L.F.

LAKEFRONT LOTS

AREA 1	40 LOTS
AREA 2	84 LOTS
AREA 3	48 LOTS
AREA 4	3 LOTS
	175 LOTS



**BARGE WAGGONER & SUMNER, INC.**  
**BWSC**  
ENGINEERS ARCHITECTS PLANNERS  
LANDSCAPE ARCHITECTS AND SURVEYORS  
6951 Collier on Park Drive Suite 550, Oak Ridge, Tennessee 37830  
Phone: 423-499-9999 Fax: 423-499-9995

PRELIMINARY  
NOT FOR  
CONSTRUCTION  
DATE

OVERALL RESIDENTIAL DEVELOPMENT PLAN  
**LONE MOUNTAIN SHORES**  
CLAIBORNE COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION



## **2.0 Alternatives**

### **2.1 Introduction**

This chapter describes the four alternatives that have been identified. These are:

- **Alternative 1 (No Action Alternative):** Under this alternative, TVA would consider permits from individuals for private water use facilities using guidelines, standards or regulations in effect at the time of the application.
- **Alternative 2:** Under this alternative, TVA would consider 2 community docks only. No private docks would be permitted.
- **Alternative 3:** Under this alternative, TVA would consider a combination of private water use facilities and 2 community areas, each having a boat launching ramp and courtesy pier. No community slips would be permitted.
- **Alternative 4:** Under this alternative, TVA would consider a combination of private water use facilities and 2 community areas, each having a boat launching ramp and community slips.

These alternatives are discussed in the following sections. The potential environmental consequences associated with each alternative are described in Chapter 4.

### **2.2 Alternative 1**

Under Alternative 1, the No Action Alternative, TVA would consider permits from individuals for private water use facilities using guidelines, standards and or regulations in effect at the time of submittal of the application. TVA shoreline inventory data and on-site inspections would be used in evaluating effects of proposed actions. Alternative 1 is the no action alternative because it represents a continuation of current TVA shoreline management direction. Based on the SMI EIS, the shoreline is “open” for consideration of private water use facilities.

### **2.3 Alternative 2**

Under Alternative 2, TVA would consider two community docks only. No private docks would be permitted. The community dock locations have been identified in the SMP prepared by LMS and are sited to avoid or mitigate impacts to sensitive resources.

### **2.4 Alternative 3**

Under Alternative 3, TVA would consider a combination of private water use facilities and 2 community areas, each having a boat launching ramp and courtesy pier. No community boat slips would be permitted. To guide permitting of private water use facilities, LMS has prepared a SMP using TVA shoreline inventory data and field resource surveys (Figure 2). The SMP categorizes shoreline to avoid and minimize future impacts to sensitive resources, as proposed in Section 2.8.1 of the SMI FEIS. The SMP identifies the density of waterfront lots and shoreline segments where individual dock applications would be considered by TVA. Under this alternative, the projected total private water use facilities would be 175. Upon TVA approval of the SMP, individual permit applications would be reviewed using TVA Shoreline Management Policy guidelines, standards, and/or regulations in effect at the time of application.



## **2.5 Alternative 4**

Under Alternative 4, TVA would consider a combination of private water use facilities and two community areas, each having a boat launching ramp and community slips. To guide permitting of the private water use facilities, LMS has prepared a proposed SMP using TVA shoreline inventory data and field resource surveys (Figure 2). The plan categorizes shoreline to protect, avoid, and minimize impacts to sensitive resources, as proposed in Section 2.8.1 of the SMI FEIS. The plan identifies the density of waterfront lots, the location of the community area, and shoreline segments where individual Section 26a dock applications would be considered by TVA. For those shoreline segments that may be categorized as "Residential Mitigation," additional analysis and review to enhance environmental protection would be required. Upon TVA approval of this SMP, individual permit applications for private water use facilities would be reviewed using TVA guidelines, standards, and/or regulations in effect at the time of the application. Under Alternative 4, Community Dock I would be approved for seasonal use. Community Dock I would include 56 boat slips.

## **2.6 Mitigation Measures Incorporated in the SMP**

The following measures would be required under Alternatives 3 or 4 and are designed to maintain navigational safety, better protect water quality, promote aesthetic quality, and protect recreational quality, wetlands and sensitive wildlife habitat.

- Residential access along Residential Mitigation shoreline (an areas of steep slopes and potentially eligible cultural resources) would only be allowed after a special analysis of individual development proposals and the need for additional specific mitigation measures.
- Any cutting, trimming, or other alteration or removal of vegetation below the 1044-foot contour line cannot be undertaken without approval from TVA under Section 26a of the TVA Act. All such vegetation management practices shall be in accordance with the provisions of Section 2.8.3 of the SMI FEIS. LMS will make potential lot owners aware of this plan by placing the requirements in their "Vital Information Sheet." Where permitted by TVA, shoreline stabilization would be accomplished by riprap and/or shoreline vegetation plantings with native vegetation (willows, buttonbush, etc.). No retaining walls would be allowed.
- At community docks, fuel sales, boat/motor repair or sales, materials or provisions sales and other amenities typically provided by commercial marinas would be prohibited.
- No individual ramps would be allowed adjacent to the waterfront lots.
- The total number of private water use facilities in Area 4 will be limited to 3.
- LMS would comply with the provisions of TDEC Rule 1200-4-10-.05, General NPDES Permit for Storm Water Discharges Associated with Construction Activity for all site grading, stormwater management and installation of erosion/sedimentation control facilities on the property.
- The loss of a 0.06-acre portion of Wetland 1, located in the Community Dock I area, will be mitigated by LMS as outlined in the mitigation plan in Appendix 3 of this EA. No additional disturbance to wetland areas 2-7 (including construction of pathways or private use facilities) will be permitted. The mitigation plan will include a combination of 400 woody tree species and placement of 10 wood duck boxes in and around Area 1 Wetland 8, specifically in the Protected Shoreline and Managed Residential shoreline of the cove. The plantings would include four species: 100 Willow Oak, 100 Black Willow, 100 Button Bush, and 100 Common Persimmon. LMS will schedule joint pre-construction site



inspections with TVA at a mutually agreeable time prior to initiation of on-the-ground construction at Community Dock I to ensure minimal additional direct effects on remaining wetland areas.

- LMS will provide for easements to the 1044-foot contour to allow for public access to Lewis Cemeteries #41 and #42 (40CE96-97). LMS will construct appropriate fencing for protection of these cemeteries.
- Shoreline above cultural resource sites potentially eligible for listing on the National Register of Historic Places (NRHP) will be categorized within Residential Mitigation shoreline. LMS will be required to identify the areal extent to lot purchasers and educate them on the importance of avoiding effects to these areas. In reviewing the lot owner's Section 26a application for activities to be conducted below the 1044-foot contour line that may impact archaeological sites, TVA would conduct a Phase II survey of the sites that potentially would be impacted. The cost of the Phase II survey would be borne by the lot owner.
- Because suitable summer habitat for Indiana bats does occur on TVA lands adjacent to the LMS property as well as on nearby private properties, the following restriction on permitted vegetation removal would apply: Live or dead hardwood trees greater than 6 inches in diameter at breast height (dbh) (U.S. Fish and Wildlife Service, Personal Communication with W. Brines, January 4, 2000) shall be removed from TVA lands only after receipt of TVA approval of a vegetation management plan and between October 15 and March 31 when Indiana bats are not present (USFWS, 1999).

## ***2.7 Comparison of Alternatives***

### ***2.7.1 Alternative 1***

Adoption of Alternative 1 (the No Action Alternative) would result in TVA reviewing applications for individual docks, ramps and other private use facilities from individual lot owners under current procedures. In addition, LMS could submit 26a permit applications for community dock facilities. If these applications meet with TVA requirements, permits could be issued for construction of these facilities. There would be no provisions for mitigation or enhancement above the 1044 contour as this is open shoreline (TVA, 1998) with access rights that allow qualified adjacent property owners to apply for TVA review and approval of plans for docks, ramps, and other facilities. Development along the TVA-controlled shoreline could be unplanned in the absence of a complete categorization of the shoreline. Under this alternative, the projected total private water use facilities would be 175. A number of community docks also would likely be constructed.

Because of the potential for more shoreline alteration, adoption of this alternative could result in more extensive shoreline disturbance than Alternatives 2, 3 or 4. The increased alteration could potentially adversely impacts wetlands, visual character, water quality, and fish, plant and wildlife habitats.

### ***2.7.2 Alternative 2***

Alternative 2 would prevent the construction of private docks but would allow consideration of Section 26a permit applications for 2 community dock facilities. This alternative would result in the least shoreline alteration of any of the alternatives; however, the impacts would be more



concentrated in the two community dock locations. The likely number of community slips requested would be greater than for any other alternative, and there would be a need for additional parking areas, access roads, and other community facilities such as restrooms to serve such concentrated use. Impacts to the environment would likewise be concentrated at the community dock locations. Vehicular trips within the development would increase due to the need to travel to the community dock facilities for reservoir access.

Exclusion of private docks could negatively impact waterfront lot property values and would also result in decreased rates of lot sales. This would have a negative impact on residential construction jobs, overall local economic activity, and tax revenues to local governments.

The exclusion of private docks would reduce potential adverse effects on water quality, riparian wildlife, and plant habitats and would provide visual protection of the shoreline. Concentration of the community docks presents the potential for more substantial impacts in these areas.

### 2.7.3 Alternative 3

Alternative 3 would allow consideration of Section 26a permit applications for private docks and 2 community areas, each having a boat launching ramp and courtesy pier, but no community boat slips. The projected total private water use facilities would be 175. Shoreline would be categorized to avoid and minimize impacts on sensitive resources below the 1044-foot contour as set forth in Section 2.8.1 of the SMI FEIS. This alternative would result in less potential environmental impacts than Alternative 1 and greater potential environmental impacts than Alternatives 2 and 4.

In terms of economic impact, this alternative could make the interior lots less attractive and, based on previous experience with similar waterfront developments throughout the United States, 50 percent less valuable due to the unavailability of community docks to these lot owners. Therefore, the interior lots would sell slower and at a lower price. This would result in less overall economic activity in the area and lower tax revenues to local governments.

### 2.7.4 Alternative 4

Under Alternative 4, additional environmental protective measures would be incorporated into the development, some of which would be above the 1044-foot contour. These additional mitigative measures and restrictions would provide further environmental safeguards. Under alternative 4, an application for an additional community dock (Community Dock II) would be entertained. This additional community dock is expected to have 64 spaces and would be for year-round use. Thus, the projected total community dock slips at LMS would be 120 and the projected total private water use facilities would be 175.

Potential effects on scenic character would be less than Alternatives 1 and 3 and greater than Alternative 2 due to the proposed protected and residential mitigation shoreline in areas of steep topography and other sensitive resources and the adoption of Section 2.8.3 of the SMI vegetation management standards. The elimination of ramps and dredging would yield a significant reduction in impacts to a variety of resources. This alternative would have the most positive effects on the local economy.



### ***2.8 Preferred Alternative***

Alternative 4 is preferred because it best meets the objectives for planned shoreline development that accommodates reasonable access. In addition, this alternative meets TVA objectives for protection of sensitive shoreline resources. This alternative is consistent with standards approved in the SMI FEIS.



## **3.0 Affected Environment**

### **3.1 Introduction**

The LMS property currently being developed for residential purposes is located in Claiborne County, Tennessee, on the Norris Reservoir between Clinch River Miles 127.5 and 133. The nearest city is Tazewell, approximately 5 miles northeast of the site. The property is approximately 4 miles long by 1 mile wide and is oriented northeast to southwest and contains approximately 10.5 miles of shoreline. The property remains predominately wooded, but was logged extensively by a previous owner. Some road construction and utility line construction has occurred in recent months. Lone Mountain is a prominent landscape feature of this area, which is mostly rural, with scattered houses and pastures. There are currently few other ongoing activities that may cumulatively affect resources of concern for the LMS development. Much of the area is rural, with some agriculture in the form of pasture. Other shoreline development on a smaller scale is occurring upstream at the Woodlake Golf Community. A few private water use facilities currently exist in Area 1 of the LMS development.

### **3.2 Transportation System**

#### **3.2.1 Highways**

US Highway 25E, a major artery in the Appalachian Highway System, is located 6.5 miles east of the property. State Route (SR) 33 is located 5 miles northwest of the LMS entrance. SR 33 connects to U.S. 441 to the south and to US 25E at Tazewell. The property is accessed from SR 33 or US 25E via Lone Mountain Road, a two-lane county road. Traffic count data provided by the Tennessee Department of Transportation indicate that average daily traffic (ADT) on SR 33 at the intersection with Lone Mountain Road was 6910 vehicles per day in 1998. ADT increased once it entered the Tazewell city boundary to 14,670 vehicles per day. The latest available ADT on Lone Mountain Road near SR 33 was 1080 vehicles per day in 1998.

#### **3.2.2 Navigation and Rail Access**

Norris Reservoir is not used for commercial navigation. The nearest rail access is 3.5 miles from the property.

### **3.3 Socioeconomic Conditions**

The development of this property has received support from local government and business leaders. LMS has been working with the Claiborne County Planning Commission in the review of development plans for the initial phases of the project.

The LMS property is located within Claiborne County which, according to 1997 estimates by the U.S. Census Bureau, has a population of approximately 29,010. Residents age 65 and over make up about 13 percent of the population, slightly higher than the state average of 12.7 percent and the national average of 12.6 percent. The county is predominately white (95 percent), while the state average is 83 percent. Per capita income in the county in 1990 was \$8,371.00, which is 32 percent less than the state average of \$12,255.00. The unemployment rate for the county was estimated to be 4.2 percent in March 1999, which is consistent with the unemployment rate for



the state (4.2 percent) and the nation (4.3 percent) during that period (Department of Employment Security, Public Information Office).

### **3.4 Recreation**

The LMS property is privately owned and, therefore, no public recreation activities occurs on the site. However, from the 1044 contour to the waters' edge, land fronting all of the LMS property is public property owned by TVA. Several areas along Norris Reservoir in the vicinity of the property are currently owned by TVA and are used by the public for hunting, fishing, and camping. Several TWRA-maintained boat ramps are located near LMS. A ramp on Big Hill Branch is visible across the reservoir from LMS. Also in this vicinity, Norris Reservoir is used for a variety of water-related activities, including fishing, skiing, and boating.

Although the closest is more than 15 river miles away from LMS, there are two state parks on the Norris Reservoir (Big Ridge and Norris Dam) totaling 7,680 acres in size. These state parks provide for a variety of public recreational opportunities including camping, cabins, swimming, picnicking, hiking and other activities. TVA facilities on Norris Reservoir include a pavilion, 6 ramps, 36 picnic units, 74 campsites and one improved beach. There are also county-owned recreational facilities on Norris including Anderson County Park and other smaller facilities. The Tennessee Wildlife Resources Agency (TWRA) has 38 public ramps on Norris. There are four marinas within 7 river miles of LMS. These marinas have approximately 1,100 boats and houseboats with approval from TVA to add another 300 boats within existing harbor limits.

### **3.5 Biological Setting**

Lone Mountain is classified as part of the Southern Sandstone ridges ecoregion (67h) by TDEC, EPA, USGS, and NRCS (Griffith et al., 1999). Other lands on Norris Reservoir are in the Southern Limestone/Dolomite Valleys and Low Rolling Hills Ecoregion (67f). The potential natural vegetation for both ecoregions is Appalachian oak forest, consisting of mixed oaks, hickory, poplar, and maple, with some mixed mesophytic forest.

#### **3.5.1 Terrestrial Biology**

The interior of the LMS property has been logged recently to remove large hardwood (furniture grade) trees. The shorelands are covered primarily by young forest cover, including mixed hardwood and Virginia pine; however, small portions of the property's shorelands contain semi-mature forest where recent human influences have been limited.

At present, the property provides habitat for a variety of wildlife species. Lick Branch and numerous intermittent streams provide corridors for animal movements, and game species seen in these areas during the field work included wild turkey, ruffed grouse, woodcock, mourning dove, eastern gray squirrel, eastern cotton-tail, and white-tailed deer. Tracks and other sign indicating use of the site by raccoon and fox were also seen.

The site's hardwood forests and moist, protected coves support numerous neotropical migrant bird species (i.e., migratory birds that overwinter in Central and South America), typical for woodlands in the area. These species include yellow-billed cuckoo, woodthrush, red-eyed vireo, Kentucky warbler, hooded warbler, and summer tanager. Permanent residents of these woodlands include a few species of woodpeckers (downy, hairy, pileated), blue jay, Carolina



chickadee, tufted titmouse, and white-breasted nuthatch. Permanent residents of the shorelands include the great blue heron and Canada goose.

Surveys for threatened and endangered species at the project site were conducted by personnel from BHE Environmental, Inc., Dinkins Biological Consulting and the University of Tennessee, Department of Botany, on February 18 and 25, March 17 through 20, and July 17, 1999. Although the primary goal of the surveys was to document the actual or potential presence of the protected species on the TVARHP list, the survey scope included all state and federally listed species potentially occurring in the vicinity, as provided by TVA heritage records.

A summary of the survey efforts is provided in the descriptions below. The results of the field work indicate that no federally listed, proposed, or special concern species (former candidate species) are known to occur on or regularly use the property, with the possible exception of the bald eagle (*Haliaeetus leucocephalus*).

The bald eagle, listed by the U. S. Fish and Wildlife Service (USFWS) as threatened, occurs throughout the year on Norris Reservoir and has recently nested a few river miles upstream of the property. It is likely that the property's wooded shoreline receives occasional fall and winter use by bald eagles, but they are not known to nest on its shorelines and no indications of nesting were observed in the trees during the fieldwork.

The osprey (*Pandion haliaetus*) is listed by the state of Tennessee as threatened and was observed flying over the reservoir during the fieldwork. Due to expanding populations on other TVA reservoirs in east Tennessee, this species may attempt to nest along the property's shoreline within the next few years. No active or former nests of the osprey have been found on the property.

Southeastern shrews (*Sorex longirostris*), listed by the state of Tennessee as "deemed in need of management," occur on the property and may actually be fairly common, even in areas recently disturbed by logging. Results of small mammal trapping in three distinctly differing habitats on the property revealed their presence in all three areas. A total of seven southeastern shrews was collected in the pitfall traps. Development of the property as a residential area with private and community water use facilities would alter some habitat for the southeastern shrew, but the amount of habitat lost would be minor.

The Allegheny woodrat (*Neotoma magister*) is listed by the state of Tennessee as "deemed in need of management." Populations of this species in the northeastern U.S. have declined recently for unexplained reasons. This species is associated with rocky outcrops and cliffs with deep crevices, caves, or large boulders piled in such a way as to form numerous retreats and shelters. Several rocky outcrops occur on the property, although none had the distinctive piles of sticks associated with the nest of this species. During the course of fieldwork, the field team examined crevices and rock ledges and placed Tomahawk traps at several locations where small piles of nuts were found. No woodrats were captured during this effort. Thus, while it appears that habitat for the Allegheny woodrat exists on the property, the species is either absent or present in such low numbers as to avoid detection.



The Cooper's hawk (*Accipiter cooperii*) is listed by the state of Tennessee as "deemed in need of management" and is an uncommon to rare permanent resident to be expected in every county in Tennessee. Its rarity is due to overuse of pesticides and, historically, illegal shooting. The Cooper's hawk may be more common today than in the past few decades; however, it is a difficult bird to locate and observe. Although nesting habitat occurs throughout most of the property, it is not known to nest on or in the vicinity of the property. It is somewhat frequently seen throughout east Tennessee. Consequently, the species may, in the future, become a permanent resident, especially if it continues to increase in number.

The sharp-shinned hawk (*Accipiter striatus*) is listed by the state of Tennessee as "deemed in need of management" and is an uncommon to rare permanent resident in every county of the state. Large numbers of this species pass through Claiborne County every year during spring and fall migration. No active or former nests were observed during the fieldwork.

The Indiana bat (*Myotis sodalis*) is listed by the USFWS as endangered. Indiana bats hibernate in caves or mines during winter months (approximately October–March) that have stable temperatures below 50° F (preferably 38°–46° F). While male Indiana bats may roost in or near hibernacula during summer, females tend to form maternity colonies in trees that can be a considerable distance from hibernacula. The Indiana Bat Recovery Plan (USFWS 1999) indicates no Indiana bat hibernacula are located in Claiborne County, Tennessee, and no caves or mines providing potential winter habitat for Indiana bats were found on the property. Indiana bats forage most frequently in upland and riparian forests, but they also may forage along wooded edges between forests and croplands, over fallow fields, and over impounded water. Much of the property provides low quality Indiana bat summer habitat; however, moderate quality summer habitat was observed in three areas: (1) Area 4, along a seep just east of the most southwestern point; (2) Area 3, along the two small peninsulas at the mouth of Wildcat Hollow; and (3) lower Lick Branch drainage.

The gray bat (*M. grisescens*) is listed by the USFWS as endangered. With few exceptions, gray bats roost in caves year-round. No caves or mines occur on the property; therefore, no summer or winter roost habitat suitable for the gray bat exists on the site. Gray bats generally forage over streams, rivers, and reservoirs and occasionally in riparian vegetation adjacent to open water. Suitable gray bat foraging habitat therefore exists on the adjacent Norris Reservoir and in riparian vegetation on the property.

Spike-rush (*Eleocharis intermedia*), a species listed as special concern in Tennessee, typically favors an open wet habitat, flowers from June to September, and often grows in standing water. A member of the sedge family, *E. intermedia* produces minute, often undetectable flowers on a single stalk. *Eleocharis intermedia* is known from the head of the Dodson Creek embayment, approximately 9 miles downstream from the LMS property. As a group, species of *Eleocharis* produce a tough, wiry stem that usually persists into the winter from the previous growing season. Numerous temporary and intermittent creek embayments occur along the shoreline of the property. Thus, habitat for *E. intermedia* exists on the property, but surveys conducted in February and July 1999 did not reveal its presence. The mid-July survey revealed *E. obtusa* on the small mudflat in the unnamed embayment bordered by LMS lots 60–63. *Eleocharis obtusa* is a common and widespread species favoring roadside ditches and wet meadows.



Bugbane (*Cimicifuga rubifolia*) is listed by Tennessee as a threatened species. It favors rich, well-drained, loamy soils over limestone, typically on open, undisturbed slopes under mixed mesophytic forest. This member of the buttercup family (*Ranunculaceae*) produces a long, open, flowering stalk. The flowers are minute, have no petals, and the sepals fall when the bud opens. *Cimicifuga rubifolia* has been found in appropriate habitats along the Clinch River both upstream and downstream of the LMS property. During the preliminary habitat survey conducted February 18, 1999, two areas of potential habitat for this species were identified. High potential habitat was found in the sheltered, steeply sloping cover along the lower reaches of Lick Branch. In this area, numerous limestone outcrops and bluffs occur in combination with a mature, oak-hickory forest community. Low potential habitat was found along the wooded slope of Lots 24-28. In this area, the overstory is composed primarily of beech and oak, and the understory is dominated by mountain laurel. These two areas represent the western and eastern boundary of the LMS property along the reservoir. Habitats in the intervening area have been recently impacted by logging, and the forest community is presently dominated by young hardwoods and Virginia pine.

In July, the site was again surveyed for *C. rubifolia*, with particular attention given to those areas where the mid-winter survey had revealed potential habitat. Numerous *C. racemosa* (black snakeroot), a common and closely related species, were found in areas having minimal disturbance. No *C. rubifolia* were found. Like *C. rubifolia*, the black snakeroot inhabits mesic to semi-mesic woodlands; however, it appears that even the more undisturbed areas on the LMS property are not quite moist or rich enough to support *C. rubifolia*.

Spreading false-foxglove (*Aureolaria patula*) is listed by Tennessee as a threatened species. It favors shady areas under open stands of mixed hardwoods on limestone creek or river bluffs, often in association with red cedar. This member of the foxglove family produces one to several yellow flowers on short stalks. The flowering period is from late June into July. Spreading false-foxglove is thought to be parasitic on oak roots. Spreading false-foxglove has not been documented from Norris Reservoir. It has been found on Fort Loudoun, Tellico, Melton Hill, and Watts Bar Reservoirs. The only suitable habitat identified on the LMS property for this species was found along the lower reaches of Lick Branch. This area was re-examined during the growing season (July). Numerous species typical of moist, undisturbed ravine woodlands were found; however, *A. patula* was not present.

### 3.5.2 Aquatic Biology

The Clinch River adjacent to the LMS property was impounded by Norris Dam in 1933. Constructed to produce electricity and to control flooding in the Clinch and Powell River valleys, the dam altered habitat for several species of fish and freshwater mussels that are rare today. Native mussels are all but gone from the reach of river adjacent to the LMS property, except for a few common species able to tolerate impounded conditions. A few freshly dead shells of the giant floater (*Pyganodon grandis*), and a single, subrelict valve of the federally endangered finereyed pigtoe (*Fusconaia cuneolus*) were found along the shoreline of Lick Branch during the February 18 habitat survey. Based on its chalky condition, the valve of the finereyed pigtoe presumably came from an individual that lived either in lower Lick Branch or the adjacent reach of the Clinch River prior to formation of Norris Reservoir. The lower reach of Lick Branch is inundated by Norris Reservoir during summer pool levels. The finereyed pigtoe has been extirpated from most of its former range, with the last remaining viable populations in Tennessee



occurring in the Clinch and Powell rivers upstream of Norris Reservoir (Parmalee and Bogan, 1998). The species is not believed to currently inhabit any area on the Clinch River impounded by Norris Reservoir (Parmalee and Bogan, 1998). Relative to LMS, the TVARHP has plotted the closest extant location for the finereyed pigtoe as occurring approximately 25 river miles upstream.

TVARHP has records of the tangerine darter (*Percina aurantiaca*) approximately 20 river miles upstream of LMS. The tangerine darter is listed by Tennessee as "Wildlife in Need of Management." No other state or federal listed fish species has been recorded from the Norris Reservoir or any of its tributaries in the vicinity of the LMS property.

On a regular basis, TVA collects fisheries information from three locations on Norris Reservoir. The closest monitoring location to the LMS property occurs at Clinch River Mile 125.0, approximately 2.5 miles downstream. The most recent survey effort, conducted October 6, 1997, using gill nets and a boat-mounted electrofishing unit, produced a total of 24 species. The more common species were: gizzard shad, largemouth bass, smallmouth bass, spotted bass, green sunfish, bluegill, rockbass, black crappie, channel catfish, flathead catfish, shorthead redhorse, golden redhorse, black redhorse, river redhorse, freshwater drum, common carp, walleye, and sauger.

### 3.5.3 Wetlands

TVA delineated eight wetlands within the project area (Table 1). The boundaries of the wetlands surveyed can be seen on Figure 2. These areas were determined to be wetlands according to the definition contained in Executive Order 11990, Protection of Wetlands. The acreage for each wetland is listed below:

**Table 1. TVA Wetlands on Residential Access Shoreline Fronting LMS**

<b>Wetland Number</b>	<b>Acreage</b>
Wetland 1	0.933
Wetland 2	0.268
Wetland 3	0.884
Wetland 4	0.457
Wetland 5	1.188
Wetland 6	0.227
Wetland 7	0.504
Wetland 8	1.188

These wetlands are of two types—forested and emergent scrub-shrub plant communities—and are scattered along the shoreline. They are found within the fluctuation zone of rising and falling



water levels adjoining the main water body (i.e., the operating zone of the Norris Reservoir). These wetlands almost exclusively are located below the 1020-foot summer pool elevation. The dominant forested wetland species are sycamore and sweetgum. The emergent scrub-shrub communities, classified as fringe wetlands, consist primarily of buttonbush and black willow. Other common wetland species found in these areas include common cattail, woolgrass, soft rush, silky dogwood and river alder.

Fringe wetlands stabilize the shoreline and disperse the energy of waves and currents, thus reducing erosion and suspension of sediments. This helps maintain water clarity and improves water quality. These wetlands also filter runoff from uphill, trapping sediments and nutrients.

Fringe and littoral zone (i.e., overbank area) wetlands also provide habitats that support wetland dependent wildlife including wood ducks, Canada geese, mallards, great blue and green-backed herons, red wing blackbirds, swamp sparrows, mink, muskrat, raccoon, and a variety of reptiles and amphibians. These systems also support the food chain by incorporating nutrients from decomposed organic debris. This process supports plant and animal communities within the wetland, on adjoining uplands, and in adjacent waterbodies.

### ***3.6 Air Quality***

Air quality in Claiborne and adjacent counties meets all National Ambient Air Quality standards (B. Pugh, personal communication, April 16, 1999).

### ***3.7 Water Quality***

#### ***3.7.1 Norris Reservoir Water Quality***

Norris Reservoir is formed by Norris Dam at Clinch River mile 79.8. The reservoir is a large tributary storage impoundment of the Clinch and Powell Rivers which flow together about nine miles upstream of the dam. Norris is one of the deeper TVA tributary reservoirs, with depths over 200 feet. Annual drawdown averages about 32 feet. At full pool, the surface area of the reservoir is 34,200 acres, the shoreline is about 800 miles in length, and water is impounded 73 miles upstream on the Clinch River and 53 miles upstream on the Powell River. Norris Reservoir has a long average retention time (about 245 days) and an average annual discharge of approximately 4200 cubic feet per second. Due to the great depth and long retention time, significant vertical stratification occurs in the summer and fall months. This condition results in dissolved oxygen depletion in the lower depths of the reservoir during this period of the year.

The ecological health of the reservoir was rated fair by TVA in 1995. This reach of Norris Reservoir is surrounded by low density agricultural or residential lands and forested watersheds, resulting in generally good water quality. Bacteria levels at most recreation sites in the Clinch-Powell watershed are considered safe. There are no fish consumption advisories in the watershed. Mercury levels in fish collected from Norris Reservoir in 1993 were slightly elevated, but not enough to warrant action by state officials. Concentrations of pesticides and polychlorinated biphenyls were either low or non-detectable.

#### ***3.7.2 Groundwater***

TDEC records of water wells within the Tazewell quadrangle indicate that groundwater in the vicinity is generally of good quality. The property is underlain primarily by sandstones and



shales of the Clinch, Rockwood and Rome Formations; however, the north shore of Norris Reservoir is underlain by the limestones and shales of the Conasauga Group, and a portion of Wildcat Hollow is mapped as being underlain by the Chickamauga Group. Wells drilled into carbonate bedrock (limestone, marble, and calcareous shales) will produce good quality water, but it is typically hard. It is likely that the most productive well locations will be in the carbonate portions of the Conasauga and Chickamauga Groups within 500 to 1500 horizontal feet of Norris Reservoir. Generally, production is at a depth of less than 300 feet. The yield of any well would depend upon the solution channels and fracture system(s) intercepted.

### ***3.8 Utilities and Services***

#### **3.8.1 Water Supply**

Water supply to the lots would be facilitated by drilling of individual wells because the distance to the nearest public water supply would make service uneconomical for this development. However, 20 lots near Lone Mountain Road (not waterfront lots) have access to city water.

#### **3.8.2 Wastewater Treatment**

Wastewater treatment would be handled by individual septic tanks because the distance to the nearest wastewater treatment facility would make service uneconomical for this development. Each septic tank and drainfield would be designed and installed per TDEC requirements. A soil scientist examines each individual lot and lays out the system according to TDEC requirements and makes adjustments in the lot lines as needed. TDEC requires that not only is an area set aside for the primary treatment system, but that an equal area be set aside on each lot as a reserve area in case the primary system were to fail unexpectedly. Before a lot is recorded as a final plat and can be sold, TDEC must issue a permit for the installation of the septic tank and drain field, ensuring that each system meets TDEC's requirements. Documentation from TDEC regarding plat approval is presented as Appendix 5.

Soil surveys for Areas 1 and 2 indicate the soil percolation rates to be in the range of 30–60 minutes per inch (MPI) to a depth of 36 inches and variable below this depth ranging from 60 to greater than 75 MPI. Percolation rates below 75 MPI are adequate for subsurface disposal without special measures; however, the required length of the trenches increases as the percolation rates rise. Due to the slopes on the property, special measures must be taken to ensure adequate performance of the system. These include water protection (swales, etc.) above the drainfields and further horizontal separation of the trenches to account for effluent going out of the trench sidewalls instead of the bottom.

#### **3.8.3 Solid Waste Disposal**

The Claiborne County Solid Waste Authority is responsible for overseeing the management of solid waste generated within the county. The county provides convenience center collection stations for drop-off of residential waste. Some waste is collected by private haulers under contract. Collected waste is transported to a transfer facility located at the Poor Road Landfill, approximately 4 miles from the LMS property. Solid waste is then transported to the Carter Valley Landfill for long-term storage. This landfill is located in Hawkins County and is operated by BFI, Inc. The landfill currently receives an estimated 200 tons of waste per week from Claiborne County; this amounts to a little over 10,000 tons per year.



#### **3.8.4 Fire and Police Protection and Emergency Medical Services**

Fire protection for the development would be provided by the Claiborne County Volunteer Fire Department. The Claiborne County Sheriff's Department provides police protection, and the Claiborne County Rescue Squad/Ambulance Service provides emergency medical services.

#### **3.8.5 Electrical Service**

Electrical service to the development would be provided by Powell Valley Electric and natural gas would be supplied by the Claiborne County Utility District.

#### **3.8.6 Schools**

The LMS property is within the Claiborne County school district. There are currently 5 elementary schools, 2 middle schools, and 3 secondary schools in the county. The current enrollment is approximately 4200 students. The system is currently near capacity, and there are preliminary plans for adding two high schools.

### **3.9 Cultural Resources**

Pursuant to the National Historic Preservation Act of 1966 and the Archaeological Resources Protection Act of 1979, TVA protects significant archaeological resources, historic properties, and historic structures located on TVA lands or affected by its undertakings. A historic property is "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places." [16 U.S.C. 470w (5)]

Phase I archaeological surveys were performed by TRC Garrow Associates, Inc., in 1996 and 1999. The 1996 survey included the area within approximately 100 feet of the 1020-foot contour. Four sites were identified in that survey. The more extensive 1999 survey area was conducted between the 1020-foot and 1044-foot contours and identified 14 archaeological sites ranging from the Paleo-Indian Period to the twentieth century. Thus, a total of 18 archaeological sites were identified during both these surveys.

TVA determined that 9 archaeological sites were potentially eligible for the National Register of Historic Places. In addition, there were 2 cemeteries on the site that must be protected. On December 28, 1999, the State Historic Preservation Office concurred with the identification of sites. These sites would be avoided or subject to Phase II archaeological testing. All of these sites are located within either Protected or Residential Mitigation Shoreline.

#### **3.10 Floodplains**

The 100-year floodplain elevation for most of Norris Reservoir is approximately 1032-foot mean sea level (msl), while the 500-year floodplain is 1035-foot msl. TVA retains fee simple ownership of shoreland below the 1044-foot contour.

#### **3.11 Prime Farmland**

No prime farmland, unique farmland, or farmland which has been designated by the state of Tennessee as being of state-wide importance occurs on the TVA-owned or private property affected by this development. Therefore, no farmland conversion would result from use of the TVA public shorelands.



### ***3.12 Visual Setting***

The property is characterized by steep to very steep slopes that are largely forested with oak-hickory and pine-oak-hickory communities. Approximately 10.5 miles of the property is bordered by Norris Reservoir. The property's dominant feature is Lone Mountain, a long, narrow mountain which rises over 1000 feet above the elevation of the reservoir. The numerous coves along the shoreline provide visual diversity. The Liberty Hill Community is located across the reservoir from the LMS proposed development. LMS is visible from many parts of Liberty Hill community. This community lies behind shorelands almost entirely owned by TVA.

The property is most frequently seen by boaters on the reservoir. These recreationists are a combination of fishermen, skiers, pleasure boaters, and persons on anchored craft in surrounding coves. The frequency of these viewers is greatest during summer months, on weekends and during weekday evenings. Shoreland across the reservoir, in Grainger County, is primarily steep, forested and undeveloped. Several cliff faces rise up from the water.



## **4.0 Environmental Consequences**

### **4.1 Introduction**

The environmental consequences that would likely result from adopting each of the four alternatives are discussed in this chapter. The chapter is organized by potentially affected resources. Important potential effects associated with the four alternatives are discussed for each of these resources.

### **4.2 Effects on Transportation**

#### **4.2.1 Highways**

Access to the development would be primarily via US 25E, SR 33 and Lone Mountain Road. The current traffic volumes for SR 33 and Lone Mountain Road are well within acceptable levels of service (Transportation Research Board, 1997). US 25E is currently being upgraded to a four-lane divided highway between I-75 in London, Kentucky and I-40 near Morristown (TDOT, 1998).

Development of 575 homes on the LMS property would result in approximately 3645 additional daily trips on Lone Mountain Road. This estimate was generated based on a methodology used to determine additional trip generation estimates based on an independent variable (dwelling units) for a particular land use (single-family homes and recreation homes) for a specified day or time period (weekday). Assuming 287 permanent single-family homes (2735 trips per day at 9.53 trips per home) and 288 "recreational" dwellings (910 trips per day at 3.16 trips per home), trip generation estimates were made based on several field studies of residential areas (Trip Generation, Institute of Transportation Engineers, 1997). Most of this increase would likely go to US 25E. If it all went to SR 33, the average daily traffic on SR 33 would experience approximately a 50 percent increase, whereas the average daily traffic on Lone Mountain Road would experience a large increase of approximately 340 percent. Although the increase on Lone Mountain Road is high, this road is generally underutilized. With the upgrade of US 25E to four lanes, additional traffic would be distributed among SR 33, US 25E, and Lone Mountain Road. The additional traffic should not place SR 33 or Lone Mountain Road at an unacceptable level of service. Traffic, though, may become subject to considerable and sudden variation and reduced freedom to maneuver at times; however, operating speeds would remain tolerable.

Adoption of any of the alternatives would not have a significant effect on the local highway system. Alternatives 2 and 3 could result in decreased lot demand; therefore, traffic volumes would not build as quickly during the early years of project development. Over a long period of time, there is a natural progression to improve the quality of the local roadway network. Also, the increases in traffic over a longer span of time would not change traffic conditions suddenly and would not be perceived by the user as a significant change. New roads would likely be constructed for expected traffic conditions to county standards to serve the lots in the development and provide access to community use facilities. Alternatives 2 and 3 have two community areas. This would result in concentrated use at these locations. Vehicular trips would increase within the development due to the need to travel. Alternative 2 would have the



greatest impact due to the community slips. However, users of the new access roads are multi-users of the area and vehicular trips can be made without affecting the off-site road system. Overall, the difference in impacts should be minimal.

#### 4.2.2 Navigation

Because Norris Reservoir is inaccessible to commercial river traffic, implementation of any of the alternatives would have no effect on commercial navigation. The effects on recreational water traffic are discussed in Section 4.4.

### 4.3 *Effects on Socioeconomic Conditions*

The sale of 575 waterfront and interior lots, over a 5-year period, and the construction of 240 homes on selected lots during the first 10 years of the project development period would produce \$27.9 million in estimated improvements value. It is projected that this total improvement value, inflating at a conservative rate of 5 percent a year, would grow to \$45.5 million in the twentieth year of the project, without benefit of any additional home construction. By the tenth year, there would be approximately \$651,000 in annual property taxes being generated for Claiborne County from this land development project. Over a 20-year period this subdivision project is expected to produce \$12.3 million in total property taxes for the county. These calculations were based on the assumption of a 25 percent equalization rate (the ratio of assessed value to fair market value) and a tax rate of \$2.60 per \$100 of assessed value.

Sales taxes would also be produced by this project during the first ten years of its operation. It is conservatively assumed that building materials would represent 50 percent of the total house construction cost, as determined by reference to the 1999 Means Square Foot Cost estimation manual. In addition, it is estimated that 80 percent of the cost of 25 miles of roadway construction would represent by taxable building materials. Assuming a constant 8.25 percent sales tax rate over the ten-year build-out period, this project would generate approximately \$2.2 million in sales tax revenue for Claiborne County and the State of Tennessee. Refer to Appendix 7 for economic impact analysis.

These benefit projections do not take into account any indirect multipliers and do not include additional economic benefits derived from residents moving to the development from outside Tennessee. Being a rural and sparsely populated area, Claiborne County would benefit in a variety of ways from increased population, particularly from retirement age couples with no children. The burden on the public education system would be marginal, while the increase in property tax revenue would provide additional resources for education and maintenance of infrastructure. In addition, the construction of infrastructure and new homes would provide additional employment opportunities for the county.

The 1990 Census information for the county and the Barren Creek Census Division, which includes the LMS property, indicates that only 0.6% of the population in the Barren Creek Division are non-white, the income levels are higher in this area than in the rest of the county, and the poverty rate is lower. In addition, the proposed development would have a potential positive economic impact on the area's population due to the availability of new jobs and potential increases in property values. A potential negative effect could be an increase in traffic that could pass through communities that contain some minority or low-income residents. The only differential effect that any of the alternatives would have as it relates to traffic is the time it



would take for traffic to build to peak levels. This is because Alternatives 2 and 3 are projected to have lower demand for lots and therefore the development would not sell out as quickly, therefore traffic would build more slowly. Under any of the alternatives, 575 lots would eventually be sold; the alternatives would affect how long it would take to sell them. These findings reveal that the proposed development would not disproportionately impact the very small minority population or low-income residents in the area and no significant impacts are expected regardless of the alternative implemented.

#### 4.3.1 Alternative 1

Assuming that several property owners who have rights to apply for private docks would be granted permits in the future and that community docks can be constructed, this alternative could have the full economic benefit as outlined above.

#### 4.3.2 Alternative 2

This alternative includes 575 lots that are projected to have 90 houses built on 175 waterfront lots and 150 houses built on 400 interior lots by the tenth year of the economic projection period. In this assumption, the waterfront lots, priced at \$37,500, are assumed to include a restriction against dock construction on the individual properties. Interior lots, priced at \$40,000, include the right of access to community docking facilities. The waterfront lots, averaging two acres, are assumed to have houses with an initial value of \$187,500, five times the value of the lot, in the first year of the projection period. The interior lots, averaging three acres, are assumed to have houses with an initial value of \$120,000, three times the value of the lot, in the first year of the projection period. Both these categories of houses are projected to experience a 5 percent annual growth rate in property value. This alternative is estimated to produce \$11.0 million in property taxes and approximately \$2.2 million in sales taxes over the 20-year projection period. There would be a loss of \$1.3 million in total property tax revenue for the county.

#### 4.3.3 Alternative 3

For analysis of this alternative, the waterfront lots, priced at \$75,000, are assumed to include no restriction against dock construction on the individual properties and interior lots, priced at \$20,000, include no access to community slips. The size of waterfront and interior lots remains the same as Alternative 2. The waterfront lots are still assumed to have houses with an initial value of \$187,500, two and a half times the value of the lot, in the first year of the projection period. The interior lots are still assumed to have houses with an initial value of \$120,000, six times the value of the lot, in the first year of the projection period. Both these categories of houses are projected to experience a 5 percent annual growth rate in property value. This alternative is estimated to produce \$10.7 million in property taxes and approximately \$2.2 million in sales taxes over the 20-year projection period. There would be a loss of \$1.6 million in property tax revenue for the county.

#### 4.3.4 Alternative 4

This alternative would have the full economic benefit as stated at the beginning of the section.

### 4.4 *Effects on Recreation*

All alternatives (except Alternative 2) could result in fewer opportunities for informal recreation (bank-fishing, limited camping, fishing from boat to bank, etc.) on the TVA public land below the 1044 contour adjacent to LMS. This impact occurs because much of this strip of land would



take on the appearance of private property due to the likely eventual approval and development of floats, steps, cables, etc. The public is reluctant to use the shoreline under these conditions. Alternative 2 would prevent the construction of private docks and would have the least impact on informal recreation. Given the existing land rights, in the absence of this development, impacts on informal recreation would occur over time as individual lots would be sold and developed.

In general, developing this number of homes would create more recreational demand for boating, skiing, pleasure boating, etc., and have some negative impact on the visual component of the recreation experience of those users currently using this portion of the reservoir. All of these variables lower the recreation experience of current users. There would be more people in this section of the reservoir than current users which would probably increase the sense of crowding. This would be an insignificant negative impact on the recreational experience. The positive impact from new users with new expectations, however, would more than likely balance out the negative effects current users would experience.

#### 4.4.1 Alternative 1

This alternative would increase the demand for the development of the shoreline for private water use facilities. This alternative would allow qualified shoreline owners apply for approval to develop private water use facilities under current TVA policies and procedures. As home sales continue in the LMS development, the upper portions of Norris Reservoir would experience increased boat traffic.

#### 4.4.2 Alternative 2

Private water access facilities would be restricted along the entire shoreline. Two community sets of slips, totaling 120 slips, and support facilities would probably be approved for development. This level of development would provide less boat access than Alternatives 1 and 4 but probably more than Alternative 3. Also this alternative would have the least impact on the public land along the shoreline. With this alternative only two locations would appear to be private facilities, therefore, the shoreline would continue to appear as undeveloped public shoreline and anticipated effects would be minor. As home sales continue in the LMS development, the upper portions of Norris Reservoir would experience increased boat traffic.

#### 4.4.3 Alternative 3

This alternative would have about the same impact to the TVA public land as Alternatives 1 and 4. It would have more impact than Alternative 2 on the shoreland. By providing the backlying property owners two common boat ramps and parking, this alternative would provide more boat access to this section of the reservoir than Alternative 1. The boat access would be somewhat smaller than Alternative 4 which provides 120 slips for backlying property owners. As home sales continue in the LMS development, the upper portions of Norris Reservoir would experience increased boat traffic. development. There is little development on this section of Norris and therefore little boat traffic relative to other portions of the reservoir. It should be anticipated that the potential addition of about 175 boats over the residential build-out period would have some negative impact on the current users. But to some degree this would be offset by the positive benefits associated with the new boaters and their expectation. Overall there are approximately 5,000 boats in marinas and 1,500 boats at private moorings on Norris. The addition of 175 boats over the build-out period would be an insignificant increase in the total boating activity of Norris Reservoir.



#### 4.4.4 Alternative 4

This alternative would provide the most boating access to Norris Reservoir of the four alternatives and would impact TVA land below the 1044 contour in the same manner as Alternatives 1 and 3. All three of these alternatives are within the 38% developed shoreline alternative evaluated in the SMI FEIS (TVA, 1998). This alternative would have a larger impact on the public land than Alternative 2, but this impact would be insignificant because of commitments to protect the environment and sensitive resources. As home sales continue in the LMS development, the upper portions of Norris Reservoir would experience increased boat traffic. This alternative would likely have a greater impact on the public land than Alternatives 2 and 3 because of recreational use patterns and length of anticipated build-out of the LMS development. There is little development on this section of Norris; therefore, there is little boat traffic relative to other portions of the reservoir. It is anticipated that the potential addition of about 300 boats over the residential build-out period would have some negative impact on the current users. But to some degree this would be offset by the positive benefits associated with the new boaters and their expectation. Overall there are approximately 5,000 boats in marinas and 1,500 boats at private moorings on Norris. The addition of 300 boats over the build-out period would be an insignificant increase in the total boating activity of Norris Reservoir.

#### 4.5 *Effects on Biological Resources*

Much of the shoreline habitat along the Clinch River embayment of Norris Reservoir between SR 33 and US 25E is publicly owned by TVA, and this habitat is expected to be protected over the long term. The only other subdivision currently being developed is the Woodlake Golf Community, four miles northeast of LMS on Lone Mountain Road. Thus, significant cumulative effects on biological resources are not expected.

##### 4.5.1 Terrestrial Effects

###### 4.5.1.1 *Alternative 1*

Under Alternative 1, the no action alternative in which TVA would consider permits from individuals for private water use facilities using guidelines, standards, and/or regulations in effect at the time of application, no immediate or short-term impacts to terrestrial habitats and wildlife are anticipated. However, as the property is developed by individual residences, there would be minor impacts to the upland game and non-game fauna depending upon the amount of land cleared or disturbed. The local population of certain upland species (e.g., white-tailed deer, squirrel, and wild turkey) may even be enhanced when the property is developed because of a reduction in hunting pressure, feeding of wildlife by local residents, and the creating of small, grassy clearings within forested habitats.

In general, the amount of woodland that would be cleared to accommodate home construction and clearing for individual docks under Alternative 1 is minimal relative to the total amount of woodland along the water and across the site. Thus, infrequent wintering bald eagle use of the shoreline is expected to continue for the immediate future. Spring and fall osprey use would also continue. Potential impacts on these species and their use of the shorelands and adjoining overwater areas depends on the amount of shoreline clearing and overall disturbance resulting from residential development. Southeastern shrews would also continue to occur on the property, although minor losses in population number are expected as habitats are disturbed.



However, because this species is apparently a generalist in terms of its habitat preferences, impacts to this species under Alternative 1 are expected to be insignificant.

Conducted in accordance with provisions to minimize habitat loss and direct effects on bats (see Section 4.5.1.4), clearing of trees on the property is not likely to adversely affect foraging or roosting Indiana bats. The percentage of forest that might be cleared would be small relative to total forest cover in the immediate area. Implementation of Alternative 1 is not expected to affect gray bats because no summer or winter roost habitat exists on the site, and because clearing of forest to accommodate homes and individual docks would not affect a significant percentage of the site's forest cover.

#### *4.5.1.2 Alternative 2*

Under Alternative 2, the same impacts to terrestrial wildlife in the interior of the property would apply as that described for Alternative 1, in the sense that small areas within woodland habitat would be cleared and altered to allow for construction of residential homes. However, under Alternative 2, there would be greater impacts to terrestrial wildlife because of disturbance to habitat in areas where the two community docks are proposed. These impacts would be caused by construction of parking areas, access roads, and other community facilities such as restrooms to serve such concentrated use. Impacts to seasonally present bald eagles and ospreys would be greater in the areas where the community facilities are proposed due to increased boat and vehicular traffic in those areas. Impacts to these species along the remaining shorelines would probably be less because no private docks would be allowed, thereby reducing localized boat traffic along the shorelines; however, the ramps at the community docks could somewhat offset this reduction as waterfront property owners could access their homes from the shoreline.

Clearing of trees for individual home sites and for the community docks also is not expected to significantly affect foraging Indiana bats given that, overall, much of the site represents low quality habitat, and the percentage of forest that might be cleared for individual homes and the two community docks would be small relative to total forest cover in the immediate area. Implementation of Alternative 2 is not expected to affect gray bats because no summer or winter roost habitat exists on the site, and because clearing of forest to accommodate homes and the community docks would not affect a significant percentage of the site's forest cover.

#### *4.5.1.3 Alternative 3*

Under Alternative 3, the same impacts to terrestrial wildlife in the interior of the site would apply as that described for Alternative 1, in the sense that small areas within woodland habitat would be cleared and altered to allow for construction of residential homes. However, under Alternative 3, there would be greater impacts to terrestrial wildlife because of disturbance to habitats in areas where the 2 community areas are proposed. These impacts would be caused by construction of parking areas, access roads, and other community facilities such as restrooms to serve such concentrated use. Impacts to seasonally present bald eagles and ospreys would be greater in the areas where the community facilities are proposed due to increased boat and vehicular traffic in those areas. Impacts to these species along the remaining shoreline probably would be greater than under Alternative 2 because private docks would be allowed, thereby increasing localized boat traffic along the shorelines.



Clearing of trees for individual home sites, private water use facilities, and for the community docks also is not likely to adversely affect foraging Indiana bats given that, overall, much of the site represents low quality habitat, and the percentage of forest that might be cleared for individual homes, private docks, and the two community docks would be small relative to total forest cover in the immediate area. Implementation of Alternative 3 is not expected to affect gray bats because no summer or winter roost habitat exists on the site, and because clearing of forest to accommodate homes and the community docks would not affect a significant percentage of the site's forest cover.

#### *4.5.1.4 Alternative 4*

Under Alternative 4, the same impacts to terrestrial wildlife in the interior of the property would apply as that described for Alternative 1, in the sense that small areas within woodland habitat would be cleared and altered to allow for construction of residential homes. However, under Alternative 4, there would be greater impacts to terrestrial wildlife because of disturbance to habitats in areas where the community area is proposed. The impacts would be caused by construction of parking areas, access roads, and other community facilities such as restrooms to serve such concentrated use. Impacts to seasonally present bald eagles and ospreys would be greater in the area where the community facilities are proposed due to increase boat and vehicular traffic in this area. Because wooded shoreline is common on much of the 800 miles of Norris Reservoir shoreline, no adverse effects to either of these species are expected to result from the minor amount of habitat loss associated with Alternative 4. No eagle or osprey nesting activity is presently known to occur along the immediate shoreline fronting this proposed development. Known use in the vicinity of this shoreline by both species largely infrequently occurs during spring and fall migration. Impacts to these species along the remaining shorelines would probably be greater than Alternative 2 because private docks would be allowed, thereby increasing localized boat traffic along the shorelines.

Because suitable summer habitat for Indiana bats does occur on TVA lands adjacent to the Lone Mountain Shores Development as well as on nearby private properties, the following restriction on permitted vegetation removal would apply: Live or dead hardwood trees greater than 6 inches in diameter breast height (dbh) (Wally Brines, pers. comm., January 4, 2000) shall be removed from TVA Lands only after receipt of TVA approval of a vegetation management plan and between October 15 and March 31 when Indiana bats are not present (USFWS, 1999).

#### *4.5.2 Aquatic Effects*

##### *4.5.2.1 Alternative 1*

Under Alternative 1, no immediate or short-term impacts to aquatic habitats and aquatic life are anticipated. However, as land is cleared to accommodate individual residences, and private lawns are constructed around the new homes, applications of fertilizer, pesticides, and herbicides would occur on private land. Improper application could result in runoff of lawn chemicals into the reservoir, which may adversely impact aquatic life through direct and indirect toxicity. Habitat and water quality may be adversely impacted by nutrient loading, which could cause excessive periphyton biomass on near-shore substrata (e.g., filamentous green algae and diatoms). There is also the potential for impacts to the adjacent aquatic community caused by destruction of riparian vegetation and degradation of shoreline habitats associated with increased boat traffic in and around the private docks. Dock construction and maintenance and increased



boating activity in the vicinity of the docks would increase shoreline erosion and may adversely impact fish spawning and nursery habitat.

#### *4.5.2.2 Alternative 2*

Under Alternative 2, there is potential for impacts to the adjacent aquatic community caused by destruction of riparian vegetation and degradation of shoreline habitats associated with increased boat traffic in and out of the coves where the community docks would be built. There is also the potential for impacts to aquatic communities in the vicinity of the community docks and individual ramps from shoreline erosion and runoff of fertilizers, herbicides, and pesticides from maintained lawn areas, and runoff of oil and grease from community parking areas.

#### *4.5.2.3 Alternative 3*

Under Alternative 3, impacts resulting from private docks would be similar to those described for Alternative 1, in the sense that there would be some destruction of riparian vegetation and degradation of shoreline habitats associated with increased boat traffic in and around the docks constructed on public land. Impacts would probably be slightly less than, but somewhat similar to those associated with Alternative 4. Dock construction and maintenance, and increased boating activity in the vicinity of the docks could increase shoreline erosion and may adversely impact fish spawning and nursery habitat.

There would also be the potential for impacts to the adjacent aquatic community caused by destruction of riparian vegetation and degradation of shoreline habitats associated with increased boat traffic in and out of the coves where the community areas would be built. Shoreline erosion and runoff of fertilizers, herbicides, and pesticides from maintained lawn areas at the community grounds may impact aquatic life, as does runoff of oil and grease from community parking areas.

#### *4.5.2.4 Alternative 4*

Under Alternative 4, impacts to aquatic resources would be slightly greater than, but somewhat similar to those described for Alternative 3, except that there would be increased potential for impact in the vicinity of the community areas because community boat slips would be allowed. Additional measures would also be implemented to protect the environment and sensitive resources.

### **4.5.3 Effects on Wetlands**

#### *4.5.3.1 Alternative 1*

The shoreline wetland areas meet the definition of wetlands as stated in Executive Order 11990 (Protection of Wetlands). Each individual permit request for private water use facilities or vegetation disturbance would be reviewed by TVA. Permit requests located in or adjacent to wetlands would be modified to avoid or minimize any adverse impacts to wetlands. Permit requests that cannot be modified would be denied. This review of individual permit requests would minimize direct wetland impacts such as wetland vegetation removal. Increased vehicle and human traffic around wetlands could also have some indirect impacts on wetlands.

Alternative 1 would have minimum, localized impacts on wetlands and wetlands wildlife. Cumulative impacts to wetlands or wetland wildlife would, however, be considered insignificant on a regional basis.



#### *4.5.3.2 Alternative 2*

The impacts under this alternative would be similar, yet less severe than Alternative 1 due to the prohibition of private docks. Residential development along the shoreline and adjacent to wetland areas would result in direct and indirect impacts to the wetland environments. Cumulative impacts to wetlands or wetland wildlife would, however, be considered insignificant on a regional basis.

Potential impacts to wetlands in the community dock areas, particularly Community Dock I, would be minimized by careful location of the access walk ways and piers, ramps and parking areas in the field by LMS and TVA personnel.

#### *4.5.3.3 Alternative 3*

Under Alternative 3, the SMP for LMS would help to ensure that shoreline wetlands would be avoided or development impacts mitigated. These protection measures are discussed more fully below in section 4.5.3.4. This level of protection would likely be greater than that afforded under Alternatives 1 and 2 because the SMP is a tool to inform prospective property owners of the presence of wetlands and the need to avoid disturbing them. However, the inclusion of private docks under Alternative 3 could have the potential for greater indirect impacts than Alternative 2. Cumulative impacts to wetlands or wetland wildlife would, however, be considered insignificant on a regional basis because these types of small wetlands and the species that use them are somewhat common and widespread.

#### *4.5.3.4 Alternative 4*

In accordance with the conditions of Alternative 4, LMS has proposed that wetland areas 2-7 and most of wetland 1 would be categorized as Shoreline Protection. A small portion of wetland 1, proposed to be affected by dock and ramp construction at Community Dock 1, would be categorized as Shoreline Mitigation. These effects would be offset by implementing a mitigation plan (further described below). Thus, approval of this alternative would not result in significant direct impacts to existing wetlands and their associated functions and values. As with Alternative 3, cumulative impacts to wetlands or wetland wildlife would be considered insignificant on a regional basis.

Some impacts would occur to Wetland 1 in the Community Dock I area. A 0.93-acre wetland was identified at the site of this proposed dock. During field inspections, design considerations were agreed upon to minimize impacts to this wetland. Both the ramp and dock structure are the minimum width feasible. Because impacts to the wetland are unavoidable, TVA, USACE, and the TDEC have worked with the applicant and developed a mitigation plan (see Appendix 3). This mitigation plan is designed to offset the effects of a 0.06-acre wetland loss. Since enhancement of wetlands typically requires a 4:1 mitigation ratio, the total mitigation area is 0.24 acres.

As recommended by USACE and TVA, the mitigation plan includes a combination of 400 woody tree species and placement of 10 wood duck boxes in and around Area 1 Wetland #8, specifically in the Protected Shoreline and Managed Residential shoreline of the cove. The plantings would include four species: 100 Willow Oak, 100 Black Willow, 100 Button Bush, and 100 Common Persimmon. The tree plantings and construction of the wood duck boxes would follow the requirements as set forth by USACE.



LMS would schedule a pre-construction site inspection with TVA prior to initiation of on-the-ground construction at Community Dock I to ensure minimal additional direct effects on remaining wetland areas.

#### ***4.6 Effects on Air Quality***

The expected increased volume of vehicular and recreational boat traffic, as well as other activities such as outdoor burning of some vegetation and minor amounts of appropriate construction waste, that would result from approval of either alternative, would result in minor smoke and exhaust emissions. Given the general good quality of existing ambient air quality conditions, there would be no adverse impacts on air quality expected to result under any of the alternatives.

Outdoor burning would be conducted in accordance with Tennessee open burning regulation and only after appropriate permits are obtained from the Tennessee Division of Forestry.

#### ***4.7 Effects on Water Quality***

The LMS development will be required to meet a variety of state and federal regulations designed to protect water quality. In addition, Alternative 4 would include additional protections. With the effective implementation of these regulations, the quality of water in this reach of Norris Reservoir would not be cumulatively affected.

##### ***4.7.1 Alternative 1***

This alternative does not include any developer-imposed provisions for protection of water quality. Construction of walkways and private and community docks and individual ramps could result in the potential for erosion, sedimentation, and water quality impacts. The TVA SMI standards (see Section 4.6.2) would minimize these effects by providing for buffer zones, clearing requirements, and specific best management practices for protection of water quality.

##### ***4.7.2 Alternative 2***

Alternative 2 does not include any developer-imposed provisions for protection of water quality. Under this alternative, potential impacts would likely be less than Alternative 1 due to the prohibition of private docks. Without limits on shoreline development, buffer zones, clearing requirements and specific best management practices, potentially adverse water quality impacts could occur.

##### ***4.7.3 Alternative 3***

Alternative 3 does not include special provisions for protection of water quality other than existing TVA and other regulatory requirements for work near waterways and on upland areas. The shoreline plan would have the potential to reduce impacts due to potential for protection of sensitive areas. TVA SMI standards (see Section 4.6.2) would minimize these effects by providing for buffer zones, clearing requirements, and specific best management practices for protection of water quality.



#### 4.7.4 Alternative 4

Alternative 4 includes special provisions for protection of water quality in addition to existing TVA and other regulatory requirements for work near waterways and on upland areas. Among special conditions that would reduce water pollution are home setbacks/buffers, Protected and Residential Mitigation shoreline development areas, limits on vegetation removal and use of retaining walls, no dredging and fill, limits on facilities at community docks (no fuel or repair services), protection of wetlands, and the elimination of individual ramps.

#### 4.8 *Effects on Utilities and Services*

As noted previously, it is expected that approximately 50 percent of this development would be seasonal residents. In addition, the majority of the residents are expected to be retirees that are attracted to the development from outside the State. This is expected to be true under any or all of the alternatives. Therefore, the impacts on utilities and services should be viewed in light of the origin of the new residents and their demographics.

##### 4.8.1 Potable Water Supply and Wastewater Treatment

Since the water supply would be from wells and wastewater treatment would be achieved via septic tanks and drainfields, the effects on these systems are expected to be very similar, if not the same, across all the alternative; however, further explanation is provided below.

The installation of approximately 575 individual wells on the 2400 acres has the potential to withdraw approximately 172,500 gallons per day (gpd) from the groundwater (300 gpd per home). Due to the nature of the development (seasonal residency), it is highly unlikely that this level of withdrawal would ever be reached. While there is the potential for drawdown of groundwater levels as a result of the installation of the wells, it is not likely due to the groundwater characteristics of the underlying carbonate formations where they occur and the proximity to Norris Reservoir. The drawdown would be basically limited to the LMS property and should not impact adjacent properties due to (1) likely direction of groundwater flow towards the Clinch River and (2) properties to the north (across the crest of Lone Mountain) are in a different geologic formation, therefore, groundwater connectivity to the LMS property is unlikely.

TDEC requires that any well must be located at least 50 feet from any drain field. While not eliminating the potential for contamination, this provision would enhance protection of groundwater quality.

##### 4.8.2 Solid Waste Disposal

Based upon an estimated residential population of 1294 people, with an average waste generation rate of 0.81 tons per person per year (the national average), household solid wastes are projected to be about 1048 tons. This projected tonnage of household waste is higher than would be actually anticipated due to the seasonal occupancy of the community. While the Loop Hollow Road landfill has limited capacity to handle the additional solid waste generated from the development, the expected effects would not vary across the alternatives. Impacts of the additional solid waste generated by LMS's development would be minor because additional disposal capacity at this or a new site would likely be developed prior to build-out of this development.



#### **4.8.3 Fire and Police Protection and Emergency Medical Services**

Implementation of either Alternatives 1, 2, 3, or 4 would be expected to have similar, if not the same effects on fire and police protection and emergency medical services. These services would be expected to be upgraded in the area over the anticipated build-out schedule for the LMS development.

#### **4.8.4 Electrical Service**

Implementation of either Alternatives 1, 2, 3, or 4 would be expected to have similar, if not the same effects on electrical service. These services would be expected to be upgraded in the area over the anticipated build-out schedule for the LMS development.

#### **4.8.5 Schools**

Implementation of either Alternatives 1, 2, 3, or 4 would be expected to have similar, if not the same effects on schools. Seasonal residents and retirees without young children would not be expected to contribute to the need for more educational facilities. However, construction of new or expansion of existing schools would be expected in the area over the anticipated build-out schedule for the LMS development.

### ***4.9 Effects on Cultural Resources***

Nine archaeological sites potentially eligible for the National Register of Historic Places and three cemeteries occur along the shoreland fronting Lone Mountain Shores residential development. TVA's case by case reviews of land use and shoreline development proposals submitted under Section 26a would emphasize avoidance. Given that the average lot width of reservoir frontage would be 258 feet, avoidance would likely be feasible. However, if avoidance is not practicable, the potentially affected site would be subject to further Phase II testing and evaluation (refer to Appendix 5). The cost of the Phase II testing and evaluation would be borne by the owners of lots abutting the archaeological site likely to be impacted by improvements made to the property below the 1044-foot contour. If a site is determined to be eligible for listing in the NRHP, then further consultation with TVA and the Tennessee Historical Commission would be necessary, and any adverse effects would be mitigated in accordance with Section 106 of the NHPA. Therefore, no adverse effects on eligible properties are expected under either Alternatives 1, 2, 3, or 4. None of the alternatives would affect the two cemeteries.

#### **4.9.1 Alternative 1**

Under this alternative, TVA would review each individual's land use permit request on a case-by-case basis. This alternative has the potential to affect 9 archaeological sites potentially eligible for listing in the NRHP, because of disturbance associated with individual private water use facilities. However, these sites would be avoided or subjected to Phase II archaeological testing before a decision to permit was made.

#### **4.9.2 Alternative 2**

This alternative would have the least potential for impact on archaeological resources due to the prohibition of private docks. The community dock facilities could have an impact if they are constructed near such resources. Under this alternative, one archaeological site would be avoided or subjected to Phase II archaeological testing as recommended by the Tennessee State Historical Preservation Office (TN SHPO). No individual land use permits would be permitted.



#### 4.9.4 Alternatives 3 and 4

Implementation of this alternative also has the potential to affect nine archaeological sites potentially eligible for listing in the NRHP. However, guidance provided in the SMP would minimize impacts on sensitive resources by placing these eligible sites in the Residential Mitigation category. Therefore, any potential actions that could potentially affect these resources would be subject to review by TVA. LMS will identify the areal extent of those sites containing archaeological resources to lot purchasers in their Vital Information Sheets, Declaration of Covenants, Warranty Deeds, or other appropriate instruments.

#### 4.10 *Effects on Floodplains*

The 100-year floodplain lies below the 1032-foot contour and the 500-year floodplain is below the 1035-foot contour. TVA retains fee simple ownership below the 1044-foot contour. Therefore, the only development that would occur within the floodplain would be the private water use facilities such as docks. These are water dependent, repetitive actions and there is no practicable alternative to locating these facilities in the floodplain. Thus, the requirements of Executive Order 11988 are met. Under any alternative, vegetation management or other shoreline alterations meeting TVA Shoreline Management Policy requirements would have little or no effects on flooding or floodplain values.

#### 4.11 *Effects on Prime Farmland*

Since the property contains no prime farmland, unique farmland, or farmland which has been designated by the state of Tennessee as being of state-wide importance, no adverse impacts to such resources are expected. No such farmland would be impacted under either of the alternatives.

#### 4.12 *Effects on Aesthetics*

##### 4.12.1 Alternative 1

The No Action Alternative would produce visual change due to the potential for construction of private water use facilities, including individual docks and ramps. There would be increased shoreline erosion from wave action due to increased boating activities.

The provisions of the SMI FEIS vegetative buffers and clearing (see Section 2.8.3) would apply to this alternative which would provide a measure of protection for aesthetic impacts due to clearing of vegetation. No such protections on uplands are included in this alternative and, therefore, implementation of this alternative could potentially have the greatest effects.

##### 4.12.2 Alternative 2

This alternative would likely result in the least aesthetic impacts on the shoreline due to the prohibition of individual docks; however, it would have no effect on potential upland impacts. The provisions of Section 2.8.3 of the SMI FEIS vegetative buffers and clearing would also apply to this alternative which would provide a measure of protection for aesthetic impacts due to clearing of vegetation. No such protection for uplands is included in this alternative, but because no individual private docks would be permitted, this alternative could comparatively result in the least effects.



#### 4.12.3 Alternative 3

Implementation of this alternative would likely result in greater impacts than Alternative 2, but probably less than Alternative 1 because no community slips would be approved. The provisions of Section 2.8.1 of the SMI FEIS would again apply but there would be no such protection for uplands included.

#### 4.12.4 Alternative 4

Development of LMS with the implementation of mitigation measures proposed by the developer would reduce visual impacts to the viewing public. The classification of steep shoreline into Residential Mitigation and limiting the number of docks in Area 4 would reduce impacts. The preservation of existing shoreline vegetation below the 1044-foot contour, the allowance of a narrow corridor for water use facility access, and the limitation on clearing of vegetation on upland areas would aid in preserving visual resources. The protection of wetland areas, the concentration of community dock facilities to one area, the restriction of individual water use facilities to shoreline areas not warranting visual protection, the control of shoreline erosion by visually acceptable means, and the elimination of individual ramps would reduce visual impacts. Implementation of this alternative would likely result in greater impacts than Alternative 2 and less impacts than Alternative 1. Aesthetic impacts of Alternative 4 would be greater than Alternative 3 because of the community slips and seasonal mooring of boats.

#### ***4.13 Unavoidable Adverse Impacts***

Selection of any of the alternatives would inevitably result in some isolated adverse environmental effects. The magnitude of these effects would be reduced by adoption of the additional mitigative measures under Alternatives 3 or 4. Any development actions would create temporary increases in sediment, herbicides, and pesticides entering water courses; dust, boat, and vehicle emissions; increase in noise; loss of wildlife habitat and food sources; and changes in the visual landscape to a less natural appearance.

These adverse effects would be localized and limited to the LMS property and the immediate vicinity. Some adverse effects, such as those related to construction, would cease or abate over time. Although such impacts would be difficult to totally eliminate, they can be minimized or mitigated to acceptable levels.

#### ***4.14 Relationship of Short-Term Uses and Long-Term Productivity***

The relationship between short-term uses of the human environment and maintenance and/or enhancement of long-term productivity is complex and involves trade-offs and changes in environmental characteristics. Short-term uses are those that generally occur on an annual basis. Since the uplands of the LMS property are currently under private ownership, there are no short-term uses of the property such as agricultural production or informal recreation. Visual changes would result in long-term loss of a more natural setting to reservoir users; however, long-term productivity would occur from economic development and recreational and employment opportunities for residents, employees, and guests.

#### ***4.15 Irreversible and Irretrievable Resource Commitments***

The fuel and energy used to create the residential development would be irreversibly lost. Many of the construction materials also represent irreversible losses; however, some would be recycled



during and after the life of the project. Neither the energy expended or the construction materials used are expected to result in regionally or locally significant environmental effects. Also, given the abundance of similar land use/land cover types in the region, loss of wildlife habitat is not considered significant.



## 5.0 Commitment List

Should alternative 4 be selected, the following commitments would be implemented:

1. Private Water Use Facility Restrictions. No individual ramps will be allowed adjacent to waterfront lots. The total number of private water use facilities in Area 4 will be limited to 3. Where permitted by TVA, shoreline stabilization will be accomplished by riprap and/or shoreline vegetation plantings with native vegetation (willows, buttonbush, etc). No retaining walls would be allowed. For all other facilities, a Section 26a permit must be obtained by the purchaser of waterfront lots for any and all improvements made to their property below the 1044-foot contour line. Improvements shall include, but are not limited to, docks, boathouses, shoreline maintenance, walkways, etc.
2. Use of SMI Vegetation Management Standards. Any cutting, trimming, or other alteration or removal of vegetation below the 1044-foot contour line cannot be undertaken without approval from TVA under Section 26a of the TVA Act. All such vegetation management practices shall be in accordance with the provisions of Section 2.8.3 of the SMI FEIS. Pathways will be permitted across the TVA public lands only in accordance with approved vegetation management plans to access TVA-approved private or communal dock facilities.
3. Community Docks. At community docks, fuel sales, boat/motor repair or sales, materials or provisions sales and other amenities typically provided by commercial marinas will be prohibited.
4. Wetland Mitigation. The loss of a 0.06-acre portion of Wetland 1, located in the Community Dock I area, will be mitigated by LMS as outlined in the mitigation plan in Appendix 3 of this EA. No additional disturbance to wetland areas 2-7 (including construction of pathways or private use facilities) will be permitted. The mitigation plan will include a combination of 400 woody tree species and placement of 10 wood duck boxes in and around Area 1 Wetland 8, specifically in the Protected Shoreline and Managed Residential shoreline of the cove. The plantings would include four species: 100 Willow Oak, 100 Black Willow, 100 Button Bush, and 100 Common Persimmon. LMS will schedule joint pre-construction site inspections with TVA and USACE at a mutually agreeable time prior to initiation of on-the-ground construction at Community Dock I to ensure minimal additional direct effects on remaining wetland areas.
5. Endangered Species Protection. Live or dead hardwood trees greater than 6 inches in diameter at breast height (dbh) shall be removed from TVA lands only after receipt of TVA approval of a vegetation management plan and between October 15 and March 31.
6. Stream Obstructions. No roads, bridges, or culverts or any obstruction will be constructed over tributary streams of the Clinch River or below the 1044-foot contour elevation without prior review and Section 26a approval by TVA.
7. Cemeteries. LMS will provide for easements to the 1044-foot contour to allow for public access to Lewis Cemeteries #41 and #42 (40CE96-97). LMS will construct appropriate fencing for protection of these cemeteries.
8. Archaeological Sites. Shoreline above archaeological sites potentially eligible for listing on the National Register of Historic Places (NRHP) will be categorized within Residential Mitigation shoreline. LMS will identify the areal extent to lot purchasers and educate them on the importance of avoiding effects to these areas. In reviewing the lot owner's Section 26a application for activities to be conducted below the 1044-foot contour line, if impacts to the archaeological sites cannot be avoided, TVA would conduct a Phase II survey of the sites that would be impacted. The cost of the Phase II survey would be borne by the lot owner.



## 6.0 Agencies, Persons, and References Consulted

Barge, Waggoner, Sumner & Cannon, Architects, Engineers, and Planners. Draft EA Preparation by Steve Fritts.

East Tennessee Development District. Letter from Robert E. Freeman, November 30, 1999

First Claiborne Bank, Eleanor Yoakum and Tammy Flanagan. Letters of May 26, 1999.

Griffith, G., J. Omernik, and S. Azevedo, 1999. Ecoregions of Tennessee. Map published by U.S. Geological Survey.

Institute of Transportation Engineers. 1997. "Trip Generation."

Parmalee, Paul W. and Authur E. Bogan. 1998. *The Freshwater Mussels of Tennessee*. University of Tennessee Press, Knoxville.

Pugh, Billy. 1999. Personal Communication. TDEC Division of Air Pollution Control, Nashville, TN, April 16, 1999.

Tennessee Department of Agriculture, Louis Buck (no response received).

Tennessee Department of Economic and Community Development, Wilton Burnette (no response received).

Tennessee Department of Environment and Conservation, Environmental Policy Office, Justin Wilson (no response received)

Tennessee Department of Environment and Conservation, Historical Commission, Herbert L. Harper. Letters of April 26, 1999, October 20, 1999, November 19, 1999 and December 28, 1999.

Tennessee Department of Environment and Conservation, Commission of Indian Affairs, Toney Heap, Letter of October 19, 1999.

Tennessee Department of Environment and Conservation, Groundwater Division, Isaac C. Russell, letter of October 13, 1999

Tennessee Department of Environment and Conservation, Natural Heritage Division, Reggie Reeves (no response received)

Tennessee Department of Environment and Conservation, Water Pollution Control, Greg Denton (no response received)

Tennessee Department of Transportation. 1998. Transportation Improvement Program, Fiscal Years 1998-2000.



Tennessee Department of Transportation, Glen Beckwith (no response received).

Tennessee Valley Authority. 1998. *Final Environmental Impact Statement - Shoreline Management Initiative - An Assessment of Residential Shoreline Development Impacts in the Tennessee Valley*, Volume 1 FEIS November 1998.

Tennessee Wildlife Resources Agency, Dan Sherry, Letters of November 30, 1999 and December 1, 1999.

Transportation Research Board, National Academy of Sciences. 1997. Highway Capacity Manual, Special Report Number 209.

U.S. Army Corps of Engineers, Nashville District, Deborah T. Tuck, letters of December 17, 1999 and January 10, 2000.

U.S. Fish and Wildlife Service. 1999. *Agency Draft Indiana Bat (Myotis sodalis) Revised Recovery Plan*. Fort Snelling, Minnesota, 53 pp.

U.S. Fish and Wildlife Service, Lee A. Barclay. Letters of October 29, 1999 and November 17, 1999.

U.S. Fish and Wildlife Service, Kentucky-Tennessee Field Office, Personal Communication with Wally Brines, January 4, 2000.



## **Appendix 1.**

### **Detailed Plan for Community Dock I**



**Attachment 1**  
**Description of Activity**

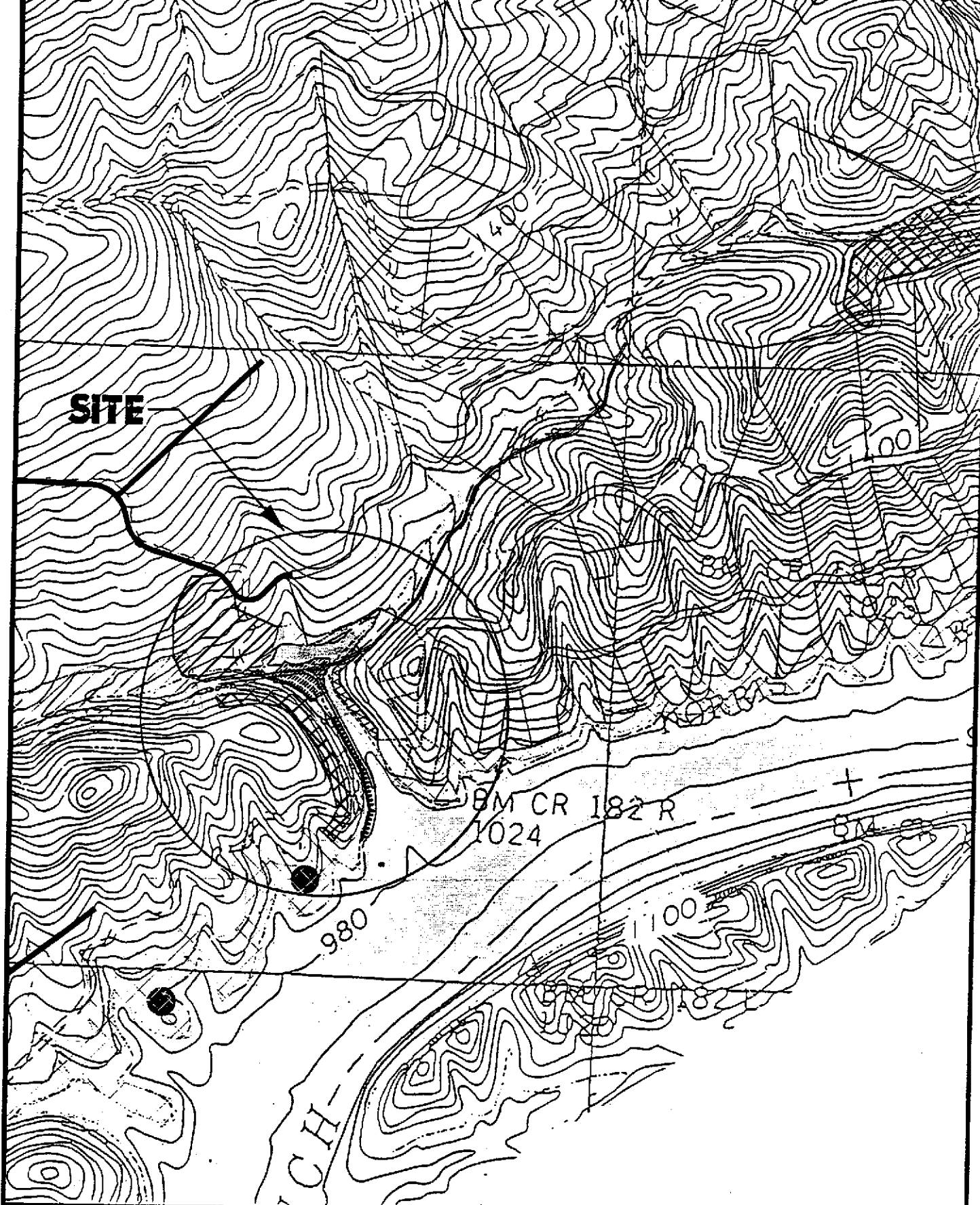
The activity involves the construction of an access drive, a 24' x 48' gravel turnaround, concrete boat ramp and 56 boat slips below the 1044 contour. All of these improvements will be constructed with a minimum of earth and vegetation disturbance activities. No fill material, other than the gravel for the drives and the concrete for the ramp will be placed below the 1044.

A floating walkway (6' in width) is proposed to provide access to 56 community floating boat slips. These slips will be available for use by interior (non-lakefront) lot owners. The slips are for seasonal use only and are designed to hinge into a folded position during the winter months. The method of flotation will be encased foam.

A parking area to serve the ramp and the slips will be constructed above the 1044.

Archaeological and T&E species investigations are underway or have been completed for this area as a part of the EA for this project. Indications at this point are that there are no such sensitive resources below the 1044 in this location. In addition, the same is true for the parking area above the 1044.





**BWSC**

ENGINEERS ARCHITECTS PLANNERS  
LANDSCAPE ARCHITECTS AND SURVEYORS

First Tennessee Plaza Suite 2100, Knoxville, Tennessee 37929  
Phone (423) 637-7800 Fax (423) 617-6954

BARGE  
WAGGONER  
SUMNER &  
CANNON, INC.

# **SITE LOCATION MAP**

**LONE MOUNTAIN SHORES**  
UPPER EAST TENNESSEE

DRAWN BY:

KCB

CHECKED BY:

SAF

DRAWING NO.:

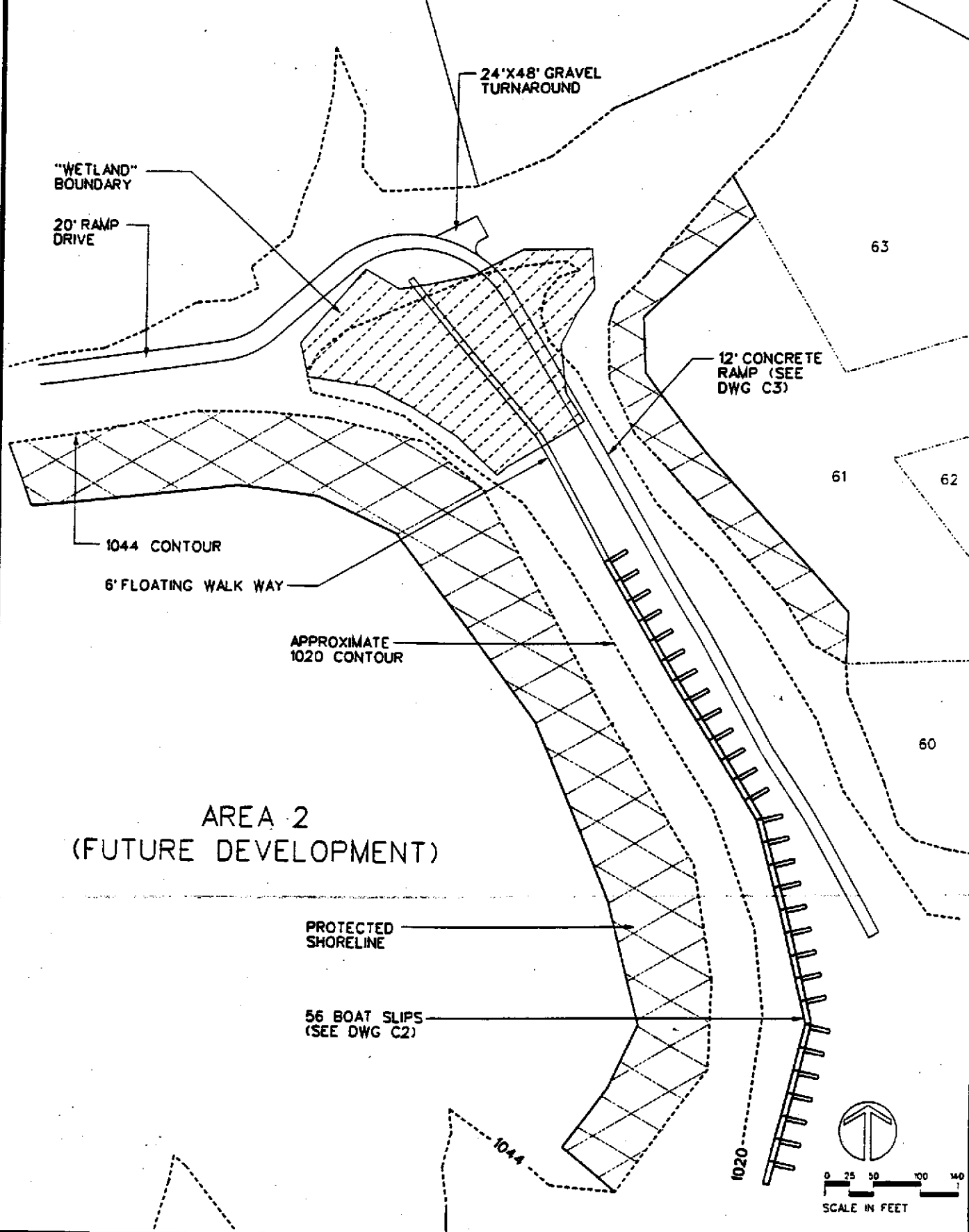
PROJECT NO.:

25128-00

DATE:

3-25-99





**BWSC**

ENGINEERS ARCHITECTS PLANNERS  
LANDSCAPE ARCHITECTS AND SURVEYORS

First Tennessee Plaza Suite 2400, Knoxville, Tennessee 37929  
Phone (423) 537-2900 Fax (423) 579-9584

BARGE  
WAGGONER  
SUMNER &  
CANNON, INC.

## DEVELOPMENT PLAN

## LONE MOUNTAIN SHORES UPPER EAST TENNESSEE

DRAWN BY:

KCB

CHECKED BY:

SAF

DRAWING NO.:

**C1**

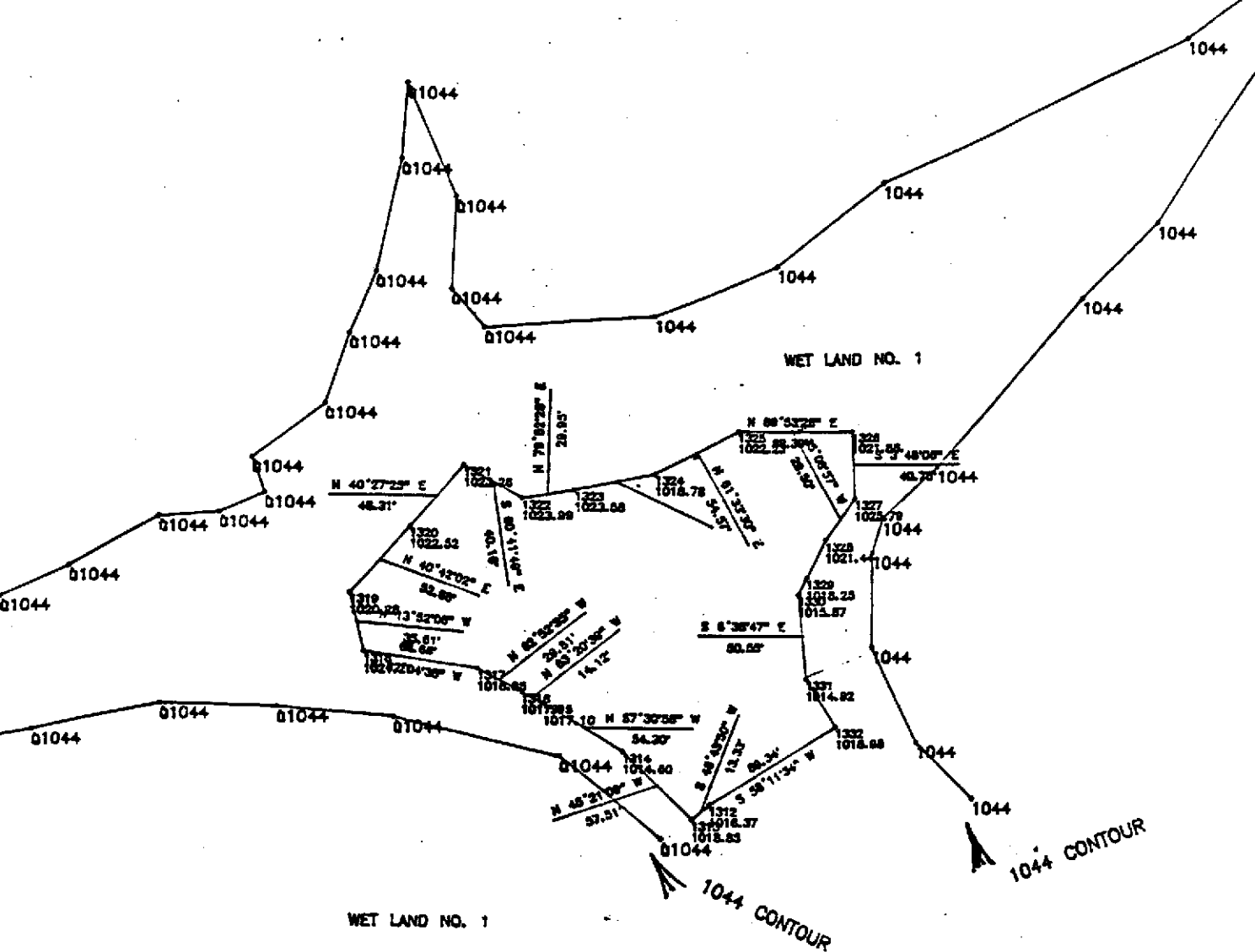
PROJECT NO.:

25128-00

DATE:

3-25-99

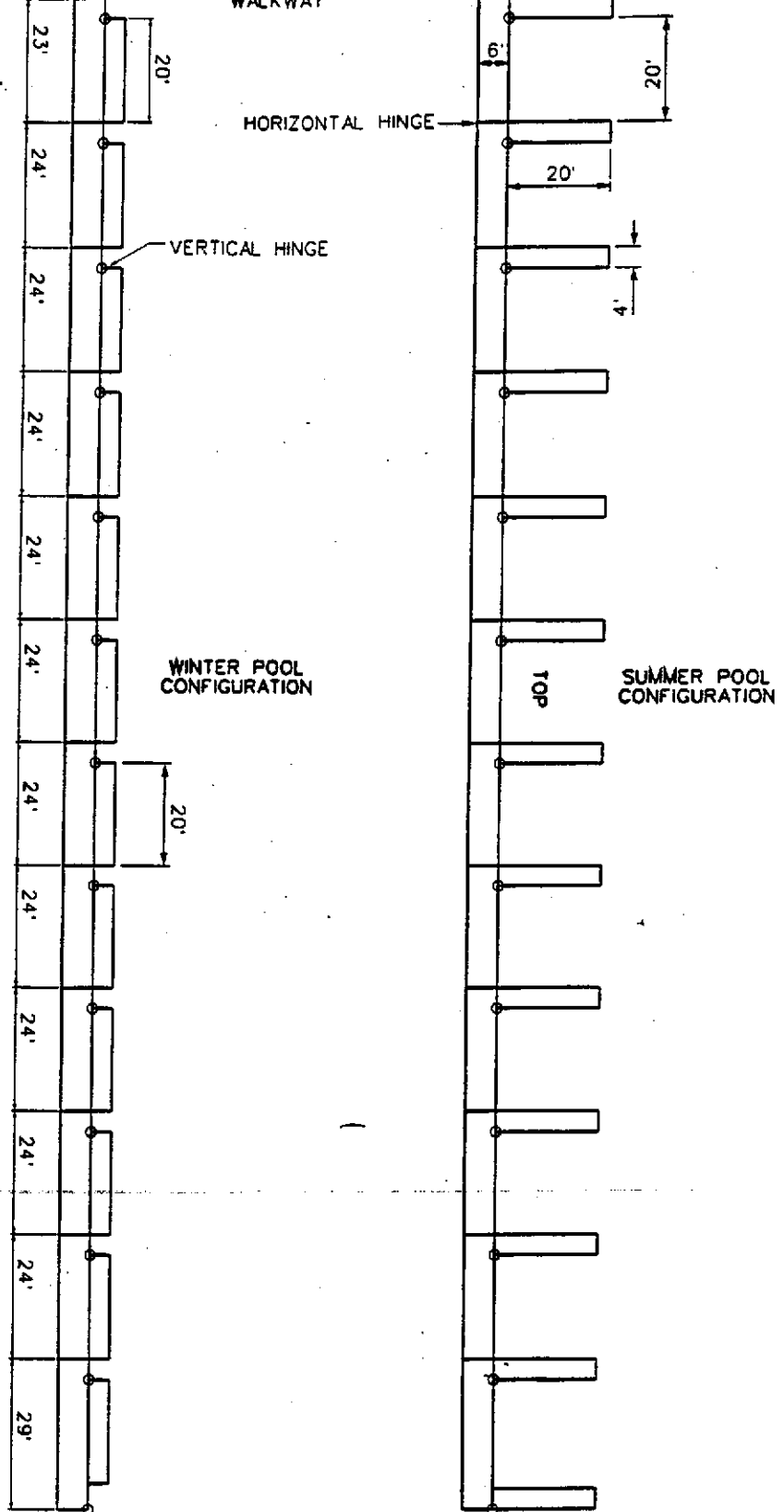




	NORTH	EAST	ELVE.	
1312	7405.2724	12588.0622	1016.3735	TVA
1313	7396.4830	12578.0466	1018.8549	TVA
1314	7436.8968	12537.1323	1014.6040	TVA
1315	7466.0569	12491.3316	1017.0991	TVA
1316	7472.3922	12478.7111	1017.9144	TVA
1317	7485.9831	12452.1790	1018.8468	TVA
1318	7495.4472	12384.1739	1021.2146	TVA
1319	7530.0199	12375.6383	1020.2831	TVA
1320	7569.9557	12409.9893	1022.5201	TVA
1321	7606.7111	12441.3336	1023.2570	TVA
1322	7587.0539	12476.3581	1023.9904	TVA
1323	7592.3196	12505.8435	1023.5844	TVA
1324	7602.3899	12552.2967	1018.7823	TVA
1325	7628.3817	12600.2840	1022.2325	TVA
1326	7628.5136	12669.6731	1021.8555	TVA
1327	7587.8271	12672.3767	1025.7938	TVA
1328	7563.7059	12655.3930	1021.4416	TVA
1329	7541.3240	12644.4130	1018.2455	TVA
1330	7531.4721	12639.5507	1015.8739	TVA
1331	7481.2863	12645.4009	1014.9248	TVA
1332	7452.3588	12663.9837	1018.9833	TVA



2. FLOTATION TO BE ENCASED  
FOAM FOR WALKWAY AND SLIPS.
3. TOTAL ACCESS WALKWAY  
LENGTH 250'±



# BWSC

**ENGINEERS ARCHITECTS PLANNERS  
LANDSCAPE ARCHITECTS AND SURVEYORS**

FD-29 (Rev. 10-1-79) Page 5, Ltr 2400, Ltr 2400, Ltr 2400 57529  
Phone 1-214-617-7800 Fax 1-214-617-0514

**BARGE  
WAGGONER  
SUMNER &  
CANNON, INC.**

## TYPICAL BOAT SLIPS PLAN

**LONE MOUNTAIN SHORES**  
**UPPER EAST TENNESSEE**

**DRAWN BY:**

KCB

CHECKED BY:

SAF

**DRAWING NO.:**

**C2**

PROJECT NO.:

25128-00

DATE:

3-25-99



TOP VIEW

384'

LAUNCHING RAMP

CUBIC YARDS OF FILL 49.5

CONCRETE 3 1/2" THICKNESS OF SLAB

NOTE: MINOR MACHINE GRADING TO FACILITATE CONSTRUCTION.

13.9% GRADE

SIDE VIEW

EL. 1034 +

EL. 98

**BWSC**

ENGINEERS ARCHITECTS PLANNERS  
LANDSCAPE ARCHITECTS AND SURVEYORS

605 Commerce Park Drive Suite 300, Oak Ridge, Tennessee 37830  
Phone: (423) 481-0976 Fax: (423) 481-2695

**BARGE  
WAGGONER  
SUMNER &  
CANNON, INC.**

**RAMP**

**LONE MOUNTAIN SHORES  
UPPER EAST TENNESSEE**

DRAWN BY:

KCB

CHECKED BY:

SAF

DRAWING NO.:

**C3**

PROJECT NO.:

25128-00

DATE:

3-25-99



## **Appendix 2.**

### **Declaration of Covenants, Restrictions, and Easements**

---



STATE OF TENNESSEE           §   DECLARATION OF COVENANTS,  
                                 §   CONDITIONS, RESTRICTIONS AND  
COUNTY OF CLAIBORNE       §   EASEMENTS FOR LONE MOUNTAIN SHORES

THIS DECLARATION OF COVENANTS, RESTRICTIONS AND EASEMENTS FOR LONE MOUNTAIN SHORES is made this 3rd day of September, 1998, by TENNESSEE LONE MT. SHORES CORP., a Tennessee Corporation (hereinafter referred to as the "Declarant").

WITNESSETH:

WHEREAS, Declarant is the owner of certain real property located in County of Claiborne, State of Tennessee containing approximately 206.443 acres, more or less; and

WHEREAS, Declarant intends to develop the property as a subdivision known as "LONE MOUNTAIN SHORES" (hereinafter referred to as the "Property"), which is more fully described in Exhibit "A" attached hereto and incorporated herein by this reference; and

WHEREAS, additional property may be included in Lone Mountain Shores in the future and declarant wishes to reserve the right to subject other properties into Lone Mountain Shores by way of future amendments of this Declaration in accordance with the provisions contained herein; and

WHEREAS, Declarant intends by this Declaration to impose upon the Property mutually beneficial restrictions under a general plan of improvement for the benefit of all owners of property in Lone Mountain Shores, and to provide a flexible and reasonable procedure for the development of the Property.

NOW THEREFORE, Declarant hereby declares that the Property which is described in EXHIBIT "A" and any property hereafter made subject hereto as hereinafter provided shall be held, transferred, sold, conveyed, leased, occupied and used subject to the following easements, restrictions, covenants, charges, liens and conditions which are for the purpose of protecting the value and desirability of the Property, and which shall touch and concern and run with title to the Property. The Covenants and all provisions hereof shall be binding on all parties having any right, title or interest in the Property or any portion thereof, and their respective heirs, successors, successors in title and assigns, and shall inure



ARTICLE I  
IMPOSITION OF COVENANTS AND  
STATEMENT OF PURPOSE

Section 1.01 Imposition of Covenants. Declarant hereby makes declares and establishes the following covenants, conditions, restrictions and easements (collectively referred to as the "Covenants") upon the "Property" which shall be held, sold and conveyed subject to the Covenants. The Covenants shall run with the land and shall be binding upon all persons or entities having any right title or interest in all or any part of the Property, and the covenants shall inure to the benefit of each owner of the Property.

Section 1.02 Statement of Purpose. The Covenants are imposed for the benefit of all owners of the parcels of land located within the Property. These Covenants create specific rights and privileges which may be shared and enjoyed by all owners and occupants of any part of the Property.

Section 1.03 Declarant's Intent. The provisions of these Covenants, as amended from time to time, are intended to act as the land use controls applicable to the Property, and in the events of a conflict or difference between the provisions hereof and of the Claiborne County Zoning Ordinance, the terms of this Declaration, as amended, shall control and supersede such Zoning Ordinance. Each Owner, automatically upon the purchase of any portion of the Property, is deemed to waive all protections afforded to him, now or in the future, under the Claiborne County Zoning Ordinance to the extent such Zoning Ordinance is at variation with the provisions of this Declaration, as amended, or with the provisions of any of the other Lone Mountain Shores Documents, including but not limited to the Architectural Guidelines established by the Architectural Review Committee.

Section 1.04 Areas subject to these Covenants: Be it understood that these covenants shall apply only to the development of Lone Mountain Shores by Tennessee Lone Mt. Shores Corp. Phase One (1) of Lone Mountain Shores and prior conveyances of three (3) lots from Phase II, being Lot Nos. 30, 32 and 42 of Lone Mountain Shores Phase II were developed by prior owners and are therefore not subject to these covenants and restrictions.

ARTICLE II  
DEFINITIONS

The following terms as used in these Covenants, are defined as follows:

Section 2.01 "Architectural Review Committee" or "ARC" shall mean and refer to the committee formed pursuant to Article VII below to maintain the quality and architectural harmony of improvements in Lone Mountain Shores.

Section 2.02 "Assessments" shall mean and refer to annual special, and default assessments levied pursuant to Article IV below to meet the estimated cash requirements of the Associations.

Section 2.03 "Association" shall mean and refer to the Lone Mountain Shores Owners Association, Inc., a non-profit corporation, or any successor of the Association by whatever name, charged with the duties and obligations set forth in these Covenants.

Section 2.04 "Building" shall mean and refer to any one or more Buildings constructed on a Lot or Tract.

Section 2.05 "Covenants" shall mean and refer to this Declaration of Covenants, conditions, restrictions, and easements for Lone



Mountain Shores, as and if amended.

Section 2.06 **"Declarant"** shall mean and refer to Tennessee Lone Mt. Shores Corp., a Tennessee Corporation and its successors and assigns.

Section 2.07 **"Lot"** shall mean and refer to a parcel of land designated as a lot on any Plat of Lone Mountain Shores.

Section 2.08 **"Maintenance Fund"** shall mean and refer to the fund created by Assessments and fees levied pursuant to Article IV below to provide the Association with the funds required to carry out its duties under these Covenants.

Section 2.09 **"Membership"** shall mean and refer to the rights and responsibilities of every Owner of any Lot in Lone Mountain Shores. Every Owner by virtue of being an owner and only as long as he or she is an Owner, shall retain their Membership in the Association. The Membership may not be separated from Ownership of any Lot. Regardless of the number of individuals holding legal title to a Lot no more than one Membership shall be allowed per Lot owned. However, all individuals owning such Lot shall be entitled to the right of Membership and the use and enjoyment appurtenant to such ownership.

Section 2.10 **"Owner"** shall mean and refer to the record owner, whether one or more persons or entities, of fee simple title to any Lot, but shall not mean or refer to any person or entity who holds such interest merely as security for the performance of a debt or other obligation, including a Mortgage, unless and until such persons or entity has acquired fee simple title pursuant to foreclosure or other proceedings.

Section 2.11 **"Plat"** shall mean and refer to any plat (or asbuilt survey) depicting the Property filed in the Registrar's Office for Claiborne County, Tennessee, as such plat may be amended from portions of the Property from time to time.

Section 2.12 **"Supplemental Covenants"** shall mean and refer to additional or further restrictive covenants imposed on a portion or portions of the Property from time to time.

Section 2.13 **"Lone Mountain Shores"** shall mean and refer to the planned community created by these Covenants, consisting of the Property and all of the Improvements located on the Property

Section 2.14 **"Common Area"** shall mean all real property (including the improvements thereto) owned by the Home Owners Association by deed of Declarant for the common use and enjoyment of the Owners. The Common Area or Areas, as exists by plat, shall be conveyed to the Association no later than when seventy-five (75%) percent of the lots in the Subdivision are sold.

### ARTICLE III THE ASSOCIATION

Section 3.01 **Developer as The Association.** Until such time as seventy-five (75%) percent of the lots in Lone Mountain Shores are deeded to individual lot purchasers, and the Association is operative, the Declarant shall act and have the authority to act as the Homeowners Association and have such rights and such obligations as are created herein.

Section 3.02 Every owner of a lot shall be a member of the Association. Membership shall be appurtenant to and may not be separated from ownership of any lot which is subject to assessment.

Section 3.03 **Board of Directors.** The Association shall elect at its first annual meeting a Board of Directors which shall govern the association. The Board of Directors shall consist of five (5) members, all of whom must be property owners in the Lone Mountain Shores Development and a member in good standing with the associa-



... The Board of Directors shall consist of a President, Secretary and Treasurer and a member who shall also serve on the Architectural Review Committee and serve as a Liaison between the Board of Directors of the Association and the Architectural Review Committee. The Board of Directors shall have the responsibility of over seeing all functions of the association as stated in these covenants and restrictions and shall be responsible for collecting all association assessments and shall develop and amend association by-laws consistent with these covenants and restrictions. Furthermore, the Board shall be responsible for appointing and over seeing the members of the Architectural Review Committee.

**Section 3.04 Association Records.** Upon written request to the Association by any Owner of a lot or any, Mortgagee, or guarantor of a first mortgage on any Lot, or the insurer of improvements on any Lot the Association shall make available for inspection current copies of the Association's documents, books, records, and financial statements. The Association shall also make available to the prospective purchasers current copies of the Association's documents, including rules governing the use of lots and the most recent annual financial statement, if such is prepared.

"Available" as used herein shall mean available for inspection upon written request, during normal business hours.

#### ARTICLE IV COVENANT FOR COMMON AREAS AND MAINTENANCE ASSESSMENTS

**Section 4.01 Declaration of Declarant's Intent for Common Areas.** It is the Declarant's intent to create an owner's common area or areas for the use and enjoyment of all existing lots and future lots which may include but are not limited to parking areas, marina slips, parks, and land areas.

**Section 4.02 Road.** It is the intent of the Declarant to convey all public roads to the Claiborne County Highway Department and said entity will take over the ownership and maintenance of all public roads throughout the development. Public roads shall be defined as all roads which are not noted on any of the recorded plats as a private road.

**Section 4.03 Owner's Easement of Enjoyment.** Every owner shall have a right and easement of enjoyment in and to the Common Area or Areas which shall be appurtenant to and shall pass with the title to every Lot, subject to the following provisions:

The right of the Home Owner's Association to suspend the voting rights and right to use of the recreational facilities by an owner for any period during which any assessment against his/her lot remains unpaid;

The right of the Home Owner's Association to dedicate or transfer all or any part of the Common Area to any public agency, authority, or utility for such purposes and subject to such conditions as may be agreed to by the Board of Directors of the Home Owner's Association.

No such dedication or transfer shall be effective unless an instrument agreeing to such dedication or transfer signed by an authorized officer of the Home Owner's Association has been recorded in the Registrar's Office of Claiborne County, Tennessee.

**Section 4.04 Delegation of Use.** Any owner may delegate, in accordance with the By-Laws, his/her right of enjoyment to the Common Area and facilities to the members of his/her family or the owner's accompanied guests.

**Section 4.05 Default Assessments.** All monetary fines assessed against an Owner pursuant to the Lone Mountain Shores Documents, or any expense of the Association which is the obligation of an



Owner or which is incurred by the Association or the Declarant on behalf of the Owner Pursuant to the Lone Mountain Shores Documents, shall be a default Assessment and shall become a lien against such Owner's Lot which may be foreclosed or otherwise collected as provided in these Covenants. Notice of the amount and due date of such default Assessment shall be sent to the Owner subject to such Assessment at least thirty (30) days prior to the due date, provided that failure to give such thirty (30) days prior notice shall not constitute a waiver thereof, but shall only postpone the due date for payment thereof until the expiration of said thirty (30) day period.

**Section 4.06 Effect of Nonpayment of Assessment; Lien Remedies of Association.** Any Assessment, whether pertaining to annual, special or default Assessments, which is not paid within thirty (30) days of its due date shall be delinquent. In the event that an Assessment becomes delinquent, the Association, in its sole discretion, may take any or all of the following action:

Assess a late charge of at least fifteen (15%) percent per delinquency;

Assess an interest charge from the date of delinquency at the rate per annum of two points above the prime rate charged by the Association's bank, or such other rate as shall have been established by the Board;

Suspend the voting rights of the Owner during any period of delinquency;

Suspend all privileges to recreational facilities situated upon common areas;

Accelerate any unpaid annual Assessments for the fiscal year such that they shall be due and payable at once;

Bring an action at law against any Owner personally obligated to pay the delinquent installments; or

File a statement of lien with respect of the Lot, and foreclose as set forth in more detail below.

**Section 4.07 Annual Assessments.** The Declarant shall not be required to pay any association dues or annual assessments on any of the unsold lots. The purpose of the assessments by the Declarant is to provide funding for the Declarant or the Association to maintain common areas, entrances and any other obligations as provided in Lone Mountain Shores Documents.

(a) The initial maximum annual assessment for each residential lot shall be Three Hundred (\$300.00) Dollars per year. Each owner of each individual lot shall not be required to pay the annual assessment until January 1, of the year immediately following the execution of the deed of conveyance by the Declarant to the owner of each lot, until the Association is formed.

(b) From and after January 1, of the year immediately following the conveyance of the first lot to an owner, the maximum annual assessment may be increased each year by the Board of Directors of the Association, or the Declarant if the Association is not operable by not more than ten (10%) percent (but no more than twenty-five (25%) percent over a five (5) year period) above the maximum assessment for the previous year without a majority vote of the Home Owner's Association.

(c) The Board of Directors of the Home Owner's Association may fix the annual assessment at an amount not to exceed the maximum.



ARTICLE V  
INSURANCE

Section 5.01 Casualty Insurance on Insurable Common Areas. The Association shall keep all insurable improvements and fixtures of the Common Area or Areas insured against loss or damage by fire for the full insurance replacement cost thereof, and may obtain insurance against such other hazard and casualties as the Association may deem desirable. The Association may also insure any other property whether real or personal, owned by the Association, against loss or damage by fire and such other hazards as the Association may deem desirable, with the Association as the owner and beneficiary of such insurance. The insurance coverage with respect to the Common Area shall be written in the name of, and the proceeds thereof shall be payable to, the Association. Insurance proceeds shall be used by the Association for the repair and replacement of the property for which the insurance was carried. Premiums for all insurance carried by the Association are common expenses included in the common assessments made by the Association.

Section 5.02 Liability Insurance. The Association shall maintain liability insurance as to all common areas and property, acts or omissions of its officers or governing body, or otherwise as it deems necessary designated as a common expense in the By-Laws by the Owners Association.

Section 5.03 Replacement or Repair of Property. In the event of damage to or destruction of any part of the Common Area Improvements, the Association shall repair or replace the same from the insurance proceeds available. If such insurance proceeds are insufficient to cover the costs of repair or replacement of the property damaged or destroyed, the Association may make a Reconstruction Assessment against all lot owners to cover the additional cost of repair or replacement not covered by the insurance proceeds, in addition to any other common assessments made against such lot owner.

Section 5.04 Annual Review of Policies. All insurance policies shall be reviewed at least annually by the Board of Directors in order to ascertain whether the coverage contained in the policies is sufficient to make any necessary repairs or replacement of the property which may have been damaged or destroyed.

ARTICLE VI  
LAND USE AND BUILDING TYPE

WHEREAS, it is the desire of the Declarant to maintain fair and adequate property values in said development and to prevent nuisances and to maintain an attractive area for residential purposes thus the following covenants are adopted.

Section 6.01 Minimum residential size restrictions for lots 24-63 of Lone Mountain Shores, Phase Two (2). Each dwelling shall contain a minimum of 1,800 square feet of heated living space, excluding garages, porches, overhangs, etc. Dwellings of two (2) stories above ground level shall contain in the heated living area thereof (excluding garages, porches, overhangs, etc.) not less than 1,800 total square feet, inclusive of both stories, with the main first floor to contain not less than 1,200 square feet.

Section 6.02 Minimum residential size restrictions for all interior lots which are not lots 24-63 of Lone Mountain Shores, Phase Two (2). Each dwelling shall contain a minimum of 1,200 square feet of heated living space, excluding garages, porches, overhangs etc. Dwellings of two (2) stories above ground level shall contain in the heated living area thereof (excluding garages, porches, overhangs, etc.) not less than 1,200 total square feet, inclusive of both stories, with the main first floor to contain not less than 800 square feet.

Section 6.03 Residential Use Only. The lots shall be used for



residential purposes only, and no commercial use shall be permitted. This restriction shall not be construed to prevent rental of any dwelling for private residential purposes or to prevent an individual lot owner from conducting home occupations in the dwelling, which occupation is subordinate to the primary residential use and occupies not greater than twenty (20%) percent of the dwelling's floor area or employees not more than two (2) persons.

**Section 6.04 Types of Dwellings Prohibited.** Modular homes, mobile homes, manufactured homes, housing motor coaches, recreational vehicles, house trailers, trailers and basements are prohibited for permanent residential or occupancy purposes. However, during the construction phase of the residence upon the real estate, the owner may place a temporary self contained recreational vehicle upon the premises and reside in said recreational vehicle for a maximum period of one (1) year during the construction phase. Furthermore, this covenant is not meant to exclude prefabricated home sections which are constructed at other sites and transported to the owner's lot for attachment to the dwelling.

**Section 6.05 Review By Architectural Committee.** All proposed plans of dwellings to be erected in said subdivision shall be submitted to Architectural Committee to be reviewed and approved by said Committee in accordance with Article VII. Red Creek Ranch, Inc. shall constitute the Architectural Committee until such time as there is a transfer pursuant to Article VII.

**Section 6.06 Exposed Block.** No exposed concrete foundation or block shall be permitted above ground level in construction of a dwelling, building, wall or fence.

**Section 6.07 Drainage.** No construction on any lot shall be done in such a way as to materially increase the drainage of water upon any adjoining lot.

**Section 6.08 Television, Radio and Satellite Antenna.** All television or radio antennas must be placed in the attic of a residence, unless an alternative location is approved by the Architectural Committee. Television or radio towers are prohibited. Satellite dishes of 24 inches or less are allowed and must be hidden from view of the roads and the lake front. All satellite dishes above 24 inches are prohibited.

**Section 6.09 Rental.** As stated in Section 6.04 residences may be rented and all tenants are awarded owner's privileges and are required to abide by all covenants and restrictions.

**Section 6.10 Construction Completion.** All exterior work on improvements shall be completed and an occupancy permit obtained no later than twelve (12) months from the commencement of the construction of the improvement unless specifically waived by the Architectural Review Committee.

**Section 6.11 Setbacks and Building Location.** No building or any part thereof, shall be erected on any lot nearer than thirty (30) feet to the road side lot line or nearer than thirty (30) feet to any side street line. No building or any part thereof shall be located nearer than fifteen (15) feet to any interior lot line or nearer than fifteen (15) feet to any rear lot line, except if the rear lot line is the 1044 TVA Contour Line, then the rear set back line shall be five (5) feet from the 1044 TVA Contour Line. It is noted that the plat of Phase Two (2) of Lone Mountain Shores specifically states that all rear lot lines shall be fifteen (15) feet, unless otherwise noted. Therefore, it is the Declarant's intent to note that the rear lot lines are changed as stated herein. Furthermore, on all lots which are contiguous to the lake, no building or other improvement may be constructed below elevation 1044 unless otherwise permitted by the Tennessee Valley Authority (TVA).

**Section 6.12 Easements.** Declarant reserves unto itself, its successors, and assigns, the right to erect and maintain all utility



and electric lines, and grant easements for utility purposes, and the right of access and ingress for the purpose of installing and maintaining such easements and structures and utility lines, including but not limited to water, sewer, gas and cable, situate thereon; on, over, and under a strip of land ten (10) feet wide along the side and rear lot lines of each lot, and twenty (20) feet wide along the front lot lines of each lot. Unless the rear lot line in the 1044 TVA contour line and in that event said easement shall be five (5) feet from the 1044 TVA contour line. No structures, plantings or other materials shall be placed or permitted to remain, or activities undertaken thereon, which may damage or interfere with the usage of said easements for utility purposes. The areas on any lot affected by such easements shall, except for improvements situated thereon, by public authority or utility company, be maintained by the owner of the lot.

**Section 6.13 Storage of Boats and/or Boat Trailers.** Each lot owner and/or their assigns or agents may store or park one (1) boat and/or boat trailer upon the lot for not more than fourteen (14) consecutive days in open view to the public, and shall not be for more than twenty-eight (28) days during the entire calendar year. Storage over and above said time frame must be in a facility that is completely enclosed. Furthermore, each lot owner may store more than one (1) boat and/or boat trailer upon their property, but all such boats and/or boat trailers must be stored inside a complete enclosure.

**Section 6.14 Garages.** A private garage may be built separately or attached to and made a part of the dwelling, but must be made of the same materials or conform to construction with the dwelling and must be built at the same time or after construction of the dwelling and must be approved by the ARC.

**Section 6.15 Outbuildings.** Any separate storage building, workshop or other incidental outbuilding may be allowed provided that the architectural style, quality of construction and building material are consistent with the caliber and appearance of the main residence structure. All out buildings must be approved by the Architectural Review Committee prior to construction, and must be built at the same time or after construction of the dwelling.

**Section 6.16 Construction Materials.** The exterior walls of any structure or dwelling on any such lot shall be of materials consisting of wood, log, stone, stucco, brick or vinyl and must be of natural colors. White vinyl is prohibited as well as any type or color of aluminum siding, except as used for trim, gutters, shutters, soffits and roofs.

**Section 6.17 Foundations.** All foundations shall be fully enclosed at the exterior walls; no pier-type foundations or unenclosed foundations shall be permitted.

**Section 6.18 Above Ground Swimming Pools.** No above ground swimming pools shall be permitted on any lot.

**Section 6.19 Nuisances.** No noxious or offensive trade or activity shall be carried on upon any lot, nor shall anything be done thereon which may be or may become an annoyance or nuisance to the neighborhood.

**Section 6.20 Maintenance.** Each residence shall be maintained in a neat and sanitary condition. Each owner shall promptly remove or otherwise dispose of any accumulation of trash, garbage or rubbish. All incinerators or other equipment for the storage or disposal of such material shall be kept in a clean and sanitary condition. Junked, inoperative or unlicensed vehicles shall not be stored or kept on any lot.

**Section 6.21 Pets, Livestock and Poultry.** No animals, livestock or poultry of any kind shall be kept, used or bred on any lot either for commercial or private purposes, except the usual domestic pet, provided that the same is not allowed to run at large and does not



and intent of these Covenants. The ARC shall be composed of five (5) persons of which a minimum of three (3) must be Members who are in good standing with the Association. All of the Members of the ARC shall be appointed, removed and replaced by the Board. The ARC is the only standing committee of the Board that has perpetual existence. One Director shall serve as a member of the ARC and as a liaison to the Board. Until such time as the ARC is functional, the Declarant and/or its assigns shall act as the ARC, having such duties, rights and obligations created herein.

#### Section 7.02 Duties of ARC.

7.02.1 The ARC shall exercise its best judgment to see that all improvements conform and harmonize with any existing structures as to external design, quality, Covenants as outlined in the Architectural Guidelines.

7.02.2 No improvements on the Property shall be erected, placed or altered on any Lot, Building Site nor shall any construction be commenced until plans for such improvements shall have been approved by the ARC; provided, however, that improvements and alterations which are completely within a building may be undertaken without such approval.

7.02.3 The actions of the ARC in the exercise of its decision including approval of plans, approval of plans with conditions, or disapproval of plans, or with respect to any other matter before it, shall be conclusive and binding on all interested parties subject to appeal as approved in the By-Laws.

#### Section 7.03 Organization and Operations of the ARC.

7.03.1 Term. The term of office of each Member of the ARC, shall be two (2) years except the initial terms of two (2) Members which will be for one (1) year each to create an alternating board, commencing on January 1 of each year and continuing until his or her successor shall have been appointed. Should an ARC Member die, retire, or become unable to serve or in the event of a temporary absence of an ARC Member, a successor may be appointed by the Board.

7.03.2 Chairman. The chairman of the ARC shall be appointed for a two (2) year term by a majority vote of said Board.

7.03.3 Operations. The chairman shall preside over and conduct all meetings and shall provide for reasonable notice to each Member of the ARC prior to any meeting. The notice shall set forth the time and place of the meeting and notice may be waived by any member. In the absence of a Chairman, the Vice Chairman shall serve as temporary successor.

7.03.4 Voting. The affirmative vote of a majority of the Members of the ARC shall govern its actions and be that act of the ARC. A quorum shall consist of a majority of the Members.

7.03.5 Expert Consultation. The ARC may avail itself of technical and professional advice and consultants as it deems appropriate.

Section 7.04 Expenses. Except as provided below, all expenses of the ARC shall be paid by the Association. The ARC shall have the right to charge a fee for each application submitted to it for review in an amount which may be established by the ARC from time to time, and such fees shall be collected by the ARC and remitted to the Association to help defray the expenses of the ARC's or declarant's operations. Until December 31, 2000, the filing fee shall not exceed three hundred (\$300.00) DOLLARS per dwelling unit but may be subject to reasonable increase after that date, as determined by the Board on recommendation from the ARC.

Section 7.05 Architectural Guidelines and Rules. The ARC shall adopt, establish and publish from time to time Architectural Guidelines which shall be a Lone Mountain Shores Document. The



Architectural Guidelines are subject to the approval of the Board and shall not be inconsistent with these Covenants, but shall more specifically define and describe the design standards for Lone Mountain Shores and the various uses within the Lone Mountain Shores. The Architectural Guidelines may be modified or amended from time to time by the ARC. Further, the ARC, in its sole discretion, may excuse compliance with such requirements as are not necessary or appropriate in specific situations and may not permit compliance with different or alternative requirements. Compliance with the Lone Mountain Shores design review process is not a substitute for compliance with the Claiborne County building, zoning and subdivisions regulations, and each Owner is responsible for obtaining all approvals, licenses and permits as may be required prior to commencing construction.

Section 7.06 Procedures. As part of the Architectural Guidelines the ARC shall make and publish such rules and regulations as it may deem appropriate to govern its proceedings. Appeals shall be conducted as provided in the By-Laws.

#### ARTICLE VIII MAINTENANCE

Section 8.01 Association's Responsibility. The Association shall maintain and keep in good repair those areas designated as privately maintained roads, road signs, parks, marinas, boat ramps and entrance area into Lone Mountain Shores, such maintenance to be funded as provided below. This maintenance shall include repair and replacement, subject to any insurance then in effect, of all landscaping and other flora, structures and improvements situated in roadway and entrance area.

Section 8.02 Owner's Responsibility. Except as provided otherwise in the Lone Mountain Shores Documents, applicable Project Documents or by written agreement with the Association, all maintenance of the Lots and all structures, landscaping, parking areas and other improvements thereon shall be the sole responsibility of the Owner thereof, who shall maintain said Lot in accordance with community wide standards of Lone Mountain Shores. The Association shall in the discretion of the Board, assume the maintenance responsibilities of such Owner if, in the opinion of the Board, the level and quality of the maintenance being provided by such Owner does not satisfy such standards. Before assuming the maintenance responsibilities, the Board shall notify the Owner in writing of its intention to do so and if such Owner has not commenced and diligently pursued remedial action within thirty (30) days after mailing of such written notice, then the Association shall proceed. The expenses of such maintenance by the Association shall be reimbursed to the Association by the Owner, together with interest at five (5%) percent per annum above the prime rate charged by the Association's bank, or such other rate set by the Board, from the date of expenditure. Such charges shall be a default Assessment and a lien on the Lot or the Owner as provided in Section 4.02 above.

#### ARTICLE IX DAMAGE OR DESTRUCTION

Section 9.01 Damage or Destruction Affecting Lots. In the event of damage or destruction to the improvements located on any Lot, the Owner thereof shall promptly repair and restore the damaged improvements to their condition prior to such damage or destruction. If such repair or restoration is not commenced within one hundred twenty days (120) from the date of such damage or destruction, or if repair and reconstruction is commenced but then abandoned for a period of more than ninety (90) days, then the Association may after notice and hearing as provided in the By-Laws, impose a fine of not less than ONE HUNDRED (\$100.00) DOLLARS per day on the owner of the Lot until repair and reconstruction is commenced, unless the Owner can prove to the satisfaction of the Association that such failure is due to circumstances beyond the Owner's con-



trol. Such a fine shall be a default Assessment and a lien against the Lot as provided in Section 4.02 above.

#### ARTICLE X ENFORCEMENT OF COVENANTS

Section 10.01 Violations Deemed a Nuisance. Every violation of these Covenants or any other of the Lone Mountain Shores Documents is deemed to be a nuisance and is subject to all the remedies provided for the abatement of the violation. In addition, all public and private remedies allowed by law or in equity against anyone in violation of these Covenants shall be available.

Section 10.02 Compliance. Each Owner or other occupant of any part of the Property shall comply with the provisions of the Lone Mountain Shores Documents as the same may be amended from time to time.

Section 10.03 Failure to Comply. Failure to comply with the Lone Mountain Shores Documents shall be grounds for an action to recover damages or for injunctive relief to cause any such violation to be remedied, or both. Reasonable notice and an opportunity for a hearing shall be given to the delinquent party prior to commencing any legal proceedings.

Section 10.04 Remedies. In addition to the remedies set forth above, any violation of the Lone Mountain Shores Documents shall give the Board, the Manager or a designated representative of the Declarant, on behalf of the owners, the right to enter upon the offending premises or take appropriate peaceful action to abate, remove, modify, or replace at the expense of the offending Owner, any structure, thing or condition that may exist therein contrary to the interest and meaning of the Lone Mountain Shores Documents. If the offense occurs on any easement, walkways, Common Area or the like, the cure shall be at the expense of the Owner or other person responsible for the offending condition.

Section 10.05 No Waiver. The failure of the Board, Board of Directors, Declarant, the Manager, the ARC or any aggrieved Owner to enforce the Lone Mountain Shores Documents shall not be deemed a waiver of the rights to do so for any subsequent violations or of the right to enforce any other part of the Lone Mountain Shores Documents at any future time.

#### ARTICLE XI DURATION OF THESE COVENANTS AND AMENDMENT

Section 11.01 Term. The covenants and restoration of these Covenants shall run with and bind the Property, and shall inure to the benefit of and shall be enforceable by the Association or the Owner of any property subject to this Covenant, their respective legal representatives, heirs, successors and assigns for a term of twenty (20) years from the date these Covenants are recorded, after which time they shall be automatically extended for successive periods of ten (10) years, unless an instrument in writing, signed by a majority of the then Owners, has been recorded within the year preceding the beginning of each successive period of ten (10) years, agreeing to change covenants and restrictions in whole or in part or to terminate the same.

#### Section 11.02 Amendment.

(a) Subject to the requirements of (b) below, these Covenants, the Articles, or By-Laws may be materially amended only by a unanimous vote of the Board and the affirmative vote of fifty-five (55%) percent of the Owners voting by absentee ballot. Any amendment must be recorded in the Registrar's Office of Claiborne County, Tennessee.

(b) Pursuant to Sections 3.01 and 3.03 the declarant, acting as



that may amend these Covenants, Articles or by laws which the Lots in Lone Mountain Shores are deeded.

Section 11.03 Effective on Recording. Any modification or amendment shall be immediately effective upon recording in the Registrar's Office for Claiborne County, Tennessee a copy of such amendment or modification, executed and acknowledged by the necessary number of Owners (and by Declarant, as required), together with a duly authenticated Certificate of the Secretary of the Association stating that the required number of consents of Owners were obtained and are on file in the office of the Association.

## ARTICLE XII PRINCIPLES OF INTERPRETATION

Section 12.01 Severability. These Covenants, to the extent possible shall be construed or reformed to give validity to all of its provisions. Any provisions of these Covenants found to be prohibited by law or unenforceable shall be ineffective to the extent of such prohibition or unenforceable without invalidating any other part hereof.

Section 12.02 Construction. In interpreting words in these Covenants, unless the context shall otherwise provide or require the singular shall include the plural, the plural shall include the singular and the use of gender shall include all genders.

Section 12.03 Headings. The headings are included for purposes of convenient references, and they shall not affect the meaning or interpretation of these Covenants.

Section 12.04 Registration of Mailing Address. Each Member shall register his mailing address with the Secretary of the Association from time to time, and notices or demands intended to be served upon or given to a Member shall be personally delivered or sent by mail, postage prepaid, addressed in the name of the member at such registered mailing address.

Section 12.05 Notice. All notices and requests required shall be in writing. Notice to any Member shall be considered delivered and effective upon personal delivery or three days after posting, when sent by certified mail, return receipt requested, to the address of such a Member on file in the record of the Association at the time of the such mailing. Notice to the Board, the Association, the ARC or the Manager shall be considered delivered and effective upon personal delivery or three (3) days after postage, when sent by certified mail, returned receipt requested, to the Association, the Board, the ARC or the Manager at such address shall be established by the Association from time to time by notice to Members. General notices to all Members or any classification thereof need not be certified, but may be sent by regular first class mail.

Section 12.06 Waiver. No failure on the part of the Association, the Board, or the ARC to give notice of default or to exercise or to delay in exercising any right or remedy shall operate as a waiver, except as specifically provided above in the event the Board fails to respond to certain requests. No waiver shall be effective unless it is in writing, signed by the Chairman or Vice Chairman of the Board on behalf of the Association, or by the Chairman of the ARC on behalf of the ARC.

Section 12.07 Limitation of Liability and Indemnification. The Association shall indemnify every Board Member or Committee Member or Architectural Review Committee Member against any and all expenses, including trial and appellate attorney's fees and costs reasonably incurred by or imposed upon any officer or director in connection with any action, suit or other proceedings (including the settlement of any suit or proceedings if approved by the Board) to which he or she may be party by reason of being or having been a board member or committee member. The board members and commit-



ligent, or otherwise, except for their own individual willful malfeasance, misconduct or bad faith. The board members and committee members shall have no personal liability with respect to any contract or other commitment made by them, in good faith, on behalf of the Association (except to the extent of that such board member and committee member may also be members of the Association), and the Association shall indemnify and forever hold each such board member or committee member free of harmless against any and all liability to others on account of any such contract or commitment. Any right to indemnification provided for herein shall not be exclusive of any other rights to which any board member or committee member may be entitled.

Section 12.08 Conflict Between Documents. In case of conflict between these Covenants and the Articles of the By-Laws, to be created by the Association, these covenants shall control. In case of conflict between these Covenants and the Architectural Guidelines, the Architectural Guidelines shall control.

IN WITNESS WHEREOF, the said Tennessee Lone Mt. Shores Corp., hereinafter known as Declarant, has hereunto caused these presents to be executed on this the 3rd day of September, 1998.

TENNESSEE LONE MT. SHORES CORP.

BY: [Signature]  
Vice President

STATE OF TENNESSEE:

COUNTY OF CLAIBORNE:

Personally appeared before me, the undersigned authority, a Notary Public in and for said County and State, as aforesaid, Vice President, with whom I am personally acquainted, who proved to me by satisfactory evidence of identity, and who, upon oath, acknowledged himself/herself to be the Vice President for Tennessee Lone Mt. Shores Corp., the within named bargainer, and that as such, he/she has been authorized to execute the foregoing instrument on behalf of said corporation for the purposes therein contained, by signing the name of the corporation by himself/herself as such Vice President.

WITNESS my hand and official seal at office this the 3rd day of September, 1998.

[Signature]  
Notary Public

My commission expires: Sept. 19, 2001



DESCRIPTION OF PROPERTY

SITUATED in District No. Three (3) of Claiborne County, Tennessee and further described as follows:

BEING a portion of Tract No. 7031, as shown in Quitclaim Deed dated July 24, 1995, from Norris Lake Development, Inc. to Grantor (Lone Mountain Development, LLC), recorded in W/D Book 231, Pages 213-217, Register of Deed's Office, Claiborne County, Tennessee and further described as follows:

BEING a parcel of land, containing 206.443 acres by Survey of William L. Parsons, RLS #1172, dated 9-13-96 and recorded in Plat Book 3, Page 70, Register's Office, Tazewell, Tennessee.

THERE IS ALSO GRANTED herewith the right of ingress and egress from the waters of Norris Lake over and upon the adjoining land lying between the 1044 contour elevation and the waters of the Lake.

Being Parcel 1.01 on Tax Map 133. (Portions herein Excepted)

THERE IS EXCEPTED from the foregoing parcel the following three tracts:

1. A Lot known as Lot 6 on an unrecorded survey of Norris Landings Unit I as prepared by William L. Parsons, Tennessee RLS No. 1172, dated March 31, 1997; and also known as Lot 30 on an unrecorded survey labeled Lone Mountain Shores Phase II, dated 5/14/98 and revised 5/27/98; and described as follows: BEGINNING at a point on the south side of Rockfish Point, then S. 84° 06' 52" E. 210.54 feet; S. 11° 03' 04" W. 46.73 feet; S. 8° 35' 30" W. 72.29 feet; S. 8° 41' 55" W. 98.61 feet; S. 27° 29' 04" W. 40.17 feet; N. 62° 17' 58" W. 24.26 feet; N. 59° 16' 34" W. 31.52 feet; N. 35° 40' 41" W. 269.86 feet; and N. 62° 54' 13" E. 55.88 feet to the point of beginning, and being the property which Lone Mountain Shores, LLC, conveyed to George L. Evans, III, by warranty deed, dated May 21, 1998, recorded in W/D Book 248, Pages 692-698, Register's Office of Claiborne County, Tennessee.

2. A Lot known as Lot No. 32 on an unrecorded survey labeled Lone Mountain Shores Phase II, dated 5/14/98, revised 5/27/98; and described as follows: BEGINNING at a point on the south side of Rockfish Point, then S. 46° 27' 30" E. 76.75 feet; S. 29° 50' 15" W. 25.61 feet; S. 20° 27' 52" W. 85.50 feet; S. 11° 18' 12" W. 54.74 feet; S. 31° 35' 54" E. 54.61 feet; N. 75° 06' 21" W. 168.60 feet; N. 27° 41' 48" E. 27.67 feet; N. 27° 41' 48" E. 12.82 feet; N. 28° 59' 35" E. 74.82 feet; N. 24° 52' 46" E. 67.76 feet; N. 30° 06' 19" E. 39.65 feet; N. 62° 19' 19" E. 32.26 feet to the point of beginning, containing 0.555 acres.

3. A Lot known as Lot 42 on an unrecorded survey labeled Lone Mountain Shores Phase II; and described as follows: BEGINNING at a point on the south side of Mallard Road, then S. 14° 21' 46" E. 98.87 feet; S. 2° 19' 19" E. 294.75 feet; S. 64° 52' 21" W. 37.03 feet; S. 46° 31' 14" W. 35.80 feet; S. 48° 46' 43" W. 43.36 feet; S. 79° 02' 07" W. 45.45 feet; N. 43° 49' 39" W. 38.64 feet; N. 84° 25' 14" W. 46.63 feet; N. 6° 04' 41" W. 31.94 feet; N. 8° 01' 54" E. 21.61 feet; N. 27° 40' 05" E. 44.52 feet; N. 19° 40' 05" E. 22.53 feet; N. 23° 31' 14" W. 237.07 feet; N. 65° 34' 33" E. 44.34 feet; N. 55° 54' 54" E. 50.25 feet; N. 51° 49' 19" E. 29.10 feet; N. 56° 06' 47" E. 20.53 feet; N. 73° 15' 50" E. 20.88 feet; N. 83° 09' 38" E. 57.19 feet; N. 69° 30' 04" E. 44.26 feet to the point of beginning, containing 2.014 acres.



which Lone Mountain Shores, LLC acquired by warranty deed, dated October 7, 1996, from Lone Mountain Development, LLC, recorded in Warranty Deed Book 238, Pages 547-550, in the Register's Office of Claiborne County, Tennessee.

Subject to all covenants, rights of way, easements, reservations, restrictions, conditions, exceptions, and limitations of record, including rights of ingress and egress for the maintenance of cemeteries, and especially as set out in Deed Book 89, Page 400, in the Register's Office of Claiborne County, Tennessee.

Subject to the Grant of the Transmission Line Easement to the United States of America by deed dated September 30, 1970, recorded in Misc. Book 22, Page 168, in the Claiborne County Register's Office.



## **Appendix 3.**

### **Wetland 1 Mitigation Plan**

---





DEPARTMENT OF THE ARMY  
NASHVILLE DISTRICT, CORPS OF ENGINEERS  
P.O. BOX 1070  
NASHVILLE, TENNESSEE 37202-1070

RECEIVED  
BARGE, WAGGONER SUMNER & CANNON

DEC 22 1999

REPLY TO  
ATTENTION OF:

December 17, 1999

FILE#

TO

*Stine*

Regulatory Branch

SUBJECT: File No. 980016280; Proposed Community Dock and Boat Ramp at Mile 131.6 R, Clinch River, Norris Lake, Claiborne County, Tennessee

Vice President Barge, Waggoner, Sumner & Cannon  
Mr. Steven A. Fritts, ASLA  
1093 Commerce Park Drive, Suite 500  
Oak Ridge, Tennessee 37830

Dear Mr. Fritts:

This letter is in regard to the mitigation requirements for the impact to 0.06 acres of jurisdictional shoreline wetlands as a result of the proposed subject work. Enhancement of wetlands typically requires a 4:1 mitigation ratio, therefore, resulting in a total of 0.24 acres of mitigation.

Below, I have outlined the details of the mitigation requirements, which have been determined by the coordinated efforts of the State of Tennessee Division of Water Pollution Control, the Tennessee Valley Authority (TVA), and this office. We do, however, request that you submit a plan based on these requirements in order to satisfy the federal regulations of permit approval.

We recommend a combination of 400 woody species plantings and placement of 10 wood duck boxes in and around Area 1 Wetland #8, specifically in the Protected Shoreline, and Managed Residential Shoreline of this cove. The plantings would include four woody species: 100 Willow Oak (*Quercus phellos*) (FACW-), 100 Black Willow (*Salix nigra*) (OBL), 100 Button Bush ((OBL), and 100 Common Persimmon (*Diospyros virginiana*) (FAC) to be placed on 5-6' centers, and if in rows, the rows to be no closer than 5-6'. We require 2-year old bare root seedlings to be planted in sufficient soils between Elevations 1018 and 1020 for success. The seedlings should be planted prior to April 15, 2000. Wetland plantings should be monitored for survival each year for 2 years. Any dead seedlings should be replanted each year for 2 years.

Construction of the wood duck boxes should be to specific plans for such and would require at least 100' spacing in between each placement. For your convenience, a copy of such specifications is forthcoming from TVA. We also recommend the



placement of at least two wood duck boxes in the cove of the Residential Mitigation Shoreline section near Clinch River Mile 132.3.

If you have any questions, please contact me at the above address or telephone (615) 736-2759.

Sincerely,



Deborah T. Tuck  
Regulatory Specialist  
Construction-Operations Division

Copy Furnished:

TVA Land Management Team  
Forestry Building  
17 Ridgeway Road  
Norris, TN 37828

TDEC, Mike Lee  
Division of WPC  
401 Church Street  
7<sup>th</sup> Flr., L&C Annex  
Nashville, TN 37243-1534

Red Creek Ranch  
d/b/a Lone Mountain Shores, Inc.  
204 Court Street  
Tazewell, TN 37879

---



1093 COMMERCE PARK DRIVE  
SUITE 500  
OAK RIDGE, TENNESSEE 37830  
423 481 0496  
FAX 423 481 3895  
E-MAIL oakridge@bargewaggoner.com

**BWSC** | BARGE  
WAGGONER  
SUMNER  
CANNON

January 10, 2000  
File 25128-00

**Via Federal Express**

Ms. Deborah T. Tuck, Regulatory Specialist  
Department of the Army  
Nashville District, Corps of Engineers  
P. Box 1070  
Nashville, Tennessee 37202-1070

**RE: File No. 980016280, Lone Mountain Shores**

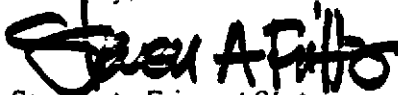
Dear Ms. Tuck:

I am in receipt of your letter dated December 22, 1999 concerning mitigation requirements for impacts to .06 acres of jurisdictional wetland on the subject project. This correspondence is intended to inform you that our client is in total agreement with the requirements as set forth in the correspondence and is prepared to proceed immediately with installing the plantings and the wood duck boxes. Given the rather simple nature of the mitigation requirements, we would ask that this letter confirming my client's intent to proceed as set forth in your letter serve as submission of a plan for such, rather than preparing drawings that would simply show what is verbally described in your letter.

The plantings will be installed in accordance with the provisions set forth by in the letter by a landscape contractor. This work will commence immediately. Once we receive the specifications for the wood duck boxes, this work will likewise begin. If you have any specific reporting requirements for monitoring, please advise us of such.

If you have any other questions or need further information, please contact me at 865-481-0496. (please note the change in my area code).

Sincerely,



Steven A. Fritts, ASLA  
Vice President

xc: Steve Neff, LMS  
Mike Emmons, LMS  
Linda Fowler, TVA.





**DEPARTMENT OF THE ARMY**  
**NASHVILLE DISTRICT, CORPS OF ENGINEERS**  
**P.O. BOX 1070**  
**NASHVILLE, TENNESSEE 37202-1070**

REPLY TO  
 ATTENTION OF:

January 10, 2000

Regulatory Branch

SUBJECT: File No. 980016280; Proposed Community Dock and Boat Ramp at Mile 131.6 R, Clinch River, Norris Lake, Claiborne County, Tennessee

Vice President Barge, Waggoner, Sumner & Cannon  
 Mr. Steven A. Fritts, ASLA  
 1093 Commerce Park Drive, Suite 500  
 Oak Ridge, Tennessee 37830

Dear Mr. Fritts:

This letter is a follow up of our conversation today regarding mitigation requirements, for the wetland impact, in addition to the requirements set forth in the letter dated December 17, 1999.

As per our conversation, you agreed, upon behalf of the applicant Lone Mountain Shores, Inc., to ensure a 75% survival rate for the specified plantings, acknowledging that, if at the end of the two year period this rate has not been achieved, the applicant would re-plant accordingly, with extended monitoring to achieve this rate.

You have agreed to accept these requirements by your faxed letter dated today, and therefore, have completed the initial requirement of plan submittal. You further agreed to monitor the site for two years, as previously set forth, and will report yearly on the hydrology, soils, vegetation survival, general site observations and any other pertinent information related to mitigation success.

As always, we appreciate your conscientious efforts in this matter. If you have any questions, please contact me at the above address or telephone (615) 736-2759.

Sincerely,

Deborah T. Tuck  
 Regulatory Specialist  
 Construction-Operations Division

**RECEIVED**  
 BARGE WAGGONER SUMNER & CANNON

JAN 13 2000

FILE # \_\_\_\_\_  
 TO LE # \_\_\_\_\_  
 TO \_\_\_\_\_



Copy Furnished:

TVA Land Management Team  
Forestry Building  
17 Ridgeway Road  
Norris, TN 37828

TDEC, Mike Lee  
Division of WPC  
401 Church Street  
7<sup>th</sup> Flr., L&C Annex  
Nashville, TN 37243-1534

Red Creek Ranch  
d/b/a Lone Mountain Shores, Inc.  
204 Court Street  
Tazewell, TN 37879



1093 COMMERCE PARK DRIVE  
SUITE 500  
OAK RIDGE, TENNESSEE 37830  
423 481 0496  
FAX 423 481 3895  
E-MAIL oakridge@bargewaggoner.com

**BWSC** | BARGE  
WAGGONER  
SUMNER &  
CANNON, INC

January 10, 2000  
File 25128-00

Via Facsimile 423-626-3435

Mr. Steve Neff  
Tennessee Lone Mountain Shores  
124 Court Street  
Tazewell, Tennessee 37879

**RE: Corp of Engineers Wetland Mitigation**

Dear Steve:

I spoke with Debbie Tuck today concerning the wetland mitigation. I faxed her a letter that indicated acceptance of the terms of her December 22 letter. She accepted that as our "plan" that is referenced in her letter and therefore we are in good shape with the Corp. She did relay the following additional information:

1. They expect a 75% survival rate on the plantings. In other words, 25% of the plants can die without having to be replaced.
2. The Button Bush should be planted on 5'-6' centers. The tree species should be planted farther apart. I would suggest a spacing of 25' on the trees.
3. In the areas where the new plantings take place, if other naturally occurring tree and shrub species germinate and begin to grow, these new plants can be credited against any required replacements.
4. You will need to submit a yearly inspection report to the Corp for the next 2 years. I would suggest that the monitoring should take place in late April of 2001 and 2002 after the plants come into leaf. The monitoring report should document the survival rates, growth rates, any required plant replacement and any changes in soil and/or hydrologic conditions.

She also mentioned another issue that is of concern. She would like to extend the managed residential shoreline on the opposite side of the cove from Community Dock I in front of lot 60 and 59 and not allow private docks on this point. In a subsequent conversation, Linda Fowler mentioned the same thing. I told both of them that this may be a problem as we have been assuming that these lots can have docks for several months and that you may have represented such to prospective purchasers. I need to get back with them on this issue as soon as possible.



Mr. Steve Neff

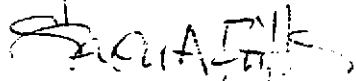
Page 2

January 11, 2000

File 25128-00

Please give me a call to discuss these matters at your convenience.

Sincerely,

A handwritten signature in dark ink, appearing to read "S. Fritts", with a stylized flourish extending from the end.

Steven A. Fritts, ASLA

Vice President



## Appendix 4



ENVIRONMENTAL ASSISTANCE CENTER  
TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
2700 MIDDLEBROOK PIKE, SUITE 220  
KNOXVILLE, TENNESSEE 37921-5602  
PHONE (423) 594-6035 STATEWIDE 1-888-881-8332 FAX (423) 594-6105

October 13, 1999

Lone Mountain Shores  
ATTN: Steve Neff  
204 Court Street  
Tazewell, TN 37879

Dear Mr. Neff:

The plat approval for Lone Mountain Shores Subdivision represents a general approval of the subdivision lots in terms of said suitability and sufficient (primary and duplicate) area for a given number of bedrooms. Prior to any construction on any lot, the Departments Policy on Fee Collection shall apply. After the appropriate fee is paid, a permit for each lot should be issued. All permits which are issued must be subject to conditions and requirements set out in the Division statutes and regulations.

One example of this as noted, is the regulation requirements found in Rule 1200-1-6-.10, which provides for distance set-offs. The sewage system must be a minimum of fifty (50) feet from any water well. The sewage systems for Lone Mountain Shores were designed with this in mind.

Sincerely,

A handwritten signature in black ink, appearing to read "Isaac C. Russell", written over a horizontal line.

Isaac C. Russell, Manager  
Groundwater Division

ICR:cmm



**RECEIVED**

BARGE, WAGGONER, SIMMER & CANNON

December 23, 1999

DEC 28 1999

FILE # \_\_\_\_\_  
TO Steve F.

Ms. Jennifer Bartlett  
Tennessee Division of Archaeology  
5103 Edmondson Pike  
Nashville, Tennessee 37211

Dear Ms. Bartlett:

TVA, LONE MOUNTAIN SHORES DEVELOPMENT, UNINCORPORATED,  
CLAIBORNE COUNTY

This follows your letter of April 26, 1999 regarding section 106 consultation for the referenced project. At the outset, TVA would like to bring to your attention an error regarding the eligibility recommendation for Site 40CE128. We were recently informed of this error by Ms. Lynn Pietak of TRC Garrow Associates (TRC). In December, 1999, TRC recorded and documented this site in the report titled *Phase I Archaeological Survey of the Tennessee Lone Mountain Shores Development, Claiborne County, Tennessee*. Although the text of the report identified Site 40CE128 as being ineligible for listing in the National Register of Historic Places (NRHP), the site was erroneously placed in the table (i.e. Table 17) of the report that compiled the potentially eligible sites. Ms. Pietak stated that the table is incorrect, and Site 40CE128 is not being recommended as eligible for listing in the NRHP. After reviewing this additional information, TVA concurs with the recommendation of ineligibility for this site. Please make a note of this in your records.

With regard to our Section 106 obligation under the National Historic Preservation Act (NHPA), we agree with the view expressed in your April 26, 1999 letter that the eight archaeological sites potentially eligible for listing in the NRHP (40CE84, 40CE91, 40CE120, 40CE121, 40CE122, 40CE125, 40CE127, 40CE133) and the three cemeteries (40CE96, 40CE97, and 40CE124) should either be avoided or subjected to additional Phase II testing if these sites would be affected by the undertaking. In view of the large land area involved for this project (2400 acre development) and the long shoreline corridor associated with the development (175 lakefront lots with an average of 374 linear feet of lake frontage per lot), it is difficult to predict at the present time whether the archaeological and cemetery sites can be completely avoided. We are therefore proposing



Ms. Jennifer Bartlett  
Page 2  
December 23, 1999

that the decision whether to avoid the sites or conduct Phase II evaluations be deferred until a future time when section 26a permit applications are submitted by individual lot owners for constructing water-use facilities. At that time, based on the specific plans submitted by individual lot owners for constructing water-use facilities, we would be able to determine whether the archaeological and cemetery sites can be completely avoided. If avoidance is not feasible, a Phase II survey would be required to be conducted as part of the data to be submitted with the section 26a permit application.

Based on the above, we would like to proceed with the current undertaking to approve the overall shoreline management plan for the Lone Mountain Shores Development project. In future, as Section 26a permit applications are received from individual lot owners, we will coordinate our review of these applications with your office to determine whether the archaeological and cemetery sites can be avoided, and, if not, to have Phase II surveys conducted to identify and evaluate the historic properties. Section 800.4(b)(2) of the regulations of the Advisory Council for the protection of historic properties allows phased identification and evaluation of historic properties for projects of this kind involving corridors or large land areas. *See* 36 CFR 800.4(b)(2). We understand that under this phased approach, TVA can proceed with the current undertaking to approve the overall shoreline management plan deferring the decision to conduct Phase II surveys to a future time when Section 26a permit applications are received from individual lot owners.

Eric Howard or Richard Yarnell will call you during the beginning of next year to discuss with you this issue of phased evaluation. In the meantime, if you have any questions or need additional information, please contact A. Eric Howard at (423) 632-1403 or fax at (423) 632-1795.

Sincerely,

J. Bennett Graham  
Senior Archaeologist

cc: Mr. Steve Fritts  
✓ Barge Waggoner Sumner & Cannon, Inc.  
1093 Commerce Park Drive  
Suite 500  
Oak Ridge, Tennessee, 37830

Mr. Mike Emmons  
Red Creek Ranch  
665 Simons Road  
Williamstown, Massachusetts 01267





**TENNESSEE HISTORICAL COMMISSION**  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
2941 LEBANON ROAD  
NASHVILLE, TN 37243-0442  
(615) 532-1550

December 28, 1999

Mr. J. Bennett Graham  
Tennessee Valley Authority  
Cultural Resources  
NRB 2C  
17 Ridgeway Road, Box 920  
Norris, Tennessee 37828-0920

RE: TVA, LONE MOUNTAIN SHORES DEVELOPMENT, UNINCORPORATED, CLAIBORNE COUNTY

Dear Mr. Graham:

The additional information regarding the above-referenced undertaking has been reviewed with regard to National Historic Preservation Act compliance by the participating federal agency or its designated representative. Procedures for implementing Section 106 of the Act are codified at 36 CFR 800 (64 FR 27044, May 18, 1999).

We acknowledge the error in regard to the eligibility determination for site 40CE128. We concur with your office's recommendation that site 40CE128 does not contain cultural resources eligible for inclusion in the National Register of Historic Places.

We further concur with your agencies proposed strategy of phased compliance for the Lone Mountain Shores Development. Additional compliance requirements, including Phase II testing or avoidance of the eleven previously identified sites (40CE84, 40CE91, 40CE120, 40CE121, 40CE122, 40CE125, 40CE127, 40CE133, 40CE96, 40CE97, and 40CE124), may be addressed on a permit by permit basis for individual lots.

Please submit each permit application for this development to this office for review and comment. Each permit application will be reviewed for both its primary and secondary effect on cultural resources. While the permits will be reviewed individually, all will be considered in relation to the encompassing Lone Mountain Shores Development and thereby will be addressed as phases of a single undertaking.

Please inform this office if this project is canceled or not permitted by the federal agency. Questions and comments may be directed to Jennifer M. Bartlett (615) 741-1588, ext. 17.

Your cooperation is appreciated.

Sincerely,

Herbert L. Harper  
Executive Director and  
Deputy State Historic  
Preservation Officer





**TENNESSEE HISTORICAL COMMISSION**  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
2941 LEBANON ROAD  
NASHVILLE, TN 37243-0442  
(615) 532-1550

November 19, 1999

Mr. Jon Loney  
Tennessee Valley Authority  
400 West Summit Hill Drive  
Knoxville, Tennessee 37902-1499

RE: TVA, PHASE I ARCHAEOLOGICAL ASSESSMENT, LONE MOUNTAIN SHORES  
DEVELOPMENT, UNINCORPORATED, CLAIBORNE COUNTY,

Dear Mr. Loney:

At your request, our office has reviewed the above-referenced archaeological Draft Environmental in accordance with regulations codified at 36 CFR 800 (64 FR 27044, May 18, 1999). In accordance with our previous correspondence with your agency dated April 26, 1999, we concur that the project area contains archaeological resources potentially eligible for listing in the National Register of Historic Places. Archaeological sites 40CE84, 40CE91, 40CE96, 40CE97, 40CE120, 40CE121, 40CE122, 40CE124, 40CE125, 40CE127, 40CE128, and 40CE133 must either be avoided by proposed activities or subjected to Phase II archaeological testing.

Upon receipt of the Phase II testing report, we will complete our review of this undertaking as expeditiously as possible. Please submit a minimum of two copies of each final report and complete and Tennessee Site Survey Forms to this office in accordance with the Tennessee Historical Commission Review and Compliance Section Reporting Standards and Guidelines. Until such time as this office has rendered a final comment on this project, your Section 106 obligation under federal law has not been met. Please inform this office if this project is canceled or not funded by the federal agency. Questions and comments may be directed to Jennifer M. Bartlett (615) 741-1588, ext. 17.

Your cooperation is appreciated.

Sincerely,

Herbert L. Harper  
Executive Director and  
Deputy State Historic  
Preservation Officer

HLH/jmb

<b>RECEIVED</b>	
NOV 24 1999	
Doc. No. 6258558	
<input checked="" type="checkbox"/> JML	<input type="checkbox"/> MLI
<input checked="" type="checkbox"/> Files	<input type="checkbox"/> AHL
	<input type="checkbox"/> MDM
	<input checked="" type="checkbox"/> JMB
Environmental Management	

Sent to  
S. Davis  
L. Fowler

for follow-up  
action





**TENNESSEE HISTORICAL COMMISSION**  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
2941 LEBANON ROAD  
NASHVILLE, TN 37243-0442  
(615) 532-1550

April 26, 1999

Mr. A. Eric Howard  
Tennessee Valley Authority  
Cultural Resources  
NRB 2C  
17 Ridgeway Road, Box 920  
Norris, Tennessee 37828-0920

RE: TVA, PHASE I ARCHAEOLOGICAL ASSESSMENT, LONE MOUNTAIN SHORES  
DEVELOPMENT, UNINCORPORATED, CLAIBORNE COUNTY,

Dear Mr. Howard:

At your request, our office has reviewed the above-referenced archaeological survey report in accordance with regulations codified at 36 CFR 800 (51 FR 31115, September 2, 1986). Based on the information provided, we concur that the project area contains archaeological resources potentially eligible for listing in the National Register of Historic Places. Sites 40CE84, 40CE91, 40CE96, 40CE97, 40CE120, 40CE121, 40CE122, 40CE124, 40CE125, 40CE127, 40CE128, and 40CE133 must either be avoided by project activities, or subjected to Phase II archaeological testing.

Upon receipt of the Phase II testing report and/or avoidance strategy, we will complete our review of this undertaking as expeditiously as possible. Please submit a minimum of two copies of each final report and complete and Tennessee Site Survey Forms to this office in accordance with the Tennessee Historical Commission Review and Compliance Section Reporting Standards and Guidelines. Until such time as this office has rendered a final comment on this project, your Section 106 obligation under federal law has not been met. Please inform this office if this project is canceled or not funded by the federal agency. Questions and comments may be directed to Jennifer M. Bartlett (615) 741-1588, ext. 17.

Your cooperation is appreciated.

Sincerely,

Herbert L. Harper  
Executive Director and  
Deputy State Historic  
Preservation Officer

HLH/jmb



# Appendix 6

## Lone Mountain Shores: Revised Economic Impact Analysis - Alternative #2

(Revised baseline project proposal, with full land sale price for interior lots and reduced sale price for lake front lots)

Prepared by: Barge, Waggoner, Sumner, & Cannon, Inc.: Oak Ridge Office

August 2, 1999

Projection Year	Annual Number of Developed Lots Sold (575 total)		Annual Number of Houses Built (50% build-out)		Land Inventory Dedicated to Lake Front and Interior Lots (5 Yr. sell-out)	Land Inventory Dedicated to Project Road Right-of-Way (25 miles of total roadway times 60' wide right-of-way)	Remaining End-of-Year Undeveloped Land Inventory (2,400 acres minus right-of-way & lots)
	Lake Front (2.0 acre average lot) (5 Yr. sell-out)	Interior (3.9 acre average lot) (5 Yr. sell-out)	Lake Front (10 Yr. build-out)	Interior (10 Yr. build-out)			
1	35	80	9	15	310	36	2,054
2	35	80	9	15	620	73	1,707
3	35	80	9	15	930	109	1,361
4	35	80	9	15	1,240	145	1,015
5	35	80	9	15	1,550	182	668
6			9	15	1,550	182	668
7			9	15	1,550	182	668
8			9	15	1,550	182	668
9			9	15	1,550	182	668
10			9	15	1,550	182	668
11					1,550	182	668
12					1,550	182	668
13					1,550	182	668
14					1,550	182	668
15					1,550	182	668
16					1,550	182	668
17					1,550	182	668
18					1,550	182	668
19					1,550	182	668
20					1,550	182	668
Totals	175	400	90	150			

Projection Year	Cumulative Land Value of Lake Front Lots (2 acres average w/ \$37,500 initial value & 5.0% annual growth rate in value)	Lake Front House Improvem't Value (@ 5.0 times land value = \$187,500 house value) (With 5.0% annual growth rate in value)	Cumulative Land Value of Interior Lots (3 acres average w/ \$40,000 initial value & 5.0% annual growth rate in value)	Interior Lot House Improvem't Value (@ 3.0 times land value = \$120,000 house value) (with 5.0% annual growth rate in value)	Estimated Total Annual Property Taxes (Sold lake front and interior lots, built homes, and remaining undeveloped land)	Estimated Total Annual Sales Taxes (Lake front and interior house construction cost times 50% times 8.25%) (Plus \$40/L.F. roadway construction cost times 80% times 8.25%)	Estimated Total Annual Benefits to Claiborne County and State of Tennessee (Annual property taxes and sales taxes)
1	\$1,312,500	\$1,687,500	\$3,200,000	\$1,800,000	\$68,686	\$213,555	\$282,241
2	\$2,756,250	\$3,543,750	\$6,720,000	\$3,780,000	\$123,072	\$220,748	\$343,820
3	\$4,341,094	\$5,581,406	\$10,584,000	\$5,953,500	\$183,047	\$228,301	\$411,348
4	\$6,077,531	\$7,813,969	\$14,817,600	\$8,334,900	\$249,029	\$236,231	\$485,260
5	\$7,976,760	\$10,255,834	\$19,448,100	\$10,939,556	\$321,461	\$244,558	\$566,019
6	\$8,375,598	\$12,922,351	\$20,420,505	\$13,783,841	\$366,194	\$183,605	\$549,799
7	\$8,794,378	\$15,829,880	\$21,441,530	\$16,885,205	\$414,610	\$192,785	\$607,396
8	\$9,234,087	\$18,995,856	\$22,513,607	\$20,262,246	\$466,967	\$202,425	\$669,391
9	\$9,695,801	\$22,438,855	\$23,639,287	\$23,934,778	\$523,536	\$212,546	\$736,081
10	\$10,180,591	\$26,178,664	\$24,821,251	\$27,923,908	\$584,608	\$223,173	\$807,781
11	\$10,689,621	\$27,487,597	\$26,062,314	\$29,320,103	\$613,567	\$0	\$613,567
12	\$11,224,102	\$28,861,977	\$27,365,430	\$30,786,108	\$643,973	\$0	\$643,973
13	\$11,785,307	\$30,305,076	\$28,733,701	\$32,325,414	\$675,901	\$0	\$675,901
14	\$12,374,572	\$31,820,329	\$30,170,386	\$33,941,685	\$709,424	\$0	\$709,424
15	\$12,993,301	\$33,411,346	\$31,678,906	\$35,638,769	\$744,624	\$0	\$744,624
16	\$13,642,966	\$35,081,913	\$33,262,851	\$37,420,707	\$781,584	\$0	\$781,584
17	\$14,325,114	\$36,836,009	\$34,925,993	\$39,291,743	\$820,392	\$0	\$820,392
18	\$15,041,370	\$38,677,809	\$36,672,293	\$41,256,330	\$861,140	\$0	\$861,140
19	\$15,793,439	\$40,611,700	\$38,505,908	\$43,319,146	\$903,925	\$0	\$903,925
20	\$16,583,111	\$42,642,285	\$40,431,203	\$45,485,104	\$948,850	\$0	\$948,850
Totals					\$11,004,688	\$2,157,928	\$13,162,516



# Lone Mountain Shores: Economic Impact Analysis - Alternative #3

( Revised baseline project proposal with full land sale price for interior and lake front lots )

Prepared by: Barge, Waggoner, Sumner, & Cannon, Inc.: Oak Ridge Office

August 2, 1999

Projection Year	Annual Number of Developed Lots Sold (575 total)		Annual Number of Houses Built (50% build-out)		Land Inventory Dedicated to Lake Front and Interior Lots (5 Yr. sell-out)	Land inventory Dedicated to Project Road Right-of-Way (25 miles of total roadway times 60' wide right-of-way)	Remaining End-of-Year Undeveloped Land Inventory (2,400 acres minus right-of-way & lots)
	Lake Front (2 acre average lot) (5 Yr. sell-out)	Interior (3 acre average lot) (5 Yr. sell-out)	Lake Front (10 Yr. build-out)	Interior (10 Yr. build-out)			
1	35	80	9	15	310	36	2,054
2	35	80	9	15	620	73	1,707
3	35	80	9	15	930	109	1,361
4	35	80	9	15	1,240	145	1,015
5	35	80	9	15	1,550	182	668
6			9	15	1,550	182	668
7			9	15	1,550	182	668
8			9	15	1,550	182	668
9			9	15	1,550	182	668
10			9	15	1,550	182	668
11				15	1,550	182	668
12					1,550	182	668
13					1,550	182	668
14					1,550	182	668
15					1,550	182	668
16					1,550	182	668
17					1,550	182	668
18					1,550	182	668
19					1,550	182	668
20					1,550	182	668
Totals	175	400	90	150			

Projection Year	Cumulative Land Value of Lake Front Lots (2 acres average w/ \$75,000 initial value & 5.0% annual growth rate in value)	Lake Front House Improvem't Value (@ 2.5 times land value = \$187,500 house value) (With 5.0% annual growth rate in value)	Cumulative Land Value of Interior Lots (3 acres average w/ \$40,000 initial value & 5.0% annual growth rate in value)	Interior Lot House Improvem't Value (@ 3.0 times land value = \$120,000 house value) (with 5.0% annual growth rate in value)	Estimated Total Annual Property Taxes (Lake front and interior lots and remaining undeveloped land)	Estimated Total Annual Sales Taxes (Lake front and interior house construction cost times 50% times 8.5%) (Plus \$40/L.F. roadway construction cost times 80% times 8.5%)	Estimated Total Annual Benefits to Claiborne County and State of Tennessee (Annual property taxes and sales taxes)
1	\$2,625,000	\$1,687,500	\$3,200,000	\$1,800,000	\$77,217	\$213,555	\$290,772
2	\$5,512,500	\$3,543,750	\$6,720,000	\$3,780,000	\$140,987	\$220,748	\$361,736
3	\$8,682,188	\$5,581,406	\$10,584,000	\$5,953,500	\$211,264	\$228,301	\$439,565
4	\$12,155,063	\$7,813,969	\$14,817,600	\$8,334,900	\$288,533	\$236,231	\$524,764
5	\$15,953,520	\$10,255,834	\$19,448,100	\$10,939,556	\$373,310	\$244,558	\$617,868
6	\$16,751,196	\$12,922,351	\$20,420,505	\$13,783,841	\$420,635	\$183,605	\$604,240
7	\$17,588,755	\$15,829,880	\$21,441,530	\$16,885,205	\$471,774	\$192,785	\$664,559
8	\$18,468,193	\$18,995,856	\$22,513,607	\$20,262,246	\$526,988	\$202,425	\$729,413
9	\$19,391,603	\$22,438,855	\$23,639,287	\$23,934,778	\$586,558	\$212,546	\$799,104
10	\$20,361,183	\$26,178,664	\$24,821,251	\$27,923,908	\$650,782	\$223,173	\$873,955
11	\$21,379,242	\$27,487,597	\$26,062,314	\$29,320,103	\$683,049	\$0	\$683,049
12	\$22,448,204	\$28,861,977	\$27,365,430	\$30,786,108	\$716,930	\$0	\$716,930
13	\$23,570,614	\$30,305,076	\$28,733,701	\$32,325,414	\$752,505	\$0	\$752,505
14	\$24,749,145	\$31,820,329	\$30,170,386	\$33,941,685	\$789,859	\$0	\$789,859
15	\$25,986,602	\$33,411,346	\$31,678,906	\$35,638,769	\$829,081	\$0	\$829,081
16	\$27,285,932	\$35,081,913	\$33,262,851	\$37,420,707	\$870,263	\$0	\$870,263
17	\$28,650,229	\$36,836,009	\$34,925,993	\$39,291,743	\$913,505	\$0	\$913,505
18	\$30,082,740	\$38,677,809	\$36,672,293	\$41,256,330	\$958,909	\$0	\$958,909
19	\$31,586,877	\$40,611,700	\$38,505,908	\$43,319,146	\$1,006,583	\$0	\$1,006,583
20	\$33,166,221	\$42,642,285	\$40,431,203	\$45,485,104	\$1,056,640	\$0	\$1,056,640
Totals					\$12,325,372	\$2,157,928	\$14,483,300



## Lone Mountain Shores: Revised Economic Impact Analysis - Alternative #4

( Revised baseline project proposal, with full land sale price for lake front lots and reduced sale price for interior lots )

Prepared by: Barge, Waggoner, Sumner, & Cannon, Inc.: Oak Ridge Office

August 2, 1999

Projection Year	Annual Number of Developed Lots Sold ( 575 total )		Annual Number of Houses Built ( 50% build-out )		Land Inventory Dedicated to Lake Front and Interior Lots ( 5 Yr. sell-out )	Land Inventory Dedicated to Project Road Right-of-Way ( 25 miles of total roadway times 60' wide right-of-way )	Remaining End-of-Year Undeveloped Land Inventory ( 2,400 acres minus right-of-way & lots )
	Lake Front ( 2.0 acre average lot ) ( 5 Yr. sell-out )	Interior ( 3.9 acre average lot ) ( 5 Yr. sell-out )	Lake Front ( 10 Yr. build-out )	Interior ( 10 Yr. build-out )			
1	35	80	9	15	310	36	2,054
2	35	80	9	15	620	73	1,707
3	35	80	9	15	930	109	1,361
4	35	80	9	15	1,240	145	1,015
5	35	80	9	15	1,550	182	668
6			9	15	1,550	182	668
7			9	15	1,550	182	668
8			9	15	1,550	182	668
9			9	15	1,550	182	668
10			9	15	1,550	182	668
11					1,550	182	668
12					1,550	182	668
13					1,550	182	668
14					1,550	182	668
15					1,550	182	668
16					1,550	182	668
17					1,550	182	668
18					1,550	182	668
19					1,550	182	668
20					1,550	182	668
Totals	175	400	90	150			

Projection Year	Cumulative Land Value of Lake Front Lots ( 2 acres average w/ \$75,000 initial value & 5.0% annual growth rate in value )	Lake Front House Improvem't Value ( @ 2.5 times land value = \$187,500 house value ) ( With 5.0% annual growth rate in value )	Cumulative Land Value of Interior Lots ( 3 acres average w/ \$20,000 initial value & 5.0% annual growth rate in value )	Interior Lot House Improvem't Value ( @ 6.0 times land value = \$120,000 house value ) ( with 5.0% annual growth rate in value )	Estimated Total Annual Property Taxes ( Sold lake front and interior lots, built homes, and remaining undeveloped land )	Estimated Total Annual Sales Taxes ( Lake front and interior house construction cost times 50% times 8.25% ) ( Plus \$40/L.F. roadway construction cost times 80% times 8.25% )	Estimated Total Annual Benefits to Claiborne County and State of Tennessee ( Annual property taxes and sales taxes )
1	\$2,625,000	\$1,687,500	\$1,600,000	\$1,800,000	\$66,817	\$213,555	\$280,372
2	\$5,512,500	\$3,543,750	\$3,360,000	\$3,780,000	\$119,147	\$220,748	\$338,896
3	\$8,682,188	\$5,581,406	\$5,292,000	\$5,953,500	\$176,866	\$228,301	\$405,167
4	\$12,155,063	\$7,813,969	\$7,408,800	\$8,334,900	\$240,376	\$236,231	\$476,607
5	\$15,953,520	\$10,255,834	\$9,724,050	\$10,939,556	\$310,103	\$244,558	\$554,661
6	\$16,751,196	\$12,922,351	\$10,210,253	\$13,783,841	\$354,269	\$183,605	\$537,874
7	\$17,588,755	\$15,829,880	\$10,720,765	\$16,885,205	\$402,089	\$192,785	\$594,874
8	\$18,468,193	\$18,995,856	\$11,256,803	\$20,262,246	\$453,819	\$202,425	\$656,244
9	\$19,391,603	\$22,438,855	\$11,819,644	\$23,934,778	\$509,731	\$212,546	\$722,277
10	\$20,361,183	\$26,178,664	\$12,410,626	\$27,923,908	\$570,112	\$223,173	\$793,286
11	\$21,379,242	\$27,487,597	\$13,031,157	\$29,320,103	\$598,347	\$0	\$598,347
12	\$22,448,204	\$28,861,977	\$13,682,715	\$30,786,108	\$627,993	\$0	\$627,993
13	\$23,570,614	\$30,305,076	\$14,366,851	\$32,325,414	\$659,121	\$0	\$659,121
14	\$24,749,145	\$31,820,329	\$15,085,193	\$33,941,685	\$691,805	\$0	\$691,805
15	\$25,986,602	\$33,411,346	\$15,839,453	\$35,638,769	\$726,124	\$0	\$726,124
16	\$27,285,932	\$35,081,913	\$16,631,425	\$37,420,707	\$762,159	\$0	\$762,159
17	\$28,650,229	\$36,836,009	\$17,462,997	\$39,291,743	\$799,995	\$0	\$799,995
18	\$30,082,740	\$38,677,809	\$18,336,147	\$41,256,330	\$839,724	\$0	\$839,724
19	\$31,586,877	\$40,611,700	\$19,252,954	\$43,319,146	\$881,438	\$0	\$881,438
20	\$33,166,221	\$42,642,285	\$20,215,602	\$45,485,104	\$925,239	\$0	\$925,239
Totals					\$10,715,274	\$2,157,928	\$12,873,202



April 9, 1999

File 25128-00

Ms. Linda Fowler, Land Use Specialist  
TENNESSEE VALLEY AUTHORITY  
17 Ridgeway Road  
Norris, Tennessee 37828

**RE: Lone Mountain Shores 26A Application**

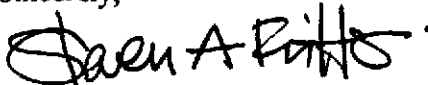
Dear Ms. Fowler:

Enclosed you will find the completed application for the first community dock and ramp for this project. As you review the application, please note the following:

1. The locations of the proposed features are approximate. We would propose a field review of the locations with you to fully understand the project parameters. In addition, we can make minor adjustments as necessary in the field.
2. Attachment 2 illustrates the limits of the wetlands (as delineated by TVA personnel using your agency's criteria). Please note that the elevations of the vast majority of the points which define the boundary of the area are below the 1020 contour, therefore the bulk of this area is under water in the summer. As you can see on Drawing C1, the ramp passes through the wetland. This is an almost unavoidable situation due to the steep terrain on each side of this inlet.
3. The boat slips are for seasonal use only. They are designed to hinge inward for winter storage.

Because our clients have already paid an initial retainer for the EA work, it is our assumption that the normal fee for this application is covered under that retainer. Therefore, we are not submitting a fee with this application. Thank you in advance for your prompt review of this application. We are prepared to meet with you or other TVA representatives in the field to review this at your earliest convenience.

Sincerely,



Steven A. Fritts, ASLA  
Vice President

xc: Randy Corlew  
Mike Emmons  
Steve Neff



# APPLICATION FOR

Department of the Army Permit

and/or

Tennessee Valley Authority Section 26a Approval

The Department of the Army (DA) permit program is authorized by Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of The Clean Water Act (P.L. 95-217). These laws require permits authorizing structures and work in or affecting navigable waters of the United States and the discharge of dredged or fill material into waters of the United States. Section 26a of the Tennessee Valley Authority Act, as amended, prohibits the construction, operation, or maintenance of any structure affecting navigation, flood control, or public lands or reservations across, along, or in the Tennessee River or any of its tributaries until plans for such construction, operation, and maintenance have been submitted to and approved by the Tennessee Valley Authority (TVA).

Name and Address of Applicant

Tennessee Lone Mountain Shores Corp.  
204 Court Street  
Tazewell, TN 37879

Telephone Number

Home \_\_\_\_\_  
Office 423-626-0608

Name, Address, and Title of Authorized Agent

Steven A. Fritts, Vice President  
Barge, Waggoner, Sumner and Cannon, Inc.  
1093 Commerce Park Drive, Suite 500  
Oak Ridge, TN 37830

Telephone Number

Home \_\_\_\_\_  
Office 423-481-0496

Location where activity exists or will occur (include Stream Name and Mile, if known)

TVA Tract No. XNR-861,  
Map Nos. 86D, 87D, and 91D

Application submitted to

DA ☐ Yes ☐ No TVA ☒ Yes ☐ No

Date activity is proposed to commence upon approval

Date activity is proposed to be completed 90 days after

Describe in detail the proposed activity, its purpose and intended use (private, public, commercial, or other). Describe structures to be erected including those placed on fills, piles, or floating platforms. Also describe the type, composition, and quantity of materials to be discharged or placed in the water; the means of conveyance; and the source of discharge or fill material. Please attach additional sheets if needed.

See attachment 1.

Application is hereby made for approval of the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities.

4/9/99  
Date

Steven A. Fritts  
Signature of Applicant or Authorized Agent

The application must be signed by the applicant; however, it may be signed by a duly authorized agent if this form is accompanied by a statement by the applicant designating the agent and agreeing to furnish upon request, supplemental information in support of the application.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of The United States knowingly and willfully falsifies, conceals, or covers up by any trick scheme or device a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both. Do not send a permit processing fee with this application. The appropriate DA fee will be assessed when a permit is issued.



Names, addresses, and telephone numbers of adjoining property owners, lessees, etc., whose properties also join the waterway.

None

List of previous DA/TVA permits/approvals

☐

DA

Permit Number

☐

TVA

Date

Is any portion of the activity for which authorization is sought now complete?

☐

YES

☒

NO

If answer is "Yes" attach explanation. Month and year the activity was completed

Indicate the existing work on the drawings.

List all approvals or certifications required by other federal, interstate, state, or local agencies for any structures, construction, discharges, deposits, or other activities described in this application.

Issuing Agency

Type Approval

Identification No.

Date of Application

Date of Approval

Has any agency denied approval for the activity described herein or for any activity directly related to the activity described herein?

☐

Yes

☒

No

(If "Yes" attach explanation)

Two sets of original drawings on 8" x 10 1/2" tracing paper or good reproducible copies that show the location and character of the proposed activity must be attached to this application (see sample drawings) and be submitted to the appropriate U.S. Army Corps of Engineers and TVA offices at the addresses listed below. An application that is not complete will be returned for additional information. Information in the application is made a matter of public record through issuance of a public notice, if warranted. Disclosure of the information requested is voluntary; however, the data requested are necessary in order to communicate with the applicant and to evaluate the application. If necessary information is not provided, the application cannot be processed nor can a permit/approval be issued.

Department of the Army Offices

TVA Office Locations

TVA Mailing Addresses

Commander, Nashville District  
U.S. Army Corps of Engineers  
Post Office Box 1070  
Nashville, Tennessee 37202-1070  
Phone: 615-736-5181

U.S. Army Corps of Engineers  
Eastern Regulatory Field Office  
Post Office Box 465  
Lenoir City, Tennessee 37771-0465  
Phone: 615-986-7296

U.S. Army Corps of Engineers  
Western Regulatory Field Office  
Room 234, Federal Building  
400 Wells Street, NE.  
Decatur, Alabama 35601-9990  
Phone: 205-350-5620

U.S. Army Corps of Engineers  
Grove Arcade Building, Room 75  
37 Battery Park Avenue  
Asheville, North Carolina 28801

Natural Resources Building  
Room 116  
Ridgeway Road  
Norris, Tennessee  
Phone: 615-632-1530

202 West Blythe Street  
Paris, Tennessee  
Phone: 901-642-2041

170 Office Service Warehouse Annex  
Muscle Shoals, Alabama  
Phone: 205-386-2223

1101 Congress Parkway  
Athens, Tennessee  
Phone: 615-745-1783

2611 West Andrew Johnson Highway  
Morristown, Tennessee  
Phone: 615-587-5600

Manager, Land Resources  
Tennessee Valley Authority  
Norris, TN 37828

Manager, Property Management  
Western Land Resources District  
Post Office Box 280  
Paris, TN 38242-0280

Manager, Property Management  
Southern Land Resources District  
170 Office Service Warehouse Annex  
Muscle Shoals, AL 35660

Manager, Property Management  
Central Land Resources District  
Post Office Box 606  
Athens, TN 37303

Manager, Property Management  
Eastern Land Resources District  
2611 West Andrew Johnson Highway  
Morristown, TN 37814



## **Attachment 1**

### **Description of Activity**

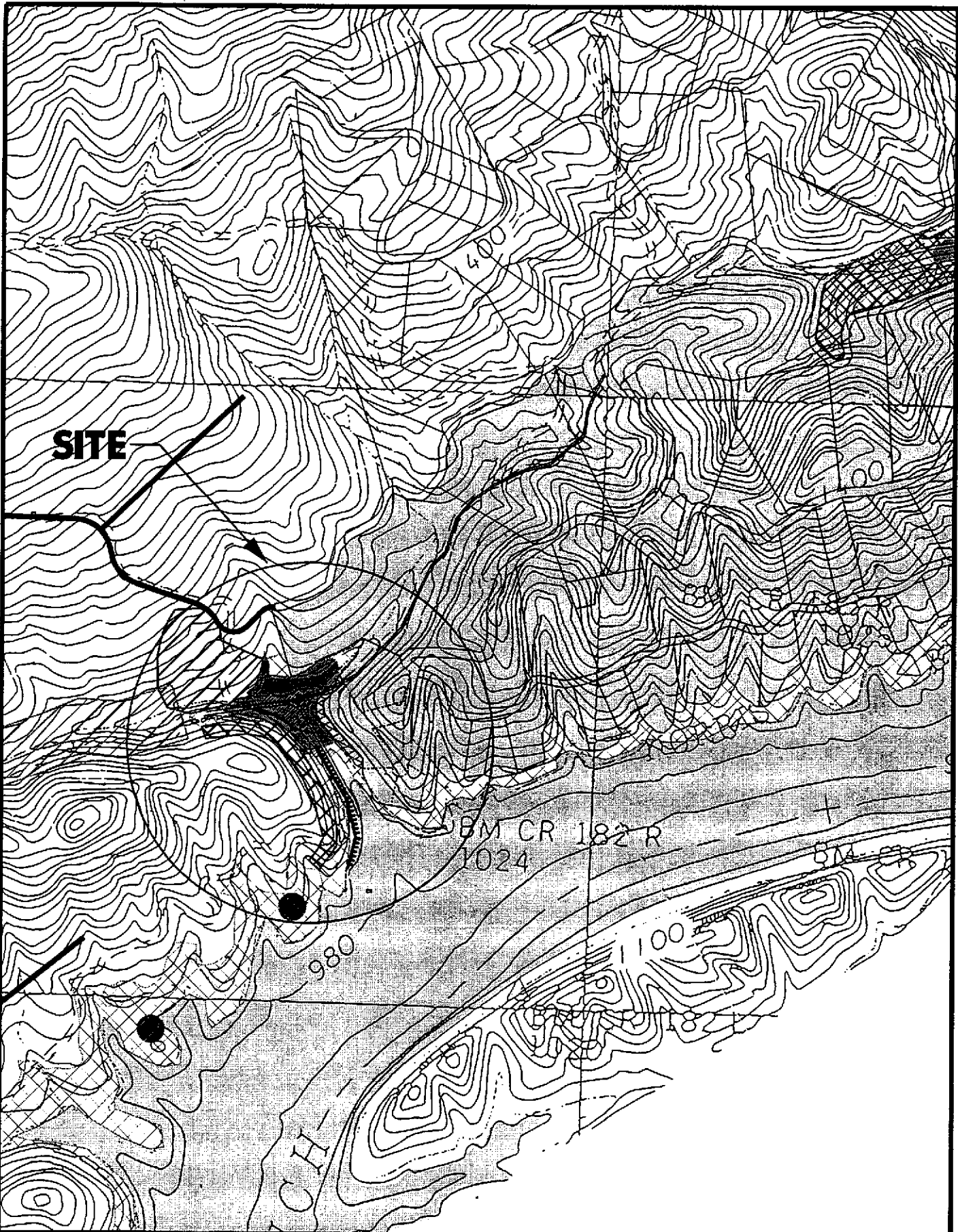
The activity involves the construction of an access drive, a 24' x 48' gravel turnaround, concrete boat ramp and 56 boat slips below the 1044 contour. All of these improvements will be constructed with a minimum of earth and vegetation disturbance activities. No fill material, other than the gravel for the drives and the concrete for the ramp will be placed below the 1044.

A floating walkway (6' in width) is proposed to provide access to 56 community floating boat slips. These slips will be available for use by interior (non-lakefront) lot owners. The slips are for seasonal use only and are designed to hinge into a folded position during the winter months. The method of flotation will be encased foam.

A parking area to serve the ramp and the slips will be constructed above the 1044.

Archaeological and T&E species investigations are underway or have been completed for this area as a part of the EA for this project. Indications at this point are that there are no such sensitive resources below the 1044 in this location. In addition, the same is true for the parking area above the 1044.





**BWSC**

**BARGE  
WAGGONER  
SUMNER &  
CANNON, INC.**

ENGINEERS ARCHITECTS PLANNERS  
LANDSCAPE ARCHITECTS AND SURVEYORS

First Tennessee Plaza Suite 2400, Knoxville, Tennessee 37925  
Phone (423) 631-2980 Fax (423) 673-8954

**SITE LOCATION MAP**

**LONE MOUNTAIN SHORES  
UPPER EAST TENNESSEE**

DRAWN BY:

KCB

CHECKED BY:

SAF

DRAWING NO.:

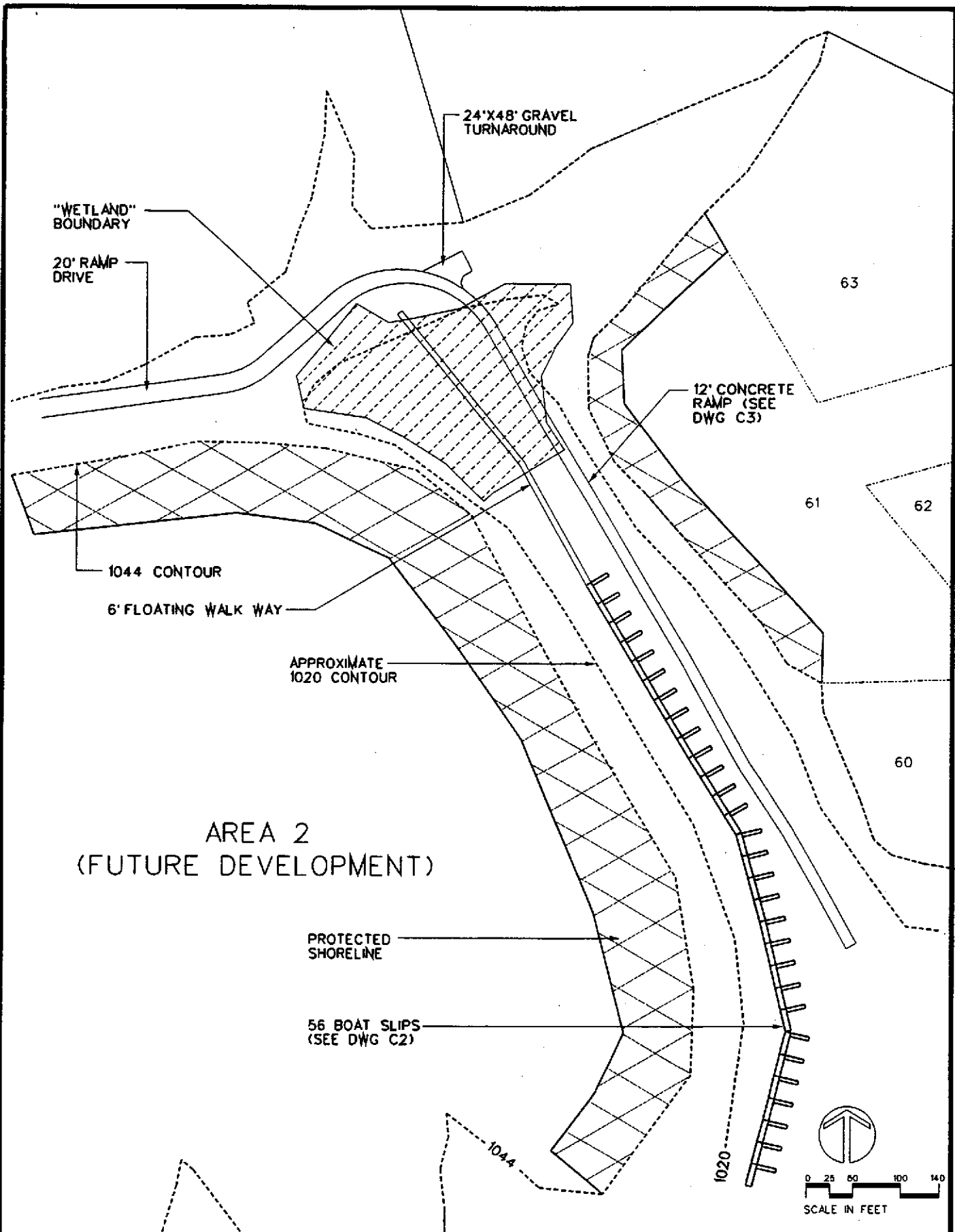
PROJECT NO.:

25128-00

DATE:

3-25-99





**BWSC**

ENGINEERS ARCHITECTS PLANNERS  
LANDSCAPE ARCHITECTS AND SURVEYORS

First Tennessee Plaza Suite 2400, Knoxville, Tennessee 37929  
Phone (423) 637-2800 Fax (423) 675-8954

**BARBE  
WAGGONER  
SUMNER &  
CANNON, INC.**

## DEVELOPMENT PLAN

**LONE MOUNTAIN SHORES**  
UPPER EAST TENNESSEE

DRAWN BY:

KCB

CHECKED BY:

SAF

DRAWING NO.:

**C1**

PROJECT NO.:

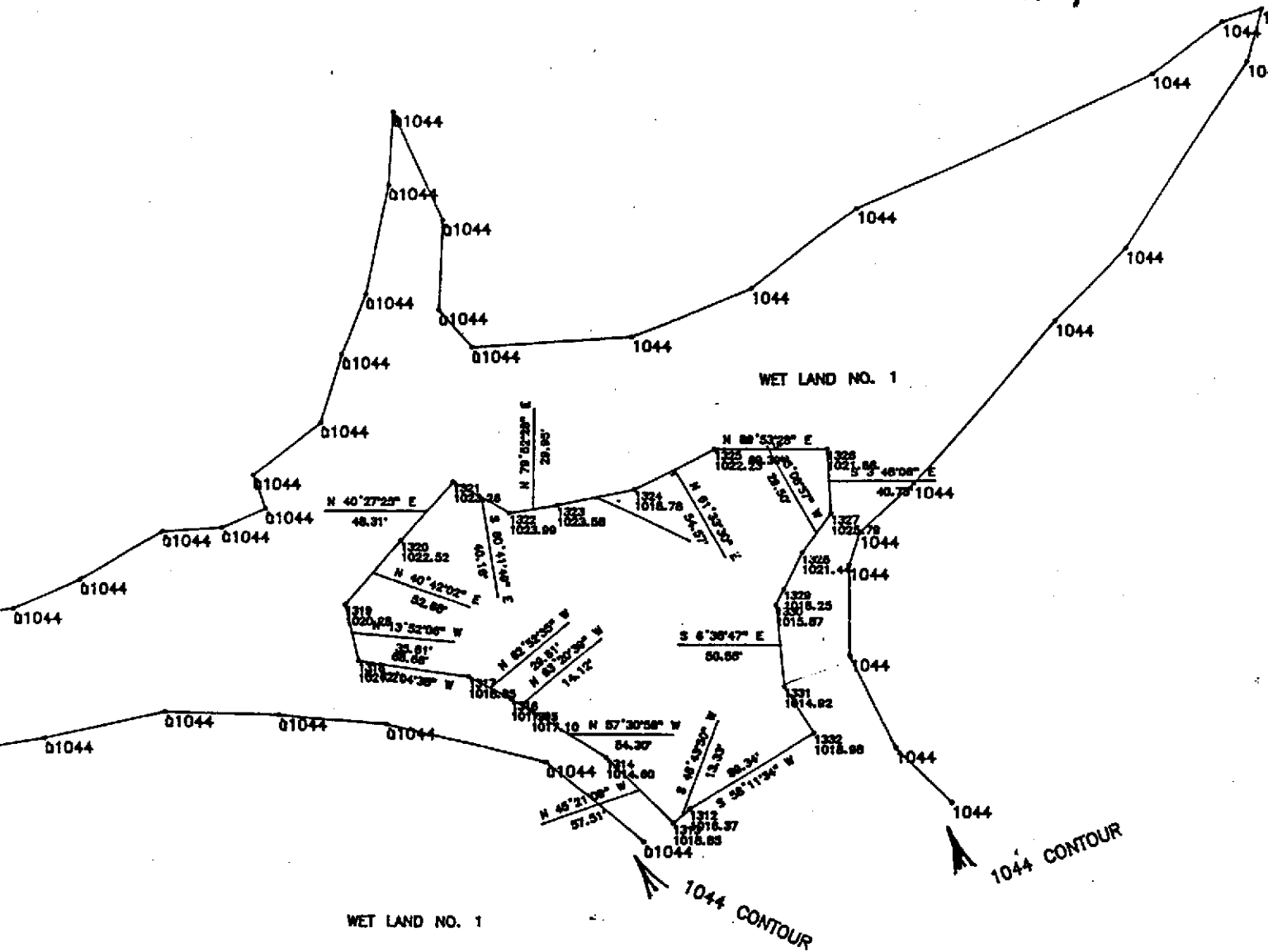
25128-00

DATE:

3-25-99



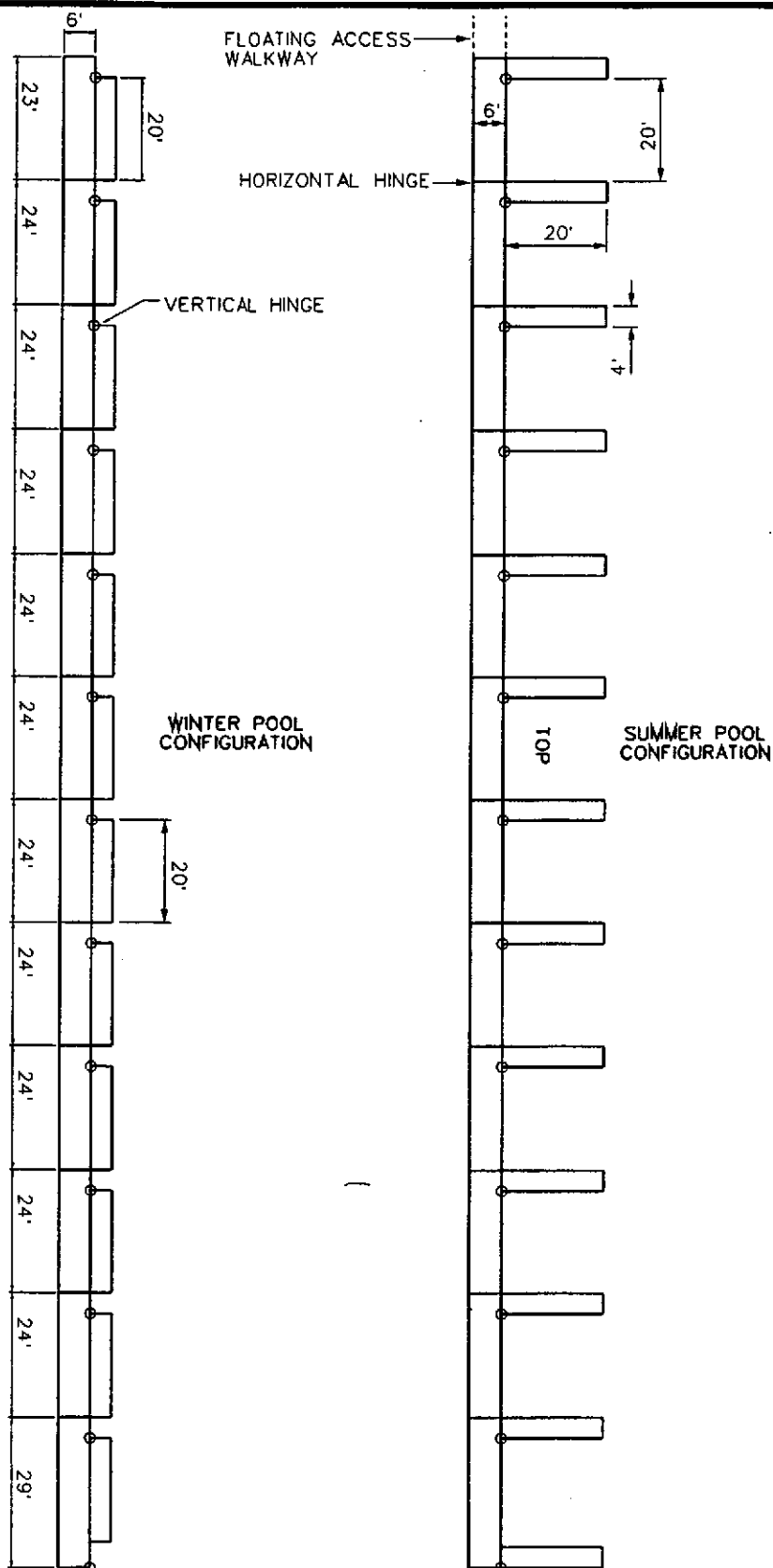
# ATTACHMENT 2 - WETLAND BOUNDARY



	NORTH	EAST	ELVE.	
1312	7405.2724	12588.0622	1016.3735	TVA
1313	7396.4830	12578.0466	1018.8549	TVA
1314	7436.8968	12537.1323	1014.6040	TVA
1315	7486.0569	12491.3316	1017.0991	TVA
1316	7472.3922	12478.7111	1017.9144	TVA
1317	7485.9831	12452.1790	1018.8468	TVA
1318	7495.4472	12384.1739	1021.2146	TVA
1319	7530.0199	12375.6383	1020.2831	TVA
1320	7569.9557	12409.9893	1022.5201	TVA
1321	7606.7111	12441.3336	1023.2570	TVA
1322	7587.0539	12476.3581	1023.9904	TVA
1323	7592.3196	12505.8435	1023.5844	TVA
1324	7602.3899	12552.2967	1018.7823	TVA
1325	7628.3817	12600.2840	1022.2325	TVA
1326	7628.5136	12669.6731	1021.8555	TVA
1327	7587.8271	12672.3767	1025.7938	TVA
1328	7563.7059	12655.3930	1021.4416	TVA
1329	7541.3240	12644.4130	1018.2455	TVA
1330	7531.4721	12639.5507	1015.8739	TVA
1331	7481.2663	12645.4009	1014.9248	TVA
1332	7452.3588	12663.9837	1018.9833	TVA



3. TOTAL ACCESS WALKWAY  
LENGTH 250'±



# BWSC

ENGINEERS ARCHITECTS PLANNERS  
LANDSCAPE ARCHITECTS AND SURVEYORS

First Tennessee Plaza Suite 2400, Knoxville, Tennessee 37929  
Phone (423) 637-2880 Fax (423) 673-8554

**BARGE  
WAGGONER  
SUMNER &  
CANNON, INC.**

## TYPICAL BOAT SLIPS PLAN

**LONE MOUNTAIN SHORES**  
UPPER EAST TENNESSEE

DRAWN BY:

KCB

CHECKED BY:

SAF

**DRAWING NO.:**

**C2**

PROJECT NO.:

25128-00

DATE:

3-25-99



TOP VIEW

384'

LAUNCHING RAMP

12'

CUBIC YARDS OF FILL 49.5

CONCRETE 3 1/2" THICKNESS OF SLAB

NOTE: MINOR MACHINE GRADING TO FACILITATE CONSTRUCTION.

EL. 1034 +

13.9% GRADE

SIDE VIEW

EL. 980

**BWSC**

ENGINEERS ARCHITECTS PLANNERS  
LANDSCAPE ARCHITECTS AND SURVEYORS

1093 Commerce Park Drive, Suite 500, San Diego, Tennessee 37330  
Phone: (423) 49-0456 Fax: (423) 49-3895

**BARGE  
WAGGONER  
SUMNER &  
CANNON, INC.**

**RAMP**

**LONE MOUNTAIN SHORES**  
UPPER EAST TENNESSEE

DRAWN BY:

KCB

CHECKED BY:

SAF

DRAWING NO.:

**C3**

PROJECT NO.:

25128-00

DATE:

3-25-99





US Army Corps  
of Engineers  
Nashville District

# Public Notice

Public Notice No. 99-62

Date October 12, 1999

Application No. 980016280

In Reply Refer to:  
Regulatory Branch, PO Box 1070, Nashville, TN 37202-1070

**JOINT PUBLIC NOTICE**  
**US ARMY CORPS OF ENGINEERS**  
**TENNESSEE VALLEY AUTHORITY**  
**AND**  
**STATE OF TENNESSEE**

**SUBJECT:** Proposed Community Dock and Boat Ramp on Norris Lake for Phase I of the Lone Mountain Shores Subdivision Development. This work would be part of a residential development, which in accordance with a shoreline management plan, would include an additional community dock and boat ramp, and other private water use facilities.

**TO ALL CONCERNED:** The application described below has been submitted for a Department of the Army (DA) Permit pursuant to **Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (33 U.S.C. 1344)**. Only Phase I facilities are being reviewed for a DA Permit at this time. The Tennessee Valley Authority (TVA) is reviewing Phase I and Phase II in accordance with their Shoreline Management Initiative and pursuant to **Section 26a of the TVA Act**, requiring authorization for development and use of public land below mean sea level elevation 1044. Also, before a permit can be issued, the State of Tennessee, Division of Water Pollution Control, must provide certification pursuant to Section 401(a)(1) of the CWA, that applicable water quality standards will not be violated. By copy of this notice, the applicant hereby applies for the required certification.

**APPLICANT: Red Creek Ranch**  
**d/b/a Tennessee Lone Mountain Shores, Inc.**  
**204 Court Street**  
**Tazewell, Tennessee 37879**

**LOCATION:** Mile 131.6 R, Clinch River, Norris Lake, Claiborne County, Tennessee,  
lat:36-21-25 lon:83-36-38, Powder Springs Quadrangle

**DESCRIPTION:** The applicant proposes to construct a floating community dock and boat launching ramp on an embayment of Norris Lake. The structures are part of the Phase I work for the planned residential community designated as Lone Mountain Shores Subdivision comprising 1200 acres. The area is identified as Area 1 on the attached map. The floating dock would be 26' wide and 700' long, providing 56 slips for use in the summer months only. The dock would have a 6' wide main walkway with a series of 4'



The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of the activities on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the work must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the work will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. In addition, the evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under authority of Section 404(b)(1) of the CWA (40 CFR Part 230). A DA permit will be granted unless the District Engineer determines that it would be contrary to the public interest.

The Corps of Engineers and TVA are soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers and TVA to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

An Environmental Assessment has been prepared by the applicant pursuant to TVA's request for a shoreline management plan for use of TVA lands, proposed private water use facilities, and overall future development. The Environmental Assessment is ready for review. An Environmental Assessment will be prepared by the Corps of Engineers prior to a final decision concerning issuance or denial of the requested DA Permit.

TVA identified the existence of properties that may be listed in or eligible for listing in the National Register of Historic Places which may be affected by the proposed work. Therefore, TVA required the applicant to conduct an archeological survey of the project area. Phase I archeological surveys were performed in 1999 and previously in 1996 by TRC Garrow and Associates, Inc. TVA is coordinating these efforts with The Tennessee Historical Commission. This review constitutes the full extent of cultural resources investigations unless further comments to this notice are received concerning the potentially eligible sites. Copies of this notice are being sent to the office of the State Historic Preservation Officer and the U.S. Department of the Interior, National Park Service, - Atlanta.



PROJECT LIMITS

POWDER SPRINGS, TN  
QUAD.

LOCATION OF PHASE I FACILITIES

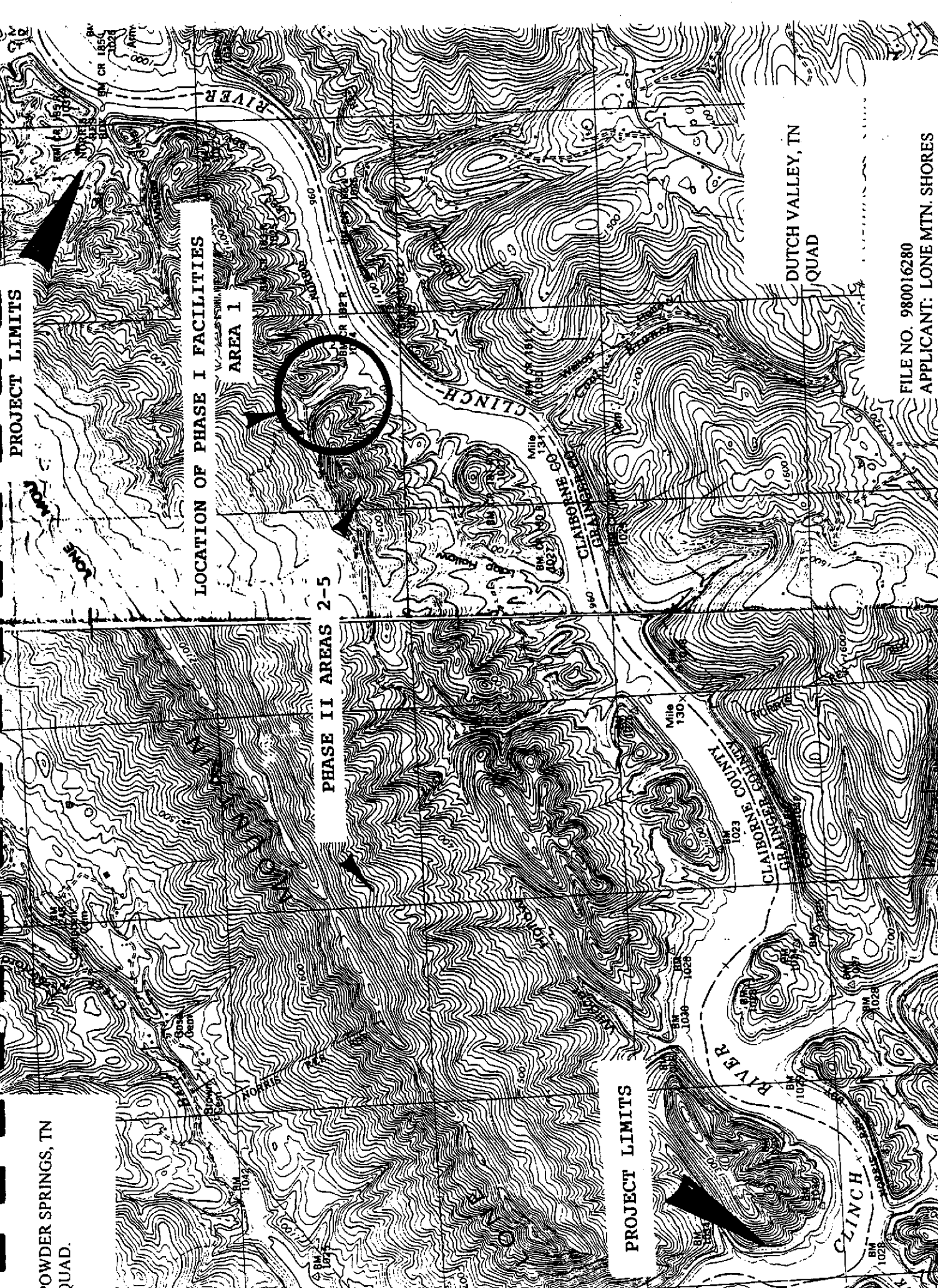
AREA 1

PHASE II AREAS 2-5

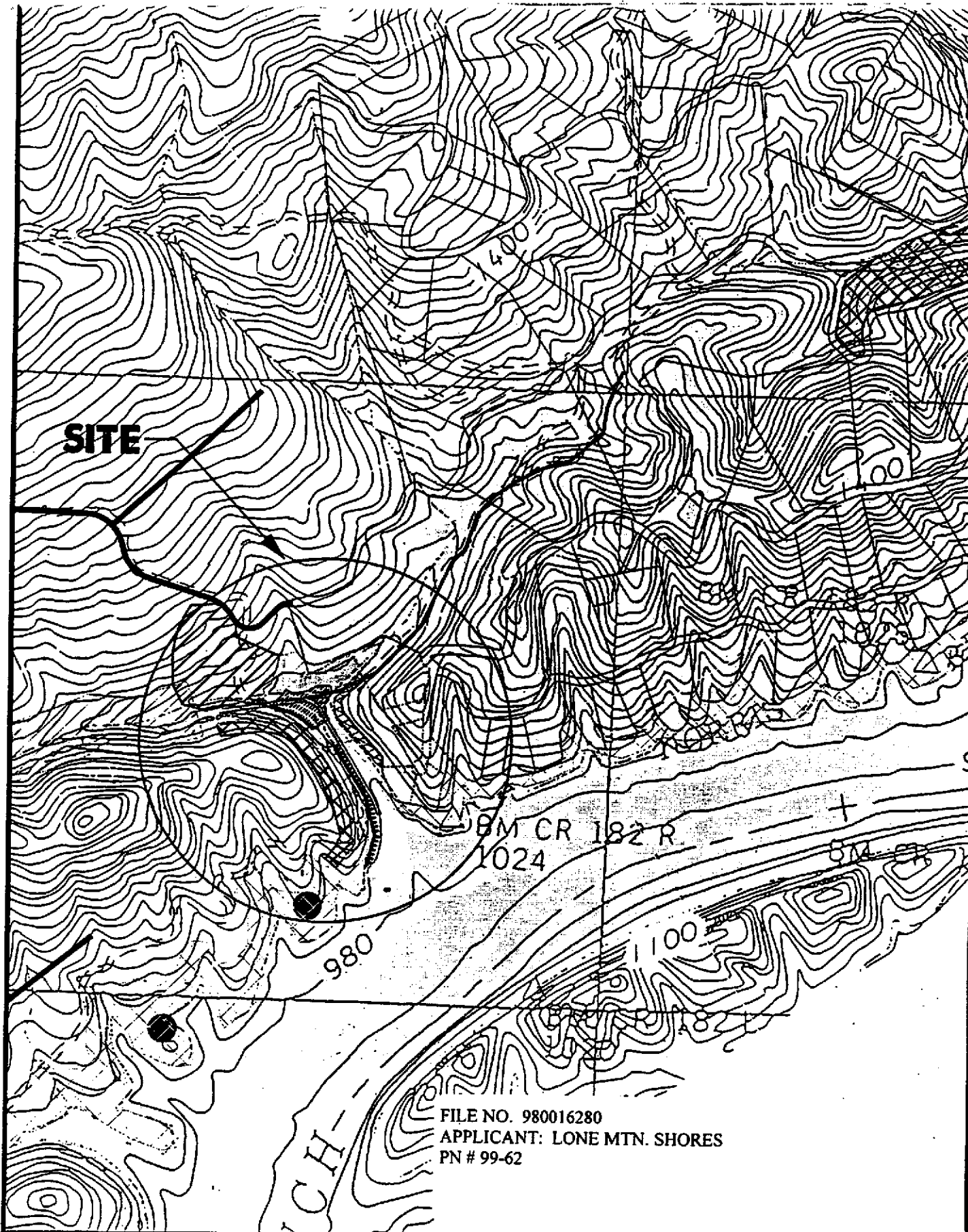
PROJECT LIMITS

DUTCH VALLEY, TN  
QUAD

FILE NO. 980016280  
APPLICANT: LONE MTN. SHORES







FILE NO. 980016280  
 APPLICANT: LONE MTN. SHORES  
 PN # 99-62

**BWSC**

**BARGE  
 WAGGONER  
 SUMNER &  
 CANNON, INC.**

ENGINEERS ARCHITECTS PLANNERS  
 LANDSCAPE ARCHITECTS AND SURVEYORS

One Tennessee Plaza Suite 2000 Knoxville Tennessee 37921  
 Phone (423) 637-2900 Fax (423) 637-9554

**SITE LOCATION MAP**

**LONE MOUNTAIN SHORES**  
 UPPER EAST TENNESSEE

DRAWN BY: CHECKED BY:

KCB

SAF

DRAWING NO.:

PROJECT NO.:

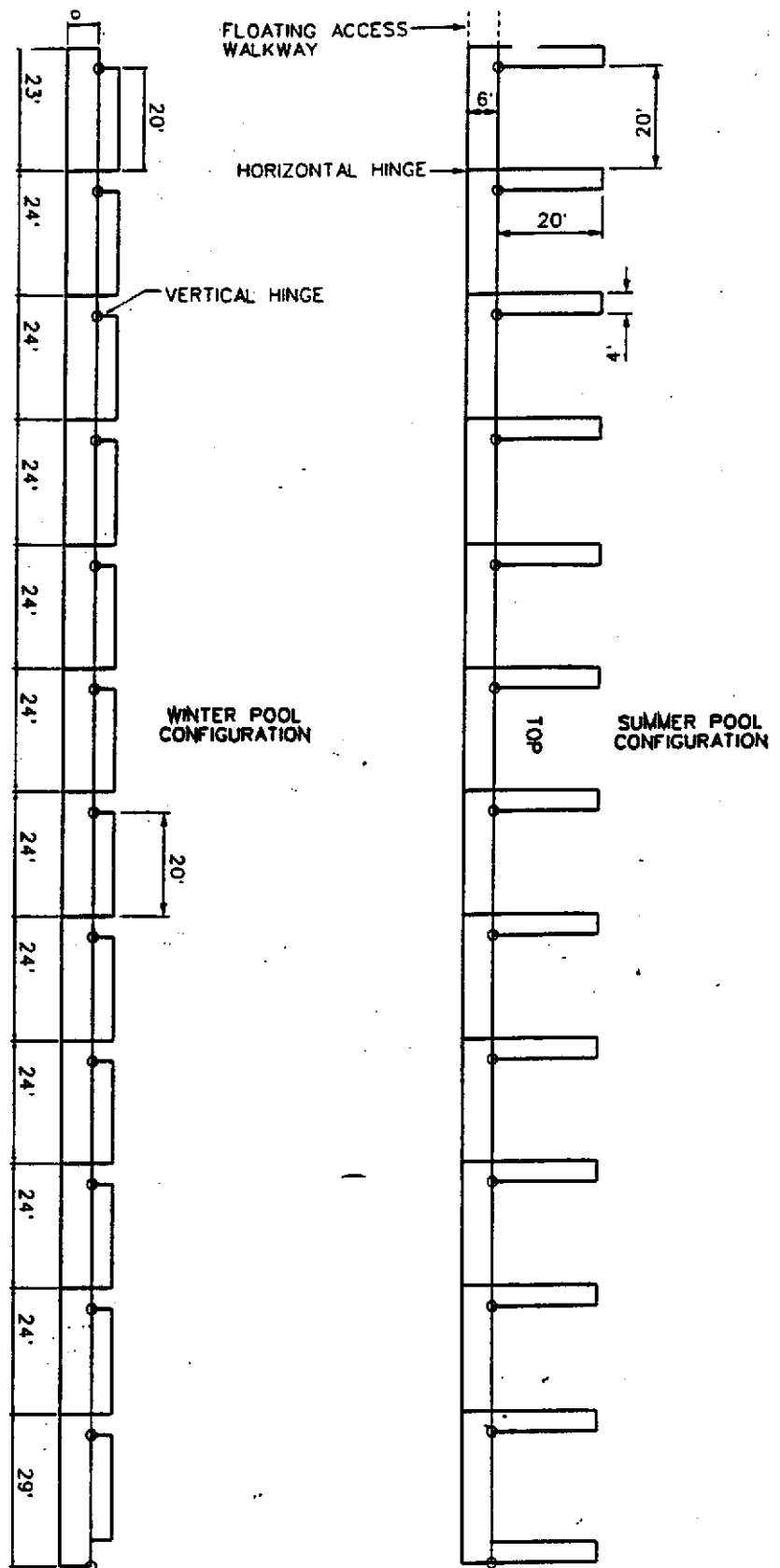
25128-00

DATE:

3-25-99



1. TOTAL SLIP LENGTH 700'
2. FLOTATION TO BE ENCASED  
FOAM FOR WALKWAY AND SLIPS.
3. TOTAL ACCESS WALKWAY  
LENGTH 250'±



FILE NO. 980016280  
APPLICANT: LONE MTN. SHORES  
PN # 99-62

# BWSC

First International Conference on the Role of the Teacher in the 21st Century  
 1998-1999, 1999-2000, 2000-2001, 2001-2002, 2002-2003, 2003-2004, 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017, 2017-2018, 2018-2019, 2019-2020, 2020-2021, 2021-2022, 2022-2023, 2023-2024, 2024-2025, 2025-2026, 2026-2027, 2027-2028, 2028-2029, 2029-2030, 2030-2031, 2031-2032, 2032-2033, 2033-2034, 2034-2035, 2035-2036, 2036-2037, 2037-2038, 2038-2039, 2039-2040, 2040-2041, 2041-2042, 2042-2043, 2043-2044, 2044-2045, 2045-2046, 2046-2047, 2047-2048, 2048-2049, 2049-2050, 2050-2051, 2051-2052, 2052-2053, 2053-2054, 2054-2055, 2055-2056, 2056-2057, 2057-2058, 2058-2059, 2059-2060, 2060-2061, 2061-2062, 2062-2063, 2063-2064, 2064-2065, 2065-2066, 2066-2067, 2067-2068, 2068-2069, 2069-2070, 2070-2071, 2071-2072, 2072-2073, 2073-2074, 2074-2075, 2075-2076, 2076-2077, 2077-2078, 2078-2079, 2079-2080, 2080-2081, 2081-2082, 2082-2083, 2083-2084, 2084-2085, 2085-2086, 2086-2087, 2087-2088, 2088-2089, 2089-2090, 2090-2091, 2091-2092, 2092-2093, 2093-2094, 2094-2095, 2095-2096, 2096-2097, 2097-2098, 2098-2099, 2099-2100, 2100-2101, 2101-2102, 2102-2103, 2103-2104, 2104-2105, 2105-2106, 2106-2107, 2107-2108, 2108-2109, 2109-2110, 2110-2111, 2111-2112, 2112-2113, 2113-2114, 2114-2115, 2115-2116, 2116-2117, 2117-2118, 2118-2119, 2119-2120, 2120-2121, 2121-2122, 2122-2123, 2123-2124, 2124-2125, 2125-2126, 2126-2127, 2127-2128, 2128-2129, 2129-2130, 2130-2131, 2131-2132, 2132-2133, 2133-2134, 2134-2135, 2135-2136, 2136-2137, 2137-2138, 2138-2139, 2139-2140, 2140-2141, 2141-2142, 2142-2143, 2143-2144, 2144-2145, 2145-2146, 2146-2147, 2147-2148, 2148-2149, 2149-2150, 2150-2151, 2151-2152, 2152-2153, 2153-2154, 2154-2155, 2155-2156, 2156-2157, 2157-2158, 2158-2159, 2159-2160, 2160-2161, 2161-2162, 2162-2163, 2163-2164, 2164-2165, 2165-2166, 2166-2167, 2167-2168, 2168-2169, 2169-2170, 2170-2171, 2171-2172, 2172-2173, 2173-2174, 2174-2175, 2175-2176, 2176-2177, 2177-2178, 2178-2179, 2179-2180, 2180-2181, 2181-2182, 2182-2183, 2183-2184, 2184-2185, 2185-2186, 2186-2187, 2187-2188, 2188-2189, 2189-2190, 2190-2191, 2191-2192, 2192-2193, 2193-2194, 2194-2195, 2195-2196, 2196-2197, 2197-2198, 2198-2199, 2199-2200, 2200-2201, 2201-2202, 2202-2203, 2203-2204, 2204-2205, 2205-2206, 2206-2207, 2207-2208, 2208-2209, 2209-2210, 2210-2211, 2211-2212, 2212-2213, 2213-2214, 2214-2215, 2215-2216, 2216-2217, 2217-2218, 2218-2219, 2219-2220, 2220-2221, 2221-2222, 2222-2223, 2223-2224, 2224-2225, 2225-2226, 2226-2227, 2227-2228, 2228-2229, 2229-2230, 2230-2231, 2231-2232, 2232-2233, 2233-2234, 2234-2235, 2235-2236, 2236-2237, 2237-2238, 2238-2239, 2239-2240, 2240-2241, 2241-2242, 2242-2243, 2243-2244, 2244-2245, 2245-2246, 2246-2247, 2247-2248, 2248-2249, 2249-2250, 2250-2251, 2251-2252, 2252-2253, 2253-2254, 2254-2255, 2255-2256, 2256-2257, 2257-2258, 2258-2259, 2259-2260, 2260-2261, 2261-2262, 2262-2263, 2263-2264, 2264-2265, 2265-2266, 2266-2267, 2267-2268, 2268-2269, 2269-2270, 2270-2271, 2271-2272, 2272-2273, 2273-2274, 2274-2275, 2275-2276, 2276-2277, 2277-2278, 2278-2279, 2279-2280, 2280-2281, 2281-2282, 2282-2283, 2283-2284, 2284-2285, 2285-2286, 2286-2287, 2287-2288, 2288-2289, 2289-2290, 2290-2291, 2291-2292, 2292-2293, 2293-2294, 2294-2295, 2295-2296, 2296-2297, 2297-2298, 2298-2299, 2299-2300, 2300-2301, 2301-2302, 2302-2303, 2303-2304, 2304-2305, 2305-2306, 2306-2307, 2307-2308, 2308-2309, 2309-2310, 2310-2311, 2311-2312, 2312-2313, 2313-2314, 2314-2315, 2315-2316, 2316-2317, 2317-2318, 2318-2319, 2319-2320, 2320-2321, 2321-2322, 2322-2323, 2323-2324, 2324-2325, 2325-2326, 2326-2327, 2327-2328, 2328-2329, 2329-2330, 2330-2331, 2331-2332, 2332-2333, 2333-2334, 2334-2335, 2335-2336, 2336-2337, 2337-2338, 2338-2339, 2339-2340, 2340-2341, 2341-2342, 2342-2343, 2343-2344, 2344-2345, 2345-2346, 2346-2347, 2347-2348, 2348-2349, 2349-2350, 2350-2351, 2351-2352, 2352-2353, 2353-2354, 2354-2355, 2355-2356, 2356-2357, 2357-2358, 2358-2359, 2359-2360, 2360-2361, 2361-2362, 2362-2363, 2363-2364, 2364-2365, 2365-2366, 2366-2367, 2367-2368, 236

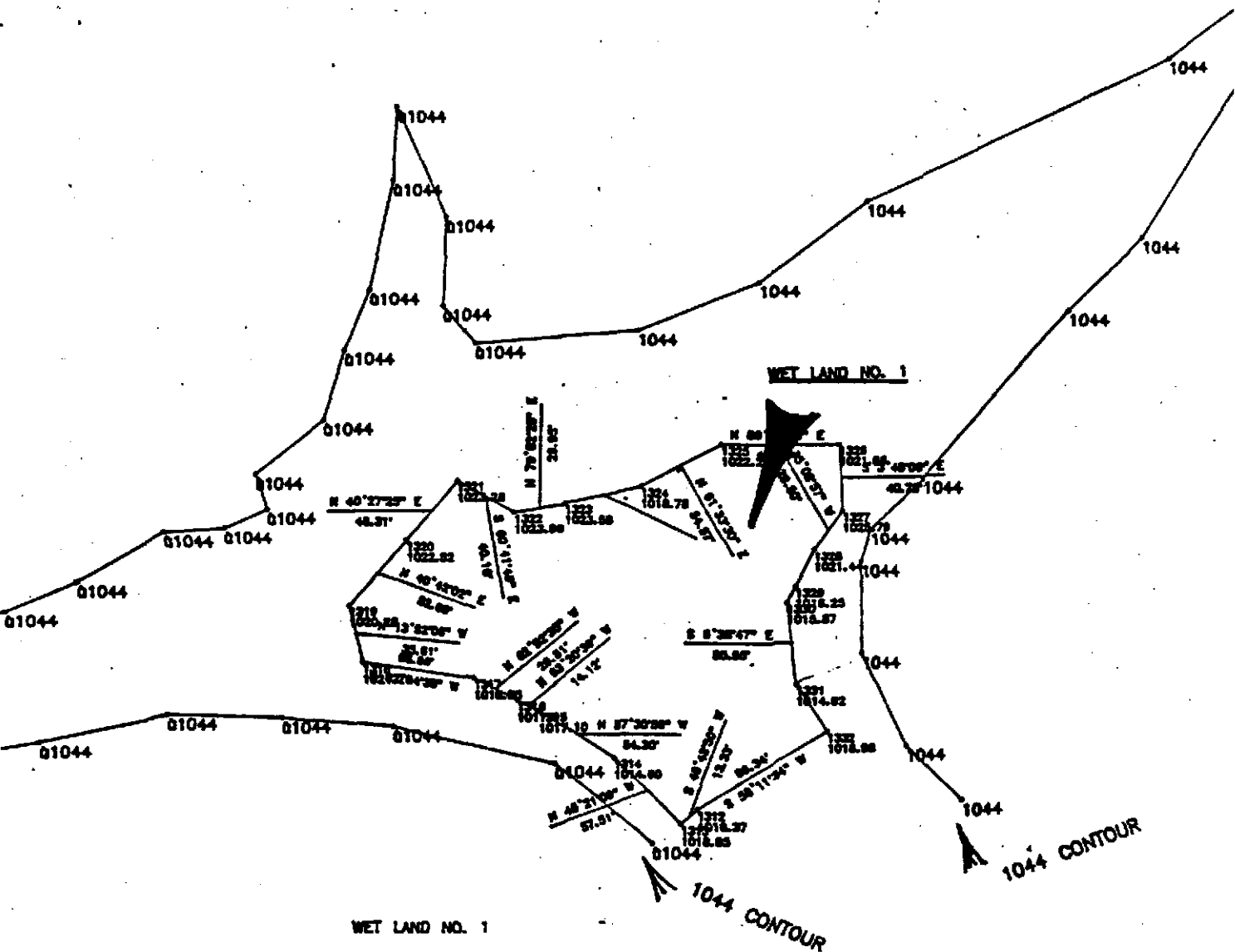
**BARBE  
WAGONER  
SUMNER &  
CANNON, INC.**

**LONE MOUNTAIN SHORES**  
UPPER EAST TENNESSEE

**C2**

3-25-99





	NORTH	EAST	ELVE.	
1312	7405.2724	12588.0622	1016.3735	TVA
1313	7396.4830	12578.0466	1018.8549	TVA
1314	7436.8968	12537.1323	1014.6040	TVA
1315	7466.0569	12491.3318	1017.0991	TVA
1316	7472.3922	12478.7111	1017.9144	TVA
1317	7485.9831	12452.1790	1018.8468	TVA
1318	7485.4472	12384.1739	1021.2148	TVA
1319	7530.0199	12375.6383	1020.2831	TVA
1320	7589.9557	12409.9893	1022.5201	TVA
1321	7606.7111	12441.3336	1023.2570	TVA
1322	7587.0539	12478.3581	1023.9904	TVA
1323	7592.3186	12505.8435	1023.5844	TVA
1324	7602.3899	12552.2967	1018.7823	TVA
1325	7628.3817	12600.2840	1022.2325	TVA
1326	7628.5136	12669.6731	1021.8555	TVA
1327	7587.8271	12672.3767	1025.7938	TVA
1328	7563.7059	12655.3930	1021.4416	TVA
1329	7541.3240	12644.4130	1018.2455	TVA
1330	7531.4721	12639.5507	1015.8739	TVA
1331	7481.2663	12645.4009	1014.9248	TVA
1332	7452.3588	12663.9837	1018.9833	TVA

FILE NO. 980016280  
 APPLICANT: LONE MTN. SHORES  
 PN # 99-62





**EAST TENNESSEE DEVELOPMENT DISTRICT**

November 30, 1999

Mr. Jon M. Loney, Manager  
NEPA Administration  
Environmental Policy & Planning  
Tennessee Valley Authority  
400 W. Summit Hill Drive  
Knoxville, TN 37902-1499

Dear Mr. Loney:

SUBJECT: Result of Regional Review  
Tennessee Valley Authority - Draft Environmental Assessment for Tennessee  
Lone Mountain Shores Development on Norris Reservoir

The East Tennessee Development District has completed its review of the above mentioned proposal, in its role as a regional clearinghouse to review state and federally-assisted projects.

ETDD review of this proposal has found no conflicts with the plans or programs of the District or other agencies in the region. However, ETDD or other reviewing agencies may wish to comment further at a later time.

We appreciate the opportunity to work with you in coordinating projects in the region.

Sincerely,



Robert E. Freeman  
Executive Director

REF/tg

RECEIVED	
DEC 03 1999	
Doc. No. 6258617	
<input checked="" type="checkbox"/> JML	<input type="checkbox"/> MLI
<input checked="" type="checkbox"/> Files	<input type="checkbox"/> ALI
- 2 H	





May 26, 1999

Tere C. McDonough  
Facilitator  
Tennessee Valley Authority  
17 Ridgeway Road  
Norris, Tennessee 37828-0920

Dear Ms. McDonough:

It has been brought to my attention that you are considering the request by Lone Mountain Shores for lake access to the property. We think the project will be a major asset to the needs of our community. The tax base alone will help to create schools, maintain our street systems and many other vital area needs.

The new people this development is bringing into our area will be of the utmost importance to the local businesses. This is a badly needed development for our area. We would appreciate your support of the project.

Sincerely,

Tammy Flanagan  
Executive Vice-President

TF/zn





**ELEANOR E. YOAKUM**  
Chairman of the Board

May 26, 1999

Tere C. McDonough  
Facilitator  
Tennessee Valley Authority  
17 Ridgeway Road  
Norris, TN 37828-0920

Dear Ms. McDonough:

It has come to my attention that you and Linda Fowler are currently reviewing the request by Lone Mountain Shores Development for lake access in their waterfront community. It is my understanding that in your approval process you consider the economic impact on the area, as affected by their request. Being a resident of Tazewell, Chairman of the Board of First Claiborne Bank, and former member of the Tennessee Economic Growth Board, I would like to plea for your favorable consideration.

Lone Mountain Shores represents tens of millions of dollar in future taxable personal property. These tax revenues would provide much needed services to Claiborne County. Concurrently, because of the demographics in this rural, residential development, there would be a minimal burden to these same services.

The cities of Tazewell and New Tazewell are going to be benefiting from the expansion of US Hwy 25-E from its current two lanes into a four-lane highway. The increase in traffic and idyllic location of these cities on the scenic route will result in more business activity and ultimately an increase in the local population. Again, Lone Mountain Shores will be a welcome addition in meeting future residential needs.

Finally, with the influx of new people, especially those of the economic status who are purchasing in the Norris Lake community, there will be an increase in retail purchases. This will not only help the local businesses, but also impact the state's revenues. With Tennessee seeking various means to maintain its quality of services to the people of the state, it is my opinion that Lone Mountain Shores would be a tremendous asset.

I personally have visited the lone Mountain Shores project and have talked numerous times with some of their principals about the importance of their being able to obtain their necessary permits from the Tennessee Valley Authority. I implore you to give your utmost support of the people at Lone Mountain Shores. Claiborne County and Tennessee can benefit substantially from this fine company and the quality community they are developing.

Respectfully,

Eleanor Yoakum  
Chairman of First Claiborne Bank

EEY/jmp

CC: Linda Fowler





**TENNESSEE COMMISSION OF INDIAN AFFAIRS**

7th Floor, L & C Annex, 401 Church Street  
Nashville, Tennessee 37243-0459  
(615) 532-0745

Cubert Bell, Sr.

Carolyn Hughes

Eddie Nickens

Clayton W. Prest

October 19, 1999

Linda Fowler  
TVA Clinch-Powell Watershed Team  
17 Ridgeway Road  
Norris, TN 37828

Dear Ms. Fowler:

I recently received US Army Corps of Engineers Public Notice No. 99-62 regarding Application 980016280, a permit request by Tennessee Lone Mountain Shores, Inc. to construct a floating dock and boat ramp on Norris Lake.

This Public Notice states that TVA identified properties that may be listed in or eligible for listing in the National Register of Historic Places and that TVA required the applicant to conduct an archaeological survey of the project area. I would like to request a copy of this survey report.

Thank you for your time. Please contact me if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Toye Heape".

Toye Heape  
Executive Director





**TENNESSEE HISTORICAL COMMISSION**  
**DEPARTMENT OF ENVIRONMENT AND CONSERVATION**  
2941 LEBANON ROAD  
NASHVILLE, TN 37243-0442  
(615) 532-1550

October 20, 1999

Ms. Deborah Tuck  
United States Army Corps of Engineers  
Regulatory Branch  
Post Office Box 1070  
Nashville, Tennessee 37202-1070

RE: COE-N, PN# 99-82/LONE MOUNTAIN SHORES, UNINCORPORATED, CLAIBORNE COUNTY,

Dear Ms. Tuck:

At your request, our office has reviewed the above-referenced project in accordance with regulations codified at 36 CFR 800 (64 FR 27044, May 18, 1999). Based on the information provided by the Tennessee Valley Authority, we concur that the project area contains archaeological resources potentially eligible for listing in the National Register of Historic Places. Sites 40CE84, 40CE91, 40CE96, 40CE97, 40CE120, 40CE121, 40CE122, 40CE124, 40CE125, 40CE127, 40CE128, and 40CE133 must either be avoided by project activities, or subjected to Phase II archaeological testing.

Upon receipt of the Phase II testing report, we will complete our review of this undertaking as expeditiously as possible. Please submit a minimum of two copies of each final report and complete and Tennessee Site Survey Forms to this office in accordance with the Tennessee Historical Commission Review and Compliance Section Reporting Standards and Guidelines. Until such time as this office has rendered a final comment on this project, your Section 106 obligation under federal law has not been met. Please inform this office if this project is canceled or not funded by the federal agency. Questions and comments may be directed to Jennifer M. Bartlett (615) 741-1588, ext. 17.

Your cooperation is appreciated.

Sincerely,

Herbert L. Harper  
Executive Director and  
Deputy State Historic  
Preservation Officer

HLH/jmb





## TENNESSEE WILDLIFE RESOURCES AGENCY

ELLINGTON AGRICULTURAL CENTER  
P.O. BOX 40747  
NASHVILLE, TENNESSEE 37204

December 1, 1989

Ms. Deborah Tuck  
U.S. Army Corps of Engineers  
P.O. Box 1070  
Nashville, TN 37202-1070

re: 99-62 - Red Creek Ranch d/b/a Tennessee Lone Mountain Shores, Inc.  
Proposed community dock and boat ramp, Mile 131.6R, Clinch River, Norris  
Lake, Claiborne County, TN

Dear Ms. Tuck:

The Tennessee Wildlife Resources Agency generally supports community dock and launching facilities as an alternative to numerous privately owned docks and ramps. The Tennessee Valley Authority is currently circulating an Environmental Assessment (EA) for Lone Mountain Shores Corporation with a preferred alternative which would allow both private and community facilities. In the enclosed copy of TWRA's comment letter to TVA, we request that community facilities only be permitted for this large development. It is our position that both private facilities and large community facilities result in unnecessary and excessive shoreline development.

This agency has no direct input on the processing of the General Permits required for the private docks. We must therefore request here that this permit for community facilities not be issued unless TVA determines in its EA process not to allow private facilities, and/or, the Corps similarly does not issue General Permits for private docks.

The proliferation of shoreline development on our public reservoirs is a serious problem. We urge the Corps to assist through the Section 10/404 regulatory program in limiting development to what is absolutely required in order that these public shorelines not be unnecessarily privatized.

Sincerely,

A handwritten signature in dark ink, appearing to read "Dan Cherry".

Dan Cherry  
Fish & Wildlife Environmentalist

DS/bjs  
Enclosure

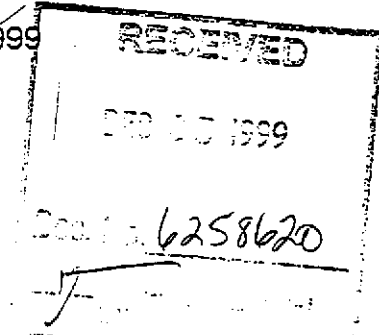




## TENNESSEE WILDLIFE RESOURCES AGENCY

ELLINGTON AGRICULTURAL CENTER  
P.O. BOX 40747  
NASHVILLE, TENNESSEE 37204

November 30, 1999



Mr. Jon M. Loney, Manager  
NEPA Administration  
Environmental Policy & Planning  
Tennessee Valley Authority  
400 W. Summit Hill Drive  
Knoxville, TN 37902-1499

re: Draft Environmental Assessment (EA) - Request for approval of Shoreline Management Plan and Private Water Use Facilities, Tennessee Lone Mountain Shores Corporation, Norris Reservoir, Claiborne County, TN

Dear Mr. Loney:

The Shoreline Management Plan for Lone Mountain Shores relates directly to the TVA Shoreline Management Initiative (SMI). The Tennessee Wildlife Resources Agency is on record as not concurring with the Blended Alternative for SMI, calling instead for stronger environmental standards than those found in the Blended Alternative.

In the subject Environmental Assessment (EA) for Lone Mountain Shores, Alternative 4 (TVA preferred) would "consider a combination of private water use facilities and two community areas, each having a boat landing ramp and community slips". Some of the shoreline segments "may" be categorized for additional mitigation measures (Residential Mitigation). It is inferred that these additional measures would afford more protection to the shoreline than with other alternatives.

Only 11 percent of the shoreline would qualify for this additional mitigation. Even within this 11 percent, specifics of what the mitigation would entail are not presented and would be developed by Lone Mountain Shores Corporation with TVA approval. In fact, the SMI already applies to all of this shoreline. Wetland protection which is presented as a benefit of Alternative 4 is already addressed in both SMI and existing regulations.

On the other hand, we are very concerned with the combination of both private and community water use facilities being permitted, a feature of preferred Alternative 4. SMI allows for this. However, this agency, in the already approved Norris Crest Partnership development, has objected to the Corps permitting of community docks in addition to the private docks allowed for by the EA for that development. This objection



is consistent with our view that SMI should be strengthened environmentally. In a permit review process for Lonestar Mountain Shores, we would similarly be compelled to object to this much development.

TWRA supports planning which allows for community dock and launching facilities as a sole source for these facilities. We see no need for both community and private facilities at the expense of a public resource (Norris Lake) except for the effect of these amenities on increased private property values. We therefore strongly urge the adoption of Alternative 2 as preferred alternative for Lone Mountain Shores.

Thank you for considering our position on this important matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Dan Sherry", written over a large, stylized number "7".

Dan Sherry  
Fish & Wildlife Environmentalist

DS/bjs

Enclosure

cc: Bob Ripley





# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

446 Neal Street  
Cookeville, TN 38501

November 17, 1999

Mr. Jon M. Loney  
Manager, NEPA Administration  
Environmental Policy & Planning  
Tennessee Valley Authority  
400 West Summit Hill Drive  
Knoxville, Tennessee 37902-1499

Dear Mr. Loney:

Thank you for your correspondence of October 27, 1999, regarding the Tennessee Valley Authority's (TVA) Draft Environmental Assessment (EA)-Request for Approval of Shoreline Management Plan and Private Water Use Facilities, Tennessee Lone Mountain Shores Corporation (LMS), Norris Reservoir, Claiborne County, Tennessee. The Fish and Wildlife Service (Service) has reviewed the document and offers the following comments.

The EA adequately describes the resources within the project impact area and the proposed actions' impact on these resources. The Service recommends that Alternative 2 be selected as the action alternative, and believes it will have the least adverse impacts to fish and wildlife resources while maintaining development and recreational opportunities in the area.

Thank you for the opportunity to comment on this action. If you have any questions regarding the information which we have provided, please contact Wally Brines of my staff at 931/528-6481, extension 222.

Sincerely,

Lee A. Barclay, Ph.D.  
Field Supervisor





# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

446 Neal Street  
Cookeville, TN 38501

October 29, 1999

Lt. Colonel Peter F. Taylor, Jr.  
District Engineer  
U.S. Army Corps of Engineers  
P.O. Box 1070  
Nashville, Tennessee 37202-1070

Attention: Deborah T. Tuck, Regulatory Branch

Dear Colonel Taylor:

The Fish and Wildlife Service (Service) has reviewed the public notice listed below. The following constitute the comments of the U.S. Department of the Interior provided in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

<u>Public Notice #</u>	<u>Date</u>	<u>Applicant</u>	<u>Due Date</u>
99-62	10-12-99	Red Creek Ranch d/b/a Tennessee Lone Mountain Shores, Inc.	11-12-99

Endangered species collection records available to the Service do not indicate that federally listed or proposed endangered or threatened species occur within the impact area of the project. We note, however, that collection records available to the Service may not be all-inclusive. Our data base is a compilation of collection records made available by various individuals and resource agencies. This information is seldom based on comprehensive surveys of all potential habitat and thus does not necessarily provide conclusive evidence that protected species are present or absent at a specific locality. However, based on the best information available at this time, we believe that the requirements of Section 7 of the Endangered Species Act of 1973, as amended, are fulfilled. Obligations under Section 7 of the Act must be reconsidered if (1) new information reveals impacts of the proposed action that may affect listed species or critical habitat in a manner not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action.



No significant adverse impacts to fish and wildlife, their habitats, and human uses thereof are expected to result from the proposal. Therefore, the Service has no objection to the issuance of the permit to conduct the work described in the subject public notice.

Sincerely,

A handwritten signature in black ink, appearing to read 'Lee A. Barclay', with a long horizontal flourish extending to the right.

*For* Lee A. Barclay, Ph.D.  
Field Supervisor

xc: Linda Fowler, TVA, Norris, TN

TBM:sjs



October 27, 1999

Dear:

**DRAFT ENVIRONMENTAL ASSESSMENT (EA)—REQUEST FOR APPROVAL OF  
SHORELINE MANAGEMENT PLAN AND PRIVATE WATER USE FACILITIES,  
TENNESSEE LONE MOUNTAIN SHORES CORPORATION, NORRIS RESERVOIR,  
CLAIBORNE COUNTY, TENNESSEE**

Enclosed for your review and comment is an applicant-prepared EA for the proposed Lone Mountain Shores development on Norris Reservoir. TVA proposes to approve a shoreline management plan that would allow residential access and use of 12.4 miles of TVA-owned shoreline. Facilities proposed for approval on TVA land would be private docks, community docks, and vegetation management.

Please provide any comments by November 22, 1999. Please note that TVA has determined that the proposed shoreline management plan would have no adverse effect on historic properties and is not likely to adversely affect federally-listed endangered or threatened species.

Should you have any questions, please contact Harold M. Draper at (423) 632-6889 or [hmdraper@tva.gov](mailto:hmdraper@tva.gov).

Sincerely,

**Original Signed By**

Jon M. Loney, Manager  
NEPA Administration  
Environmental Policy & Planning

Enclosure



**THE ATTACHED LETTER WAS SENT TO THE FOLLOWING LIST OF  
NAMES ON OCTOBER 27, 1999**

Dr. Lee A. Barclay  
Field Supervisor  
U.S. Fish and Wildlife Service  
446 Neal Street  
Cookeville, Tennessee 38501

Mr. Louis Buck, Deputy Commissioner  
Tennessee Department of Agriculture  
Ellington Agricultural Center  
Post Office Box 40627  
Nashville, Tennessee 37204

Mr. Wilton Burnette  
Department of Economic and Community Development  
320 Sixth Avenue, North, 7<sup>th</sup> Floor  
Nashville, Tennessee 37243-0405

Mr. Herbert L. Harper  
Executive Director  
Tennessee Historical Commission  
2941 Lebanon Road  
Nashville, Tennessee 37243-0442

Attention: Mr. Joe Garrison and Mr. Nick Fielder (send 2 copies)

Mr. Dan Sherry (2 copies)  
Tennessee Wildlife Resources Agency  
Post Office Box 40747  
Nashville, Tennessee 37204-0747

Mr. Glen Beckwith, Planning Division Director  
Department of Transportation  
James K. Polk Building, Suite 900  
Nashville, Tennessee 37243-0334

Mr. Robert Freeman, Executive Director  
East Tennessee Development District  
Post Office Box 19806  
Knoxville, Tennessee 37939-2806



Mr. Justin P. Wilson, Deputy to the Governor for Policy  
Department of Environment and Conservation  
Environmental Policy Office  
L & C Tower, 21st Floor  
401 Church Street  
Nashville, Tennessee 37243-1530

Attention: Mr. Dodd Galbreath (include copy of this distribution list)

Mr. Reggie Reeves  
Division of Natural Heritage  
8<sup>th</sup> Floor, L&C Tower  
401 Church Street  
Nashville, Tennessee 37243-1553

Mr. Greg Denton  
Division of Water Pollution Control  
7<sup>th</sup> Floor, L&C Tower  
401 Church Street  
Nashville, Tennessee 37243-1553

Lt. Col. Pete Taylor  
U.S. Army Corps of Engineers  
Nashville District  
Post Office Box 1070  
Nashville, Tennessee 37202-1070

Mr. Toye Heape  
Executive Director  
Tennessee Commission of Indian Affairs  
L&C Annex, 7<sup>th</sup> Floor  
401 Church Street  
Nashville, Tennessee 37243-0469

HMD:BL

Enclosure

cc: G. L. Askew, WT 8C-K  
S. E. Davis, WPB 1A-MOT  
L. J. Fowler, MU 1A-N

J. W. Shipp, Jr., MR 2T-C  
Files, EP&P, WT 8C-K