

Document Type: EIS-Administrative Record

Index Field: Final Environmental Document

Project Name: Rarity Pointe Development, Tellico Res., Loudon County

Project Number: 2002-61

FINAL ENVIRONMENTAL IMPACT STATEMENT

**RARITY POINTE COMMERCIAL RECREATION AND  
RESIDENTIAL DEVELOPMENT ON TELlico RESERVOIR**  
Loudon County, Tennessee

**Lead Agency:**  
TENNESSEE VALLEY AUTHORITY

**Cooperating Agencies:**  
U.S. ARMY CORPS OF ENGINEERS  
TELLICO RESERVOIR DEVELOPMENT AGENCY

JUNE 2003

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## **Final Environmental Impact Statement**

**June 2003**

**Proposed project:** Rarity Pointe Commercial Recreation and Residential Development on Tellico Reservoir  
Loudon County, Tennessee

**Lead agency:** Tennessee Valley Authority, Knoxville Tennessee

**Cooperating agencies:** U.S. Army Corps of Engineers, Nashville, Tennessee  
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**Abstract:** TVA is considering actions related to the Rarity Pointe project on Tellico Reservoir, including the proposed sale of approximately 118 acres of TVA public land, use of 5 acres of TVA land for a small golf course, and 4 acres for a full service marina. Potential impacts of this proposal are loss of public lands and associated shoreline habitat, recreational opportunities, and the aesthetic and visual impacts of new development. Under the No Action Alternative (Alternative A) TVA would not approve the requests and the land-use plan for Tellico Reservoir would not be modified. Under the Applicants Proposed Alternative (Alternative B), TVA would agree to make the land available for development, and approve the proposed marina and golf course. Under the Partial Land Sale with Mitigation Alternative (Alternative C) and Applicant's Proposal with Mitigation Alternative (Alternative E), the loss of public land, and impacts to aesthetics, public recreation, and terrestrial ecology would be mitigated through a land exchange. Under the No Land Sale Alternative (Alternative D), TVA would approve the use of TVA land for the small golf course and the marina but not make the approximately 118 acres available for sale. Alternative E is TVA's preferred alternative.





## **SUMMARY**

### **PURPOSE OF AND NEED FOR ACTION**

Consistent with its broad mandate to provide for the economic development and social welfare of the Tennessee Valley region, the Tennessee Valley Authority (TVA) has decided to consider a request for use of public land on Tellico Reservoir for enhancement of a commercial recreation and residential development. This request has been proposed by private developers (LTR Properties, Inc. and Rarity Communities, Inc.) (Rarity Communities) on the Tellico Reservoir in East Tennessee (Loudon County). TVA has been asked to take three actions related to the Rarity Pointe development: (1) release the planned use allocation of approximately 47.8 hectares (approximately 118 acres) of federal property above the 250-meter (820-feet) elevation (Parcels 8 and 9) on the Tellico Reservoir from recreation use and natural resource conservation use to make it available for sale and consequent use in constructing a residential resort and golf course community with 1,200 units; (2) approval of the use of about 2 hectares (5 acres) of TVA property, below the 820-feet elevation for a small (par-3) golf course; and (3) approval of a full service marina using 1.6 hectares (4 acres) of TVA property with shoreline stabilization, dredge, and 349 wet and 200 dry storage boat slips. The TVA property would be added to 87.4 hectares (216 acres) of land purchased by Rarity Communities from the Tellico Reservoir Development Agency (TRDA), and 130.7 hectares (323 acres) of private land. The EIS will evaluate not only the impacts associated with the proposed TVA actions but also the impacts associated with development of the non-TVA property that collectively make up the Rarity Pointe project as currently contemplated by Rarity Communities.

### **SCOPING**

TVA began the NEPA review for the proposed action on Tellico Reservoir after receiving Rarity Communities' request in May 2002. On June 24, 2002, TVA issued a Notice of Intent (NOI) to prepare an Environmental Assessment (EA) or EIS on the Rarity Pointe proposal. Comments were received by letter, e-mail, and at a TVA public scoping meeting held on July 26, 2002 in Loudon, Tennessee. In response to public requests, TVA extended the comment period until August 16, 2002. In addition, from July to September, TVA met with or participated in meetings with several local groups of interested people such as property owners, homeowners, and lake users associations. Both the U.S. Army Corps of Engineers and the Tellico Reservoir Development Agency have proposed actions related to the proposal and are cooperators on the EIS.

### **PUBLIC PARTICIPATION**

TVA received over 500 comments on the Rarity Communities proposal responding to the June 24, 2002 Notice of Intent and from the July 16, 2002 public meeting in Loudon, Tennessee (400 plus attendees). The comments focused on opposition to using public lands for private residential and commercial development and the associated environmental impacts such as the loss of visual and recreation opportunities and terrestrial habitat that could occur. Also expressed were concerns about the lack of public infrastructure to support the proposal, water quality, terrestrial and aquatic ecology. Commenters also asserted that there was no economic need for the proposal, that the 2000 Tellico Reservoir Land Management Plan (2000 Land Plan) should not be modified, that TVA was

disregarding public opinion, and that TVA was setting a precedent for future land management decisions.

Following release of the DEIS, TVA held an information meeting at Loudon, Tennessee on April 10, 2003 where 95 people attended. Comments were received at that meeting and in writing through May 12, 2003. Approximately 112 sets of written and oral comments were received from 99 individuals, 4 organizations, and 6 interested agencies. TVA has reviewed all of the comments. More than half of the comments received on the DEIS had non environmental themes such as alternative selection, land use plans and policy, the NEPA process, public and private land, and trust in TVA. The character of these comments was very similar to those previously provided for during scoping. The rest of comments on the DEIS raised questions and provided comments on all of the identified environmental issues except for air quality. These comments were primarily concerned with impacts to the environment such as socioeconomic concerns, recreation for Tellico Reservoir and the proposed resort, and impacts to wildlife, plants, visual resources, water quality, wetlands, and floodplains. In response to these comments, TVA revised the EIS to clarify issues raised.

## **ALTERNATIVES**

TVA identified five potential alternatives for responding to the Rarity Pointe request.

(A) No Action - No TVA approval for any requested action.

(B) Applicants Proposal - TVA would modify the current land management plan and make the requested land available for sale and development. TVA would approve the marina plans, and allow the construction of the par-3 golf course on TVA land.

(C) Partial Land Sale with Mitigation - TVA would approve the new marina plans, allow the construction of the par-3 golf course on TVA land, and modify the current land management plan to allow the sale of part of the requested land (about 49 acres total) for development of the golf course, but with enhanced mitigation measures including at least a 60 acre land exchange.

(D) Small Golf Course and Marina with No Land Sale - TVA would approve the marina plans, and allow the construction of the par-3 golf course on TVA land, but not make the requested land available for sale.

(E) Applicant's Proposal with Mitigation - TVA would approve the new marina plans, allow the construction of the par-3 golf course, and modify the current land management plan to allow the sale of the requested land for development as described under Alternative B, but with enhanced mitigation measures including a 256 acre land exchange.

Under any alternative, construction and operation of a commercial recreation and residential project is likely on the 539 acres of private land already owned by Rarity Communities. TVA has no control over this property and Rarity Communities has informed TVA that it will develop the property regardless of the decisions TVA may make respecting its requests. However, this EIS evaluates the impacts associated with the development of the entire property in order to provide a better comparison of the impacts of TVA's decision.

## **AFFECTED ENVIRONMENT**

The EIS includes discussion of the potential effects of alternatives on the following resources: visual resources, cultural resources, threatened and endangered species, terrestrial ecology, wetlands, recreation (including boating increases), water quality, aquatic ecology, air quality, and socioeconomics.

The Tellico Reservoir offers a variety of natural characteristics ranging from gently rolling valleys to mountains, and from the clear-stream entrance that the Little Tennessee makes below Chilhowee Dam to the large flat lake behind Tellico Dam. Rarity Pointe project lands are located in east-central Loudon County just south of the confluence of the Tennessee and Little Tennessee Rivers, on the east side of Tellico Reservoir at Lower Jackson Bend. The project lands are a peninsula with steep to moderate forested hills on the up-stream side graduating to lower and flatter terrain on the down-stream side with an interior of forests and old fields.

The proposed project lands were surveyed for botanical and animal resources. Approximately 88 percent of the project lands can be described in terms of three broad vegetation types: old fields, riparian zones, and upland woodlands. Vegetation types on the property include moderate sized hardwoods, occasional pine groves, and pines with beetle damage intermixed hardwood with cedar and substantial deciduous undergrowth. The remaining 12 percent was cleared of all vegetation prior to the initiation of botanical surveys. No uncommon plant communities or otherwise sensitive plant habitats were observed during field surveys of the proposed project lands. There are no federally-listed and five Tennessee state-listed plant species known from within five miles of the proposed project lands. Surveys for botanical resources conducted on project lands indicated that no state- or federal-listed plant species are present.

Terrestrial animal species found within the project lands are generally common and have widespread distributions. No uncommon wildlife communities were observed within the project lands during field investigations. Grazing has greatly reduced the amount of understory vegetation that is important to many wildlife species, including songbirds. Wildlife in the project lands includes species commonly found in deciduous woodlands, pine and cedar woodlands, and early successional habitats. No uncommon wildlife communities were observed within the project lands during field investigations. With the occasional exception of wintering bald eagles, no federally-listed terrestrial animals have been reported from areas within three miles of the project lands or from Loudon County, Tennessee. Four protected terrestrial animal species, which have not been previously reported from the vicinity, may find suitable habitat on project lands. These are the bald eagle, which is federally-threatened, the Indiana bat, which is federally-endangered, and the southeastern shrew and sharp-shinned hawk, which are listed as In Need of Management in Tennessee. No additional protected animals are known or are expected to occur on the mitigation lands involved in this proposal.

Tellico Reservoir resembles mainstream reservoirs in depth and average annual drawdown, but Tellico's cold water inflows and greater retention time (compared to mainstream reservoirs) encourage thermal stratification, which occurs throughout much of the reservoir during the summer months. Most of the discharge from Tellico Reservoir flows through the navigation canal into Fort Loudon Reservoir. Therefore, only the warmer surface layers are discharged and water below about 25 feet is trapped, in the forebay, by thermal stratification and becomes anoxic during much of the summer.

The ecological health of Tellico reservoir was rated poor by TVA in 2001. The low flows resulting from the extended drought contributed to lower than usual dissolved oxygen (DO) concentrations and higher chlorophyll concentrations. In addition, bottom-dwelling organisms rated poor and the fish community rated fair. The most notable trend for Tellico Reservoir is increase in chlorophyll levels, which suggest increased nutrient loading to the reservoir. Much of the shoreline of Tellico Reservoir is surrounded by residential and industrial areas, and the immediate watershed has significant amounts of agricultural land and dispersed residential area, resulting in relatively high pollutant loadings. Most of the site of the planned development is wooded. The state of Tennessee has designated Tellico Reservoir as not supporting its designated uses, because of sediments contaminated by polychlorinated biphenyls (PCB) which is a carcinogen. The state advises against eating catfish from Tellico because of PCB contamination.

Aquatic habitats in the reach fronting the Rarity Pointe development vary from the moderately steep with scattered small bluffs near the river channel, to typically shallower coves in areas further from the river channel, and the northern reach of shoreline in the vicinity of the proposed par-3 golf course. The deeper, western shoreline of project lands is wooded. In areas where the shoreline is presently undeveloped and therefore mostly wooded, fallen trees and brush provide woody cover. Rock is an important constituent of the littoral aquatic habitat over much of the Lower Jackson Bend shoreline, in either the form of bedrock outcrops or a mixture of rubble and cobble on steeper shorelines or gravel along shallower shorelines.

The overall average shoreline aquatic habitat index (SAHI) score at Tellico was 22.2 (out of a possible 35), which indicates generally “fair” shoreline aquatic habitat within the reservoir. The shoreline along the west side of the peninsula rated “good”, as did the entire shoreline of Parcel 8. The shoreline of Parcel 9 rated “good” along the cove where it joins Parcel 8, and “fair” from the mouth of that cove to the eastern end of the area of Parcel 9 proposed for sale.

The Little Tennessee River historically supported a diverse group of fish, mussels, and other aquatic life, including several State- and Federal-listed species. However, none of these species are likely to occur in this portion of the Little Tennessee River as no suitable habitat for these species currently exists within the impounded area of Tellico Reservoir or on the project lands.

Ten small wetlands were identified in the Rarity Pointe project area with a total acreage of 1.25 acres. With the exception of two former farm ponds, these are jurisdictional and alterations would be subject to permitting requirements under Section 404 of the Clean Water Act.

The reservoir receives substantial boating use as a result of the 14 existing public access areas, private residential docks, community docks, and two commercial marinas. There are four commercially operated campgrounds and four privately owned 18-hole golf courses available for public use. Also available for recreation are the Fort Loudoun State Historic Park, Tellico Blockhouse State Historic area, the Tanasi Memorial recreation area, a local park at Vonore, and a newly completed day use area at the Tellico Dam Reservation. No overnight lodging exists at any reservoir recreation area and TVA’s land serves as the major provider of public open space. Overnight lodging is available at nearby cities and towns, including Lenoir City and Vonore.

The 2000 Land Plan allocates two properties for commercial recreation which are currently undeveloped: a tract in Vonore (Monroe County), Tennessee and an area at Bat Creek which belongs to TRDA. TVA is considering a proposal from EPCI for the Vonore tract. Also a greenway was designated by TVA on the eastern shore of the Reservoir which was intended to create an interconnecting trail system with day use areas and access nodes at appropriate intervals, on nine tracts of TVA Land, including the land requested. The approximately 118 acres of requested land is part of a contiguous block of TVA eastern shore land allocated for public use. Typical activities allowed include camping, hiking, bird watching, bank fishing, and wildlife viewing. The coves fronting the eastern shore property provide protected, undeveloped areas for boaters. These parcels are accessible by boat and foot.

The 216 acres of former TRDA property allocated for commercial recreation use in anticipation of being developed as a commercial recreation resort and now owned by Rarity Communities is restricted by deed to be used only for commercial recreation purposes. Allowable uses include a lodge, spa, golf course, vacation homes, and restaurants. Facilities constructed on this property cannot be used for primary residences.

A 68-slip marina was previously located on the 4-acre proposed marina site in 1987 and remained in existence until 2001, when all docks and others facilities were removed. The par-3 golf course is proposed on 5 acres of TVA land between the 820-foot contour and adjacent waters of Tellico Reservoir. Both of these proposals are consistent with the allocated land uses and existing rights.

No archaeological resources eligible or potentially eligible for listing in the National Register of Historic Places were identified on the Lower Jackson Bend tract. However, a Mid-19<sup>th</sup> century cemetery, Wyly Cemetery, was recommended for avoidance. The Tennessee State Historic Preservation Officer (SHPO) concurred with these findings.

The visual landscape surrounding the project area is a rural ridge and valley countryside where the reservoir is the dominant scenic feature. The east bank is forested with one rock bluff just downstream of the project site. The back-lying lands have a pastoral character where woodlands are seen intermixed with farmsteads, pastures, and scattered homes. It is a notable contrast to the suburban character of residential areas in Tellico Village on the west bank.

The approximately 118 acres of requested TVA land are moderately sloping woodland ridges that form peninsulas along the eastern bank of Lower Jackson Bend. The natural woodland character of this land has pleasing attributes but no uniquely distinct physical features.

The 2000 Land Plan identified the requested sale property as a major residential viewshed. In the 2000 Land Plan, Parcel 9 was allocated to protect the Tellico Village viewshed and undisturbed woodland coves, and was considered a suitable scenic greenway corridor along the east side of the reservoir. The plan also indicates Parcel 8 would be managed for activities such as picnicking and hiking rather than commercial development, and that regardless of use the visual values would receive a high priority.

The former TRDA property (216 acres) is a prominent peninsula about a mile long and bordered by TVA lands on each side with a series of moderately sloping woodland ridges similar to the TVA parcels upstream. The wooded shoreline and coves along the west side

are similar to those along the TVA parcels. Tree cover on the tract was about 40 percent moderate sized hardwood, with the balance consisting of relatively young pine and a few small meadow areas. The overall visual character is in transition because project construction has begun. Trees have been removed in several large areas and exposed earth slopes and heavy equipment operations are visible in the planned lodge, marina, and residential areas. The natural character of this tract has typical reservoir landscape attributes but no unique physical features, so the scenic attractiveness is common. Due to construction, the attractiveness is declining along with visual tranquility and harmony. Scenic integrity has been moderately high, but is declining at the same pace as the expanding construction and development alterations. Visual sensitivity is high and the overall scenic value class has been good but is declining.

The remaining project lands (323 acres) are back-lying properties with a rolling pastoral area of moderately steep ridges separated by gently sloping drainages that border the TVA parcels and extend east to U. S. Highway 321. About a third of the tract is open meadow and the balance is a mix of hardwood and pine stands with a few farmstead buildings remain on the tract. The landscape character of the back-lying land is typically pastoral with no uniquely distinct physical features, so the scenic attractiveness is common. Scenic integrity is moderate since human alteration is noticeable but not dominant. Visual sensitivity is moderate and the overall scenic value class is fair.

Loudon County, Tennessee had an estimated 2000 population of 39,086. Loudon County population has been growing much faster than the labor market area (LMA), the state, and the nation in the previous decade. In 2000, the County had an average labor force of 21,280 workers, of which 740 (3.5 percent) were unemployed, which is below the LMA (3.6 percent), the state (4.5 percent), and the nation (4.8 percent). The County has a far greater share of farming employment than the LMA, the state, and the U.S. Manufacturing employment share in Loudon County also exceeds that of the LMA, the state, and the U.S. In contrast, services account for a smaller share of employment. Per capita personal income in 2000 was 26,241 dollars, just above the state figure (25,946 dollars), but below the national figure (29,469 dollars). Between 1990 and 2000, the county gained ground on the nation in terms of per capita income, increasing from 80.1 percent to 89.1 percent of the national average.

The 2000 population of Loudon County consists of 4.8 percent minorities, less than the LMA (9.5 percent), and far less than the state (20.8 percent) and the nation (30.9 percent). The poverty rate was 10.0 percent, again, less than the LMA (12.5 percent), state (13.5 percent), and nation (12.4 percent). The poverty rate for the census tract containing the proposed development is 7.3 percent.

There are two Prevention of Significant Deterioration Class I areas within 62 miles of Tellico Reservoir. The Great Smoky Mountains National Park is 19 miles to the southeast of the Rarity Pointe location, and the Joyce Kilmer/Slickrock Wilderness Area is 26 miles to the southeast. Currently there are no designated National Ambient Air Quality Standards nonattainment areas at or near the proposed development location.

## **ENVIRONMENTAL CONSEQUENCES**

Under the **No Action Alternative**, a development would still be constructed on the private property and former TRDA property at lower Jackson Bend. The facilities would likely be the same but would be concentrated on Rarity Communities existing property. The TVA

land would continue to be available for the uses described in the 2000 Land Plan including the greenway and trail. Although there would be no loss of public land, there would continue to be a significant loss of visual resources and degradation of terrestrial ecology, wetlands, water quality, and aquatic ecology by the likely continued development of private project land. There would be a potential loss of habitat for two sensitive species. The small par-3 golf course and marina with dredge would not be permitted; however, other recreation opportunities would continue, including a full sized regulation golf course. The overall socioeconomic benefits associated with the continued development of the site on the existing privately owned land would occur with slightly fewer jobs and tax revenue.

Under **Alternative B**, the recreational resort community would be constructed as proposed with a full service marina with dredge including dry storage and restaurant, an 18-hole and a par-3 golf course, and lodge guest accommodations. The socioeconomic benefits resulting from the Rarity Pointe Development would be slightly enhanced with the sale of TVA property. However, there would be a notable loss of visual quality and adverse impacts to terrestrial ecology, wetlands, water quality, and aquatic ecology to both the involved public and private project land. There would be a loss of recreation opportunities. A greenway and trail would not be established on the sold public land. There would be a potential loss of habitat for two sensitive species and cumulative terrestrial habitat loss due to the loss of public land on Tellico reservoir. The potential loss of function and values of jurisdictional wetlands; and some water quality, aquatic and terrestrial ecology impacts would be mitigated. Overall Alternative B achieves the applicant's purpose and need with the least cost to the applicant, but has the greatest environmental impact on natural resources.

Under **Alternative C**, a recreational resort community would be constructed as proposed with the exception that the residences proposed on TVA land would be placed on existing private land. The socioeconomic benefits would be the same as Alternative B. However, there would be a loss of visual resources and adverse impacts of terrestrial ecology, wetlands, water quality, and aquatic ecology to both the involved public and private project land. The proposed land exchange at Wildcat Rock (60 acres) would result in a minor loss of industrial land with an increase in the amount of public land on Tellico Reservoir, but it would not completely mitigate for the loss of terrestrial habitat or lost recreation opportunities. A loss of some recreation opportunities would be somewhat offset by the provision of vehicle access to the remaining TVA land on Parcel 8 and 9 where a greenway and trail could be considered. There would be less loss of potential habitat for two sensitive species and there would be cumulative terrestrial habitat loss due to the loss of public land on Tellico reservoir, although these losses would not be as severe as with Alternative B. Impacts to jurisdictional wetlands; and some of the water quality, aquatic and terrestrial ecology impacts would be mitigated. Alternative C achieves most of the applicant's purpose and need but with less environmental impact on natural resources than Alternative B.

Under **Alternative D**, a recreational resort community would be constructed as proposed except that the residences and parts of the large golf course would be placed on existing private land. The socioeconomic benefits would be the same as Alternatives B and C. However, there would be a loss of visual quality and adverse impacts to terrestrial ecology, wetlands, water quality, and aquatic ecology to both the involved public and private project land. There would not be a loss of TVA land but also there would not be vehicular access to Parcels 8 and 9. There would be less loss of potential habitat for two sensitive species and no terrestrial habitat loss on Tellico reservoir. Impacts to jurisdictional wetlands; and some water quality, aquatic and terrestrial ecology impacts would be mitigated. Overall



Alternative D partially achieves the applicant's purpose and need with less environmental impact on natural resources than Alternative B and C.

Under **Alternative E**, the recreational resort community could be accomplished as proposed. The socioeconomic benefits would be similar to Alternative B. However, there would be a loss of visual quality. Although there would be some adverse impacts to terrestrial ecology, wetlands, water quality, and aquatic ecology to both the involved public and private project land, these impacts would be offset by the proposed land exchange at Wildcat Rock (256 acres). The net result would be an increase in public lands on the Tellico Reservoir and a minor loss of industrial land. There would still be impacts to the residential viewshed of Tellico Village. There would be increased recreation opportunities with the exchanged land and the creation of a trail terminal on Parcel 6 and pedestrian access across Rarity Pointe property which could provide continuation of the greenway and trail along the eastern shore of Tellico Reservoir. There would be a loss of potential habitat for two sensitive species. Impacts to jurisdictional wetlands; and some water quality, aquatic and terrestrial ecology impacts would be mitigated. Overall Alternative E achieves the Applicant's purpose and need with the least environmental impact to natural resources while providing a net increase of land under public control and more recreation opportunities. TVA has selected Alternative E as its preferred alternative in the EIS.

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## CHAPTER 1

### 1. PURPOSE OF AND NEED FOR ACTION

#### 1.1. Purpose

Consistent with its broad mandate to provide for the economic development and social welfare of the Tennessee Valley region, the Tennessee Valley Authority (TVA) has decided to consider a request for use of public land on Tellico Reservoir for enhancement of a commercial recreation and residential development. This request has been proposed by private developers (LTR Properties, Inc. and Rarity Communities, Inc.) (Rarity Communities) on the Tellico Reservoir in East Tennessee (Loudon County). TVA has been asked to take three actions related to the Rarity Pointe development: (1) the applicant's request to release the planned use allocation of approximately 118 acres of federal property above the 820-foot elevation on the Tellico Reservation and make it available for sale and consequently use in constructing a residential resort and golf course community, (2) the applicant's request for approval of the use of about 5 acres of TVA property, below the 820-foot elevation, and lying between the former TRDA property and Tellico Reservoir, for a small (par-3) golf course, and (3) the applicant's request that TVA approve plans for a marina and dredge with 349 wet and 200 dry storage boat slips using 4 acres of TVA land below the 820-foot elevation.

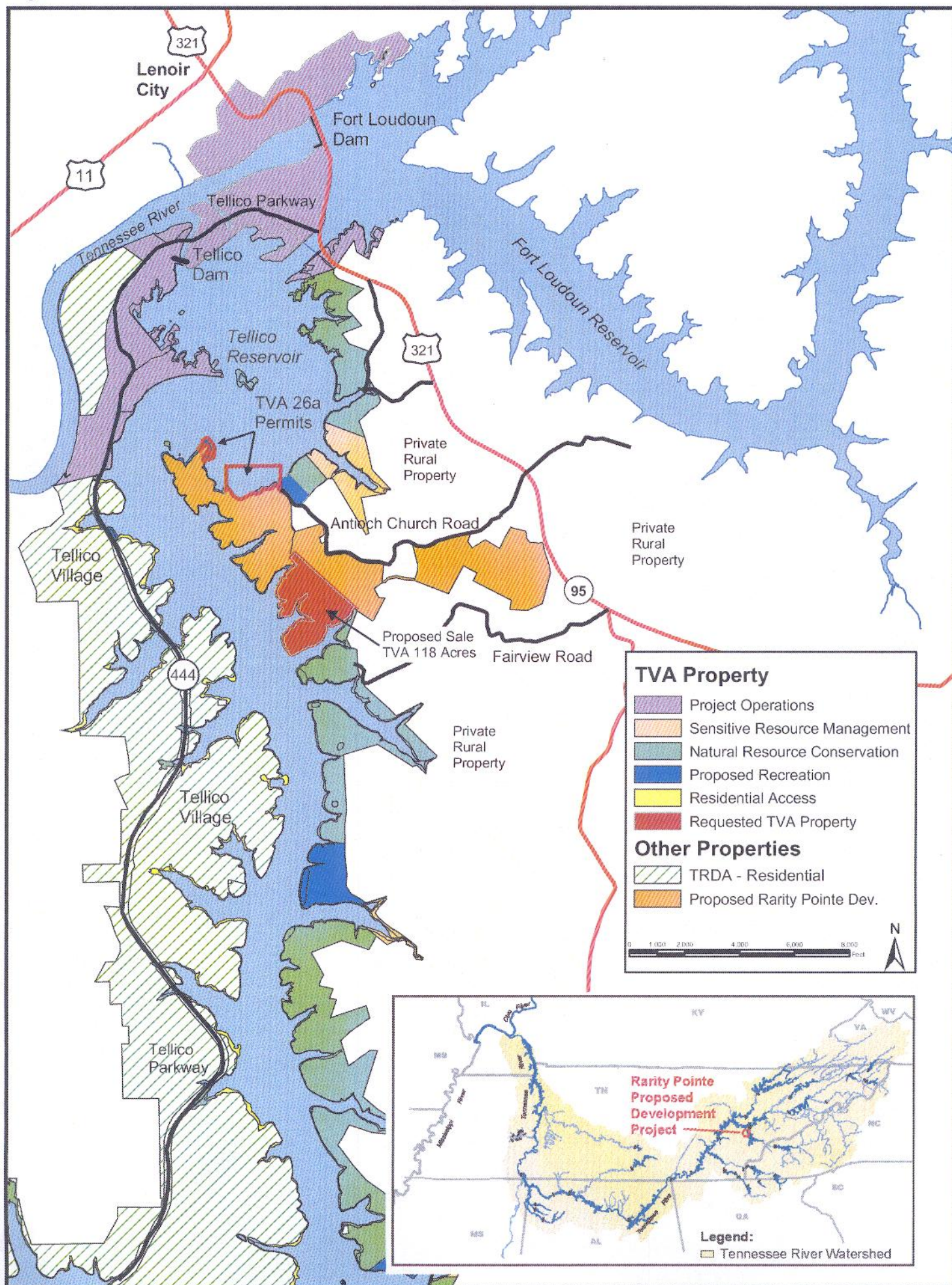
The TVA property would be added to 85.8 hectares (216 acres) of land purchased by Rarity Communities from the Tellico Reservoir Development Agency (TRDA), and 119.0 hectares (294 acres) of private land. With the proposed TVA property and the property already controlled by the Applicant, the total acreage involved is approximately 657 acres. This EIS evaluates not only the impacts associated with the proposed TVA actions but also the impacts associated with development of the non-TVA property that collectively make up the Rarity Pointe project as currently contemplated by the developers.

The site is located approximately 5 miles east of Lenoir City, Tennessee, and approximately 7 miles west of Maryville, Tennessee, on U. S. Highway 321 in Loudon County (See Figure 1-1). Rarity Communities states that the site has the advantages of proximity to I-75 and I-40, easy access to local area residents, and is approximately 15 minutes driving distance or 11.5 miles from Knoxville. Also, the site is centrally located in the nine county Knoxville Metropolitan Statistical Area (MSA) with an approximate 30-minute drive to all major area services and attractions including major healthcare, air transportation, and shopping. Additionally, the Knoxville MSA is positioned within 500 miles of more than 113 major cities comprising nearly 50 percent of the current U.S. population. A Rarity Communities visitor inquiry analysis suggests the demand for a second home and resort/rental opportunity with adjacent marina services is escalating. Finally, the area continues to attract the interest of active adult retirees as evidenced by the success of developments such as Tellico Village, Foothills Point, and Rarity Bay, also located on the Tellico Reservoir.

Rarity Communities plans to develop 677 residential units on private and TVA land, 523 recreational lodging units on the former TRDA land, a lodge complex, a small par-3 golf course, a larger 18-hole golf course, a full service marina, a retail complex, and supporting recreational infrastructure. Because this request supports regional development goals and



**Figure 1-1 Tellico Reservoir and Vicinity**



the original Tellico Project purposes of economic development, TVA decided to evaluate the proposal. The Tennessee Valley Authority (TVA) has prepared an Environmental Impact Statement (EIS) to assess the impacts of a request for land under TVA's control and approval of water use facilities under Section 26a of the TVA Act on TVA's Tellico Reservoir.

The marina proposed by Rarity Communities may be developed by Tellico Loy Venture, independent of the Rarity Communities' proposal. Because of the uncertainties over the relationship between the marina and the Rarity Communities proposal, TVA has decided to continue to evaluate the marina as part of the Rarity Communities' proposal. Tellico Loy Venture has provided more detailed plans for the proposed full service Marina, than appeared in the DEIS, and applied to TVA for approval under Section 26a and the USACE under Section 404 and Section 10. The proposed marina would include 329 floating covered boat slips, 20 open slips for rental boats, 200 dry storage spaces for boats, a fuel facility, a floating restaurant, store and office area, and parking for 165 cars. Also included in the plans are 650 feet of shoreline stabilization and dredging to along the shoreline adjacent to the marina.

This EIS tiers from TVA's Final EIS, *Tellico Reservoir Land Management Plan*, released in June 2000. The Tellico Reservoir Land Management Plan EIS (2000 Land Plan) evaluated alternative uses of the TVA lands and their influence on the surrounding environment. It identifies uses for 139 parcels of TVA public land on the reservoir. It designates parcels into planned use zones for TVA Project Operations (Zone 2), Sensitive Resource Management (Zone 3), Natural Resource Conservation (Zone 4), Industrial/Commercial Development (Zone 5), Recreation (Zone 6), and Residential Access (Zone 7). The Rarity Communities proposal involves Parcels 8 and 9 and use of TVA land below the 820-foot contour adjacent to Lower Jackson Bend.

Parcel 8 with 18.9 hectares (46.7 acres) is allocated for Zone 6 and is available for recreation including informal recreation such as picnicking and hiking. Parcel 9 with the remaining 28.9 hectares (71.4 acres) is allocated for Zone 4, natural resource conservation. Neither of these parcels is allocated for commercial recreation or residential development and Rarity Communities proposal is inconsistent with the 2000 Land Plan.

While TVA was evaluating the Rarity Communities' proposal, TVA received a proposal from the Watershed Association for Tellico Reservoir (WATeR) to construct a greenway and trail on the east side of Tellico Reservoir on TVA public land, including Parcels 8 and 9. The proposal is similar to elements described in the 2000 Land Plan and would have a trailhead (i.e. access, shelter, and parking lot) on TVA land in the vicinity of Rarity Pointe and a greenway trail utilizing Parcels 8 and 9 including the requested approximately 118 acres. However, WATeR has agreed to consider other sites on the Tellico Reservoir first and TVA is deferring consideration of the WATeR proposal for the TVA land involved in the proposed action (Parcels 6, 8, and 9) pending review of the Rarity Communities' proposal.

## 1.2. Background

The Tellico Project, once known as the "Fort Loudoun Extension," was first considered by TVA in the late 1930s. It consists of the Tellico Reservoir and the adjacent lands purchased by TVA (TVA, 1972). Tellico Dam and reservoir is a multipurpose water resource project designed for flood control, power production, and commercial navigation. Although Tellico Dam has no hydroelectric facilities, the project was designed to enhance



the hydroelectric output from TVA's Fort Loudon Dam by construction of a canal which connects the two reservoirs. The Tellico Project is also a regional economic development project with land designated for industrial, residential, commercial recreation, and greenbelt purposes.

The majority of the reservoir's lower right bank was designated as a greenbelt (TVA, 1972) and it was anticipated that private recreational development, involving resorts, marinas, camping areas, and supporting commercial services and accommodations would occur along the upper parts of the reservoir. The majority of the left bank below U. S. Highway 411 Bridge was designated for residential development, and other tracts around the reservoir were allocated for complimentary land uses.

The project was formally begun in 1967 and was controversial, at first because of land condemnation and then because of environmental issues. Consistent with the National Environmental Policy Act (NEPA) of 1969, an EIS was prepared (TVA, 1972) to identify the environmental impacts of finishing and closing the dam. As the dam neared completion in 1975-6, TVA was enjoined (stopped) from closing the dam because of potential impacts to a newly discovered fish, the snail darter (*Percina tanasi*), which was then known to occur only in this particular reach of the Little Tennessee River within the proposed reservoir and was listed as an endangered species under the Endangered Species Act (ESA).

In 1979, Congress exempted implementation of the project from all otherwise applicable environmental laws. In November 1979, the gates of Tellico Dam were closed, and implementation of the elements of this multipurpose reservoir project began. TVA has continued to conduct NEPA reviews of Tellico Project-related economic proposals as a matter of policy. A recovery plan for the snail darter implemented by TVA (TVA, 1978) was successful resulting in establishing or discovery of several populations of snail darters in the upper Tennessee River watershed. The snail darter now listed as a threatened species under ESA may soon be eligible to be considered for removal from the threatened and endangered species list.

In April 1982, the Tellico Reservoir Development Agency (TRDA) was created by the Tennessee Legislature to assist TVA in the development of the 11,151 acres of the land designated for development as part of the Tellico Project. TRDA is a public corporation with a mandate to plan programs and implement activities for the comprehensive development of the land sold and easements conveyed to it by TVA. TRDA's management, use, development, and conveyance of these lands are governed in part by a 1982 agreement (Contract No. TV-60000A) with TVA. Major objectives of the Tellico Project, reflected in the integrated land plan included in Contract No. TV-60000A and the project EIS, were to develop and use the acquired lands that surround the reservoir in a way that would permit the project to make the maximum possible contribution to the economy of the region and provide recreation opportunities.

Approximately 37,737 acres of land were purchased for the Tellico project (TVA, 2000). Of that, 13,943 acres are normally covered by water during the summer, resulting in a reservoir pool with 360.8 miles of shoreline. The balance of the acquired Tellico Project lands are used or designated for industrial, residential, and commercial recreation purposes (11,151 acres) under an agreement with the Tellico Reservoir Development Agency; or remain under TVA's direct control (12,643 acres) and are managed under the 2000 Land Plan.

Since its creation, TRDA has been successful in the creation of several quality residential communities and industrial parks. This has resulted in the majority of the land designated for development by TRDA being sold to private ownership. This includes the establishment of the Rarity Bay Community on the Bat Creek Peninsula where the land use allocation was changed from industrial to residential (TVA, 1992).

TVA and TRDA previously received a development proposal from the private sector asking to use the Lower Jackson Bend TRDA controlled property allocated for commercial recreation together with TVA Tellico reservation property, including the subject 118 acre tract, now requested by Rarity Communities. This earlier proposal was withdrawn in 2000 after TVA ceased considering it.

Until recently, a marina operated on the former TRDA property on Lower Jackson Bend. Although harbor limits were established to contain slips for several hundred boats, only 68 slips were requested and built by the marina operator after approval by TVA. The marina closed in 2001 and all structures and facilities were removed when the property was sold.

### **1.3. Permits and Approvals Needed**

TVA has been requested to make approximately 118 acres of its property available for sale to a private developer, to allow use of an additional 5 acres of property below the 820-foot elevation for a par-3 golf course fronting land previously sold for commercial recreation, and to issue Section 26a approval for a full service marina with dredge using 4 acres of TVA property below the 820-foot elevation. The TVA property would be added to 216 acres of land purchased by Rarity Communities from TRDA, and 323 acres of private land.

Approval for proposed marina and wetland alteration would also be needed from the U. S. Army Corps of Engineers (USACE) under Section 10 of the Rivers and Harbors Act of 1899, which prohibits the alteration or obstruction of any navigable waters of the United States unless authorized by USACE; and under Section 404 of the Clean Water Act which prohibits the discharge of dredged or fill material into waters of the United States without permission from USACE. The marina with dredge and wetland alteration proposal will be reviewed by USACE. Approval will be given only after full public interest review and determination that the proposal is not contrary to public interest.

If an alternative was selected involving the replacement of TVA land transferred to Rarity Communities by TRDA land on Tellico Reservoir, TRDA would have to agree to make property available to be purchased by Rarity Communities and transferred to TVA.

Because of their involvement USACE and TRDA have chosen to become cooperating agencies in this EIS.

### **1.4. Other Pertinent Environmental Reviews or Documentation**

*Change in Land Use Designation to Allow Residential Development of the Bat Creek Peninsula (TVA, 1994).* TVA completed an Environmental Assessment (EA) on the potential environmental impacts of a TRDA proposal to change the land use designation of the 1060-acre Bat Creek Peninsula from Industrial to Residential. TVA approved the land use change, with the requirement that Rarity Communities implement several mitigation measures to minimize potential environmental impacts. The area is now the Rarity Bay development and is similar to the Rarity Pointe request.

Shoreline Management Initiative, December 1998 and Record of Decision (ROD), Shoreline Management Initiative (SMI), TVA, 1999. Under this EIS, TVA adapted a strategy of “maintaining and gaining” public shoreline, a shoreline inventory and categorization system, and uniform standards for residential shoreline alterations. The Rarity Pointe proposal is not considered to be residential access shoreline under SMI because residential access is not proposed. However, the philosophy behind potential mitigation for the proposed loss of public land is compatible with the “maintain and gain” strategy.

Tellico Reservoir Land Management Plan and ROD (June 2000). The Tellico Reservoir Land Management Plan EIS evaluated alternative uses of the TVA lands and their influence on the surrounding environment. The Plan provided a statement of how TVA would manage its land in the future. It identifies allocations that will guide uses for 139 parcels of TVA public land on the reservoir, including the parcels requested here.

U.S. 321 (State Route 73) from 0.32 km West of U.S. 11 (State Route 2) to the Existing Four-Lane Section Near the Blount County Line, (In preparation March 2003). The Federal Highway Administration has prepared an Environmental Assessment to analyze a proposal to construct a new Tennessee River bridge across the Tellico Dam Reservation and to provide four-lane access between Maryville and Interstate 40 in the vicinity of Tellico Reservoir. TVA is a cooperating agency in the review by the Federal Highway Administration and Tennessee Department of Transportation. This new four-lane highway will be the primary access to the Rarity Pointe development. However highway improvements would likely proceed whether or not the Rarity Communities development was constructed. Until the new highway is constructed access would be from the existing U.S. Highway 321.

Tellico Land Reservoir Land Management Plan Memorandum of Agreement (MOA) was executed in 2000 to address effects on historic properties by TVA’s undertakings on Tellico Reservoir. This agreement allows for a phased identification, evaluation, and treatment of historic properties. TVA ensures that identification, evaluation, and treatment of historic properties are carried out prior to the commencement of any ground-disturbing activities.

## **1.5. The Scoping Process**

As part of the EIS process, TVA seeks public comment on the scope of the issues and alternatives to be addressed in the EIS. This is a normal and typical feature of all EIS review processes.

TVA began the NEPA review for the proposed action on Tellico Reservoir after receiving Rarity Communities’ request in May 2002. On June 24, 2002, TVA issued a Notice of Intent (NOI) to prepare an Environmental Assessment (EA) or EIS on the Rarity Pointe proposal. Comments were received by letter, e-mail, and at a TVA public scoping meeting held on July 26, 2002 in Loudon, Tennessee (See Appendix B). In response to public requests, TVA extended the comment period until August 16, 2002. In addition, from July to September, TVA met with or participated in meetings with several local groups of interested people such as property owners, homeowners, and lake users associations. In response to comments and concerns raised during this process, TVA decided to prepare this EIS to understand the impacts of its proposed actions and the actions of Rarity Communities better and to provide a structured means of continuing the dialogue with the public about the proposal.

The following scoping activities were undertaken to identify issues and define alternatives to be considered in the EIS:

June 24, 2002 - A Notice of Intent was published in the *Federal Register* to initiate scoping of the proposal.

July 16, 2002 - A Public Open House Meeting held at Loudon City High School, Loudon, Tennessee, recorded over 400 people attending.

July 18, 2002 - A Revised Notice of Intent was published in the *Federal Register* extending the scoping comment period to August 16, 2002.

July 22, 2002 - TVA Staff participated on a question and answer panel at a public meeting organized by the Tellico Village Property Owners Association at Tellico Village Community Church in Tellico Village, Tennessee, with over 335 people attending.

August 16, 2002 - The scoping comment period concluded with over 500 comments, letters, and e-mails on the proposal.

September 6, 2002 - TVA Staff and Management met with representatives from the Tellico Property Owners Association (TPOA), Tellico Home Owners Association (THOA), Loudon County Commission, and WATeR, at the TVA Towers in Knoxville, Tennessee about the proposal.

September 11, 2002 - TVA Staff met with the Trails sub-committee of WATeR, in Lenoir City, Tennessee about the proposal.

September 19, 2002 - TVA Staff met with representatives from TPOA, THOA, Loudon County Commission, and the WATeR, at the TPOA office in Tellico Village, Tennessee about the proposal.

The majority of the over 500 public responses to the NOI focused on opposition to using public lands for private residential and commercial development and the associated environmental impacts such as the loss of visual and recreation opportunities and terrestrial habitat that could occur (See Appendix B). Many comments were received expressing concerns about the lack of public infrastructure to support the proposal, water quality, terrestrial and aquatic ecology. Also questioned was the economic need of the proposal given the success of similar past projects.

There were also many comments about TVA's management of public lands, the planning for the management and use of public lands, and the potential results of TVA's management and planning. Commenters stated that selling the land is contrary to public opinion and contrary to past TVA decisions not to develop this public land. They stated that TVA should keep this land public and not modify the 2000 Tellico Reservoir Land Management (10 year) Plan. Commenters were concerned that other public lands similarly designated would also be made available for development. They said that if TVA changed the allocation and sold the land, it would be a precedent setting change in that this land had been designated as undeveloped public land since Tellico Reservoir was created, including two previous TVA plans and the TVA contract with TRDA.

The public responses in support of the proposal described the project as having a positive impact to the area economy. Commenters cited increases in the local economy, land values, jobs, and taxes available for local government as positive results.

#### **1.5.1. Important Environmental Issues to Be Addressed In Detail**

Based on review of the scoping comments and available information about potentially impacted resources, TVA identified the following resources and issues for detailed evaluation in the EIS (See Appendix B). For each resource, the direct, indirect, and cumulative effects of each alternative have been analyzed.

#### **Terrestrial Ecology**

Ecosystems and broad natural community types found within the affected area have been described. Important natural features, including rare species habitat, important wildlife habitat, or locally uncommon natural community types have been identified. The effects of each alternative on terrestrial ecosystems in the vicinity of the Rarity Pointe project have been evaluated (Section 3.1 and 4.1).

#### **Aquatic Ecology**

Aquatic biological resources potentially affected by the Rarity Pointe project and identified alternatives have been identified. The effects of each alternative on aquatic habitat have also been analyzed (Sections 3.2 and 4.2).

#### **Endangered and Threatened Species**

Populations of state- or federally-listed plants and animals known to exist in the vicinity of the Rarity Pointe project have been identified. In addition, any areas proposed for development that may provide endangered species habitat have been surveyed to determine if any populations exist. The effects of each alternative on endangered, threatened, and rare species in need of management have been evaluated (Sections 3.3 and 4.3).

#### **Water Quality**

Current water quality and activities contributing to Tellico Reservoir that are affecting water quality have been described. Affected aquatic ecological conditions have also been identified. The impact of each alternative may affect water quality, and the trends in reservoir water quality have been analyzed (Sections 3.4 and 4.4).

#### **Wetlands and Floodplains**

Wetlands and floodplains found within the affected area have been located and described. The effects of each alternative on any floodplain or wetland ecosystems within the Rarity Pointe project area have been evaluated (Sections 3.5 and 4.5).

#### **Recreation**

Several issues were identified during scoping, including the sale of public land for a private development, boating congestion, public access to commercial property, and the loss of recreation/open space on TVA public land. These issues have been addressed and the effects of each alternative on recreation opportunities impacted by the Rarity Pointe proposal have been evaluated, including the impacts to the greenway designations (Sections 3.6 and 4.6).

## **Cultural Resources**

Archaeological and historic resources in the Rarity Pointe project area of potential effect have been characterized, and any known National Register sites discussed. Both property under TVA's control as well as Rarity Communities' property over which TVA lacks control have been surveyed to determine if any potential National Register-eligible resources are present. The effect of each alternative on historic and archaeological resources has been evaluated, and the impacts of the proposal coordinated with the Tennessee State Historic Preservation Officer (SHPO) in accordance with Section 106 of the National Historic Preservation Act (Sections 3.7 and 4.7).

## **Visual Resources**

The aesthetic setting of the area has been characterized as scenic and distinctive. Both Parcels 8 and 9 were identified in the recent Tellico Land Plan as having important visual concerns and viewsheds with excellent scenery and distinct visual qualities. The effect of each alternative on the aesthetics and visual resources along the shoreline has been evaluated (Sections 3.8 and 4.8).

## **Socioeconomic Impacts**

The current population, labor force, employment statistics, income, and property values potentially impacted by the proposal and the identified alternatives have been evaluated. Potential impacts on traffic, infrastructure and facilities, population, taxes, local communities, and environmental justice have been addressed for each alternative. Because Rarity Communities is proceeding with its plans on the property it controls whether or not TVA approves its requests, this analysis will show the incremental socioeconomic effects between the full and scaled-back development approaches (Sections 3.9 and 4.9).

## **Air Quality**

The Rarity Pointe project is expected to have minor impacts to air quality. The effects of each alternative on air quality have also been analyzed (Sections 3.10 and 4.10).

### ***1.5.2. Probable Non-Significant Environmental Issues***

The following environmental issues were identified in scoping but have not been addressed in detail in the EIS because the resources involved are not present or not likely to be affected by the proposed alternatives. There are no prime farmlands or managed recreation areas present on the site. Commercial navigation is present on the Tellico Reservoir but is so infrequent that it is not likely to be impacted. In addition, noise and litter will only have very minor localized impacts.

### ***1.5.3. Responses to Comments on the DEIS***

Following release of the DEIS, TVA held an information meeting at Loudon, Tennessee on April 10, 2003 where 95 people attended. Comments were received at that meeting and in writing through May 12, 2003. Approximately 112 sets of written and oral comments were received from 99 individuals, 4 organizations, and 6 interested agencies. TVA has reviewed all of the comments. More than half of the comments received on the DEIS had non environmental themes such as, alternative selection, land use plans and policy, the NEPA process, public and private land, and trust in TVA. The character of these comments was very similar to those previously provided by the public during scoping. The rest of comments on the DEIS raised questions and provided comments on all of the identified environmental issues except for air quality. These comments were primarily concerned with impacts to the environment such as socioeconomic concerns, recreation for Tellico

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Reservoir and the proposed resort, and impacts to wildlife, plants, visual resources, water quality, wetlands, and floodplains. In response to these comments, TVA revised the EIS to clarify issues raised. A complete record of comments received and TVA responses is included in Appendix B.

## CHAPTER 2

### 2. ALTERNATIVES INCLUDING THE PROPOSED ACTION

This chapter describes the alternatives and summarizes the environmental consequences associated with each of the alternatives developed for the proposed action.

#### 2.1. The Proposed Action

TVA proposes to issue permits or approvals to enhance or facilitate portions of the Rarity Pointe development. There are three parts to the proposed action that require TVA action or approval. These include: (1) the Applicant's request to release the planned use allocation of approximately 118 acres of federal property above the 820-foot elevation on the Tellico Reservation and make it available for sale and consequently use in constructing a residential resort and golf course community, (2) the Applicant's request for approval of the use of about 5 acres of TVA property, below the 820-foot elevation, and lying between the former TRDA property and Tellico Reservoir, for a small (par-3) golf course, and (3) the Applicant's request that TVA approve plans for a full service marina, shoreline stabilization, and dredge with 349 wet and 200 dry storage boat slips (see Figure 2-1) using 4 acres of TVA land below the 820-foot elevation. Approval of private water use facilities and other residential shoreline development has not been requested and would not be permitted on any transferred TVA lands.

USACE's proposed action is issuance or denial of the Section 404 and Section 10 permits for the proposed marina and dredge, and any wetlands impacts. TRDA's proposed action is to transfer lands identified for mitigation purposes to the Applicant for further transfer to TVA.

#### 2.2. Alternatives

As a result of scoping, TVA has identified the following five potential alternatives for analysis in this EIS; Alternative A – No Action, Alternative B – Applicant's Proposal, Alternative C – Partial Land Sale with Mitigation, alternative D – Small Golf Course and Marina with No Land Sale, and Alternative E – Applicant's Proposal with Mitigation. Under the No Action Alternative (Alternative A) and the Small Golf Course and full service Marina with No Land Sale Alternative (Alternative D), TVA would not convey any property or property rights to Rarity Communities Properties and would continue to manage the requested parcels under the existing 2000 land use plan without modification. Under the Applicant's Proposal Alternative (Alternative B) and the Applicants Proposal with Mitigation Alternative (Alternative E), TVA would modify the land use allocation of Parcel 8 (47 acres) from Commercial Recreation to Residential and part of Parcel 9 (71 acres) from Natural Resource Conservation to Residential, and make this land available for development. Under the Partial Land Sale with Mitigation Alternative (Alternative C) TVA would modify the land use allocation of part of Parcels 8 and 9 totaling about 49 acres and make the land available for development of the championship golf course as well as allowing a par-3 golf course to be located on its property and approve the proposed marina.

Under any alternative, construction and operation of a commercial recreation and residential project is likely on the 539 acres of private land already owned by Rarity



# MASTER PLAN RARITY POINTE ON TELlico LAKE



Communities. TVA has no control over this property and Rarity Communities has informed TVA that it will develop the property regardless of the decisions TVA may make respecting its requests. As of September 2002, development of the former TRDA property had started and currently has progressed to the construction of an internal road system to provide access to the planned house sites, the lodges, and the marina. The impacts of these activities include the removal or modification of vegetation, road grading and fill, and the installation of underground utilities (see Figure 2-1). This EIS evaluates the impacts associated with the development of these private lands.

### **2.2.1. Alternative A – The No Action**

Under the No Action Alternative, TVA would not modify the 2000 Land Plan to allow the sale of the approximately 118 acres, not approve new plans for the marina, or allow the par-3 golf course on TVA public land (See Figure 2-2). Management of Tellico Reservoir would remain as established by contract with TRDA and lands would be allocated as determined in the 2000 Land Plan. The approximately 118 acres of TVA land (Parcels 8 and 9) would continue to be available for the uses described in the plan including designation as a greenway and a trail although there would be no public access across the former TRDA property or other privately owned property. Because Rarity Communities has informed TVA that it intends to develop the 539 acres of property already under its control even if TVA denies its request, TVA has examined the impacts of such development as part of this alternative.

### **2.2.2. Alternative B – Applicant's Proposal**

Under Alternative B, the Applicant's Proposal, TVA would change the use allocation of the land as proposed and make the land available for sale and development. The marina plans with 349 wet and 200 dry storage boat slips, shoreline stabilization and dredge would be approved as proposed and TVA would allow the construction of the par-3 golf course on TVA land below the 820-foot Mean Sea Level (MSL) contour. The establishment of the Greenway and trail would not occur on the transferred land.

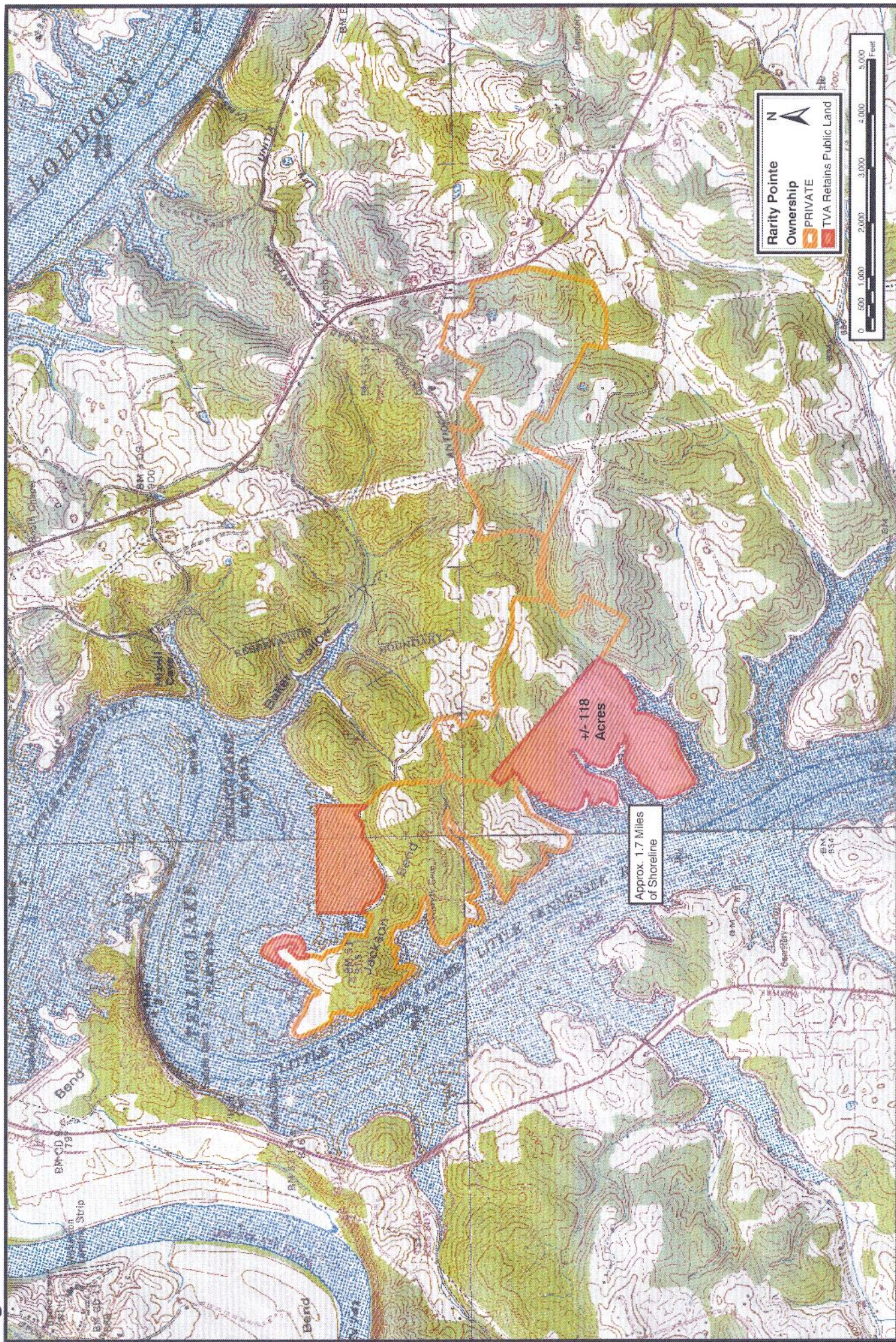
The proposed plan of development for Rarity Pointe includes property from several sources (see Figure 2-3). Approximately 323 acres of back lying property has been purchased from private owners. Plans for this parcel include construction of residential units, with open space and park areas around an 18-hole golf course.

The other non-TVA property is the 216-acre tract of former TRDA property on the Lower Jackson Bend peninsula. This property has restrictions, as set forth under the Commercial Recreation Standards adopted by TRDA and recorded in TVA's agreement with TRDA, TVA 60000A. Under applicable restrictions, the recreational lodging units planned on this parcel by Rarity Communities could not be permanently occupied. Rarity Communities would make a rental program available to all of the recreational lodging units. In addition, all commercial recreation amenities placed on the former TRDA land, including the lodge, spa, golf course, restaurant, and marina will be made commercially available to the public.

The applicant's proposal for Rarity Pointe assumes the acquisition of approximately 118 acres of TVA public land and the use of an additional 9 acres of public land comprising of three TVA parcels. The three parcels of land and their proposed uses are as follows:

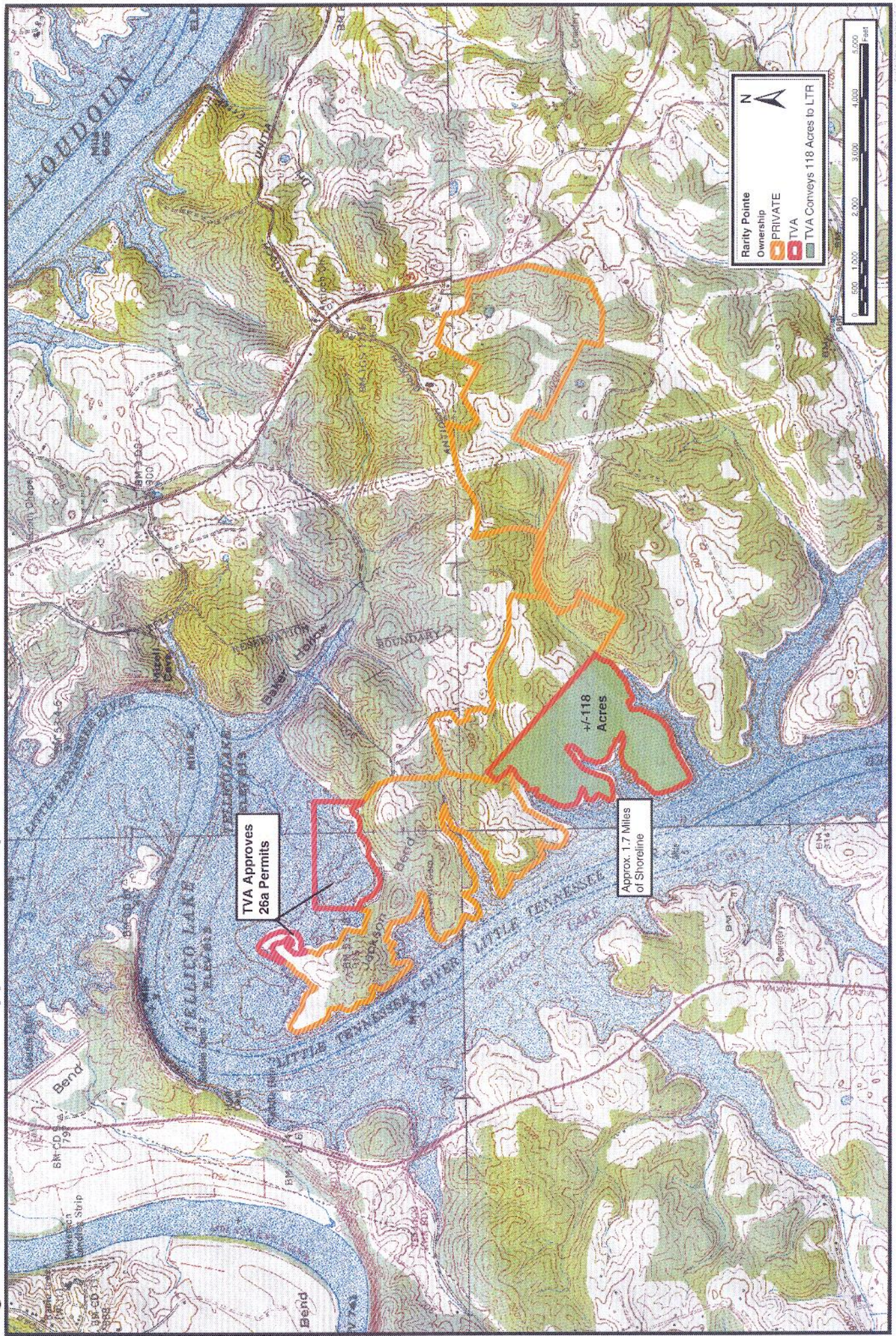


Figure 2-2 Alternative A - No Action





### Figure 2-3 Alternative B - Applicant's Proposal





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- Parcel 8 (approximately 47 acres) is currently allocated for recreational use. Rarity Communities proposes to purchase the TVA property and use it for residential and golf course development.
- Parcel 9 (approximately 71 acres) is currently allocated for natural resource conservation use. Rarity Communities proposes to purchase the TVA property and use it for residential, golf course, and clubhouse development.
- Parcel 7 (approximately 9 acres) is located on Jackson Bend between the summer pool reservoir level and private property owned by Rarity Communities. The proposal is to secure a use permit from TVA for developing a par-3 golf course and for ingress and egress associated with the proposed marina operation.

Rarity Communities plans approximately 1,200 units over the approximate 657-acre site. The planned unit development density will be less than two units per acre, providing for additional open space, park areas, and low to mid-rise condominium design and construction. In the overall site planning and golf course routing design, the addition of TVA property would enhance the value of the recreational amenities by keeping golf course routing away from the shoreline and giving way to less crowding of amenity structures, thus increasing the overall value of each unit/lot parcel.

The approximate 657-acre Rarity Pointe master plan concept (see Figure 2-1 and Appendix A) would provide a recreational resort community offering both residential and rental use opportunities. Recreational and leisure amenities would include a full service marina including facilities for wet and dry storage of boats, fuel storage and dispensing, sewage pump out, and small store with boat repair and rental service, and restaurant with public use rights; an 18-hole, tournament-play golf course and extensive practice facility; a golf clubhouse with onsite stay and play guest accommodations; a full service spa and lodge site with in-lodge guest accommodations; meeting and banquet facilities; both casual and fine dining; an infinity pool, gardens and outdoor chapel; outdoor lighted tennis courts; walking trails and park areas; and planned/controlled access to Tellico Reservoir. Private individual boat docks would not be permitted at the shoreline. The entrance would be gated and employ 24-hour gatehouse attendants.

The site presents topography, affording aesthetic view corridors for much of the planned development. Natural resources include a wide-variety of mature hardwood trees that have been incorporated into the community design guidelines for preservation (Appendix A). These existing trees are part of an overall landscaping program to provide tree clustering throughout the site development. Extensive water views and lakefront buffer areas have been planned to provide walking access at the shoreline.

An English Country Manor and English Countryside architectural design theme has been incorporated into the design of the Lodge and Golf Club facilities to set the tone for all future development. The character of the English Manor House architectural design was chosen to enhance the natural environment of the site with the use of wood and stone, both on interiors and exteriors of all vertical structures. The construction of recreational and leisure amenities, as well as housing and resort accommodations would be managed under this theme.

Rarity Pointe would offer a mix of residential and rental opportunities to include: low-rise and mid-rise condominiums; cottage-style cabins; twin homes (duplexes); attached and

detached villas; single-family estate homes; custom home sites; and overnight suite accommodations. A retail and commercial site is planned adjacent to U. S. Highway 321 at the entrance to Rarity Pointe to accommodate owners and guests, as well as local area residents and tourists. An information center, visitor and guest check-in, and general store would be located in this center outside the entrance.

Rental management and property services would operate permanently onsite at the lodge facility to provide a full service rental and guest management program to all residents, tenants, guests, and visitors. Use rights for all recreational and leisure amenities are incorporated in the "Rental Management Agreement" (See Appendix A). The resort rental offering and recreational use rights would be marketed on a local, regional, and national basis. Maintenance and housekeeping for the rental program would be located in the lodge facility.

Recreational use rights are incorporated into the "Rarity Pointe Membership Plan" (See Appendix A). The membership plan presents varied levels of membership based on community involvement. Property owner members, resort club members, and public access members and related use rights are defined in the Rarity Pointe Rules and Regulations for the Rarity Pointe Club. A "community access" membership classification for local area residents would be available at a reasonable annual fee, offering golf, marina services, spa and fitness programs with access to all dining facilities, and attendance at community events (See Figure 2-3).

Most of the utility infrastructure serving the proposed Rarity Pointe development will be installed by local public utility service providers. Because the applicant is proceeding with the development of the property it already controls, this infrastructure will be built regardless of the TVA decision. A three phase electric power service will be provided by Fort Loudon Electric (Madisonville, TN) overhead via Antioch Church Road and then underground through out the Rarity Pointe "phase-one" development. Eventually the utility will develop a sub station at a location to be determined near the 69 KV line right-of-way adjacent to TVA's 161-kV which runs north to south across Rarity Pointe.

Rarity Pointe will utilize a new 13.5-mile sewer line that TRDA is constructing from the Tellico Area Services System (TASS) wastewater treatment plant located near Vonore, Tennessee. The route for the sewer will follow an existing utility right-of-way (ROW) east along U. S. Highway 411 north to Reservation Boundary Road, east to National Campground Road, north to State Highway 95, and along U. S. Highway 321 which fronts the Rarity Pointe Development. The eight-inch sewer line will consist of both pressure and gravity systems. The sewer line should be completed before the "phase-one" Rarity development experiences build-out. A temporary measure to handle sewer for up to 20 homes will consist of a holding tank and "pump and haul" solution. This application would have to be approved by the Tennessee Department of Environment and Conservation (TDEC). The preliminary agreement is to permit the "pump and haul" disposal process to extend for a period up to one year.

The TASS wastewater treatment plant has a current capacity of 300,000 gallons per day and is estimated to be between 65 to 70 percent capacity. The treatment plant has the capacity to handle the additional load generated from the "phase-one" Rarity development. TASS has near term plans and the property to expand its capacity to one million gallons per day. The additional capacity will also provide service for the Community of Greenback, Foothills Point Subdivision, and additional industrial demand from Niles Ferry Industrial

Park. It will also provide service for any future TRDA development at Wears Bend Peninsula and the Rollins Cemetery property.

Water service is currently available to Rarity Pointe via a TASS water line located along Antioch Church Road. The 6-inch line is fed from a 200,000-gallon water tank located near U. S. Highway 321 and Antioch Church Road. This tank is also supported by water from a one million gallon water tank located near Hackney Chapel Road.

A natural gas line is currently located along U. S. Highway 321 and is serviced by Loudon Utility. This line has the capacity to provide natural gas to Rarity Pointe and is available to serve the entire community.

The widening of the U. S. Highway 321, currently underway, is projected by the State of Tennessee to be completed by 2005. Rarity Pointe "phase-one" construction will likely use the Antioch Church Road to access the commercial facilities and new rental housing until a temporary road can be connected with U. S. Highway 321. Initially, much of the labor and construction materials will gain access to the project via Antioch Church Road which would continue to be the primary access to this site until the construction on US. Highway 321 is completed.

### **2.2.3. Alternative C – Partial Land Sale with Mitigation**

TVA would approve the marina plans with up to 349 wet and 200 dry boat slips, shoreline stabilization and dredge; allow the construction of the par-3 golf course; and modify the current land use plan to allocate part of the requested land (Parcel 8 and the uplands portion of the requested Parcel 9, about 49 acres total) and make it available for development as described under Alternative B, but with enhanced mitigation measures. This would allow Rarity Communities to construct and operate the proposed 18-hole golf course as described under Alternative B but would not allow the residential development as proposed on Parcels 8 and 9.

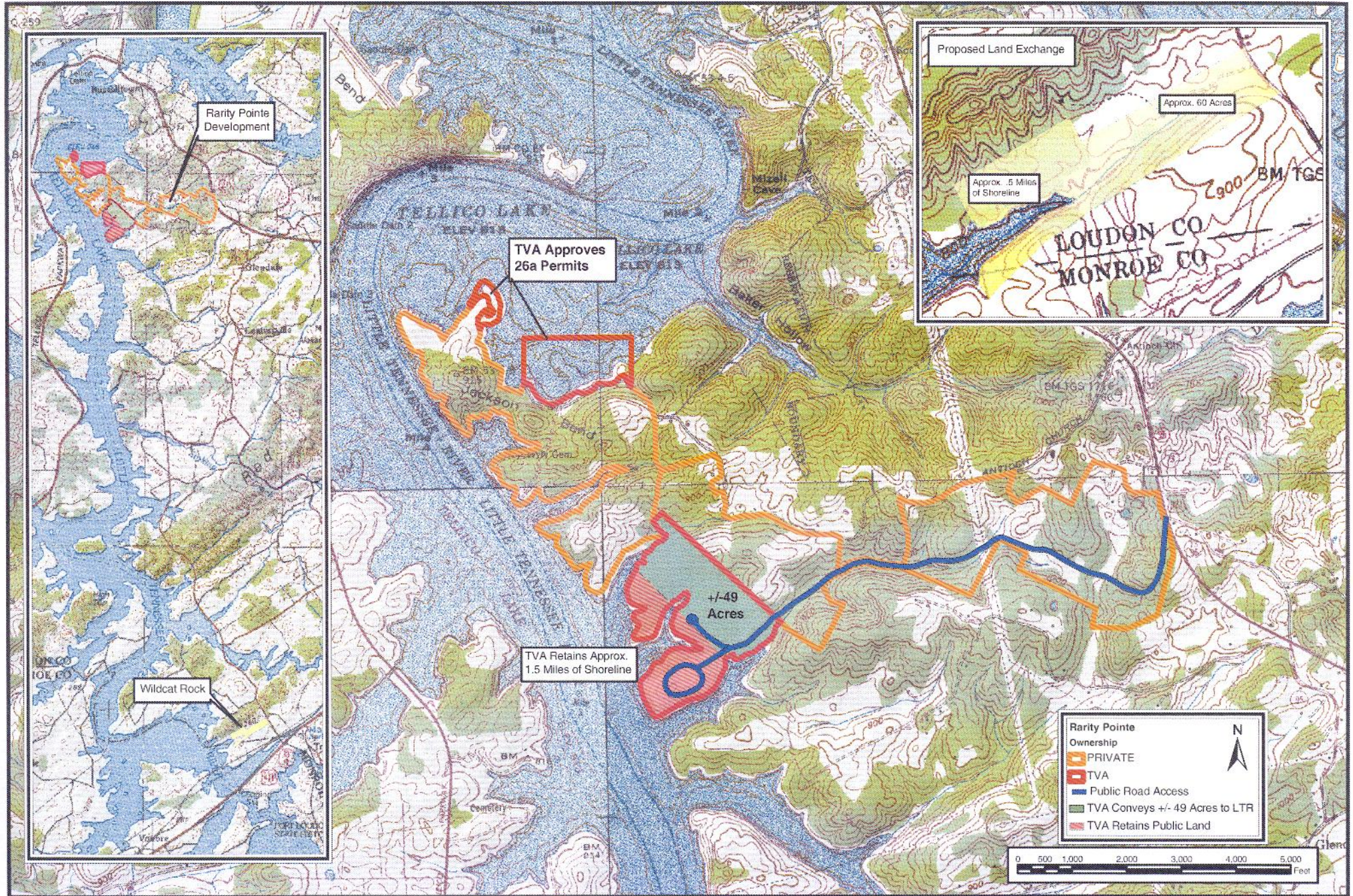
The mitigation would address the loss of public lands and impacts to terrestrial habitat, aesthetics, public recreation including a greenway and trail (described in the 2000 Land Plan), and other potential environmental impacts. Rarity Communities would provide vehicle and trail access to the remaining TVA public land so that a trail terminal could be established and the greenway designation remain on the balance of the requested portion of Parcel 9. In addition, Alternative C includes provisions for the loss of public land through a land exchange in which Rarity Communities would provide at least 60 acres of property. TVA would approve the sale and allocation change of the Wildcat Rock tract from Industrial use to Cultural, Public Use, and Open Space by TRDA. See Figure 2-4.

### **2.2.4. Alternative D – Small Golf Course and Marina with No Land Sale**

Under Alternative D, TVA would not change the use allocation or sell the land as requested. The land would continue to be managed under the 2000 Land Plan, including, the designation of a greenway and possible design and establishment of a trail system. However, TVA would approve the full service marina plans with up to 349 wet and 200 dry boat slips, shoreline stabilization and dredge: and TVA would allow the construction of the par-3 golf course on TVA land below the 820-foot contour as described in Alternative B. See Figure 2-5.

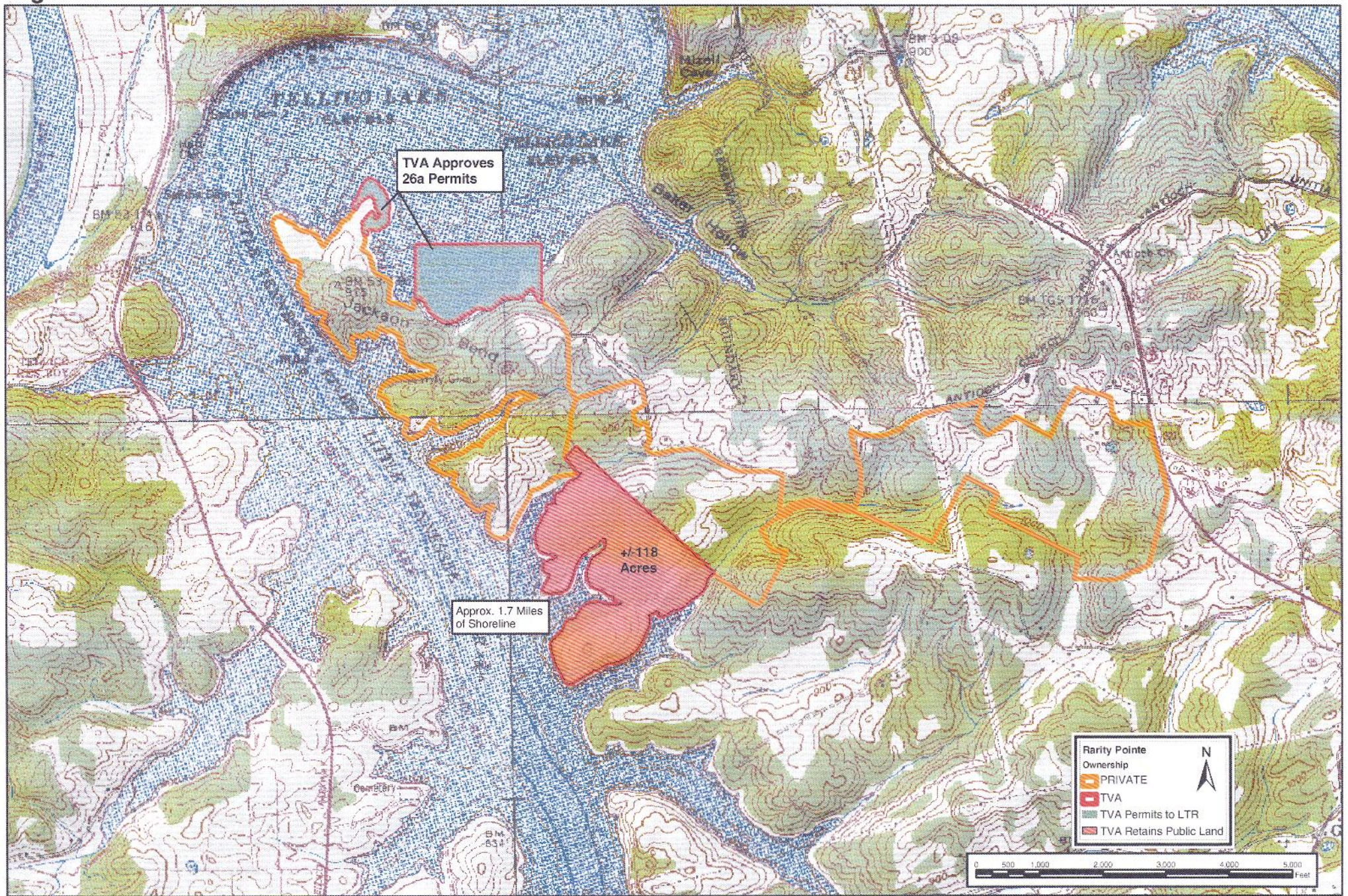


**Figure 2-4 Alternative C - Partial Land Sale with Mitigation**





**Figure 2-5 Alternative D - Small Golf Course and Marina with No Land Sale**





### **2.2.5. Alternative E – Applicant's Proposal with Mitigation**

TVA would approve the new marina plans with up to 349 wet and 200 dry boat slips, shoreline stabilization and dredge; allow the construction of the par-3 golf course; and modify the land use allocation of current land use plan of the requested land and make it available for development as described under Alternative B, but with enhanced mitigation measures. The mitigation would address the loss of public lands and impacts to terrestrial habitat, aesthetics, and public recreation including a greenway and trails, and other potential environmental impacts. Rarity Communities would assist in establishing a trail terminal on Parcel 6, consisting of the construction of an access road, restroom, picnic area, and parking area of TVA design, and provide trail access for pedestrians across Rarity Pointe property (or elsewhere) to Parcel 9. Rarity Communities would also provide 256 acres of property at the Wildcat Rock site for the loss of public land and to mitigate other environmental impacts. TVA would reallocate the land on Parcel 6 for the trail terminal from Natural Resource Conservation to Recreation use; and approve the sale and allocation change of the Wildcat Rock tract from Industrial to Cultural, Public Use, and open Space by TRDA. See Figure 2-6.

### **2.3. Alternatives and Mitigation Eliminated From Detailed Consideration**

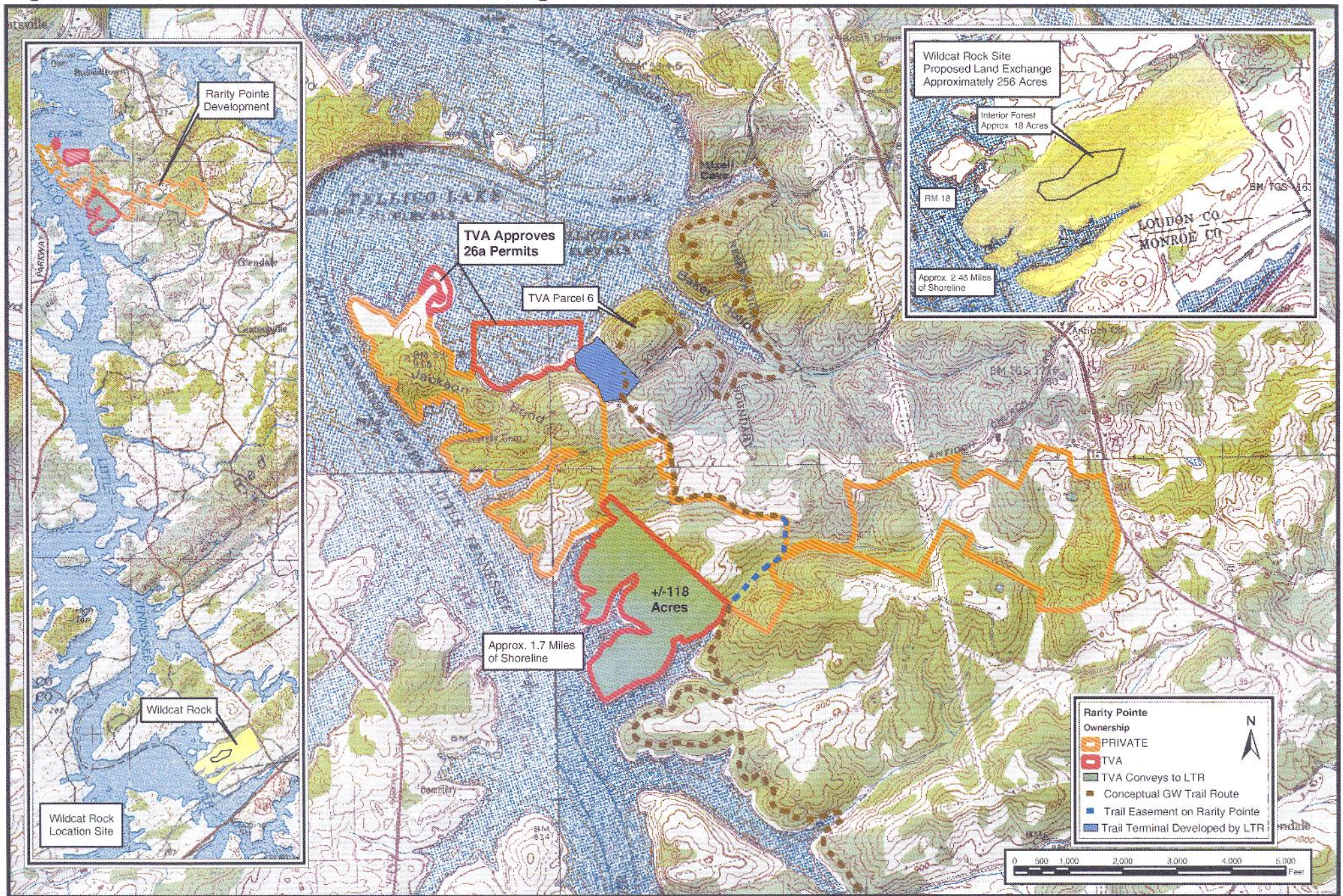
An alternative eliminated from further consideration involved (after the sale of the requested land) making the remainder of TVA property on the eastern shore of Tellico Reservoir subject to a legal instrument that would permanently dedicate the land to natural resource conservation (for example, a conservation easement) or transfer control of the remaining property to another federal or state land conservation agency and restrict its use to natural resource conservation. This is actually more properly viewed as a separate proposal or, possibly, as mitigation for the proposed action rather than an alternative. In any case, restricting all of the property remaining under TVA's control on the eastern side of the reservoir would not be consistent with the 2000 Land Plan or the purposes of the Tellico project. While this could help mitigate some of the potential consequences of the requests at hand, other Alternatives provide an approach to mitigation that is more consistent with the scope of the potential impacts of Rarity Communities' proposal. For these reasons, TVA has decided not to further analyze this as an alternative in the EIS.

TVA also considered as a mitigation element the construction and operation of a trailhead terminal on Parcel 8 as described in the land use plan. However, investigation into constructing a trail around the former TRDA property on TVA land below the 820-foot contour showed it to be impractical to construct. The existing terrain was very steep in places and the available TVA property too narrow in other places to accommodate a trail as part of a greenway. Further, unrestricted public vehicle and pedestrian access across the property which is now owned by Rarity Communities would conflict with their plans for a gated community and is unlikely to be obtainable. This mitigation element has, therefore, been eliminated from further consideration in this EIS.

In addition, TVA initially considered another mitigation site, the 232 acre Morganton Cemetery site (See Figure 2-7). However, after detailed evaluation and field inspections it was determined that this site was not environmentally superior to the Wildcat Rock site assessed in this document for mitigation except with respect to aesthetic and visual impacts to residential viewsheds. Although the Morganton Cemetery tract would not benefit the views of Rarity Pointe from Tellico Village, it would have preserved the views of residential areas elsewhere on the reservoir from future industrial sites. For these aesthetic and visual



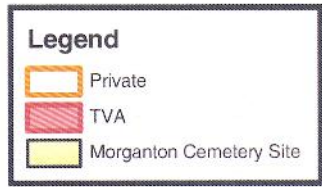
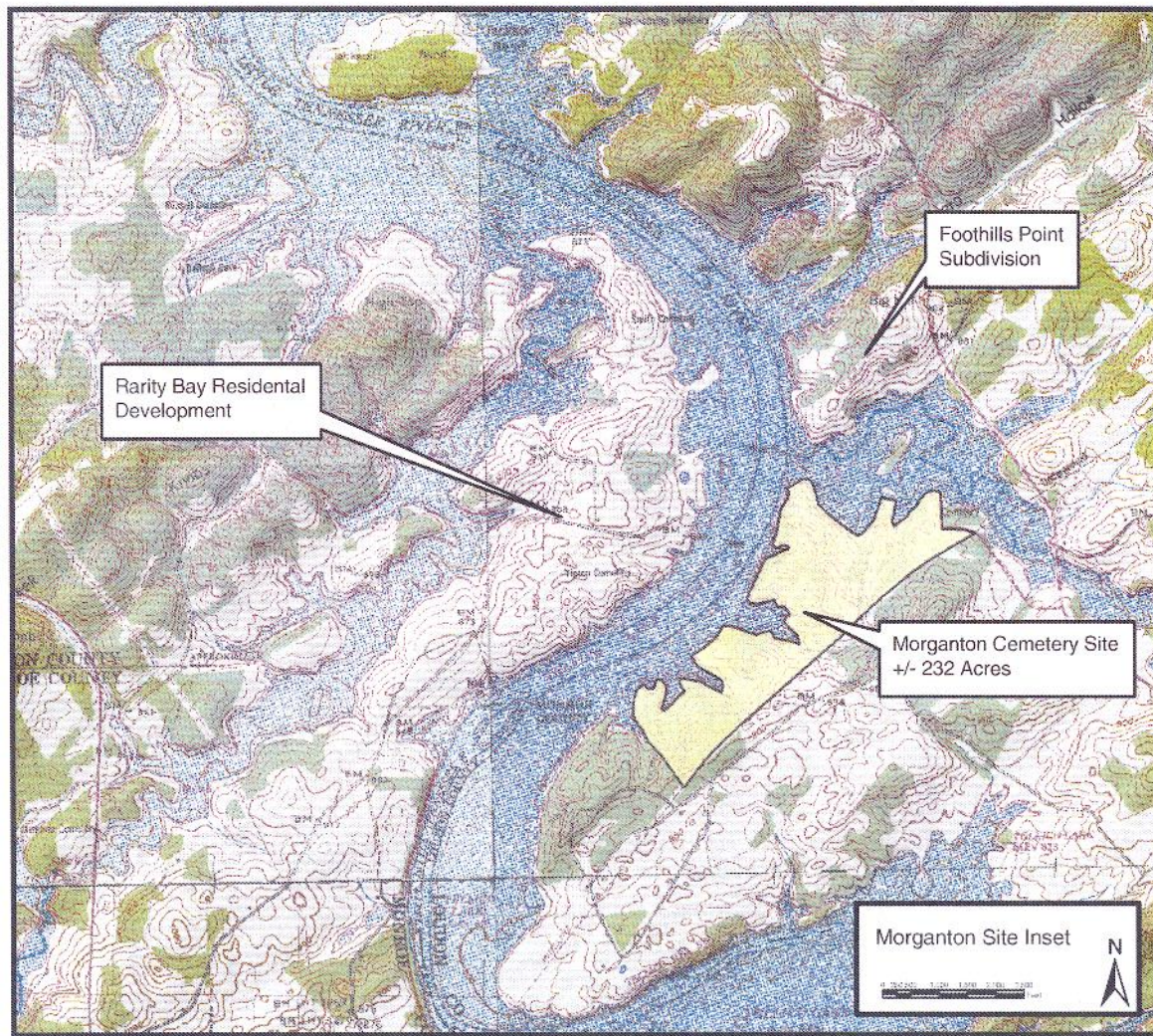
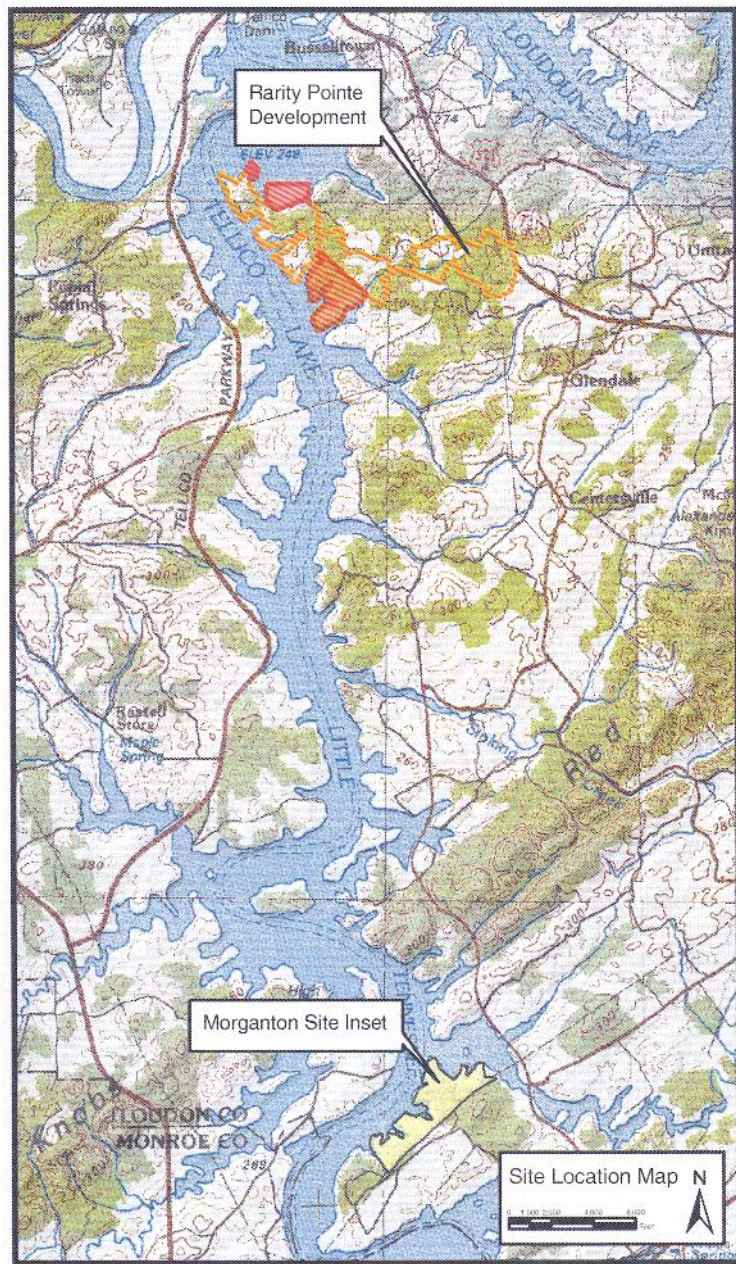
**Figure 2-6 Alternative E - Land Sale with Mitigation**



➔ To Davis Ferry Trail Terminal



Figure 2-7 Morganton Cemetery Mitigation Site





impacts, TVA has determined that the Morganton Cemetery site would be preferable. However, the Morganton Cemetery site is under TRDA's control and TRDA indicated that they would not make this property available.

## **2.4. Comparison of Alternatives**

Under any alternative construction and operation of a commercial recreation and residential project is likely on the 539 acres of private land already owned by Rarity Communities. Development of the former TRDA property started in late summer, 2002 and currently has progressed to the construction of an internal road system to provide access to the planned house sites, the lodges, and the marina (see concept map, Figure 2-1). These actions are expected to continue regardless of TVA's decision.

Under any alternative, there would be no effects to cultural resources, and only temporary and minor effects on air quality. See Table 2-1 for resource comparison by alternatives.

Under the No Action Alternative, the same number of proposed residences and other impacts would be concentrated on Rarity Communities existing property. The TVA land would continue to be available for the uses described in the 2000 Land Plan including the greenway and trail. Although there would be no loss of public land, there would continue to be a significant loss of visual resources and degradation of terrestrial ecology, wetlands, water quality, and aquatic ecology by the likely continued development of private project land. There would be a potential loss of habitat for two sensitive species. The small par-3 golf course and marina would not be permitted, however other recreation opportunities would continue, including a full sized regulation golf course. The overall socioeconomic benefits associated with the continued development of the site on the existing privately owned land would occur with slightly fewer jobs and tax revenue.

Under Alternative B, the recreational resort community would be constructed offering both residential and rental opportunities; a full service marina including dredging, shoreline stabilization, dry storage, and restaurant for public use; an 18-hole, championship-play and par-3 golf courses; and lodge guest accommodations. The socioeconomic benefits resulting from the Rarity Pointe Development would be slightly enhanced with the sale of TVA property. However, there would be a notable loss of visual quality and adverse impacts of terrestrial ecology, wetlands, water quality, and aquatic ecology to both the involved public and private project land. There would be an adverse loss of recreation opportunities and the establishment of a greenway and trail would not occur on the sold public land. There would be a potential loss of habitat for two sensitive species. There would be cumulative terrestrial habitat loss due to the loss of public land on Tellico reservoir. The adverse impacts to jurisdictional wetlands; and some water quality, aquatic and terrestrial ecology impacts would be mitigated. Overall Alternative B achieves the applicant's purpose and need with the least cost to the applicant, but has the greatest environmental impact on natural resources.

Under Alternative C, the same recreational resort community as proposed could be accomplished but the residences proposed on TVA land would be placed on existing private land similar to Alternative A. The socioeconomic impacts would be the same as Alternative B. However, there would be a loss of visual resources and adverse impacts of terrestrial ecology, wetlands, water quality, and aquatic ecology to both the involved public and private project land. The proposed land exchange at Wildcat Rock (60 acres) would result in a minor loss of industrial land, an increase in the amount of public land on Tellico Reservoir, but not completely mitigate for the loss of terrestrial habitat or lost recreation

**Table 2-1. Comparison of Alternatives**

	<b>Alternative A - No Action</b>	<b>Alternative B - Applicant Proposal</b>	<b>Alternative C - Partial Land Sale with Mitigation</b>	<b>Alternative D - Small Golf Course and Marina with No Land Sale</b>	<b>Alternative E - Applicant's Proposal with Mitigation</b>
<b>Proposed Actions</b>	None	Land sale (approximately 118 acres), par-3 golf course and marina	Land sale (49 acres), par-3 golf course, and marina	Par-3 golf course and marina	Land sale (approximately 118 acres), par-3 golf course and marina
<b>Proposed Mitigation (Commitment Number from Section 4.15)</b>	None	(2) Golf Course Plan (7) Wetlands (8 & 9) BMPs (13) No Lake Access (6 & 15) Dredge (14) Floodplains	(1) Vegetation Buffer (2) Golf Course Plan (3, 10, & 13) 60 Acre Land Exchange and Vehicle Access (4) Mature Trees (5) Lighting (7) Wetlands (8 & 9) BMPs (14) Floodplains (6 & 15) Dredge	(2) Golf Course Plan (4) Mature Trees (5) Lighting (7) Wetlands (8 & 9) BMPs (14) Floodplains (6 & 15) Dredge	(1) Vegetation Buffer (2) Golf Course Plan (3, 11, & 13) 256 Acre Land Exchange and Mitigation. (4) Mature Trees (5) Lighting (7) Wetlands (8 & 9) BMPs (14) Floodplains (6 & 15) Dredge
<b>Resource Issues;</b>					
<b>Terrestrial Ecology</b>	Impacts on private lands would contribute to cumulative terrestrial resource loss	Impacts on private and TVA lands would increase local and cumulative terrestrial resource loss.	Lesser impacts than Alt. B, Mitigation would reduce local and cumulative impacts.	Same as Alt. A with some increase to impacts from marina and par-3 golf course	Impacts to private lands are reduced, cumulative loss of terrestrial resources offset by mitigation
<b>Aquatic Ecology</b>	Adverse impacts to reservoir aquatic ecology	Adverse impacts to reservoir aquatic ecology	Minor impacts with BMPS	Minor impacts with BMPS	Minor impacts with BMPS
<b>Threatened and Endangered Species</b>	Potential loss of Indiana Bat and Bald Eagle habitat	Potential loss of Indiana Bat and Bald Eagle habitat	None	None	None
<b>Water Quality</b>	Adverse impacts from private land and golf course	Impacts from public and private lands, and marina and golf courses	Impacts from public and private lands, and marina and golf courses.	Impacts from private lands, and marina and golf courses.	Least impacts from public and private lands, and marina and golf courses.
<b>Wetlands</b>	Insignificant impacts to pond-fringe wetland on private land	Insignificant if shoreline wetlands are mitigated	Insignificant if shoreline wetlands are mitigated	Insignificant if shoreline wetlands are mitigated	Insignificant if shoreline wetlands are mitigated
<b>Recreation Resources</b>	Benefits of large golf courses (not championship) and resort, no loss of recreation on public land	Benefits of golf courses (championship) and marina, Loss of recreation on public land including greenway and terminal	Benefits of golf courses (championship), marina, and access to remaining public land, Increased acreage of public land	Benefits of golf courses (not championship) and marina. No loss of recreation on public land	Benefits of golf courses (championship) and marina, Offsets loss of recreation on TVA land, trail terminal and pedestrian access
<b>Cultural Resources</b>	None	None	None	None	None
<b>Visual and Aesthetics</b>	Significant loss of resources by development of private land	Notable increase in significant loss of resources compared to Alt. A because of development of both public and private land	Significant loss of resources on private land; loss of public shoreline land less than Alt. B; significant adverse impact to residential viewshed remains (partial mitigation)	Significant loss of resources on private land; moderate impacts to portions of public land	Significant loss of resources on private land; loss of public land mitigated by land exchange, but impacts to residential viewshed remains significant (no mitigation)
<b>Socioeconomics</b>	598 temporary jobs, 62 permanent jobs, \$1.7 million property tax revenue	645 temporary jobs, 66 permanent jobs, \$2.2 million property tax revenue	645 temporary jobs, 66 permanent jobs, \$2.2 million property tax revenue, loss of 30 acres of Industrial land	645 temporary jobs, 66 permanent jobs, \$2.2 million property tax revenue	645 temporary jobs, 66 permanent jobs, \$2.2 million property tax revenue, loss of 60 acres of Industrial land
<b>Air Quality</b>	Insignificant	Insignificant	Insignificant	Insignificant	Insignificant

opportunities. Although there would be a loss of some recreation opportunities, this loss would be somewhat offset by gaining vehicle access to the remaining TVA land on Parcel 8 and 9 where establishment of a greenway and trail could occur. There would be less potential for loss of habitat for two sensitive species. There would be cumulative terrestrial habitat loss do to the loss of public land on Tellico reservoir although not as severe as Alternative B. The adverse impacts to jurisdictional wetlands; and some of the water quality, aquatic and terrestrial ecology impacts would be mitigated. Alternative C achieves most of the applicant's purpose and need but with less environmental impact on natural resources than Alternative B.

Under Alternative D, the same recreational resort community as proposed could be accomplished but the residences and parts of the large golf course proposed on TVA land would be placed on existing private land similar to Alternative A. The socioeconomic impacts would be the same as Alternatives B and C. However, there would be a loss of visual quality and adverse impacts of terrestrial ecology, wetlands, water quality, and aquatic ecology to both the involved public and private project land. There would not be a loss of TVA land but also there would not be vehicular access to Parcels 8 and 9 across Rarity Pointe making the establishment of a trail terminal difficult. There would be less potential for loss of habitat for two sensitive species. There would be no terrestrial habitat loss on Tellico reservoir. The adverse impacts to jurisdictional wetlands; and some water quality, aquatic and terrestrial ecology impacts would be mitigated. Overall Alternative D partially achieves the applicant's purpose and need with less environmental impact on natural resources than Alternative B and C.

Under Alternative E, the recreational resort community could be accomplished as proposed. The socioeconomic impacts would occur similar to Alternative B. However, there would be a loss of visual quality. Although there would be some adverse impacts of terrestrial ecology, wetlands, water quality, and aquatic ecology to both the involved public and private project land this would be offset by the proposed land exchange at Wildcat Rock (256 acres). This would result in an increase in public lands on the Tellico Reservoir, and a minor loss of industrial land. The exchange would provide a greater variety of scenic features than present on the approximately 118 acres of public land. The exchange would offset the loss of the approximately 118 acres of public land except for the adverse, visual impacts that would occur principally to the residential viewshed, similar to alternative B. There would be increased recreation opportunities with the exchanged land and the creation of a trail terminal on Parcel 6 and pedestrian access across Rarity Pointe property which could provide continuation of the greenway and trail along the eastern shore of Tellico Reservoir. There would be a potential loss of habitat for two sensitive species. The adverse impacts to jurisdictional wetlands; and some water quality, aquatic and terrestrial ecology impacts would be mitigated. Overall Alternative E achieves the Applicant's purpose and needs with the least environmental impact to natural resources while providing a net increase of land.

**Summary** – In order of impact to the environment, Alternative E would be the most protective of the action alternatives, followed by Alternatives D, C, and B. Alternative A would have the fewest impacts to TVA public land, but would also concentrate environmental impacts on private land with fewer acres. Alternatives C and E would result in a net gain of public land on Tellico Reservoir to natural resource conservation allocation.

## **2.5 The Preferred Alternative**

TVA's preferred alternative is Alternative E. Alternative E achieves the Applicant's objectives and meets the regional and economic development goals of the Tellico Project in a manner that reduces associated environmental impacts to acceptable levels. TVA has worked closely with the Applicant and TRDA to identify and put in place a number of mitigation measures. Of primary importance is the Applicant's willingness to provide property to offset the loss of the TVA lands and their inherent public values. As a consequence, the public is actually gaining more land as a result of this alternative, than it would lose by the sale of the TVA property to Rarity Communities. Under this alternative, the Applicant would support development of the greenway trail.



## CHAPTER 3

### 3. AFFECTED ENVIRONMENT

The existing environment affected by the proposed actions is described in this chapter.

#### 3.1. Terrestrial Ecology

**Terrestrial Animals** - Terrestrial animal species found within the project lands are generally common and have widespread distributions. No uncommon wildlife communities were observed within the project lands during field investigations in the summer of 2002.

Forested habitats interspersed with open fields and ponds provide a mixture of wildlife habitats. Cattle have previously grazed much of the private land within the project area. Grazing has greatly reduced the amount of understory vegetation that is important to many wildlife species, including songbirds. Overall, forest roads, maintained agriculture fields, old fields, and shorelines create edge habitats and a somewhat fragmented composition of habitats. The highest value of the property to wildlife is the habitat that the area offers to regionally common game and nongame animals.

Due to the lack of features that provide high quality wildlife habitats, such as streams, springs, wetlands, caves, rock bluffs, and moist forested habitats, the overall diversity of wildlife on the site is not uncommon from a local, state, or regional perspective. Wildlife in the project lands includes species commonly found in deciduous woodlands, pine and cedar woodlands, and early successional habitats.

Amphibians and reptiles often found in upland deciduous forests, mixed deciduous woodlands, and along associated riparian areas, such as ponds, fringe wetlands, and the reservoir shoreline, include spotted salamander, Cope's gray tree frog, eastern box turtle, and northern water snake. Birds found in this type of habitat include Carolina wren, red-eyed vireo, barred owl, red-tailed and red-shouldered hawks, great blue heron, green-backed heron, and tufted titmouse. Mammals would include muskrat, eastern gray squirrel, raccoon, and white-tailed deer.

Although pine forest and areas dominated by eastern red cedar are not known for containing a diversity of wildlife, they do provide wildlife habitat. Amphibians and reptiles commonly found in pine forest include eastern narrow mouth toad, eastern spadefoot, southern five-lined skink, and black racer. Birds commonly found in this type of habitat include blue jay, northern cardinal, American crow, and a variety of woodpeckers. Edges along pine and cedar woodlands often provide habitat for mammals such as eastern cottontail rabbit, white-footed mouse, hispid cotton rat, and their associated predators.

Common amphibians and reptiles that are found in early successional habitats include American toad, spring peeper, upland chorus frog, and common garter snake. Birds that nest in these habitats include eastern towhee, brown thrasher, white-eyed vireo, field sparrow, eastern bluebird, and common yellowthroat. Mammals commonly found in this habitat type include white-tailed deer, eastern mole, eastern cottontail rabbit, woodchuck, gray fox, and coyote.

Migratory Birds are used as ecological indicators and their population numbers have been used to detect environmental changes, monitor organic pollutants, monitor radionuclide

contamination, indicate changes in water quality, and detect changes in prey stock (food webs) (Furness and Greenwood 1993). Numerous studies have supported the concept that habitat area in combination with isolation of woodland is one of the most important considerations in maintaining natural diversity of breeding bird populations (Robbins et al., 1989a).

In order to determine a habitat's viability as interior forest, Temple and Cary (1988) developed a model that used 200 meters as the threshold distance to forest edge. In this methodology, interior-forest habitat requires at least 200-m edge from any feature that breaks the tree cover, such as roads, rivers (reservoirs), or buildings. This criterion was used to describe lands in this chapter and to evaluate lands in Chapter 4.

Several species of neotropical songbirds are expected to occur within the project lands. Neotropical migrants are those birds that nest in North America and migrate to Central and South America, Mexico or the Caribbean during our winter months. Many species in this group have undergone significant population declines in recent years. Studies indicate that many of these species are declining on a continental scale, due to changes associated with their habitat (Robbins et al., 1989b, DeGraaf and Rappole 1995).

Migratory birds that occur in the vicinity likely include several species of waterfowl, hawks, warblers, tanagers, vireos, sparrows, and blackbirds. In addition to those songbirds mentioned earlier in the different habitat types of the area, pine warblers, yellow-throated warblers, yellow-breasted chats, eastern kingbirds, summer tanagers, and indigo buntings also nest in the area.

Waterfowl species that winter near lower Jackson Bend include small numbers of mallards, American black ducks, lesser scaup, ring-necked ducks, wood ducks, gadwall, and hooded and red-breasted mergansers. Other common migratory water birds include common loon, pied-billed and horned grebe, and American coot. No uncommon assemblages of migratory birds were observed during field investigations, or are expected to occur, within the proposed project lands and adjacent reservoir area.

Invasive terrestrial animals that are expected to occur in the project vicinity include European starling, house sparrow, and rock dove. None of these species were observed, or are expected to occur, in unusually high numbers within the project lands.

**Terrestrial Plants** - Additional information regarding the terrestrial ecology resources, including the vegetation types, of Tellico Reservoir and surrounding lands can be found in the *Tellico Reservoir Land Management EIS* (TVA, 2000). The discussion below focuses on the lower reaches of Tellico Reservoir, in the vicinity of the proposed project lands.

The proposed project lands are located in the Ridge and Valley Physiographic Province of eastern Tennessee (Fenneman, 1938). The region is characterized by a system of parallel ridges and valleys that trend northeast and southwest. Elevation ranges from 750 to 1,000 feet throughout most of the region, however several ridge systems rise to more than 2,000 feet (Martin, 1989). More specifically, the project lands are located in east-central Loudon County just south of the confluence of the Tennessee and Little Tennessee Rivers, on the east side of Tellico Reservoir at Jackson Bend. The topography at the site includes several small finger ridges and coves that vary in both slope and aspect.

Floristically, the region is located in the Oak-Chestnut Forest Region as described by Braun (1950). American chestnut was once a dominant species in the forests of the Ridge and Valley, but has since been decimated by a fungal blight. Following the demise of the chestnut, these forests have become characterized by various species of oak and hickory, as well as red maple, black gum, and pines (Martin, 1989).

Numerous vegetative cover types occurred in what is now the project area before European settlement of the region. Human activities during the past 200 years, including agriculture, residential development, timber harvests, and the impoundment of the Little Tennessee River have greatly altered the previous vegetation and have resulted in a mosaic of cover types.

The discussion that follows distinguishes between those lands that would be directly impacted as a result of the proposed development under Alternatives A-E and those lands that have been proposed for mitigation under Alternatives C and E.

The 539 acres currently owned by Rarity Communities as well as the TVA lands (approximately 127 acres) requested by Rarity Communities were surveyed for botanical resources during the summer and early fall of 2002. Approximately 88 percent (roughly 580 acres) of these lands can be described in terms of three broad vegetation types: old fields, riparian zones, and upland woodlands (Table 3-1). The remaining 12 percent (roughly 80 acres, all owned by the applicant) of these lands was cleared of all vegetation prior to the initiation of botanical surveys ('Bare ground', Table 3-1). Therefore, the discussion that follows pertains only to the vegetated portions of these lands. Appendix D contains a list of all vascular plant species observed during these 2002 field surveys. Only the most frequently encountered species are mentioned in the vegetation descriptions below.

<b>Table 3-1. Major Land Cover Types for Rarity Pointe Project Lands</b>		
<b>Major Types</b>	<b>Subtypes</b>	<b>Percent Coverage</b>
Old Field	Pine	2%
	Cedar barren	1%
Riparian Zones	Shoreline	5%
	Wet shores	< 1%
	Bluffs and rocky shores	< 1%
Bare ground	--	12%
Upland Forest	Oak-Hickory-Pine	60%
	Oak-Hickory-Cedar	2%
	North Slope Forest	1%

Less than five percent of these project lands are characterized by old field vegetation, which can be described in terms of old field and cedar barren subtypes.

The old-field subtype includes hayfields, regularly or irregularly mowed areas, and areas that in the recent past have served as pasture or cropland. When regularly mowed, these areas are dominated by grasses such as tall fescue, Johnson grass, tall redtop, foxtail

grass, orchard grass, and timothy. Within these areas, localized patches of disturbed or bare soil support several common weeds including crab grass, Bermuda grass, perennial rye grass, Japanese and Korean clover, annual ragweed, lamb's quarters, and spiny amaranth. In older fields where mowing is less frequent and succession is more advanced, coarse herbs and shrubs are prevalent. In these areas, many of the same species listed above are also common but additional species include panic grass, plume grass, sericea lespedeza, yellow crownbeard, tall ironweed, Canadian goldenrod, common blackberry, northern dewberry, Japanese honeysuckle, and winged sumac. In a few areas, particularly on drier sites over thin or eroded soil, plants characteristic of barrens are present. These species include little bluestem, broom-sage, several species of panic grass, trailing and creeping bush clovers, milk pea, sensitive brier, goat's-rue, greater coreopsis, narrow-leaf white-top aster, hyssop-leaf thoroughwort, round-leaf thoroughwort, and a few species of native sunflowers.

The cedar barren subtype includes open dry areas over thin soil where eastern red cedar is a dominant species and pine is also a significant component. Sites of this subtype occur on small ridges within the project area. Dominant species include several species of goldenrod, aster, bush clover, milkweed, tick-trefoil, sunflower, little bluestem, broom-sage, plume grass, wild oat grass, panic grass, and foxtail grass. Post oak, mockernut hickory, Virginia pine, and winged sumac are common toward the periphery of these areas.

The riparian zone encompasses lands along the shoreline of Tellico Reservoir. In some areas, the shoreline vegetation is very similar to the upland forest vegetation and consists of numerous species of oak, hickory, Virginia pine, red maple, and sourwood. Small limestone bluffs and rock outcrops are scattered along the shoreline, and are usually associated with species such as chinkapin and Shumard oaks, Carolina hickory, hop hornbeam, and yucca. Several species of ferns also occur directly on the rocks in these areas, and include black-stem spleenwort, common woodsia, Alabama lip-fern, purple cliff brake, and resurrection fern. In other areas, particularly at the back of coves where drainages enter Tellico Reservoir, small wet seeps and drainages contain a variety of species including buttonbush, silky dogwood, elderberry, hibiscus, several species of rushes and sedges, cattail, and American groundnut. The remainder of the shoreline is primarily vegetated by thickets of silky dogwood and hazel alder, interspersed with a combination of the previously mentioned species.

Upland forests cover the majority of hills and some ravines in the project area. These upland forests can be further subdivided into four forest subtypes (Table 3-2). Oaks (primarily white, post, black, and southern red), hickories (pignut and mockernut), red maple, shortleaf and Virginia pine dominate the majority of these forests, with sourwood, American hazelnut, and black gum interspersed in the sub-canopy. Rockier slopes, particularly around Jackson Bend, contain increased representation by chinkapin oak, Carolina hickory, and red cedar. On several sheltered north slopes, examples of rich ravine forests are present and include northern red oak, white oak, bitternut hickory, eastern hemlock, Carolina silverbell, Carolina holly, American holly, and mountain stewartia. A few stands of Virginia pine have established on areas that previously supported agricultural fields.

Forests are a significant component of terrestrial ecology resources, both in terms of the plant communities they contain and the wildlife habitat that they provide. Loudon County, where the project lands occur, is one of several counties within the Valley in which forests located within one-fourth-mile of the reservoir make up at least 20 percent of total forested land in the county (TVA, 1998). According to a review of the United States Geological

Survey (USGS) National Land Cover Dataset for the project area and surrounding vicinity, approximately 83 percent of the land area within one-fourth mile of the shoreline surrounding Tellico Reservoir is forested. However, the largest, most contiguous patches of forest are located along the upper reaches of Tellico Reservoir, which are bordered by the United States Department of Agriculture's Cherokee National Forest. In contrast, the proposed project is located on the lower end of the reservoir, an area that primarily consists of "land associated with the Tellico Dam Reservation, which includes upland hardwoods, early successional habitats, agricultural land, and beaver pond wetlands" (TVA, 2000).

The majority (approximately 65 percent or 480 acres) of these project lands are forested. Of these 480 acres, the approximately 118 acres currently in public ownership represent roughly 6.3 percent of all TVA-retained lands allocated to Zone 3, 4, or 6 (Natural Resource Conservation, Sensitive Resource Management, or Recreation) on the lower end of Tellico Reservoir (TVA, 2000). The majority of other lands surrounding the lower end of Tellico Reservoir (downstream of the U. S. Highway 411 Bridge) are owned by TRDA, and zoned for residential or industrial development.

Invasive terrestrial plant species typify disturbed, early successional vegetation. Several invasive terrestrial plant species are present on the lands common to Alternatives A-E as well as each of the mitigation tracts (see descriptions in section 4.1 and Appendix D). In the majority of cases, these species are present in habitats and at densities that are typical throughout eastern Tennessee.

No uncommon plant communities or otherwise sensitive plant habitats were observed during field surveys of the proposed project lands.

### **3.2. Aquatic Ecology**

Aquatic habitat in the littoral (near shore) zone is greatly influenced by underwater topography and back-lying land use. Underwater topography in the reach fronting the Rarity Pointe development varies from moderately steep, with scattered small bluffs near the river channel, to typically shallower in coves, and areas further from the river channel, and the northern reach of shoreline in the vicinity of the proposed par-3 golf course. The deeper, western shoreline is well wooded along the marginal strip fronting the Rarity Pointe property. Woody vegetation along the shoreline on the TVA tract requested for development ranges from small hardwoods and pines (including large areas of dead pine trees), to mature hardwoods. In areas where the shoreline is presently undeveloped and mostly wooded, fallen trees and brush provide woody cover. Woody habitat is generally reduced on shoreline reaches typified by smaller trees (i.e., old fields). Rock is an important constituent of littoral aquatic habitat over much of the Jackson Bend shoreline, in either the form of bedrock outcrops or a mixture of rubble and cobble on steeper shorelines or gravel along shallower shorelines. Substrate and available aquatic habitat in coves and embayments also typically correspond to shoreline topography and vegetation.

As part of the data collection effort for the Shoreline Management Initiative (SMI) EIS, a survey was conducted on Tellico Reservoir by TVA to arrive at a shoreline aquatic habitat index (SAHI) score which would indicate the quality of aquatic habitat conditions adjacent to various land uses. Scoring parameters (metrics) included seven physical habitat parameters (i.e., riparian zone condition, amount of canopy cover, bank stability, substrate composition, amount of cover, habitat diversity, and degree of slope) important to reservoir resident sport fish populations which rely heavily on shoreline areas for reproductive

success, juvenile development, and/or feeding. Field methods and the SAHI rationale are described in Appendix G of the SMI EIS (TVA, 1998). The overall average SAHI score at Tellico was 22.2 (out of a possible 35), which indicates generally “fair” shoreline aquatic habitat within the reservoir. Average SAHI scores were higher adjacent to lands allocated for Natural/Wildlife Areas (SAHI 27=“good”), and Cultural/Public Use/Open Space Areas (SAHI 24=“fair”); SAHI scores adjacent to all other allocated uses averaged 14 or 15 (“poor”). In the SAHI study reported in the SMI EIS, the shoreline along the west side of tract 7 rated “good”, as did the entire shoreline of Parcel 8; the shoreline of Parcel 9 rated “good” along the cove where it joins Parcel 8, and “fair” from the mouth of that cove to the eastern end of the area of Parcel 9 proposed for sale (See Figure 3-1)

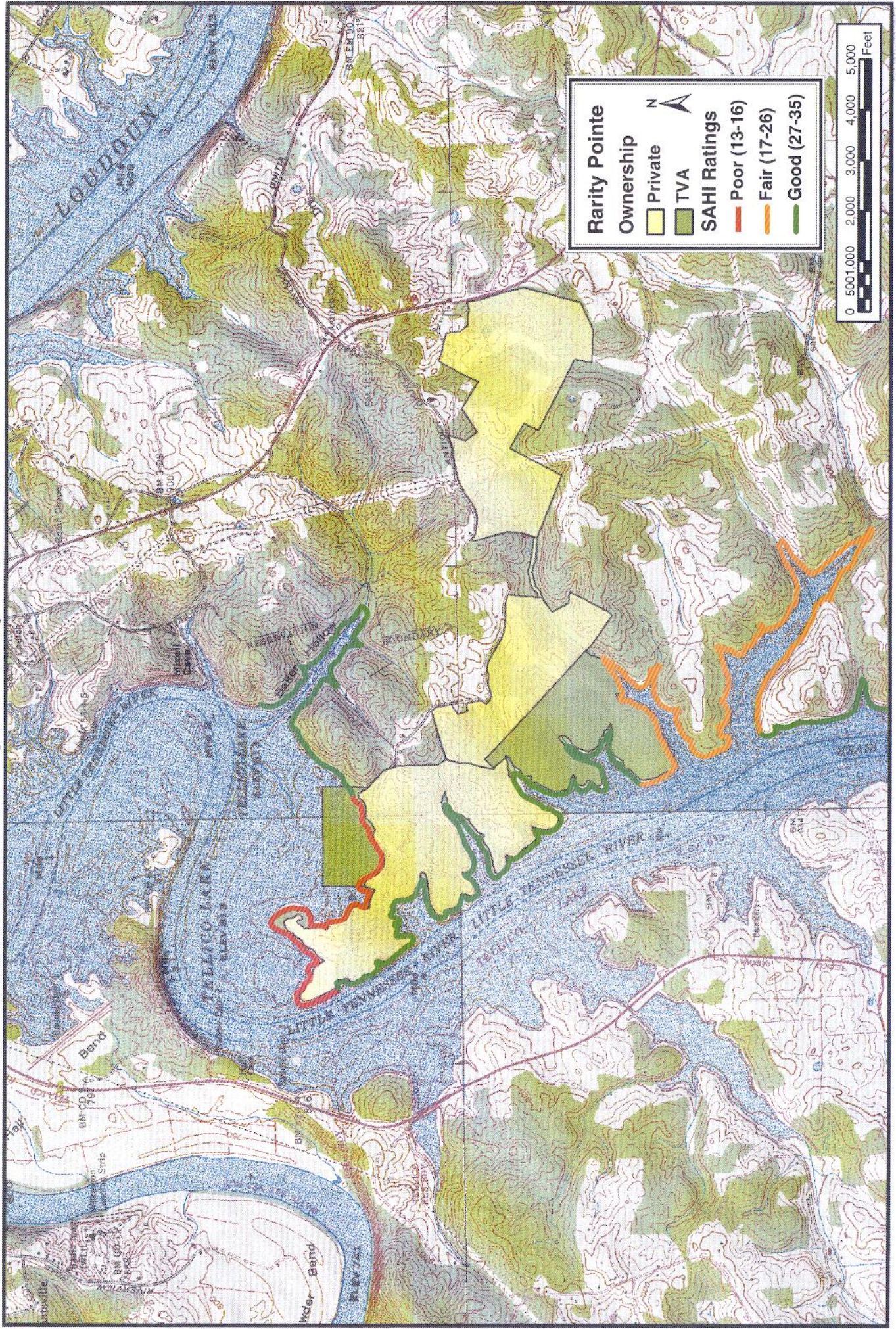
TVA began a program to systematically monitor the ecological conditions of its reservoirs in 1990. Vital signs monitoring activities focus on 1) physical/ chemical characteristics of waters; 2) physical/chemical characteristics of sediments; 3) benthic macroinvertebrate community sampling; and 4) fish assemblage sampling (Dycus and Baker, 2000). Areas sampled included the forebay (area of the reservoir nearest the dam) at Little Tennessee River Mile (LTRM) 1.0, and a mid-reservoir transition station at LTRM 15.0. The overall rating for Tellico Reservoir in 2001 was poor, largely because of poor ratings for dissolved oxygen (DO) at the forebay, high chlorophyll levels (an indicator of nutrient loading) at the forebay, and poor benthic communities at the forebay and transition stations. The only indicators to rate good were DO and sediment at the transition site. The fish assemblage rated fair at both sampling sites (Draft TVA Data).

Benthic macroinvertebrate (e.g. lake bottom-dwelling, readily visible aquatic worms, snails, crayfish, and mussels) samples were taken in two areas of Tellico Reservoir in 1994, 1995, 1997, 1999, and again in 2001, as part of TVA’s Reservoir Vital Signs monitoring program. Bottom-dwellers are included in aquatic monitoring programs because of their importance to the aquatic food chain, and because they have limited capability of movement, thereby preventing them from avoiding undesirable conditions. Sampling and data analysis were based on seven parameters (eight parameters prior to 1995) that indicate species diversity, abundance of selected species that are indicative of good (and poor) water quality, total abundance of all species except those indicative of poor water quality, and proportion of samples with no organisms present. Collection methods and rating criteria were different prior to 1994, so those results are not compared directly to samples taken using current methods. Definitive causes of such a poor benthic community are not known, but discharges from Chilhowee Dam are cold, nutrient poor, and have a low mineral content – all conditions that are not conducive to establishing a diverse, abundant aquatic community. Another possible contributor to the very low scores is that the scoring criteria used to evaluate the benthic community in Tellico are the same as for the mainstream Tennessee River reservoirs, which rarely experience low DO levels.

The Reservoir Vital Signs monitoring program also has included annual fish sampling at Tellico from 1990 through 1995, and in 1997, 1999, and 2001. The electrofishing and gill netting sampling stations correspond to those described for benthic sampling. Beginning in 1993, the transition zone sampling location was moved to its present location at LTRM 15.0, which is more characteristic of a transition environment rather than the riverine conditions present nearer Chilhowee Dam. Fish are included in aquatic monitoring programs because they are important to the aquatic food chain and because they have a long life cycle which allows them to reflect conditions over time. Fish are also important to the public for aesthetic, recreational, and commercial reasons. Monitoring results for each



Figure 3-1 Shoreline Aquatic Habitat Index Ratings for Rarity Pointe





sampling station are analyzed to arrive at Reservoir Fish Assemblage Index (RFAI) ratings which are based primarily on fish community structure and function. Also considered in the rating is the percentage of the sample represented by omnivores and insectivores, overall number of fish collected, and the occurrence of fish with anomalies such as diseases, lesions, parasites, deformities, etc. (TVA, 2000). Compared to other run-of-the-river reservoirs, the fish community at both of the Tellico sampling stations rated fair in the fall 2001 samples when 34 species were collected. More abundant species in the overall sample were gizzard shad, common carp, spotfin shiner, bluegill, and largemouth bass (Draft TVA Data).

Tellico Reservoir provides many opportunities for sport anglers. A Sport Fishing Index (SFI) has been developed to measure sport fishing quality for various species in Tennessee and Cumberland Valley Reservoirs (Hickman 1999). The SFI is based on the results of fish population sampling by TVA and state resource agencies and, when available, results of angler success as measured by state resource agencies (i.e., bass tournament results and creel surveys). In 2000, Tellico rated above average for spotted bass, walleye/sauger, striped bass, and channel catfish, but below average for largemouth and smallmouth bass, white bass, and bluegill. The Tennessee Department of Environment and Conservation (TDEC) advises that catfish from Tellico Reservoir not be eaten because of PCB contamination.

### 3.3. Threatened and Endangered Species

#### Plants

A review of the TVA Regional Natural Heritage Program database (Heritage database) indicates that there are no federal-listed and five Tennessee state-listed plant species known from within five miles of the proposed project lands (Table 3-2).

Table 3-2. Federal and State Listed Plant Species - Reported From Within Five Miles of the Proposed Project Lands, in Loudon County, Tennessee			
Common Name	Scientific Name	Federal Status	State Status <sup>a</sup>
American barberry	<i>Berberis Canadensis</i>	--	SPCO
Creekgrass	<i>Potamogeton epihydrus</i>	--	SPCO
Spreading false foxglove	<i>Aureolaria patula</i>	--	THR
Largeleaf pondweed	<i>Potamogeton amplifolius</i>	--	THR
Smoothleaf honeysuckle	<i>Lonicera dioica</i>	--	SPCO

<sup>a</sup> State status codes: THR: threatened; SPCO: special concern.



**Lands common to Alternatives A-E** - The comments below apply to the 539 acres currently owned by Rarity Communities as well as the TVA lands requested by the applicant.

Surveys for botanical resources were conducted on the 539 acres currently owned by Rarity Communities during the summer and early fall of 2002. During these inventories, areas that appeared to contain suitable habitat for rare plant species were identified and intensively surveyed. Surveys continued until the botanist determined that additional searches for rare plants would be unproductive. As stated in Section 3.1 (Affected Environment, Terrestrial Ecology), approximately 12 percent of these lands were cleared of all existing vegetation prior to the start of botanical surveys. Therefore, surveys for rare plant species were conducted on the remaining 88 percent of these lands.

One location possibly containing a state-listed plant species (spreading false foxglove, *Aureolaria patula*) was identified during the summer surveys. This is a parasitic, late summer-flowering member of the foxglove family. This species is a rather coarse, clump-forming perennial with large yellow flowers, opposite leaves, and long stems. It grows on steep, dry, partially shaded calcareous slopes, above large streams and rivers, and is usually found within a few meters of the water. Follow-up surveys conducted while these plants were in flower revealed that the plants belonged to a more common member of this genus (smooth false foxglove, *Aureolaria laevigata*). As a result, no state-listed plant species are known to occur on the proposed project lands.

No federal-listed plant species, or habitat for such species, were found during surveys of the proposed project lands.

The Wildcat Rock and Morganton Cemetery sites proposed for mitigation were surveyed for botanical resources in early January, 2003. No state or federal-listed plants were found on the Morganton Cemetery site. Part of the Wildcat Rock tract has been degraded by cattle access, and is unlikely to contain suitable habitat for rare plant species. In contrast, additional portions of the Wildcat Rock site could contain suitable habitat for several state-listed plant species (including spreading yellow false foxglove, *Aureolaria patula*; mountain honeysuckle, *Lonicera dioica*; American barberry, *Berberis canadensis*; and spreading rockcress, *Arabis patens*). However, the presence or absence of these or other rare plant species cannot be confirmed without additional surveys conducted during the growing season.

### **Terrestrial Animals**

TVA biologists reviewed the Heritage database and conducted field investigations to determine the potential occurrence of protected terrestrial animals and their habitat in the vicinity of the project lands. With the occasional exception of wintering bald eagles, no federal-listed terrestrial animals have been reported from areas within three miles of the project lands or from Loudon County, Tennessee.

The database indicated that the eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*), listed as In Need of Management in Tennessee, has been reported from several areas within three miles of the project lands. Eastern hellbenders inhabit large, clear, fast-flowing streams that contain large flat rocks and logs. This salamander was reported from several localities in the Little Tennessee River prior to impoundment. It is typically confined to major streams and does not thrive in reservoir conditions; therefore, it is not expected to occur in the vicinity of the project lands.

However, four protected terrestrial animal species, which have not been previously reported from the vicinity, may find suitable habitat on project lands. The bald eagle is federally-threatened and the Indiana bat is federally-endangered. Two of these species are listed as In Need of Management in Tennessee: southeastern shrew and sharp-shinned hawk. No additional protected terrestrial animals are known or are expected to occur on the mitigation lands involved in this proposal.

**Bald eagles** (*Haliaeetus leucocephalus*) typically nest in mature trees near or adjacent to large rivers or reservoirs where they forage. The forested setting of the project lands likely helps to maintain the integrity of bald eagle habitat on the reservoir. Although no nesting pairs of bald eagles have been reported from the immediate area, two eagle nests have been reported from upstream of the project lands in previous years. One nest is located near Citico Creek and the other nest has been reported near Ballplay Creek. Wintering eagles have been reported from a number of localities along the reservoir. The forested shoreline along the project lands provides potential habitat that is likely used for occasional roosting and foraging activities by bald eagles. The largest portion of forested shoreline on the project lands occurs on along private properties owned by Rarity Communities.

**Indiana bats** (*Myotis sodalis*) are a colonial animal that hibernate in caves or mines during winter months, and can be found in tree cavities or crevices and under loose tree bark during the summer, where they form small maternity colonies. In 1999, U.S. Forest Service personnel captured one female Indiana bat in an upland forest in the Cherokee National Forest near Vonore, less than two miles from Tellico Reservoir. Bachelor colonies of Indiana bats often form near areas where the bats hibernate. The closest known hibernaculum to the project lands is located inside the Great Smoky Mountains National Park, approximately 30 miles away.

Indiana bats can live in highly altered landscapes. They prefer large trees in the open or at forest edges, open canopies, fragmented forested landscapes and forests with an open understory (USFWS, 1999). Indiana bats forage for insects primarily in riparian and upland forests. Although no Indiana bats are known from the site, upland forests, old fields and pastures with scattered trees and ponds on Rarity Communities' properties could provide potential roosting and foraging habitat for this mammal.

**Southeastern shrews** (*Sorex longirostris*) occur in a variety of habitats, but are typically associated with moist woodlands or wetlands where rotting logs and leaf litter occur. Riparian woodlands that occur along wet weather conveyances in the project lands may provide suitable habitat for this mammal. Primarily, these habitats are located along drainages that immediately feed into the reservoir embayments of the project lands. Most of the TVA property is upland; therefore, habitat for this species is very limited on Parcels 8 and 9.

**Sharp-shinned hawks** (*Accipiter striatus*) often prefer to nest in coniferous woodlands; however, they have been reported from pine-oak woodlands. Mixed deciduous forest and edge habitats on Rarity Communities lands provide suitable habitat for this species.

### **Aquatic Animals**

This potentially affected land is located adjacent to Tellico Reservoir (Little Tennessee River) in Loudoun County, Tennessee. The Heritage database indicates that the Little Tennessee River historically supported a diverse group of fish, mussels, and other aquatic life, including several State- and Federal-listed species (Table 3-2). However, all of the

sensitive species listed in Table 3-3 are dependent upon relatively free-flowing, riverine habitats. Due to the impoundment of Tellico Reservoir, no suitable habitat for these species currently exists in this portion of the Little Tennessee River. None of these species are likely to occur within the impounded area of Tellico Reservoir.

One additional State-listed species; Tennessee dace (*Phoxinus tennesseensis*) deemed In Need of Management by Tennessee Wildlife Resources Agency (TWRA), is known to occur in several tributary streams that flow into Tellico Reservoir. Tennessee dace are restricted to small stream habitats and do not occur in the main reservoir body. No perennial streams are present on the tracts of land in question.

<b>Table 3-3. Federal and State Listed Aquatic Animals - Reported From the Little Tennessee River, Loudon and Monroe Counties, Tennessee</b>			
<b>Common Name</b>	<b>Scientific Name</b>	<b>State Status</b>	<b>Federal Status</b>
<b>Snails</b>			
Anthony riversnail	Athearnia anthonyi	Endangered	Endangered
<b>Mussels</b>			
Tan riffleshell	Epioblasma florentina walkeri	Endangered	Endangered
Cumberland monkeyface	Quadrula intermedia	Endangered	Endangered
Appalachian monkeyface	Quadrula sparsa	Endangered	Endangered
<b>Fish</b>			
Snail darter	Percina tanasi	Threatened	Threatened
Blue sucker	Cycleptus elongatus	Threatened	-
Blotchside logperch	Percina burtoni	In Need of Management	-

*Federal Status:*

*Endangered = Species is threatened by extinction throughout all, or a significant portion, of its range.*

*Threatened = Species which is likely to become an endangered species in the foreseeable future throughout all, or parts, of its range.*

*State Status:*

*Endangered = Species is threatened by extinction throughout all, or a significant portion, of its range in Tennessee.*

*Threatened = Any species or subspecies of wildlife that is likely to become an endangered species within the foreseeable future in Tennessee.*

*In Need of Management = Any species or subspecies of non-game wildlife which should be investigated further to determine management measures necessary for their continued ability to sustain themselves successfully (analogous to Special Concern).*

### 3.4. Water Quality

Tellico Dam is a multipurpose tributary project located on the Little Tennessee River, near its confluence with the Tennessee River, immediately downstream of Fort Loudoun Dam. Annual drawdown averages about 6 feet. At normal summer pool (813-feet MSL), the surface area of the reservoir is 16,500 acres, the shoreline is about 310 miles in length, and

water is impounded to about mile 31 of the Little Tennessee River. The summer volume is 414,600 acre-feet and the average annual discharge is approximately 5,700 cubic feet per second.

Tellico Reservoir has characteristics that are between those of mainstream Tennessee River reservoirs and tributary reservoirs. The average retention time for Tellico is about 37 days, whereas mainstream reservoirs average less than 20 days and most tributary reservoirs average well over 100 days. Tellico resembles mainstream reservoirs in depth and average annual drawdown, but Tellico's cold water inflows and greater retention time (compared to mainstream reservoirs) encourages thermal stratification, which occurs throughout much of the reservoir during the summer months.

Most of the discharge from Tellico Reservoir flows through the navigation canal into Fort Loudon Reservoir. Water characteristics in these two reservoirs differ considerably. The exchange of water through the canal significantly affects water quality within Tellico Reservoir. The canal is 20-25 feet deep, while the depth of Tellico Reservoir at the forebay is about 80 feet. Therefore, only the warmer surface layers are discharged and water below about 25 feet is trapped, in the forebay, by thermal stratification and becomes anoxic during much of the summer.

Upstream of the forebay, where stratification is not as strong, dissolved oxygen concentration (DO) does not get as low. In some years, a small area of deeper water has DO levels below 2 mg/L. Typically, the lower DO levels occurs during July or early August because these months are preceded by a period of reduced flows as TVA fills tributary reservoirs.

The ecological health of Tellico reservoir was rated poor by TVA in 2001. The low flows resulting from the extended drought contributed to lower than usual DO concentrations and higher chlorophyll concentrations (a measure of the amount of algae). In addition, bottom-dwelling organisms rated poor and the fish community rated fair. The most notable trend for Tellico Reservoir is the increase in chlorophyll levels, which suggest increased nutrient loading to the reservoir. However, the data covers only a 10-year period in which a wide range of meteorological and hydrological conditions have occurred.

The state of Tennessee has designated Tellico Reservoir as not supporting its designated uses, because of sediments contaminated by polychlorinated biphenyls (PCB) which is a carcinogen. The state advises against eating catfish from Tellico because of PCB contamination. There are no other fish consumption advisories as of 2001. There were no swimming advisories for bacterial contamination on Tellico Reservoir as of 2001.

Much of the shoreline of Tellico Reservoir is surrounded by residential and industrial areas, and the immediate watershed has significant amounts of agricultural land and dispersed residential area, resulting in relatively high pollutant loadings. A rough calculation based on general land use categories indicates that approximately 130 tons/year of phosphorous (usually the nutrient that limits growth of algae; estimate based on unpublished TVA land use data and Reckhow, et al., 1980) is generated in the Tennessee portion of the Little River watershed.

Most of the site of the planned development is wooded. TVA shoreline surveys, performed in 1994, indicate that the shoreline condition at the site is good, except for the north-facing section of shoreline at the base of the peninsula, which is rated fair because of a lack of a woody vegetation buffer.

### 3.5. Wetlands and Floodplains

**Wetlands** - The common wetland types associated with TVA tributary reservoirs are aquatic beds, flats, emergent, scrub-shrub, and forested wetlands (TVA, 1998). Aquatic beds and flats occur in the area between winter pool and normal summer pool elevation. Emergent wetlands typically occur in a narrow elevation zone centered on the summer pool elevation. Scrub-shrub wetlands also occur in this shoreline zone, as well as in relatively large areas in the upper ends of some large embayments. Forested wetlands associated with tributary reservoirs typically occur above summer pool in the riparian zone of the reservoir and tributary streams.

Tellico Reservoir and the land within 0.25 miles of the shoreline contain approximately 900 acres of wetlands, found in over 700 locations scattered along the length of the system (TVA, 2000). Most wetlands are located below the 820-foot maximum shoreline contour, with many found immediately adjacent to the summer pool shoreline. Aquatic beds are also found in some years, primarily in the Tellico River arm of the reservoir and the upper end of the reservoir near the mouth of Citico Creek. A survey of residential access shoreline on Tellico Lake conducted by TVA staff in the mid-1990s determined that one fourth of the residential access shoreline supports wetland vegetation (TVA, 1998).

The creation of TVA impoundments on the Tennessee River and its tributaries inundated wetland, riverine, and upslope habitats and created new wetland areas and many miles of terrestrial shoreline riparian habitat (Amundsen, 1994). There is very little quantified information describing trends in these reservoir-associated wetlands. Forested wetlands have experienced the highest acreage loss of the wetland types in the southeastern U.S., primarily due to agriculture, timber harvesting, and urban and rural development (Hefner et al., 1994). As a result of federal land ownership and management, the emergent, scrub-shrub, and forested wetlands associated with TVA reservoirs may not have experienced as much of a decline as these wetland types in the rest of the southeastern U.S. The most significant threat to reservoir wetlands may be shoreline residential development, with its consequent vegetation clearing, dock construction, shoreline alterations, and soil erosion. The SMI study for six reservoirs (Chatuge, Chickamauga, lower third of Kentucky, Tellico, Watts Bar, and Wheeler) indicated that the proportion of total wetlands acreage was greater along undeveloped shorelines than along developed shorelines (TVA, 1998).

Ten wetlands were identified in the Rarity Pointe assessment area. The total acreage of wetlands in the assessment area is approximately 1.25 acre. Table 3-4 presents details of the wetlands identified in the Rarity Pointe assessment area.

Seven of the wetlands in the assessment area are scrub-shrub wetlands located on the reservoir shoreline (W4, W5, W6, W8) and at the heads of small coves where intermittent streams enter the reservoir (W1, W2, W3). Another scrub-shrub wetland (W7) is located on the southern end of a small island just off the tip of Jackson Bend. Two emergent wetlands (W9, W10), each less than one tenth acre in size, are located on the fringe of an abandoned pond and a livestock pond, respectively. Wetlands W1 through W8 are on the TVA shoreline below the Maximum Shoreline Contour (MSC) at 820 feet elevation. Wetlands W1, W2, and W8 are on TVA Parcels 8 and 9. While wetland W3 is on Parcel 9, it is at the head of a cove just outside of the part of Parcel 9 proposed for sale. Wetlands W9 and W10 are on property belonging to Rarity Communities.

**Table 3-4. Wetlands in and Adjacent to Rarity Pointe Assessment Area**

<b>Wetland ID</b>	<b>Classification (Cowardin, et al. 1979)</b>	<b>Approximate Area (acres)</b>	<b>Location</b>	<b>Land Ownership</b>
W1	PSS1E	<0.1	At mouth of an intermittent stream at the head of a cove	TVA (below MSC 820)
W2	PSS1E	<0.1	At mouth of an intermittent stream at the head of a cove	TVA (below MSC 820)
W3	PSS1E	<0.1	At mouth of an intermittent stream at the head of a cove on the southern edge of Request Area.	TVA (below MSC 820)
W4	PSS1E	~0.5	Shoreline on northeast side of Jackson Bend	TVA (below MSC 820)
W5	PSS1E		Shoreline on northeast side of Jackson Bend; Partially in Request Area	TVA (below MSC 820);
W6	PSS1C	~0.04	Shoreline on northeast side of Jackson Bend	TVA (below MSC 820)
W7		<0.3	South end of small island at tip of Jackson Bend. The island is not in Request Area.	TVA
W8	PSS1E	<0.1	Small inlet within a cove on the southern shore of 118-acre Request Area.	TVA (below MSC 820)
W9	PEM1E	<0.05	Abandoned pond at head of intermittent stream.	Rarity Communities Properties
W10	POWH/PEM1C	<0.1	Farm pond in old field at head of a wet-weather conveyance. Approximately 90% of acreage is pond open water area. 10% of acreage is vegetated wetland on pond fringe.	Rarity Communities Properties

MSC = Maximum shoreline contour. TVA owns the land up to MSC 820-feet.

All of the wetlands on TVA property (W1 through W8), would be protected from most direct impacts through compliance with federal mandates and legal requirements for protection of wetlands. Regulatory protection is extended to wetlands under Section 404 of the Clean Water Act, and TVA is subject to EO 11990, Protection of Wetlands, the goal of which is to “minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands...” Consistent with this goal, TVA would, to the extent practicable, take measures to either avoid adverse impacts to wetlands or mitigate unavoidable effects to wetlands in decisions relating to the proposed actions.

The USACE has determined that the shoreline wetlands (W1 through W8) are jurisdictional and, thus, subject to permitting requirements under the Clean Water Act Section 404 (Cathy Elliott, USACE, Lenoir City, personal communication, January 16, 2003).

Although the wetlands on the Rarity Pointe site are few in number and small in size, they provide a number of important functions. The primary functions include shoreline stabilization, provision of wildlife habitat; provision of plant species and landscape diversity; retention of sediments; removal or transformation of contaminants; and nutrient cycling. Past residential development of Tellico Reservoir shoreline has probably cumulatively affected the wetland resources in the area. This increases the importance of the remaining wetlands in providing these functions.

**Floodplains** - The proposed development is located on the left bank of Tellico Reservoir between Little Tennessee River miles 2.2 and 5.2 in Loudon County, Tennessee. The 100-year floodplain for this reach of the Little Tennessee River would be the area below elevation 816.2 feet MSL. The TVA Flood Risk Profile (FRP) elevation for the Little Tennessee River between miles 2.2 and 5.2 would be elevation 817.0 feet MSL. The FRP is used to control flood damageable development for TVA projects, and residential and commercial development on TVA lands. At this location, the FRP elevation is equal to the 500-year flood elevation. The 500-year flood elevation is also used to establish the “critical action floodplain”. A “critical action” is defined in the Water Resource Council Floodplain Management Guidelines as any activity for which even a slight chance of flooding would be too great.

### 3.6. Recreation

**Recreation Allocations and Use** – One purpose of the Tellico project was to provide significant opportunities for recreation, and substantial amounts of public use opportunities where virtually none was available (TVA, 1972). The most recent gathering of recreational use information on Tellico occurred through the public involvement process for the 2000 Land Plan. Over eighty percent of the respondents to a questionnaire identified water-related activities as being preferred. Fifty-one percent indicated if appropriate facilities were provided they would participate in bike riding, camping at developed sites, hiking, horseback riding, special events, or swimming in designated areas. The 2000 Land Plan public involvement process focused on three land use alternatives: 1) the proposed Tellico Landing, Inc. (TLI) development, 2) a river corridor designation on the Tellico River, and 3) a greenway on the lower right bank between Lotterdale Cove and Lower Jackson Bend. The TLI proposal was dropped from consideration and designations in the 2000 Land Plan for the river corridor and greenway were approved.

TVA and TRDA have provided public access to the reservoir with 14 boat ramp areas, and there are four commercially operated campgrounds. TVA recently developed a new day use area on the Tellico Dam Reservation with a picnic shelter, beach area, and trail. Public golf is provided on the reservoir at four privately owned 18-hole golf courses, three of which are located below U. S. Highway 411 Bridge. The Town of Vonore operates the only local park on Tellico Reservoir. The TDEC manages the 395-acre Fort Loudoun State Historic Park, 38-acre Tellico Blockhouse State Historic area, and 1-acre Tanasi Memorial recreation area. No overnight lodging exists at any reservoir recreation area. Although TRDA serves as provider of park and recreation areas in Loudon County and manages the Lotterdale Cove recreation area, there is no parks department in the county and TVA's land serves as the major provider of public open space.

The 2000 Land Plan allocated 37 acres in Vonore, Tennessee at Tellico River mile 0.5 for commercial recreation purposes, approximately 19.5 river miles upstream of Rarity Pointe. Interest has been expressed over the last several years by the Eastern Band of the Cherokee Indians to develop this property for commercial recreation purposes. An additional area at Little Tennessee River mile 12.5 in Bat Creek allocated for commercial recreation purposes was sold to TRDA and remains undeveloped. The only other commercial recreation development existing on the reservoir is the Tellico Harbor Marina at Little Tennessee River mile 20.0. The reservoir receives substantial boating use as a result of the existing public access areas, private residential docks, community docks, and Tellico Village Yacht club.

As part of the 2000 Land Plan, a greenway was proposed which encompassed much of the eastern shore land and included the subject approximately 118 acres. The public's review of the 2000 Land Plan supported this allocation and resulted in TVA designating nine tracts of land encompassing a total of 1,071 acres on the eastern shore between Little Tennessee River miles 4-10 as a greenway in the plan. Parcel 8 (47 acres) was allocated for future day use recreation activities and a terminus for the greenway trail development. The adjoining portion of Parcel 9 was allocated for natural resource conservation and intended to be used as a component of the greenway and trail system. The greenway allocation of these nine tracts was intended to create an interconnecting trail system with day use areas and access nodes at appropriate intervals, and maintain substantial open space for public use.

As part of Contract TV-60000A, approximately 216 acres were allocated for commercial recreation use and sold to TRDA in December 1982, in anticipation of being developed as a commercial recreation resort. This property, now owned by Rarity Communities, is a component of the Rarity Pointe master plan development and adjacent to the approximately 118 acres being sought for residential/golf course development. It is restricted by deed to be used only for commercial recreation purposes which includes uses such as a lodge, spa, golf course, vacation homes, and restaurant. Facilities constructed on this piece of property cannot be used as primary residences. Previous attempts have been made to develop the 216 acres for commercial recreation purposes; however, none were successful. International Harbor Marina was located on the tract in 1987 and remained in existence with harbor limits and 68 slips, until land rights were terminated in 2001.

The par-3 golf course proposed on a 5-acre portion of TVA land identified as Parcel 7 in the 2000 Land Plan was allocated for commercial recreation use. It fronts the 216 acres now owned by Rarity Communities, Inc. The commercial recreation rights conveyed with the Rarity Communities' property allow development and management of appropriate recreation amenities within the context of the commercial recreation use of the property, and include the right to request TVA approval to construct, operate, and maintain water use facilities between the 820-foot contour and adjacent waters of Tellico Reservoir. The proposed par-3 golf course is consistent with the designated land use and existing rights.

The 118-acre parcel is part of a contiguous block of eastern shore land available for public use extending 13.5 miles upstream of the Tellico Canal, and encompasses approximately 2.5 miles of the potential greenway trail. Typical activities include camping, hiking, bird watching, bank fishing, and wildlife viewing. The coves fronting the eastern shore property provide protected, undeveloped areas where boaters can seek refuge. The parcel has the potential to accommodate a variety of trails serving diverse segments of the population and provide opportunities for refreshment of one's mental and physical state and solace in a natural setting. It is close to an urban area, and is accessible by boat and foot.

WATeR has submitted a master plan to TVA for development of the greenway trail system focusing on the right bank of Tellico Reservoir, potentially connecting the Tellico Dam reservation via public property to Lotterdale Cove Campground, and possibly further upstream. WATeR has requested that TVA partner with the watershed organization to initiate development of the greenway. The partnership concept parallels a similar partnership between TVA and the Boy Scouts of America (BSA) which resulted in the initiation of development in 2002 of the four-mile-long Hall Bend Trail on the Tellico Dam Reservation. The WATeR proposal, as does the BSA proposal, involves commitments of financial and in-kind resources from TVA, the organizations, and volunteers. The WATeR



trail system proposal is envisioned to accommodate a variety of interests and physical capabilities to serve all segments of the population and could be accomplished over a period of time as resources and user demand warrant.

There appears to be increased interest from the private sector in acquiring residential access rights on Tellico Reservoir, and on nearby Fort Loudoun Reservoir from government agencies owning former TVA land conveyed for public recreation purposes and the private sector. TVA considers development requests on a case by case basis, considering potential environmental impacts, including cumulative impacts.

**Outdoor Recreation Trends** - The National Golf Foundation (NGF) reports that golf participation increased from 19.9 to 26.4 million golfers from 1986-1998, and the number of rounds played increased from 401.9 to 528.5 million. However, most of this growth occurred between 1986 and 1990 when growth in golfers outpaced the growth in supply, with participation increasing 39 percent from 19.9 to 27.8 million. This trend reversed between 1991 and 1998, as growth in supply outpaced growth in golfers, and participation only increased 6.6 percent from 24.8 to 26.4 million participants. NGF also reported that over-saturation may be possible in certain local market areas. When this occurs, the successful golf courses (such as destination resorts) in a saturated market will likely be the ones that provide appropriate market niches for specific segments of the market.

The most recent Tennessee State Comprehensive Outdoor Recreation Plan (SCORP) identified statewide recreation priorities through 1999. The East Tennessee Planning Region, which includes Loudon County, placed a high priority on greenways through public input to the SCORP process. In 2001, the Tennessee Greenways and Trails Plan captured a vision and importance of greenways and trails for the future of Tennesseans. The plan promotes policies for creating an interconnected, accessible network of greenways and trails across Tennessee to create recreation opportunities, connect communities, protect wildlife and migration patterns, buffer waterways, and enhance the scenic and aesthetic quality of our state.

**Hunting and Wildlife Observation Trends** - Since TVA acquired project lands beginning in the 1960's, and in particular following the inundation of the reservoir in 1979, much of the retained property on the eastern shoreline downstream of U. S. Highway 411 has been used for a variety of outdoor pursuits including hunting and wildlife observation. These uses played a part in the resultant designation of parcels XTELR-23PT, 11PT and 9PT as Zone 4, Natural Resources Conservation in the 2000 Land Plan (TVA, 2000). In recent years, Parcels 8, 9, and 10PT have supported increased usage by hunters, especially those in pursuit of white-tailed deer and eastern wild turkey. The increased use of this property for hunting reflects the growing popularity of deer and turkey hunting in conjunction with a shrinking land base to support such recreational pursuits on a local and statewide basis.

Public Hunting Lands managed by the Tennessee Wildlife Resources Agency (TWRA) (most under agreements with private timber companies) have decreased from 800,000 acres to 375,000 acres over the last 2-3 years (Mark Gudlin, TWRA, personal communication, 2002). In addition, the remaining privately owned lands and those managed by timber companies are being leased by hunting clubs at increasing rates that range from 4 to 7 dollars per acre (Dr. Mark Fly, University of Tennessee, Department of Forestry, Wildlife, and Fisheries, personal communication, 2002) These situations, coupled with the fact that active farmland is being converted to suburban/urban uses at a current rate

of 91,000 acres per year in Tennessee (Mark Gudlin, TWRA, personal communication, 2002), have increased the importance of public lands in meeting the demand for recreational hunting opportunities.

The recently released U.S. Fish and Wildlife Service (USFWS) 2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (USFS, 2002a) reports that while overall hunting participation dropped 7 percent from 1996 to 2001, the numbers of big game (deer) hunters remained steady with a significant increase in the total amount spent by hunters. In Tennessee alone during 2001, there were 359,000 hunting participants who spent over 576 million dollars in pursuit of their sport (USFWS, 2002b).

In recent years, there has also been an enhanced interest in wildlife watching on Tellico Reservoir properties which tracks a national trend. In 2001, more than 66 million people in the United States 16 years old and older, fed, photographed, and observed wildlife and spent 40 billion dollars on their activities. Of this number, 11 million visited public parks or natural areas to enjoy wildlife (USFWS 2002b). In Tennessee during 2001, there were 1.6 million wildlife-watching participants who spent over 807 million dollars in pursuit of this activity. A 1994-95 National Survey on Recreation and the Environment conducted by the University of Georgia found that 27 million Americans considered themselves active birders. That is a 155 percent increase since 1982-83, making birding one of the fastest-growing recreational activities in the country, well ahead of golf, downhill skiing, and hiking (Weidensaul, 1999).

Local interest in wildlife watching, in particular bird watching, is further substantiated by the growing number of Tellico Village residents participating in an annual bird watching field trip at the Tellico Dam Reservation sponsored by TVA's Little Tennessee Watershed Team and the Knoxville Chapter of the Tennessee Ornithological Society. Of the 40 plus participants on the March 2002 bird walk, approximately 25 people were Tellico Village and Lenoir City residents. These public use/stakeholder needs were identified during the development of the Tellico Reservoir Land Management Plan and were important factors in the designation of the bulk of the retained property on the eastern downstream shoreline to Natural Resource Conservation and Public Recreation uses.

**Boating** - The proposed marina at Rarity Pointe is located approximately two miles from the Tellico Canal which connects Tellico and Fort Loudoun Reservoirs. The canal is commonly recognized as one of the more congested boating areas on the two reservoirs. The TWRA has placed four buoys at the canal to inform the public that the area is congested and that slow boating speeds should be observed. During peak boating periods, commonly recognized as Holiday or weekend days from noon to 8:00 PM, TWRA, as well as other law enforcement agencies, increase boating patrols to help maintain safe boating conditions for the general public. Observed recreational vessel counts (boats and jet skis) at the canal on July 4, 2002, averaged 177 per hour from noon to 3:30 PM, and vessel speed was enforced by TWRA and Loudon County Sheriff patrols.

The National Marine Manufacturers Association estimates that recreational boats owned nationwide has increased from 11.8 million in 1980 to 16.9 million in 2000. According to TWRA Boating Accident Reports for 1999, 2000, and 2001, between 1962 and 1999 registered boats in Tennessee increased from 48,341 to 314,583. The annual fatality rate per 100,000 registered boats remained fairly stable from the late 1960's through the 1970's averaging around 21.8 per year. In 1981, this fatality rate began to decrease and through

2001 averaged 8.9 per year. The accident rate per 100,000 has stayed fairly constant in the range 33 to 55 from the early 1970's through 1999. The accident rate for 1999, 2000, and 2001 has been higher than the previous years: 59, 82, and 68, respectively. The injury rate per 100,000 has risen from 8.5 in 1964 to 52.3 in 2000 (and 43.2 in 2001). Total boating accidents in the state have steadily increased since 1993. Table 3-5 presents TWRA's data for annual boating accidents.

<b>Table 3-5. Boating Accidents in Tennessee</b>									
<b>Years</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
<b>Number</b>	82	109	151	154	119	168	186	221	174

Across Tennessee, Fort Loudoun had the highest number of reservoir accidents (15) in 1999, and Tellico Reservoir ranked in the bottom twenty-five percent with 3. In 2000 and 2001, the reservoirs with the most accidents in the state ranged from 10-19. Fort Loudoun had 9 accidents and Tellico had 10 accidents during this two-year period.

### **3.7. Cultural Resources**

For at least 12,000 years, the Tennessee River and the Little Tennessee River Valley have been an area for human occupation which became more intense through succeeding cultural periods. In the upper east Tennessee area, archaeological investigations have demonstrated that Tennessee and the eastern Ridge and Valley Region were the setting for each one of these cultural/temporal traditions, from the Paleo-Indian (12,000-8000 B.C.), the Archaic (8000-1200 B.C.), the Woodland (1200 B.C.-1000 A.D.), the Mississippian (1000-1500 A.D.), to the Protohistoric-Contact Period (1500-1750 A.D.). Prehistoric archaeological stages are based on changing settlement and land use patterns and artifact styles. Each of these broad periods is generally broken into sub-periods (generally Early, Middle, and Late), which are also based on artifact styles and settlement patterns. Smaller time periods, known as "Phases" are represented by distinctive sets of artifact remains. In addition, historic era cultural traditions have included the Cherokee (1700 A.D.-present), European- and African-American (1750 A.D.-present) occupations.

The Paleo-Indian Period (12,000-8000 B.C.) represents the documented first human occupation of the area. The settlement and land use pattern of this period were dominated by highly mobile bands of hunters and gatherers. The subsequent Archaic Period (8000-1200 B.C.) represents a continuation of the hunter-gatherer lifestyle. Through time, there is increasing social complexity and the appearance of horticulture late in the period. The settlement pattern during this period is characterized by spring and summer campsites. Increased social complexity, reliance on horticulture and agriculture, and the introduction of ceramic technology characterize the Woodland Period (1200 B.C.-1000 A.D.). The increased importance of horticulture is associated with a less mobile lifestyle as suggested by semipermanent structures. The Mississippian Period (1000-1500 A.D.), the last prehistoric period in east Tennessee, is associated with the pinnacle of social complexity in the southeastern United States. This period is characterized by permanent settlements, maize agriculture and chiefdom level societies.

The Archaic through Mississippian Periods have been intensively investigated along the Little Tennessee River Valley (Chapman 1973, 1975, 1977, 1978, 1979a, 1979b, 1981; Cridlebaugh, 1981; Kimball, 1985; Polhemus, 1987; Davis, 1990; Guthe and Bistline, 1981).

In addition, it is widely known historically that many settlements along the Little Tennessee River were Overhill Cherokee villages (Timberlake, 1927; Bartram, 1995). Many archaeological investigations in the 1960s and 1970s focused on the Cherokee occupation of the area (Schroedl, 1985; Baden, 1983; Russ and Chapman, 1984). Also, studies of the trade relation between European-American and Cherokee have been conducted in the Tellico Reservoir (Polhemus, 1979). All of these investigations have provided additional details about the changing environments, shifting subsistence strategies and settlement patterns, and variations in the cultural material associated with each major stage.

TVA will ensure that identification, evaluation, and treatment of historic properties are carried out prior to the commencement of any ground-disturbing activities. TVA is mandated under the National Historic Preservation Act (NHPA) of 1966 and the Archaeological Resources Protection Act (ARPA) of 1979 to protect significant archaeological resources and historic properties located on TVA lands or affected by TVA undertakings. In 2000, the Tellico Land Reservoir Land Management Plan Memorandum of Agreement (MOA) was executed to address effects on historic properties by TVA's undertakings on Tellico Reservoir. This agreement allows for a phased identification, evaluation, and treatment of historic properties.

TVA conducts inventories of its lands to identify historic properties. For the applicant's proposal (Alternative B), the Area of Potential Effect (APE) is the entire residential/golf complex proposed for the project. This includes the TVA land to be transferred, the private property incorporated, and the marina area. The Tennessee State Historic Preservation Officer (SHPO) concurred with this APE. The other alternatives have differing APEs based on the activities involved. The APE as defined in 36 CFR Part 800.16(d) is "the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist."

Existing data along with the recent survey results were reviewed, and over 750 archaeological resources have been identified within and along the Tellico Reservoir. An archaeological resource is defined as an area with any grouping of five or more nonmodern historic or prehistoric artifacts. A large number of these resources have been inundated due to reservoir impoundment.

The following surveys were conducted by means of a pedestrian survey and systematic shovel testing from existing humus to culturally sterile subsoil. The soil matrix was screened through a one-fourth inch wire mesh screen. Crew members walked the areas in 30 meter transects and excavated shovel tests pits on 30 meter centers along each transect in zones of low slope and/or high site probability. Previously, the Lower Jackson Bend land tract (245 acres) was surveyed by TRC Garrow in 2000 for archaeological resources. No archaeological resources eligible or potentially eligible for listing to the NRHP were identified on the Lower Jackson Bend tract. However, a Mid-19<sup>th</sup> century cemetery, Wyly Cemetery, was identified within the tract. Only two of the fifty marked graves have discernible headstones- James and Mary Wyly. James Wyly was a Revolutionary War veteran who served from 1779-1781. The Wyly Cemetery was recommended for avoidance. The SHPO concurred with these findings (see SHPO letter in Appendix E).

### **3.8. Visual Resources**

Tellico Reservoir, newest of the Tennessee Valley reservoirs, offers a variety of visual characteristics ranging from gently rolling valleys, to the mountains, and the clear water



mountain stream of the Little Tennessee below Chilhowee Dam to the reservoir above Tellico Dam. Prior to impoundment, the area terrain was a mix of open rolling farmland combined with an expanse of river-bottom cropland, which was intermingled with wooded foothills, ridges, and fence rows. After the reservoir's impoundment in 1979, the landscape was similar, although the river bottom cropland has been replaced with a winding expanse of water and residential development along the shoreline.

**Background** - The physical, biological, and cultural features seen in the landscape give Tellico Reservoir its distinct visual character and sense of place. The project area is evaluated in terms of its landscape characteristics and visual qualities in order to describe the existing environment and determine the current scenic value class. The same process used to determine the extent and magnitude of potential changes. The criteria for visual resource evaluation and classification are shown in Table 3-6.

The 2000 Land Plan EIS (TVA, 2000) indicated that the reservoir areas of greatest scenic value are those not yet developed, those that are in predominant views of homeowners, and the undisturbed coves. It also noted that a greenway along the east side would provide two-fold preservation of visual and aesthetic qualities, serving as a visual buffer from the reservoir and a viewing corridor from which to see the reservoir landscape. Preservation of the natural landscape and scenic character was a reoccurring theme during the public review process for that EIS. It was often included in the comments regarding land use, recreation, proposed development, natural resources, and aesthetics. In recent public comments regarding the Rarity Pointe project, preservation of the visual qualities and undisturbed natural character were among the most frequently expressed concerns.

**Table 3-6 Criteria for Visual Resource Assessment and Classification**

**Scenic Attractiveness - 3 levels**

A measure of scenic importance based on intrinsic beauty of a physical landscape, as seen in the visual attributes of landforms, rock outcrops, water bodies, islands, wetlands, vegetation patterns, and other natural features. The valued attributes include variety, uniqueness, scale, contrast, color, harmony, pattern, balance, mystery, and vividness.

Category 1: Distinctive - Areas having one or more distinctive features along with strong, positive attributes; OR, areas in a strategic location having more common features and strong attributes.

Category 2: Common - Areas having ordinary features of the typical landscape with generally positive attributes.

Category 3: Minimal - Areas having insignificant natural features and little visual change, with weak, missing, or discordant attributes.

**Scenic Integrity - 4 levels**

A measure of scenic importance based on the degree of visual unity and wholeness of the natural landscape character, along with the absence of disruptive or discordant elements.

High: Area appears to be natural and unaltered, with any deviations not readily evident.

Moderate: Areas that appear slightly altered, with the noticeable deviations visually subordinate to the natural landscape.

Low: Areas that appear modestly altered, with deviations that begin to dominate but remain somewhat compatible with the natural landscape.

Very Low: Areas that appear heavily altered, with strongly dominating deviations. These alterations may be visually disruptive and provide negative contrast in the landscape.

### **Scenic Visibility - 2 parts, 3 levels each**

A measure of scenic importance based on human concern for scenic qualities of the land being viewed. It is expressed in terms of sensitivity and the level of detail seen.

Sensitivity includes the view location, frequency, and duration of view. Public input is used to help derive and confirm the level of sensitivity. View distance determines the degree of visible detail and scale of change.

### **Table 3-6 Criteria for Visual Resource Assessment and Classification (cont.)**

#### **Sensitivity**

High (Level 1): Areas seen by lake users, lake shore and lake view residents where the number of viewers, frequency, duration, and concern is normally quite high.

Moderate (Level 2): Areas seen from principle roads and use areas where concern is normally high while the number of viewers, frequency, and duration are moderate.

Low (Level 3): Areas seen from secondary roads and use areas where concern may be high in selected locations but the number of viewers and frequency is low.

#### **View Distance**

Foreground: 0 to ½ mile; provides the greatest visual detail with features being most distinct within 0 - 300 feet.

Middleground: ½ mile to 4 miles; provides larger patterns and form with less detail. Visible alteration can be more disruptive when seen in this broader context.

Background: 4 miles to horizon; provides outline pattern and form with little or no detail.

### **Scenic Value Class - 4 levels**

The scenic value class of a land area is determined by combining the levels of scenic attractiveness, scenic integrity and visibility. Each of the four classes is based on an integrated combination of these three component measures. The selection matrix below shows the various combinations and the resulting scenic value class. It is a guide, which is intended to complement a thorough field analysis and review of the visual absorption capacity.

Excellent: Outstanding unaltered features OR unaltered more common features in a strategic location; highly visible from land and water in fore and middleground.

Good: Common features; minor compatible alteration barely visible in the foreground with little visibility in middleground; highly visible from land and water.

Fair: Common or minimal features; moderate human alteration with discordant form, size, color or materials visible in foreground and less noticeable in the middleground; relatively high visibility from land and water.

Poor: Minimal features and/or severe human disruption; discordant contrast of alterations in the natural landscape due to incompatible form, size, color, and materials; clearly visible in foreground and middleground from both land and water.

**Table 3-6 Criteria for Visual Resource Assessment and Classification (cont.)**

SCENIC VALUE CLASS SELECTION MATRIX													
Visibility Levels: Sensitivity  View Distance		1			1			2			2		
		foreground			middleground			foreground			middleground		
Scenic Attractiveness Categories		1	2	3	1	2	3	1	2	3	1	2	3
	High	E	G	F	E	E	G	E	G	F	E	E	G
Scenic Integrity Levels	Moderate	G	G	F	E	G	F	G	G	F	E	G	F
	Low	F	F	P	F	F	P	F	F	P	F	F	P
	Very low	P	P	P	F	P	P	P	P	P	F	P	P
		Scenic Value Class: E = Excellent; G = Good; F = Fair; P = Poor											

**Affected Environment** - The visual landscape surrounding the project area is a rural ridge and valley countryside where the reservoir is the dominant scenic feature. The east bank is all forested with one rock bluff just downstream and little development. It is a notable contrast to the suburban character of residential areas in Tellico Village on the west bank. Rapid subdivision development has occurred along this area within the past ten years resulting in the numerous visible homes, lawn areas, and covered docks. As development trends continue and rural areas disappear, the scenic value and importance of undisturbed reservoir lands will increase substantially. The back-lying lands have a pastoral character where woodlands are seen intermixed with farmsteads, pastures, and scattered homes. TVA reservation lands around Tellico dam are located across the reservoir just downstream from the project area. They have a similar appearance of undisturbed woodland and open grass areas, along with the related operational facilities.

The two undeveloped TVA parcels (approximately 118 acres) shown in Figure 2-3 are moderately sloping woodland ridges that form peninsulas along the eastern bank. The three coves bordering them have a year round water depth of at least 7 feet and vary in length from 1,200 to 2,400 feet. The relatively wide ridge tops slope gently at 5 percent while the steeper side slopes vary between 18-30 percent. The ridge top elevations average near 890 feet MSL; about 77 feet above the 813 feet full pool elevation. Parcel 8 peaks about the 920 feet elevation along the back-lying property line, and is about 2,000 feet long from there to the western tip of shoreline. It is covered with moderate sized hardwoods except for a small group of evergreens along the southwest point. The woodland has little undergrowth due to previous grazing, which creates uncommon spaciousness under the canopy. The slopes are gentle along the wooded shoreline with no visible erosion. Parcel 9 is about 2,800 feet long from the western tip to the back-lying property line where it peaks slightly above the 920-foot elevation. The eastern portion averages about the 910-foot elevation. The tree cover is about 1/3 hardwood and 2/3 pine. Beetle damage has killed much of the pine, but intermixed hardwood, cedar, and substantial deciduous undergrowth are contributing to woodland recovery and helping to minimize the discordant contrast. The wooded shoreline slopes more steeply along the tip where eroded banks up to 3 feet high are visible.



The natural woodland character of these parcels has pleasing attributes but no uniquely distinct physical features. They are typical of the landscape seen along the east side of the reservoir. However, the scenic attractiveness is distinctive since the parcels are a major residential viewshed. Scenic integrity is high since no human alteration is visible. The integrity of Parcel 9 is somewhat lower due to the short-term pine beetle disturbance. Visual sensitivity is high since it is a residential viewshed, and the overall scenic value class is excellent. The parcels are seen in the immediate foreground by those who visit on the property. Visitors have intimate views of the site features and attributes that are not experienced from off-site viewing points, as well as broader more distant vistas seen from various places on the property. The parcels are seen in further foreground from about 72 waterfront home sites and 68 water view sites along the west bank, where the closest views are from the Tommotley Shores area about 2,000 feet away. They are also seen in middle ground views from 70-90 home sites about a mile away, located at higher elevations west of the Tellico Parkway. The views of undisturbed woodland seen across the broad ribbon of water provide a tranquil sense of place that is attractive and satisfying to most observers. Several boats could anchor overnight in the coves and be relatively secluded. The parcels are visible in the immediate foreground from boats in the coves and up to 1.5 miles away on the reservoir. They are visible from the Tanasi clubhouse and dock area, and briefly by motorists on the parkway nearby. They also provide a setback buffer of about 0.5 miles between the water and planned development to the east, which serves to screen most views from the reservoir area.

The reservoir management plan has identified these two parcels as major residential viewsheds. It indicates the entire Parcel 9 is intended to protect the viewshed and undisturbed woodland coves, and is considered a suitable scenic greenway corridor along the east side of the reservoir. The plan also indicates Parcel 8 would be managed for activities such as picnicking and hiking rather than commercial development, and that regardless of use the visual values would receive a high priority.

TVA Parcel 6 (about 17.0 hectares (42 acres)) shown in Figure 2-6 is the location of the greenway trailhead proposed under Alternative E. It is bordered by TVA land to the east, the Jackson Bend tract to the west, and private property to the south. The parcel is a ridge with steep sides that average about 40 percent and gentler slopes along the top that peak just above elevation 980 feet MSL. An old roadbed runs about half the shoreline length from the west and is lined with litter. Mixed woodland of mostly hardwood covers the slopes along the north and west sides, which makes the parcel appear fully wooded from most off-site viewpoints. In 1995 about 15 acres of pine was harvested along the south side of the parcel, extending almost to the crest. The area was left to natural succession and is covered with a mix of volunteer pines and hardwoods averaging 7-12 feet high.

The steep woodland has no unique physical features so the scenic attractiveness is common. Scenic integrity is moderate since some human alteration is visible, but not from the reservoir. Visual sensitivity is high and the overall scenic value class is good. The parcel is seen in the immediate foreground by those who visit on the property. They have intimate views of the landscape that are not experienced from off-site viewing points, along with more distant vistas seen from the ridge top. It is also seen by motorists and a couple homes near the end of Antioch Church Road. The parcel is visible in the immediate foreground from boats along the shoreline, as well as from the canal and on the reservoir up to 1.5 miles away. Visitors can also see the parcel from the beach and boat ramp on Tellico dam reservation near the canal.

The lower Jackson Bend tract (216 acres) shown in Figure 2-3 is a prominent peninsula about a mile long and bordered by TVA lands on each side. The principal landscape character is a series of moderately sloping woodland ridges quite similar to the TVA parcels upstream. The ridge top elevations average about 910 feet MSL, and peak on the east side about elevation 960 feet MSL at the proposed lodge area. Just below it, the shoreline slopes gently around the marina site where no facilities currently exist. The wooded shoreline and coves along the west side are similar to those along the TVA parcels, although the northern most cove is about 800 feet square. Just north of it is a section of shoreline with low rock outcrops along the water, and further north is a section of eroded banks 5-7 feet high. Tree cover on the tract was about 40 percent moderate sized hardwood, with the balance consisting of relatively young pine and a few small meadow areas. The small TVA parcel (5.4 acres) below the 820-foot elevation just north of the designated marina site also slopes gently, and is covered with young trees and brush 12-18 feet high. The overall visual character of this tract is in transition because project construction has begun. Trees have been removed in several large areas along ridge slopes on the east side. Exposed earth slopes and heavy equipment operations are visible in the planned lodge, marina, and residential areas. A couple smaller but similar areas are visible on the west side.

The natural character of this tract has typical reservoir landscape attributes but no unique physical features, so the scenic attractiveness is common. However, it has been more distinctive since the tract is part of a major residential viewshed. The attractiveness is declining along with visual tranquility and harmony. Scenic integrity has been moderately high, but is declining at the same pace as the expanding construction and development alterations. Visual sensitivity is high. The overall scenic value class has been good but is declining. The natural features can be seen in the immediate foreground. The tract is visible in foreground from about 86 waterfront home sites and 57 water view sites, plus quite a few more that also view the TVA parcels. The closest views are from the Coyatee and Tommotley Shores area along the west bank about 2,000 feet away. It is also seen in middle ground views from 90-120 home sites located at higher elevations west of the Tellico Parkway. The tract is visible from the TRDA boat ramp, and by passing motorists on the nearby parkway. It is also visible in the immediate foreground from boats in the coves, as well as from the canal and on the reservoir up to 1.5 miles away. Visitors can see both the lodge and marina area from the beach and boat ramp on Tellico dam reservation near the canal.

The remaining project lands (323 acres) shown in Figure 2-3 are back-lying properties that border the TVA parcels and extend east to U. S. Highway 321. The landscape character is a rolling pastoral area of moderately steep ridges separated by gently sloping drainages. The elevation difference between ridges and valleys is about 140 feet. The ridge top elevations average about 930 feet MSL on the western part, 1,080 feet MSL on the eastern part, and peak near 1,120 feet at the east end. About a third of the tract is open meadow and the balance is a mix of hardwood and pine stands. A few farmstead buildings remain on the tract. Antioch Church Road borders the north boundary in several sections totaling about a mile. It is a narrow country road of repeated curves, with several farms and homes along it. U. S. Highway 321 borders about 800 feet of the east boundary, where most of the adjacent valley area lays about 100 feet below. It is a rural highway with a few scattered homes, a couple of small stores and a church along the nearest 3-mile section. The landscape character of the back-lying land is typically pastoral with no unique physical features, so the scenic attractiveness is common. Scenic integrity is moderate since human alteration is noticeable but not dominant. Visual sensitivity is moderate (level 2) and the

overall scenic value class is good. The tract is seen in foreground views from about a dozen homes along Antioch Church Road, and by local automobile traffic. The eastern end is visible to passing motorists on U. S. Highway 321 and a few homes. The wooded ridge tops of the western section are visible behind the TVA parcels from boats along the west side of the reservoir, as well as from homes in the shoreline communities. The natural features can be seen in the immediate foreground.

The potential mitigation parcel for Alternative C is about 60 acres of the Wildcat Rock tract as shown in Figure 2-4. The visual character of this parcel is included in the description of the entire Wildcat Rock tract provided for Alternative E below. The portion identified for this parcel includes part of the eastern 2/3 of the valley and most of the hillside along the south side. It also includes the shoreline around the eastern half of larger embayment and an area of large trees near the north side. The parcel is not a self-enclosed viewshed and surrounded by other areas in the valley that remain available for industrial development. The landscape character includes an attractive stream area and rock outcrops, but is otherwise similar to the TVA parcel that would be sold under Alternative C. It does not include the prominent ridge, hardwood slopes, or unusual rock formations seen in other parts of the Wildcat Rock tract.

Scenic attractiveness of this parcel is common since the features and variety are not unique. Scenic integrity is moderate since about 20 percent of the parcel is actively used for pasture. Visual sensitivity is moderate since the viewshed limited. The overall scenic value class is good. Visitors to the property have intimate views of the scenic features and attributes that are not experienced from off-site viewing points, along with occasional more distant views from the shoreline or hillsides. The parcel is visible in the immediate foreground from boats in the cove, and limited views from the reservoir. It is also seen by passing motorists on the local road to the east and from surrounding industrial lands.

The potential mitigation parcel for Alternative E is the Wildcat Rock tract (256 acres) shown in Figure 2-6. The pastures and scattered woodlands of undeveloped industrial lands form the boundaries along two sides. The mostly wooded parcel is a scenic valley about a mile long that surrounds two embayments. The parcel extends up the slopes that border it on the north and south and forms a self-enclosed viewshed. Tree cover along the slopes is predominantly hardwood with some areas of larger trees and a few stands of evergreens. The parcel includes both sides of the steep dissected ridge along the north, which rises about 180 feet above full pool. The slopes vary between 20-50 percent and the ridge top elevation averages about 1,000 feet MSL, with several high points just above 1,040 feet MSL. An informal trail runs along the crest providing distant views of 3 miles or more, and there are a couple springs on the south slope. A communications tower and yard are located near the eastern end with off-site access from the north. The hillsides along the south side of the parcel rise about 60 feet above the valley with frequent rock outcrops, and the highest elevations are just above 920 feet MSL. These slopes average 25 percent and are wooded to the crest where they meet adjacent off-site pastures.

The valley is about 800 feet wide and steps up gently toward the steeper slopes with a variety of rock outcrops. A local paved road borders the east end. Most of the valley is covered with about equal areas of evergreen and deciduous trees, with mature hardwoods scattered along the north side. A small open grass area is located at the southwestern end, and about 12 acres of grass and scattered trees occur at the eastern end. A creek meanders through this area from a spring near the east end, and crosses several areas of exposed rock in the woods before reaching the main embayment. The western end of the



valley is a wooded ridge of unusual linear rock formations and fissures. It separates the two embayments and forms a bluff on the reservoir about 30 feet high. The main embayment is about 3,000 feet long and averages 300 feet wide, while the smaller one is about 1,000 feet long and averages 200 feet wide. Both have wooded shoreline, year round water depth, and they slope more steeply at the shoreline than the TVA parcels. Several boats could anchor overnight in the coves and be relatively secluded. Overall, this site has a variety of attractive natural features, which include the vegetation, topography, rock formations, and water features. The undergrowth is spare along much of the valley and ridge tops. Together they give this parcel a rather unique and naturally appealing park-like character.

Scenic attractiveness of this parcel is distinct due to the diversity of scenic features and park-like character. Scenic integrity is moderately high since little human alteration is seen other than some active grazing. Although it is not in a residential viewshed, visual sensitivity is moderately high since the north ridge is among the highest and most prominent seen from this area of the reservoir and U. S. Highway 411. The shoreline rock outcrops are also prominent. The overall scenic value class is excellent. The parcel is seen in the immediate foreground by those who visit on the property. They have intimate views of the scenic features and attributes that are not experienced from off-site viewing points, along with broader more distant vistas seen from the ridge top. The parcel is visible in the immediate foreground from boats in the coves, and up to 2 miles away on the reservoir. It is also seen by passing motorists on the local road to the east and U. S. Highway 411 Bridge to the south, as well as from surrounding industrial lands.

### 3.9. Socioeconomics

#### Population

The proposed golf courses, lodge, marina, and residential development would be located in Loudon County, Tennessee, which had an estimated 2000 population of 39,086 (See Table 3-7). The labor market area (LMA) had an estimated population of 738,157; this includes Anderson, Blount, Knox, McMinn, Monroe, and Roane counties, in addition to Loudon County. The LMA is dominated by Knox County with over 51 percent of the area's population. Loudon County's population is exceeded by all but one county (Monroe) in the LMA. However, Loudon County population has been growing much faster than the LMA, the state, and the nation in the previous decade. The LMA's growth rate fell between that of the state and the U.S.

<b>Table 3-7. Population</b>					
	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>Percent Increase 1980-90</b>	<b>Percent Increase 1990-00</b>
Anderson Co.	67,346	68,250	71,330	1.3	4.5
Blount Co.	77,770	85,969	105,823	10.5	23.1
Knox Co.	319,694	335,749	382,032	5.0	13.8
<b>Loudon Co.</b>	<b>28,553</b>	<b>31,255</b>	<b>39,086</b>	<b>9.5</b>	<b>25.1</b>
McMinn Co.	41,878	42,383	49,015	1.2	15.7
Monroe Co.	28,700	30,541	38,961	6.4	27.6
Roane Co.	48,425	47,227	51,910	-2.5	9.9
Labor Market Area	612,366	641,374	738,157	4.7	15.1
Tennessee	4,591,120	4,877,185	5,689,283	6.2	16.7
U.S.	226,546,000	248,791,000	281,421,906	9.8	13.1

Source: U.S. Department of Commerce, Bureau of the Census

### Labor Force and Unemployment

In 2000, Loudon County had an average labor force of 21,280 workers, of which 740 (3.5 percent) were unemployed (Table 3-8). The LMA had an average labor force of 378,280 workers, with an unemployment rate of 3.6 percent. These unemployment rates fall below those for the state (4.5 percent) and the nation (4.8 percent). Across the LMA, unemployment ranged from 2.5 percent in Knox County to 7.7 percent in McMinn County.

<b>Table 3-8. Unemployment, 2001 (annual average)</b>	
<b>Location</b>	<b>Unemployment Rate</b>
Anderson Co.	4.0
Blount Co.	4.0
Knox Co.	2.5
<b>Loudon Co.</b>	<b>3.5</b>
McMinn Co.	7.7
Monroe Co.	7.2
Roane Co.	4.5
Labor Market Area	3.6
Tennessee	4.5
U.S.	4.8

Source: Tennessee Department of Labor & Workforce  
Development Employment Security Division, Research &  
Statistics

### Employment by Industry

Loudon County has a far greater share of farming employment than the LMA, the state, and the U.S. (Table 3-9). In contrast, the labor market area as a whole has a farming employment share similar to that of the nation, but smaller than the state. Manufacturing employment share in Loudon County also exceeds that of the LMA, the state, and the U.S. In contrast, services account for a smaller share of employment in Loudon County. Manufacturing and services employment in the LMA are close to those of both the state and the nation.

<b>Table 3-9. Employment by Industry, 2000 (Full-time and Part-time Workers)</b>				
<b>Location</b>	<b>Total Employment</b>	<b>Percent in Farming</b>	<b>Percent in Manufacturing</b>	<b>Percent in Services</b>
Anderson Co.	50,984	1.1	21.1	34.6
Blount Co.	50,723	2.7	18.0	22.3
Knox Co.	273,547	0.6	8.3	31.8
<b>Loudon Co.</b>	<b>15,886</b>	<b>9.5</b>	<b>19.4</b>	<b>19.9</b>
McMinn Co.	25,366	5.5	30.8	19.4
Monroe Co.	16,414	6.8	33.2	15.3
Roane Co.	24,281	2.8	10.4	17.8
Labor Market Area	457,201	1.8	13.4	28.6
Tennessee	3,506,618	3.0	14.8	28.6
U.S.	167,465,300	1.9	11.4	31.8

Source: U.S. Department of Commerce, Bureau of Economic Analysis

### Per Capita Personal Income

Per capita personal income in Loudon County in 2000 was 26,241 dollars, just above the state figure (25,946 dollars), but below the national figure (29,469 dollars) (See Table 3-10). Per capita income for the labor market was almost identical to that of the state at 25,798 dollars. Per capita income across LMA counties ranged from 17,335 dollars in Monroe County to 28,281 dollars in Knox County.

Between 1990 and 2000, Loudon County gained ground on the nation in terms of per capita income, increasing from 80.1 percent to 89.1 percent of the national average. In contrast, the LMA fell slightly from 89.0 to 87.5 percent, while state per capita income increased from 85.9 to 88.1 percent of the national figure.

**Table 3-10. Per Capita Personal Income**

<b>Location</b>	<b>Per Capita Personal Income 1990</b>	<b>Per Capita Personal Income 2000</b>	<b>Percent of Nation 1990</b>	<b>Percent of Nation 2000</b>
Anderson Co.	\$17,450	\$26,032	89.2	88.3
Blount Co.	\$16,431	\$24,262	84.0	82.3
Knox Co.	\$18,966	\$28,281	96.9	96.0
<b>Loudon Co.</b>	<b>\$15,685</b>	<b>\$26,241</b>	<b>80.1</b>	<b>89.1</b>
McMinn Co.	\$14,367	\$19,855	73.4	67.4
Monroe Co.	\$12,019	\$17,335	61.4	58.8
Roane Co.	\$15,475	\$22,000	79.1	74.7
Labor Market Area	\$17,413	\$25,798	89.0	87.5
Tennessee	\$16,808	\$25,946	85.9	88.1
U.S.	\$19,572	\$29,469	100.0	100.0

Source: U.S. Department of Commerce, Bureau of Economic Analysis

### Environmental Justice

The 2000 population of Loudon County consists of 4.8 percent minorities (Table 3-11), less than the LMA (9.5 percent), and far less than the state (20.8 percent) and the nation (30.9 percent). The minority population for the U.S. Census tract (604) containing the proposed development is 2.4 percent. The census tract immediately across the lake (605) from the proposed development has a minority population of 2.2 percent.

The poverty rate in Loudon County in 2000 was 10.0 percent, again, less than the LMA (12.5 percent), state (13.5 percent), and nation (12.4 percent). The poverty rate for the census tract containing the proposed development is 7.3 percent. The census tract immediately across the lake from the proposed development has a poverty rate of 8.3 percent.

**Table 3-11. Minority and Low-Income Population**

<b>Location</b>	<b>Total Population 2000</b>	<b>Nonwhite Population 2000</b>	<b>White Hispanic Population 2000</b>	<b>Percent Minority Population 2000</b>	<b>Percent Below Poverty 2000</b>
Anderson Co.	71,330	4,737	469	7.3	13.1
Blount Co.	105,823	5,582	645	5.9	9.7
Knox Co.	382,032	45,461	2,578	12.6	12.6
<b>Loudon Co.</b>	<b>39,086</b>	<b>1,604</b>	<b>272</b>	<b>4.8</b>	<b>10.0</b>
McMinn Co.	49,015	3,570	415	8.1	14.5
Monroe Co.	38,961	1,999	285	5.9	15.5
Roane Co.	51,910	2,470	241	5.2	13.9
Labor Market Area	738,157	65,423	4905	9.5	12.5
Tennessee	5,689,283	1,125,973	57,380	20.8	13.5
U.S.	281,421,906	69,961,280	16,907,852	30.9	12.4

Source: U.S. Department of Commerce, Bureau of the Census.

### **3.10. Air Quality**

National Ambient Air Quality Standards (NAAQS) limit concentrations of six pollutants in the outside air: particulate matter, sulfur dioxide, carbon monoxide, ozone, nitrogen dioxide, and lead. These standards are designed to protect public health and welfare. An area where any air quality standard is violated is designated as a nonattainment area for that pollutant, and emissions of that pollutant, or in the case of ozone the precursor pollutants, from new or expanding sources are carefully controlled.

Currently there are no designated nonattainment areas at or near the proposed development location. However, the Environmental Protection Agency (EPA) has issued a new 8-hour standard for ozone and a new standard for particulate matter (PM) having diameters 2.5 micrometer ( $\mu\text{m}$ ) or smaller, and these are scheduled for implementation in the near future. Ozone nonattainment is expected and PM-2.5 nonattainment is possible for Knox and surrounding counties, including Loudon County. The most immediate of these standards is the ozone standard, which is currently scheduled to be implemented in 2004. Designations of attainment or nonattainment areas for the 8-hour ozone standard are scheduled to be announced in April 2004. The State of Tennessee and the counties in the Knoxville MSA have agreed to participate in EPA's Early Action Compact to develop strategies for bringing ozone nonattainment areas into attainment early.

In addition, Prevention of Significant Deterioration (PSD) regulations protect national parks and wilderness areas which are designated PSD Class I air quality areas. A new or expanding major air pollutant source within 31 miles of a Class I area would be required to estimate potential impact on the air quality of that Class I area. In addition, the federal land manager having jurisdiction over the Class I area may request similar action for large sources at distances of 31 to 62 miles or discretionary greater distances.

There are two PSD Class I areas within 62 miles of Tellico Reservoir. The Great Smoky Mountains National Park is 19 miles to the southeast of the Rarity Pointe location, and the Joyce Kilmer/Slickrock Wilderness Area is 26 miles to the southeast.



## CHAPTER 4

### 4. ENVIRONMENTAL CONSEQUENCES

The potential environmental consequences of implementing each of the alternatives are discussed in this chapter. Environmental impacts are assessed by comparing actions expected to occur under the existing 2000 Land Plan to changes that would result from Rarity Communities proposal. In addition, other activities and trends affecting common resources were considered.

#### 4.1. Terrestrial Ecology

The proposed development would be expected to contribute to increased representation by invasive plant species that occupy edge habitats. Any project-related impacts are not expected to significantly contribute to the introduction or spread of invasive, terrestrial plant species at a state or regional level (See *Invasive Species* Below).

The plant communities present on the proposed project lands are characterized by common and widespread species in east Tennessee that would not be not adversely affected by the loss of these populations. Therefore, with respect to species composition, the lands proposed for sale and/or development are representative of the region of east Tennessee in which they occur. No uncommon plant communities were identified on the proposed project lands, and no impacts to such resources are anticipated from selection of any of the proposed alternatives (discussed individually below).

However, a minimum of 520 acres (i.e., the vegetated portions of lands currently in private ownership) of primarily native vegetation would be impacted under any alternative. Depending upon the alternative selected, these impacts could extend to as many as 127 additional acres of lands currently in public ownership (i.e., the requested TVA lands). These TVA-retained lands make up roughly 6.3 percent of the acreage currently allocated to Zone 3, 4, or 6 (Sensitive Resource Management, Natural Resource Conservation, or Recreation) on the lower end of Tellico Reservoir (TVA, 2000). Seventy of these 127 acres (those on Parcel 9) are currently allocated to Natural Resource Conservation under the existing land use plan for Tellico Reservoir (TVA, 2000).

As with most development projects, the greatest impact to existing vegetation under any of the proposed alternatives would be the loss of forests that would accompany the development. These areas would be permanently converted to non-forest conditions associated with the development of the planned residences, golf courses, and marina. Approximately 65 percent, or 430 acres, of the project lands are forested. Ninety-five percent of the requested TVA lands (approximately 118 acres) are forested.

Regardless of the action taken by TVA in response to the current request, cumulative impacts to terrestrial ecology resources are ongoing and likely to continue due to the amount of land that is zoned for development along Tellico Reservoir. However, TVA's contribution to cumulative impacts to natural resources in the project area could be considerably lessened through a land exchange in which property of equal or greater ecological value were acquired and placed into the public trust in exchange for the public land currently being requested by the applicant.

In order to ensure that adequate mitigation is achieved, lands considered for this exchange should: 1) contain forest communities of equal or greater ecological value than those lands being requested from TVA, and 2) be transferred to public ownership with provisions to ensure the long-term protection of natural resources. With respect to forest communities, the ecological value of these mitigation lands depend upon several factors including the total acres of forest; the number and size forest patches (an indicator of existing levels of forest fragmentation); plant community composition; and the number and density of invasive exotic terrestrial plant species present (an indicator of current and future threats to the integrity and ecological value of the mitigation tract). The proposed Wildcat Rock site adequately meets these requirements.

**Migratory Birds** - Habitat fragmentation is associated with a number of changes that are harmful to Neotropical birds. These include nest parasitism by brown-headed cowbirds (*Molothrus ater*), loss of habitat, creation of barriers to dispersal between woodlots, and increased nest predation (Wilcove 1985). Robbins (1989a) found that the diversity of Neotropical birds increased as the area of forest increased.

The reproductive performance of some bird species may decrease along edges because edges attract predators and nest parasites such as cowbirds (Patton 1994, Wilcove 1985, Small and Hunter 1988, Yahner and Scott 1988, Robinson et al., 1995). Landscape fragmentation and creation of edge may allow for higher rates of brood parasitism by the brown-headed cowbird (Gates and Gysel 1978, Brittingham and Temple 1983). Cowbirds lay their eggs in the nest of "host" species that hatch and rear the parasite's young at the expense of their own young (Brittingham and Temple 1983). Areas consisting of either lawns, pastures, bare ground or a combination thereof are used by cowbirds as feeding areas, thus attracting this species (Robinson et al., 1993). Predation rates are higher in small woodlots than in large tracts and are especially intense in woodlots near suburban neighborhoods. Forest edges appear to be good habitat for many animals that prey on nests of forest-dwelling songbirds (Wilcove 1985).

The landscape of the project lands is somewhat fragmented due to the various types of land use and successional vegetation stages on the area. Potential impacts to area sensitive migratory birds were assessed by considering the amount of interior forest habitat on the project area and on the proposed mitigation sites.

Using Temple and Cary's (1988) 200-m criteria, the amount of interior forest habitat on the project lands is very limited, totaling less than 10 acres. Also as stated previously, past cattle grazing on a large proportion of this site has substantially reduced the amount of shrub sub-canopy layer under much of the forested areas. The lack of understory structure limits the use by some Neotropical birds.

A shoreline buffer zone maintained on the project lands would reduce the effects of human disturbance and shoreline development on waterfowl of the area (See Section 4.15, Commitment 1)

**Invasive Species** - Development entails disturbance and changes in the surrounding wildlife habitat. Often these changes foster the establishment of invasive terrestrial animals and other species that are symptomatic of disturbance, such as brown-headed cowbirds, striped skunk, and Virginia opossums. It is likely that development of the site would allow for the introduction of small populations of invasive terrestrial animals such as European starling, house sparrow, and rock dove. These species are typical in surrounding urban

environments and the development of small colonies of these species in the area would not significantly contribute to their existence.

Large-scale development can lead to increased wildlife “nuisance” problems. Animals such as white-tailed deer and raccoons may cause garden crop or ornamental shrub damage when their natural habitats are encroached upon. Depending on the amount and type of wildlife habitat that exists after development, many species can persist in golf course environments. For the most part, these species are tolerant of small fragmented habitats. They include species such as house finch, common grackle, eastern bluebird, cedar waxwing, eastern mole, house mouse, coyote, American toad, and common garter snake.

Under any alternative the proposed development would likely contribute to increased representation by invasive plant species that occupy edge habitats. Any project-related impacts are not expected to significantly contribute to the introduction or spread of invasive, terrestrial plant species at a state or regional level. In order to minimize the potential for the introduction of invasive exotic plant species on TVA owned or transferred properties the Applicant should implement the following for all action alternatives:

- Landscaping activities on development properties should not include the use of plants listed as Rank 1 “Severe Threat”, Rank 2 “Significant Threat”, and Rank 3 “Lesser Threat” on the Tennessee Exotic Pest Plant Councils list of Invasive Exotic Pest Plants in Tennessee (Appendix D).
- Re-vegetation and erosion control work should utilize seed mixes comprised of native species or non-invasive non-native species (Appendix D).

### **Alternative A - No Action**

Under this alternative, the development of the private properties is expected to proceed without the involvement of the TVA lands (Figure 2-2). With respect to vegetation, direct impacts to terrestrial ecological resources would be similar to those that would result from selection of the Applicant’s Proposal, but would impact a lesser area more intensely because the same sized development would occur on less (by 120 acres) land. Also, many of the same effects to wildlife described in Alternative B would also occur here, including those environmental consequences described under *Migratory Birds* and *Invasive Species*.

Overall, this alternative would have the least impacts on terrestrial plants and wildlife and would maintain a higher level of wildlife habitat continuity and integrity along the shoreline of Tellico Reservoir because the TVA lands (Parcels 8 and 9) would not be developed. These impacts are expected to be localized and insignificant in a state or regional context.

Although there would be no TVA action, residential development on the private properties would contribute to ongoing cumulative impacts to terrestrial ecological resources (specifically, forest communities) on Tellico Reservoir.

### **Alternative B - Applicant’s Proposal**

Under this alternative, development would occur on the private properties as well as all TVA lands requested by the applicant (Figure 2-3). This alternative would involve the largest amount land used for development, resulting in the greatest level of direct impacts to terrestrial ecological resources including plants and wildlife.

Construction activities on the site would remove wildlife habitat and would likely displace large animals, such as deer and turkey, from the site. Many smaller animals, such as shrews, moles, and salamanders would be destroyed by construction activities. Following the construction and re-vegetation of the site, wildlife, perhaps a somewhat different variety of species would re-colonize the area (See *Invasive Species*).

Development of the site would result in more habitat fragmentation and would increase the amount of edge and open habitats along Tellico Reservoir. Although some species prefer these conditions, small animals that have relatively small home ranges or habitat area requirements, or that require specific structural habitat characteristics, may be negatively affected by these conditions.

Development on the private properties would contribute to ongoing cumulative impacts to terrestrial ecological resources (specifically, forest communities) in the project (or Tellico Reservoir) area. TVA actions would contribute to these cumulative impacts by making additional lands (some of which are currently allocated to Natural Resource Conservation) available for further development.

The development of private project and TVA lands would result in local impacts to terrestrial plants and wildlife. Overall, there would be direct and indirect effects from the development. These effects would be insignificant at the state and regional level.

### **Alternative C - Partial Land Sale with Mitigation**

Under this alternative, development would occur on the private properties and approximately 55 of the 127 acres of TVA lands initially requested by Rarity Communities. This alternative also includes provisions for a land exchange in which a 60-acre tract at the Wildcat Rock site on Wear Bend would be acquired by Rarity Communities and transferred to public ownership.

Under this alternative, many of the same effects to wildlife described in Alternative B would also occur, including those environmental consequences described under *Migratory Birds* and *Invasive Species*. Some forested shoreline would remain on the lower portion of Parcels 8 and 9. This alternative would maintain some additional level of habitat continuity along the shoreline, because Parcels 8 and 9 would not be developed in their entirety (Figure 2-4).

Direct impacts to vegetation resulting from this alternative would be localized and insignificant in a state or regional context. However, as with Alternative B, TVA actions would contribute to cumulative impacts to terrestrial ecological resources (at the Tellico Reservoir level) by making lands (some of which are currently allocated to Natural Resource Conservation) available for development. Although this alternative includes provisions for mitigation for the loss of public land, the proposed 60-acre mitigation tract (Figure 2-4, Table D-1) would not completely address forest community loss. In particular, the proposed mitigation would be inadequate with respect to terrestrial ecological resources because one large, nearly contiguous tract of forest would be exchanged for a smaller, linear strip of shoreline forest that has been largely degraded by cattle grazing. This would contribute to the ongoing pattern of decreased forest tract size along developed shorelines demonstrated in the *TVA Shoreline Management Initiative EIS* (TVA, 1998).

The lands proposed for mitigation under this alternative contain some desirable habitat features including a spring, a small drainage, some forested embayment acreage, and some



mature woodlands with limestone outcrops. Although this land compensates for the acres of wildlife habitat lost, the overall outcome would leave two small, fragmented parcels for wildlife at this site and the remaining portions of Parcels 8 and 9. The remaining size and fragmentation of these parcels would provide somewhat limited benefits to wildlife. The lands that are proposed for mitigation under this alternative would not adequately offset the loss of forested wildlife habitat on TVA lands (See *Comparison of TVA and Mitigated Land in Appendix D*).

The development of private project and TVA lands would result in local impacts to terrestrial plants and wildlife. Overall, there would be direct and indirect effects from the development. These effects would be insignificant at the state and regional level.

In order to reduce the impacts to terrestrial animals in the project area, TVA would implement mitigation measures on TVA lands as a condition of its approval (See Commitments 1-4, Section 4.15).

#### **Alternative D - Small Golf Course and Marina with No Land Sale**

Under this alternative, development would occur on the private properties, as well as five acres of TVA land below the 820-foot contour requested by the applicant. Development would not occur on the 118 additional acres of TVA land requested by the applicant (e.g., parcel 8 and a portion of Parcel 9).

Under this alternative, many of the same effects to wildlife described in Alternative B would also occur here, including those environmental consequences described under *Migratory Birds* and *Invasive Species*. A higher level of terrestrial plant and wildlife habitat integrity along the shoreline of Tellico Reservoir would be maintained because Parcels 8 and 9 would not be developed (Figure 2-5). Development under this alternative would include the approximately five acres of land below the 820-foot contour and the proposed marina expansion.

The development of private project lands would result in local impacts to native terrestrial plant communities and wildlife. The development of TVA lands under this alternative would result in localized impacts. Overall, there would be direct and indirect effects from the development. These effects would be insignificant at the state and regional level.

Development on the private properties would contribute to ongoing cumulative impacts to terrestrial ecology resources (specifically, forest communities) that are now occurring from scattered suburban residential development in the project area.

In order to reduce the impacts to terrestrial animals in the project area, TVA would implement mitigation measures on TVA land (where feasible and needed on the small parcels of land including the land below the 820-foot contour fronting the development) as a condition of its approval (See Comments 1, 2, and 4, Section 4.15).

#### **Alternative E – Applicant’s Proposal with Mitigation**

This alternative includes provisions for a land exchange in which a 256-acre tract would be acquired in exchange for the approximately 118 acres of requested TVA lands (Figure 2-6).

Alternative E also includes provisions for the construction of a trail terminal on Parcel 6 (which would be retained in public ownership). The projected footprint of the trail terminal

and associated facilities is expected to be small relative to the size of the entire Parcel (40.9 acres), and would not significantly impact terrestrial ecological resources.

Under this alternative, many of the same effects to wildlife described in Alternative B would also occur here, including those environmental consequences described under *Migratory Birds* and *Invasive Species*. Due to the additional clearing for trailhead development on Parcel 6 (Figure 2-6), this alternative would involve the most land clearing. However, this alternative involves a land exchange that would help offset the impacts from the sale and development of TVA lands. In terms of terrestrial ecology resources, the larger Wildcat Rock mitigation tract (Figure 2-6) is of considerably higher quality than the tract proposed as mitigation under Alternative C. The contribution of TVA's actions to cumulative impacts would be offset by the acquisition of lands of equal or greater ecological value to those being made available for development (See *Comparison of TVA Lands to Mitigated Land in Appendix D*).

Under Alternative E, a trail terminal would be developed on TVA Parcel 6 by the Applicant according to plans established by TVA. Field investigations on these lands indicate that the establishment of a greenway trail system under any of the proposed alternatives would not adversely affect terrestrial animals that occur on the site. Any future proposals to develop additions to the trail and greenway system would be appropriately reviewed.

The development of the private project and TVA lands under this alternative would result in local impacts to wildlife and vegetation. Overall, there would be direct and indirect effects from the development. These effects would be insignificant at the state and regional level.

By protecting and managing the Wildcat Rock Site (Figure 2-6) for long-term public use, the loss of TVA lands under this alternative would be favorably mitigated. The other potential exchange tract (Morganton Cemetery) site was assessed for its suitability but would not provide adequate mitigation for terrestrial ecology. These lands ranked low in terms of the quality of forested wildlife habitat offered. Although some nice woodlands remain on the steeper slopes, timber harvest, pine beetle damage, and exotic invasive plants in the area have substantially decreased the wildlife habitat suitability in the area. On an acreage basis, this area compensates for the loss of TVA land (Table D-2); however, the tract offers limited benefits to wildlife in its current state because the timber has been removed and invasive species are common. The acquisition of these lands would not have fully offset the loss of forested wildlife habitat on TVA Parcels 8 and 9.

In order to reduce further the impacts to terrestrial animals in the project area, TVA would implement mitigation measures on TVA lands as a condition of its approval (See Comments 1-4, Section 4.15).

### **Discussion and Summary of Impacts**

Previous studies have demonstrated that development along reservoir shorelines is correlated with decreases in both the proportion of forested land and the size of contiguous tracts of forest within one-fourth-mile of TVA reservoirs (TVA, 1998). The Shoreline Management Initiative EIS also presented the results of analyses of nine reservoirs, including Tellico, which showed that the proportion of forested land is significantly greater along undeveloped shorelines. This study also demonstrated that contiguous tracts of forests within one-fourth-mile of most reservoirs are significantly larger along undeveloped shorelines.

The terrestrial ecology of Tellico Reservoir is described in the 2000 Land Plan (TVA, 2000). Whereas upper reaches of the reservoir consist primarily of forested uplands, portions downstream of U.S. Highway 411 can be characterized in terms of a combination of rural landscape and lands allocated for industrial development. According to data extracted from the USGS National Land Cover Dataset, roughly 83 percent of the approximately 28,703 acres within one-fourth mile of Tellico Reservoir (upstream to Chilhowee) are forested (Table 4-1).

<b>Table 4-1. Land Cover Data for Area Within One-fourth Mile of Tellico Reservoir, Upstream to Chilhowee Dam<sup>1</sup></b>		
<b>Land cover type</b>	<b>Acres</b>	<b>Proportion of total land area</b>
Forest	23,707	82.5
Herbaceous: planted/cultivated	4,269	14.9
Barren	409	1.4
Developed	278	1.0
Wetlands	40	0.1
<b>Total</b>	<b>28,703</b>	<b>100</b>

<sup>1</sup> Source: USGS National Land Cover Data, 1998.

The 127 acres of TVA land considered under this proposal are less than one percent of the total acres of land within one-fourth mile of the reservoir (upstream to Chilhowee), and are also less than one percent of the total acres of forested land within this same area. Although this is a very small portion of the forested habitat along the shoreline of the reservoir, the cumulative loss of terrestrial ecology resources along the reservoir is of concern, especially downstream of U.S. Highway 411.

Küchler (1996) describes upland forests occurring along Tellico Reservoir and the surrounding vicinity as Appalachian oak. With respect to species composition, diversity, age structure, and overall quality (e.g., the presence of noteworthy habitat features, the relative abundance of invasive exotic plant species, and the extent of fragmentation), the project area does not contain any unique terrestrial ecology resources.

Further examination of USGS land cover data in conjunction with recent aerial photography indicates that the amount of fragmentation along the reservoir shoreline varies from heavily fragmented to areas of relatively contiguous forested tracts.

Development would occur on a minimum of 539 acres (the private project properties) under any alternative proposed in this EIS, further reducing the integrity and continuity of existing forest communities and associated wildlife habitats along the reservoir. Under the No Action Alternative (Alternative A), TVA would not contribute to cumulative losses of forested habitat in the Jackson Bend area.

If an action alternative is selected, TVA could help offset its contribution to the cumulative loss of terrestrial habitats by acquiring lands of equal or greater ecological value in the vicinity of Jackson Bend, and by providing for the long-term protection of the natural resources they contain.

However, even if the loss of TVA lands is mitigated through such a land exchange, factors outside of TVA's control are expected to continue to influence forested habitat changes along the reservoir. These include reasonably foreseeable private and public activities associated with industrial and residential development, recreation, and associated infrastructure.

According to the 2000 Land Plan (TVA, 2000), approximately 11,151 acres of land on the reservoir shoreline are allocated for residential, industrial or commercial use by TRDA. The majority of these lands are located downstream of U.S. Highway 411. Although all of these lands are not currently forested, they do provide an indication of where future forest loss is likely to occur on the reservoir.

The cumulative effects of development are leading toward an overall change in forest integrity, wildlife habitat, and wildlife species composition in the area, especially downstream of U.S. Highway 411. The implementation of this proposal would contribute a small amount to the overall effects on these resources.

In summary, the development of private project and TVA lands would result in direct and indirect impacts to vegetation and wildlife. However, these effects would be localized to the project lands and the immediate vicinity and would be insignificant at the state and regional level. The development would also contribute to the cumulative loss of forested habitat on Tellico Reservoir. However, the above analysis of the resource indicates that the effects of this proposal would be insignificant with respect to overall impacts to terrestrial ecological resources.

#### **4.2. Aquatic Ecology**

Impacts to aquatic resources are directly related to changes of the existing natural shoreline conditions. Aquatic resources can be impacted by changes to shoreline (riparian) vegetation, vegetation on back-lying lands, and land uses. Shoreline vegetation (particularly trees) provides shade, organic matter (a food source for benthic macroinvertebrates), and shoreline stabilization; and trees provide aquatic habitat (cover) as they fall into the reservoir. Shoreline vegetation and vegetation on back-lying land provide a riparian zone which functions to filter pollutants from surface runoff while stabilizing erodible soils. Therefore, there would likely be some degradation of aquatic habitats associated with continued development along the reservoir shoreline under any of the alternatives.

Preservation of a natural shoreline condition to the extent possible on TVA land is particularly important on Tellico Reservoir because such a large percentage of the shoreline (other than the marginal strip) is not owned by TVA. Although much of the non-TVA land is presently undeveloped, future development could greatly alter the character of much of the backlying property that is not controlled by TVA. Shoreline development can alter the physical characteristics of adjacent fish and aquatic invertebrate habitats, which can result in dramatic changes in the quality of the fish community. One of the most detrimental effects of shoreline development is the removal of riparian zone vegetation, particularly trees. Removal of this vegetation can result in loss of fish cover and shade, which elevates surface water temperatures. Also, fish spawning habitat, such as gravel and woody cover, can be rendered unsuitable by excessive siltation and erosion, which can occur when riparian vegetation is cleared (TVA, 1998). Additionally, shoreline development often results in the removal of existing aquatic habitat (i.e., stumps, brush, logs, boulders, etc.) in association with the construction of water-use facilities.



**Alternative A - No Action**

This alternative would not result in impacts to aquatic habitats attributable to the sale and subsequent development of TVA land, the marina expansion, or the disturbance of approximately 5 acres of TVA land below the 820-foot contour. Development of privately owned property at Rarity Pointe would continue, so impacts related to erosion runoff from the site and development of permitted waterfront facilities would occur.

**Alternative B - Applicant's Proposal**

Adoption of this alternative would result in extensive clearing and land disturbance on what is currently TVA property, resulting in erosion runoff from the property during construction of housing and the golf course. The dredge would reduce shallow shoreline aquatic habitat. Some runoff of pesticides and herbicides to the reservoir from the golf course, as well from residential sites, would continue during operation of these facilities. Extensive clearing of trees near the shoreline would result in a loss of shade and organic matter for aquatic life; woody habitat would likely be reduced long-term since trees that are removed would not be available as fallen dead or blown down aquatic habitat in the nearshore area. Any thinning of low-growing vegetation would result in less stability of the shoreline where soil is the main constituent. The marina would be expanded, resulting in additional disturbance of the shoreline and some alteration of shoreline vegetation in that area. Use of the 5-acre tract of TVA property below the 820-foot contour for the golf course would result in alteration of the shoreline and likely a loss of woody riparian cover there.

TVA sampling has documented the presence of PCBs and chlordane in sediments in deeper waters of Fort Loudoun Reservoir. Since the applicant is proposing to excavate a large amount of soil below the normal winter elevation of 807 feet, testing of the sediment would be required for chlordane and PCBs. The level of contamination found (if any) would determine how the spoil would be handled. TWRA has an advisory that catfish from Tellico should not be eaten because of PCB contamination. The possibility of contaminants here is increased since it is near the Tellico/Fort Loudoun canal, and even if contaminants were not initially present in the Tellico basin, they could have been transported there during flows from Fort Loudoun into Tellico. If PCBs or chlordane are detected, dredging plans will be evaluated in light of the extent and level of those contaminants at the site (See Section 4.15, commitment number 6).

Runoff of soil and chemicals from the tracts where development takes place is not quantifiable. Soil runoff would be dependant on the extent to which Best Management Practices (BMPs) were implemented by Rarity Communities and homeowners during clearing and construction phases. Chemical runoff would depend on the extent to which the golf course is designed to limit runoff and channel it to catch basins, the amount and types of herbicides and pesticides used on the golf course and by homeowners, and the extent to which applicators followed label instructions and implemented good horticultural practices. Impacts related to soil and chemical runoff can be reduced to insignificant levels with implementation of BMPs by Rarity Communities and residents to control soil erosion, and to limit chemical runoff. Loss of woody vegetation can be held to insignificant levels through TVA control of vegetation management on the marginal strip below the 820-foot contour. Maintenance of a wooded shoreline is important to maintain the currently "good" shoreline aquatic habitat that exists over most of the western shoreline of both the TVA tract proposed for sale and the balance of the Rarity Pointe development. Although aquatic impacts can be reduced to insignificant levels as noted above, this is the least desirable alternative because of the likely long-term degradation in shoreline woody vegetation, and increased erosion and

chemical runoff from back-lying lands. These impacts would be similar to those seen in areas where residential development has previously occurred on Tellico Reservoir; such impacts at the Rarity Pointe site would be in addition to impacts associated with future development of residential and industrial tracts on the reservoir.

#### **Alternative C - Small Golf Course and Marina with Partial Land Sale**

Impacts associated with marina expansion and construction of the par-3 golf course would occur. Riparian zone degradation associated with development would occur on shoreline fronting private land. The extent of runoff of soil and chemicals from back-lying private property and TVA land made available for development under this alternative would vary with the amount of resultant soil disturbance and vegetation clearing, but would likely be less than anticipated for Alternative B because of less TVA land being made available for disturbance, and because a larger reach of shoreline would remain undisturbed on TVA property at the Rarity Pointe site. Impacts to aquatic life can be reduced to insignificant levels with implementation of BMPs by Rarity Communities and residents, and with establishment of a 50-foot deep buffer zone of undisturbed vegetation along the periphery of the TVA property considered in this proposal. An exchange for approximately 60 acres at the Wildcat Rock site would help mitigate the loss of shoreline remaining under TVA control reservoir-wide, but would still allow fragmentation of shoreline under TVA control at the Rarity Pointe site. Impacts from the dredge would be the same as for Alternative B requiring the same commitments.

#### **Alternative D – Small Golf Course and Marina with No Land Sale**

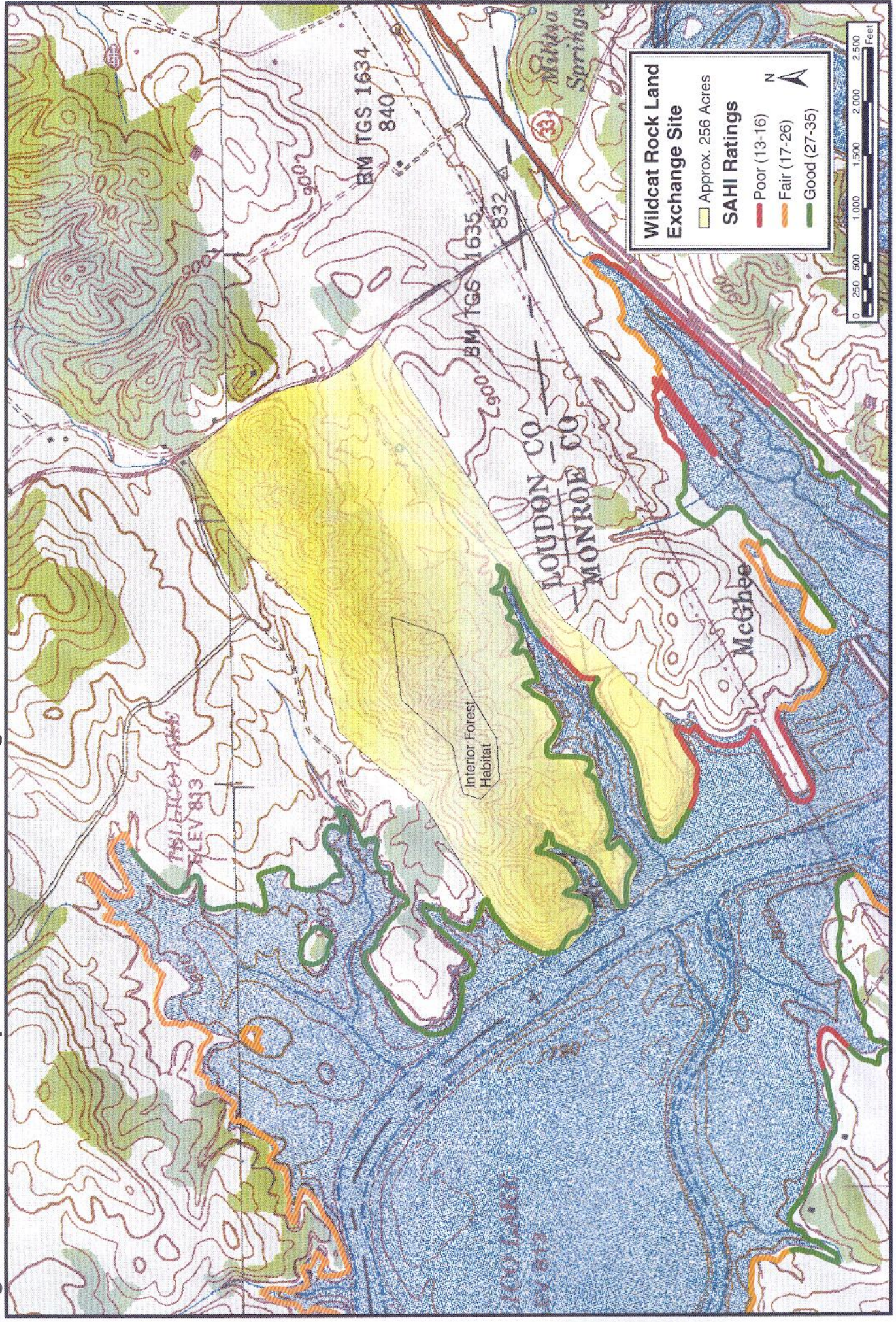
Adoption of this alternative would result in development of the Marina, with the associated disturbance of the shoreline and alteration of vegetation there, and use of TVA land below the 820-foot contour for the par-3 golf course. Impacts to aquatic life resulting from these uses and associated alterations to the shoreline condition could be reduced to insignificant levels with implementation of TVA's General and Standard Conditions normally associated with such developments. Not allowing sale of the TVA property for incorporation into the Rarity Pointe development would reduce erosion and chemical runoff to the reservoir from the golf course and residential areas that would be developed on what is now TVA property. A more wooded shoreline condition would be maintained, and trees would continue to provide shade and long-term woody habitat for aquatic life. Impacts from the dredge would be the same as for Alternative B requiring the same commitments.

#### **Alternative E – Applicant's Proposal with Mitigation**

Impacts associated with development of the Rarity Pointe site described under Alternative B would occur. Impacts from the dredge would be the same as for Alternative B requiring the same commitments. Impacts related to soil and chemical runoff can be reduced to insignificant levels with implementation of Best Management Practices by Rarity Communities and residents to control soil erosion, and to limit chemical runoff. Loss of woody vegetation can be held to insignificant levels through TVA control of vegetation management on the marginal strip below the 820-foot contour, and establishment of a 50-foot deep buffer zone of undisturbed vegetation along the periphery of the TVA property considered in this proposal. The SAHI score of most of the shoreline at the Wildcat Rock site (see Figure 4-1) rated "good"; shoreline reaches where past land use practices have resulted in a loss of trees on the shoreline in the large cove and on the southern end of the site rated "poor". TVA control of the Wildcat Rock site would allow preservation of these generally good shoreline conditions.



Figure 4-1 Shoreline Aquatic Habitat Index Ratings for Wildcat Rock





### **4.3. Threatened and Endangered Species**

**Plants** - No federal or state listed plant species were identified on any of the lands that would be sold and/or developed under any of the Alternatives. Therefore, no impacts to rare plant species are expected on any of these lands.

Alternatives C and E include provisions to mitigate for the loss of public land through a land exchange in which additional properties would be purchased by the applicant and transferred to public ownership. Because no rare plant species were identified on lands proposed for sale and/or development, mitigation is not required for rare plant species. However, the presence of rare plant species on any of the proposed mitigation lands would represent a net benefit with respect to these resources, because they would be transferred from TRDA property designated for industrial development to public ownership designated for conservation. Mitigation lands associated with Alternative C do not contain suitable habitat for rare plant species.

Alternative E also includes provisions for Rarity Communities to fund the construction of a trail terminal on Parcel 6 (which would be retained in public ownership, and left in Zone 4 – Natural Resource Conservation). The footprint of the trail terminal and associated facilities is expected to be small (1-2 acres) relative to the size of the entire Parcel (40.9 acres). No rare plants are expected to be impacted by development of the trail. However, if this alternative is selected, TVA will work closely with Rarity Communities to ensure that impacts to rare plant species are avoided during the construction and use of trail facilities on Parcel 6.

In summary, no adverse impacts to rare plant species are anticipated under any of the proposed alternatives.

**Aquatic Animals** - Since no sensitive aquatic animals are known to occur in the project area, none of the Alternatives would have an effect on endangered or threatened aquatic animals.

**Terrestrial Animals** - Nearly the entire potential suitable habitat for protected terrestrial animals occurs on the private lands currently owned by Rarity Communities. Therefore, impacts to potential habitat for these species are most dependent on the land actions for those properties. Because the development of private project lands is expected to go forward under any alternative, the impacts to habitat for these species vary little across the different alternatives as discussed below.

#### **Alternative A - No Action**

Under this alternative, the development of the private properties are expected to proceed without the involvement of the TVA lands (Figure 2-2). Many of the same effects to protected terrestrial animals described in Alternative B would also occur here.

Overall, this alternative has the potential to have the least impacts on protected terrestrial animals. A higher level of wildlife habitat continuity and integrity along the shoreline of Tellico Reservoir would be maintained because the TVA property (Parcels 8 and 9) would not be developed. This would maintain additional shoreline that can be used by wintering bald eagles.



The development of private project lands would result in local impacts to potential suitable habitat for protected terrestrial animals. TVA would take no further action and would not impact the resource.

### **Alternative B - Applicant's Proposal**

Under this alternative, nearly all of the project lands would be developed (Figure 2-3). This alternative has the potential to result in the most reduction of forested habitat potentially used by protected terrestrial animals.

No nesting bald eagles are known from the vicinity of the project site. However, wintering birds are reported annually in the vicinity. Although this development would not adversely affect the overall suitability of the reservoir for bald eagles, development of this magnitude further reduces the integrity and continuity of bald eagle habitat in the immediate area, and thus slightly reduces shoreline conditions suitable for bald eagles. Potential suitable habitat for the federal-endangered Indiana bat occurs on the private project lands.

Two species listed by the State of Tennessee as "In Need of Management" may find suitable habitat within the project lands: sharp-shinned hawk and southeastern shrew. For the most part, habitat for these species would be more isolated on project lands as a result of implementation of this alternative.

Potential nesting habitat for the sharp-shinned hawk would be removed by the selection of this alternative. Clearing would involve the removal of early successional vegetation and woodlands. Because this species nests in somewhat fragmented landscape, if present, it may continue to reside on project lands after development if scattered forested tracts remain in the area. Direct disturbances to this species as a result of this alternative are expected to be minimal and temporary; and therefore, insignificant.

If southeastern shrews occur within the project lands, some individuals may be destroyed by construction activities. This mammal has relatively broad habitat requirements and has a wide geographic distribution. If present, it may continue to reside on project lands after development if scattered forested tracts surrounding moist habitats remain in the area.

Overall, the development of private project lands would result in local impacts to potential habitat for protected terrestrial animals. TVA lands (Parcels 8 and 9) provide very limited potential habitat for protected terrestrial animals. Therefore, protected terrestrial animals or their habitat would not be adversely affected under Alternative B.

### **Alternative C - Partial Land Sale with Mitigation**

Under this alternative, many of the same effects to protected terrestrial animals or their habitats described in Alternative B would also occur. Some forested shoreline would remain on the lower portion of Parcels 8 and 9. This alternative would maintain some additional level of habitat continuity along the shoreline, because Parcels 8 and 9 would not be developed in their entirety (Figure 2-4).

The lands proposed for mitigation under this alternative (Figure 2-4) are described in Section 4.4 Terrestrial Ecology where TVA lands and the proposed mitigation lands are compared. This land provides potential habitat for those protected terrestrial animals discussed and the acquisition of these lands would adequately replace habitat for the resource from the loss of TVA land.

In order to avoid impacts on federally-protected Indiana bat habitat on the private property, TVA would require the Applicant to implement mitigation measure number 4 as a condition of its approval (See Section 4.15 - Proposed Mitigation Measures). TVA lands (Parcels 8 and 9) provide very limited potential habitat for protected terrestrial animals. Therefore, protected terrestrial animals or their habitat would not be adversely affected under Alternative C.

#### **Alternative D - Small Golf Course and Marina with No Land Sale**

Under this alternative, many of the same effects to wildlife described in Alternative B would also occur. A higher level of wildlife habitat integrity along the shoreline of Tellico Reservoir would be maintained because Parcels 8 and 9 would not be developed (Figure 2-5). Development under this alternative would include the five acres of land below the 820-ft contour and the proposed marina expansion.

In order to avoid impacts on federal-protected Indiana bat habitat on the private property, TVA would require mitigation measure number 4 as a condition of its approval (See Section 4.15 - Proposed Mitigation Measures). Therefore, protected terrestrial animals or their habitat would not be adversely affected under Alternative D.

#### **Alternative E - Applicant's Proposal with Mitigation**

Under this alternative, many of the same effects to wildlife described in Alternative B would also occur. Due to the additional clearing for trailhead development on parcel 6 (Figure 2-6), this alternative would involve the most land clearing. However, this alternative involves a land exchange that help would offset the impacts of developing TVA lands.

The lands proposed for mitigation under this alternative are described in Section 4.4 Terrestrial Ecology where TVA lands and the proposed mitigation lands are compared. This land provides potential habitat for those protected terrestrial animals discussed and acquisition of these lands would adequately replace habitat for the resources from the loss of TVA land.

In order to avoid impacts on federal-protected Indiana bat habit on the private property, TVA would require commitment number 4 as a condition of its approval (See Section 4.15 - Proposed Mitigation Measures). Therefore, protected terrestrial animals or their habitat would not be adversely affected under Alternative E. In addition the proposed land exchange and commitments would potentially benefit this resource.

Under Alternatives E, the Applicant would build a trail terminal in accordance with plans established by TVA on Parcel 6. Although no impacts are expected, TVA biologists would ensure that construction and use of the site will not adversely affect protected terrestrial animals.

The TVA lands involved in this proposal offer very limited potential suitable habitat for protected terrestrial animals and are a very small percentage of the forested lands along the reservoir. Therefore, the development of TVA lands under this proposal would have very minor or no effects on the long-term viability of protected terrestrial animals and their habitats along the reservoir.

Development would occur on a minimum of about 539 acres (Rarity Communities' properties) under any alternative proposed in this EIS, further reducing the integrity and continuity of existing forest communities and associated wildlife habitats along the reservoir

Section 4.1 Terrestrial Ecology (*Plants and Animals*) provides an analysis of the loss of forest communities and associated wildlife habitats along the reservoir. Those findings are also relevant here. An analysis of this resource indicates that the effects of this proposal would be insignificant with respect to overall impacts to protected terrestrial animals and their habitats.

#### **4.4. Water Quality**

Potential impacts to water quality include discharge of sediment during construction, increased loading of pollutants in runoff due to the change in land use to residential and golf course, and potential spills and discharges of fuel and wastewater from boats at the proposed marina. An increase of nutrient loading could contribute to higher algal mass in the reservoir, which could in turn lead to decreased dissolved oxygen in the reservoir during periods of stratification. Increases in sediment discharge contribute to the muddy appearance of the water and interfere with the quality of aquatic habitat, and toxic materials (such as metals, hydrocarbons, and pesticides) in storm water runoff from residential and golf course areas can be toxic to aquatic organisms.

##### **Alternative A – No Action**

Under this alternative, the land would not be sold, or the par-3 golf course and marina permitted. However, construction of the main golf course and the 1,200 residential units would proceed on private property.

Minor discharges of eroded soil are likely during construction. These impacts would be minimized by maintaining buffers and employing effective erosion control BMPs. Because there would be no TVA involvement, such practices would have to be overseen by the county and the state.

Residential or resort development at this density (approximately 2.9 units per acre) results in a high percentage of land covered with impervious surfaces (roofs, streets, and parking). As a result, storm water volume and peak flows increase, and pollutant loads (including nutrients and metals) increase as materials are washed off of impervious surfaces and from lawn runoff. Shoreline buffers are helpful, but most storm water flow is in a pipe or channel, so it bypasses the buffer. Minor local impact is possible, but total loads, estimated at 0.21 tons/year of phosphorus by assuming a rate of 0.97 lb. of phosphorus per acre (USEPA, 1980), will be small compared to the total load entering Tellico Reservoir (estimated above at about 130 tons/year). Phosphorus loading as a means of comparison, because it is likely to be the limiting nutrient in the reservoir in the chain of events that leads to dissolved oxygen depletion. Other pollutants are extremely varied and much less likely to have a measurable impact on water quality.

During initial phases of development, engineered onsite wastewater treatment will be used as a temporary measure. After a pipeline is constructed, sewage will be pumped to the Niles Ferry Wastewater Treatment Facility, in Monroe County.

The plant has a capacity of 0.3 million gallons per day (MGD), and currently uses approximately two thirds of its capacity. With the additional discharge from this project when fully developed, this capacity will be exceeded. Because this area is growing and there is already a need for additional waste treatment capacity, expansion is planned that would handle the additional flow from the Rarity Pointe project.

Some increase in nutrient loading to the reservoir will result from the increased volume of the treated sewage discharge produced by the Rarity Pointe project. This increase is estimated at 3.6 tons/year of phosphorus (assuming 3 people per residential unit and a typical per capita annual loading of 0.9 kg for secondary treatment).

Golf courses use amounts of fertilizer and pesticides that are similar to, and sometimes higher than, cultivated agriculture (Tennessee Department of Agriculture, 2002). Golf courses primarily use fungicides to maintain the turf, and also use some herbicides and smaller amounts of insecticides, miticides, and nematicides. Fertilizer application rates are fairly high, but excessive fertilizer application is rare because of the cost of fertilizer-increased frequency of mowing and the need to maintain. The amount of these chemicals that escape into waterways from golf courses is usually much lower than from cultivated agriculture, because golf courses are managed to maintain turf that completely covers the soil surface. The turf acts as a filter for surface flow, and prevents the erosion of soil and the chemicals that are bound to the soil particles. In addition, golf course roughs do not receive chemical treatment and act as sinks for chemicals, and the storm water flow from the course is dispersed enough that buffers can be effective. Golf courses can use additional management practices to reduce the export of pollutants, such as enhanced buffers; use of water hazards or constructed wetlands to collect and hold runoff; and the use of selected pesticides that decay rapidly in the environment. Few studies have been done that specifically quantify pollutant loadings from golf courses, but the impact of a golf course with average management is likely to be similar to a residential area on a loading/area basis, so the golf course would add approximately 0.04 tons of phosphorus per year.

The region around Tellico Reservoir is growing rapidly (see Socioeconomics Section 3.9), and water quality in the reservoir appears to be suffering from increased nutrient loading (see Section 3.4). This development would contribute approximately 4 tons of phosphorus per year of loading to the reservoir, which would be a small increase compared to current loading, which is on the order of 130 tons. This increase along with future proposed development as allocated in the Tellico Land Use plan would not significantly worsen the existing water quality in Tellico Reservoir.

### **Alternative B – Applicant's Proposal**

This alternative allows the use of approximately 118 acres of TVA land for residential development, and 5 acres of TVA land for a par-3 golf course. In addition, the proposed marina would be permitted.

The use of approximately 118 acres of TVA land would reduce the density of the residential development. Because the residential area would be less compact, there would be slightly more impervious area per residential unit. However, the same number of residential units would generate approximately the same amount of pollutants, so it is unlikely that there would be any water quality change caused by residential development compared to Alternative A.

Minor discharges of eroded soil are likely during construction. These impacts would be minimized by maintaining buffers and employing effective erosion control BMPs. (Commitment 9)

This alternative would add a small par-3 golf course located on TVA land. Because of the location, there is less opportunity to establish effective buffers or other runoff treatment than



on upland sites. Because of the general lack of buffering around the project in this alternative, export of nutrients and pesticides would be higher. Compared to total loading to the reservoir, this would not be significant. This site is exposed to waves generated by wind and boat wakes, and construction of a golf course at this site could compromise the ability of the existing vegetation to resist erosion of the shoreline.

A full service marina with 349 wet slips and 200 dry stack storage spaces would generate pollutants in the form of petroleum and wastewater discharges from boats operating from the marina. The potential impacts from these pollutants include toxicity to fish, increased nutrient loads, and bacterial contamination. The impacts from this marina would not be significant in the main reservoir by themselves because of dilution, and are unlikely to be significant immediately adjacent to the marina because of its location on the main part of the reservoir. However, these pollutant loads do add incrementally to the overall load in the reservoir, and the visible location of this marina can set the standard for marina housekeeping on this reservoir.

Increased boat traffic around the marina could cause increased shoreline erosion from boat wakes.

To minimize pollutant loading and to provide an example of good stewardship to the rest of users of Tellico Reservoir, this marina should comply with the requirements of the Clean Marina program. However, at a minimum to prevent spilling fuel or wastewater, any fuel storage or dispensing facility would comply with TVA Resource Stewardship (TVARS) Guidelines for Storage Tanks (4.5.5). A Marina Sewage Pump out station will be installed and operated according to TVARS Guidelines 4.5.3, and the marina will comply with TVARS Guidelines for Discharges (4.5.1) (See Appendix F). Detailed plans of the marina will be approved by TVA before a 26a permit is issued (Commitments 10).

In order to minimize the impacts to water, Rarity Communities would implement a management plan for the golf courses based on the Tennessee Department of Agriculture's guidelines or certification of the golf courses by Audubon or similar organizations which would reduce the environmental impacts and provide a method of tracking compliance.

More detailed marina plans submitted to TVA includes a proposed dredge of approximately 10,000 cubic yards. Dredging has the potential to suspend the fine particles in the dredge material and cause high turbidity in the immediate area of the operation. Because dredging would be performed at low water level, much of the excavation area would be out of the water, so this potential would be reduced. Some of this area would be below the water surface, and this portion of the dredging work would likely result in high turbidity in the area adjacent to the operation. Water quality impacts would be confined to a small area and would not last long past the completion of dredging.

Much of the dredge spoil material would be easily handled because the work would occur at low water. However, about a third of the material would be saturated with water because it would be coming from below the water surface elevation. This material would discharge muddy water wherever it is placed. Drainage from dump trucks could cause not only water quality impacts, but road safety impacts.

The following commitments are required for the dredge (See Section 4.15, Commitment 6):

- Material to be dredged will be tested for toxic materials (PCBs and Chlordane) before dredging commences. If any toxic materials are found, dredging will not proceed

without a dredging plan that guarantees that no toxic material will be released to the environment.

- Silt curtains must be placed around the perimeter of the dredge area, so as to not allow silt laden water outside the work area.
- A dewatering plan for the saturated spoil will be developed and approved by TVA. The plan should use berms, straw bales silt fencing, or other silt control devices positioned in such a way as to not allow silt-laden water to re-enter the reservoir.
- All dredged material must be removed to an upland site (above 820-foot elevation) and contained in a manner to prevent its return to any waterbody or wetland, and permanently stabilized to prevent erosion.

### **Alternative C – Small Golf Course and Marina with Partial Land Sale**

In this alternative, all development proposed in Alternative B would take place. Some TVA land would be retained, which would reduce the amount of development close to the shoreline, and therefore marginally reduce the amount of pollutants delivered to the reservoir.

Minor discharges of eroded soil are likely during construction. These impacts would be minimized by maintaining buffers and employing effective erosion control BMPs (Commitment 9).

This alternative also involves the conversion of 60 acres of land currently designated for industrial use to a natural resource conservation allocation. Currently, part of this land is used for grazing, and part is wooded. Removal of cattle from this area would marginally reduce pollutant delivery to the reservoir.

The increase in loading from any future industrial development at this site would depend on the nature of the industrial activity and the number of employees. At this time, there are no proposals for industrial development of any of this site. Because of the steep and rocky nature of approximately half of this site, industrial development would be difficult, and is unlikely to occur until all of the better sites in the area are used. With these factors considered, it is unlikely that more than a small fraction of the loading generated by Rarity Pointe would be offset by this change in allocation.

Increased boat traffic around the marina could cause increased shoreline erosion from boat wakes. However, impacts to water quality would be insignificant provided the commitments as described for Alternative B are implemented for this alternative.

### **Alternative D – Small Golf Course and Marina with No Land Sale**

This alternative is similar to Alternative A, except that the marina and the par-3 golf course would be permitted as in Alternative B. Impacts would be similar to Alternative A with the additional impacts of the marina and par-3 golf course as discussed under Alternative B.

Minor discharges of eroded soil are likely during construction. These impacts would be minimized by maintaining buffers and employing effective erosion control BMPs.

Increased boat traffic around the marina could cause increased shoreline erosion from boat wakes. However, impacts to water quality would be insignificant provided the commitments as described under Alternative B for the golf course and marina are implemented.

### **Alternative E – Applicant’s Proposal with Mitigation**

In this alternative, the approximately 118 acres of TVA land would be sold, the par-3 golf course would be permitted, and the marina approved. To mitigate for the loss of public lands, it is proposed that a 256-acre parcel currently allocated to industrial use be changed to a natural resource conservation allocation. Impacts of the development are discussed in Alternative B.

Minor discharges of eroded soil are likely during construction. These impacts would be minimized by maintaining buffers and employing effective erosion control BMPS (Commitment 9).

In addition to the commitments described in Alternative B, in order to further minimize the impacts to water quality and to be consistent with similar TVA actions, Rarity Communities will be required to maintain a 50 foot buffer and 35 foot setback on parcels 8 and 9 as described in Section 4.15, Commitment 1.

Increased boat traffic around the marina could cause increased shoreline erosion from boat wakes. However, impacts to water quality would be the least adverse of all the alternatives provided the commitments as described are implemented.

## **4.5. Wetlands and Floodplains**

### **Alternative A - No Action**

There would be no direct impacts to wetlands W1, W2, and W8 on TVA Parcels 8 and 9 because the land allocation would not change. There would be no impacts to wetland W4, which is on the shoreline in the area of the proposed Rarity Point Marina; wetland W5, which is partially along the shoreline in the area proposed for the par-3 golf course; and the 100-year floodplain because these uses would not be approved.

The wetlands that are wholly on land owned by Rarity Communities Properties are W9 and W10 which are fringe wetlands along small man-made ponds. The loss of these emergent wetlands would be insignificant locally and regionally because of their small size, and the common occurrence of this type of pond-associated fringe wetland community in the local area and the region at large. It is likely that the constructed ponds on the Rarity Pointe development, including permanent storm-water retention ponds and recreational ponds, could develop emergent wetlands (either by design or natural processes) which would replace the wildlife habitat functions provided by W9 and W10.

There will be no direct impacts to shoreline wetlands (W1, W2, W3, W4, W5, W6) or the island wetland (W7) on land in TVA ownership below the maximum shoreline contour (MSC) 820-feet because these wetlands will not be disturbed and there will be a vegetated buffer on TVA land below MSC 820-feet between the wetlands and adjacent development and other land disturbance. Potential indirect impacts to these wetlands include increases in inputs of sediments from land erosion and contaminants associated with residential and golf course developments, such as oil and grease, nitrogen, phosphorus, pesticides, and litter. These impacts to wetlands are expected to be avoided since storm water detention ponds, vegetated buffers, and structural erosion controls would be used to avoid the introduction of sediments and contaminants into surface waters and wetlands

Wetland impacts under the No Action Alternative are expected to be insignificant. Any future plans for greenway trails that are not related to the current development would be reviewed for environmental impacts when they are proposed.

### **Alternative B - Applicant's Proposal**

Potential impacts and impact avoidance for wetlands W1, W2, W3, W6, W7, W8, W9 and W10 are expected to be as described above in the No Action Alternative.

Under Alternative B, the marina and par-3 golf course would be approved by TVA. It is likely that wetland W4 would be lost for marina development. The new marina is expected to be placed in the same location and harbor limits as an older, now dismantled, marina. This placement is the most practicable alternative because of the economic and environmental benefits. The applicant would not have to do extensive property clearing, etc. Although the marina would adversely impact the W4 wetland, the benefits and practicality of placing the marina in the proposed location makes this the only practicable alternative. This action would be mitigated by requiring the Applicant to provide shoreline stabilization, alternative wetland creation on the site, or other shoreline habitat enhancement.

Impacts to wetland W5 would consist primarily of limited vegetation removal and trimming of some individual plants. TVA would require the Applicant to fully mitigate the impact in the same manner as the potential impacts to wetland W4 would be mitigated. TVA would require the following mitigation for unavoidable permanent or temporary loss of some or all wetland functions in wetlands W4 and W5. W4 and W5 are to be mitigated under the Wetlands Mitigation Plan found in Appendix C.

Mitigation would consist of a combination of shoreline stabilization, wetland creation, and shoreline habitat enhancement, on the Rarity Pointe and/or TVA shoreline to achieve shoreline erosion control, wildlife habitat creation, and an increase in native plant diversity. This mitigation would be applied at a minimum 3:1 ratio of mitigation area to lost wetland area and affected shoreline length. Suitable areas for shoreline stabilization and wetland creation are available along the shoreline between the western end of the proposed marina and wetland W5, and around the par-3 golf course peninsula. See Mitigation Plan in Appendix C (Commitment 7).

Vegetated buffers would be established between the wetlands and adjacent development and other land disturbance to minimize indirect impacts. In areas where establishing standard 100 foot wetland buffers is infeasible, one or more of the following three options would be used to compensate for the reduced buffer area and prevent degradation of wetland functions, see Mitigation Plan in Appendix C (Commitment 7):

1. Use of variable width buffers, where encroachments are offset by proportionally increasing buffer width in other areas.
2. Establishment of a 150 foot sub-zoned buffer, with usage limitations decreasing farther from the wetland. In this case parts of the golf course itself would be counted as the outer part of the buffer. Areas would be counted as part of the buffer where limitations are established on pesticide usage, impervious surface area, and excavation, and/or where native vegetation with the greatest capability to remove sediments and contaminants over shorter distances is incorporated into the landscaping.



3. To compensate for the reduced buffer area additional areas of shoreline stabilization, wetland creation, and/or other shoreline habitat enhancement, would be substituted for the reduced buffer area on a 1:1 basis.

Wetland impacts resulting from this alternative are expected to be insignificant because wetlands impacts would be avoided, minimized, or compensated.

The proposed development involves the construction of residential structures, golf courses and a marina. TVA would retain ownership of all land below elevation 820.0 feet MSL and all development subject to flood damage (including all residential structures and the dry boat storage building) would be located off of TVA retained land and, therefore, above the TVA Flood Risk Profile elevation. Within the 100-year floodplain, the proposed marina facilities consist of floating boat slips, fuel dock, floating restaurant and breakwater, and a boat launching ramp. For compliance with Executive Order (EO) 11988, these are considered to be repetitive actions in the floodplain that generally result in minor floodplain impacts. The par-3 golf course is not on the list of repetitive actions, however, a golf course is considered to be a recreational use of the floodplain. Recreational use of the floodplain is acceptable provided no flood damageable facilities or equipment are located in the floodplain. The activities proposed for the golf course (landscaping, vegetation management, pedestrian walkways, driveway and parking lots) would have minor floodplain impacts. There would be no loss of flood control storage associated with the construction of the golf course which would comply with the TVA Flood Control Storage Loss Guideline.

Overall, impacts to floodplains would be minor and insignificant. To prevent an increase in future flood damages, the following commitments, would be included in the final Section 26a permit and land use approval:

- The applicant will securely anchor all floating facilities to prevent them from floating free during major floods
- Any future facilities or equipment subject to flood damage would be located above the TVA Flood Risk Profile elevation of 817.0 feet MSL
- Any future development proposed within the limits of the 100-year floodplain, elevation 816.2 feet MSL, would be consistent with the requirements of EO 11988
- All future development would be consistent with the requirements of TVA's Flood Control Storage Loss Guideline.

#### **Alternative C – Small Golf Course and Marina with Partial Land Sale**

The floodplain and wetland impacts and their impact mitigation requirements of this alternative are the same as described in Alternative B. Wetlands W2, W3, and W8 will be closer to developed areas under this alternative, but indirect impacts will be avoided through implementation of BMPs and/or mitigated as described above.

Impacts to wetlands occurring on the proposed land exchange sites are expected to be beneficial because these sites would be transferred to TVA and designated for natural resource and recreational purposes. Existing sources of adverse wetland impacts on these sites, such as cattle on the Wildcat Rock site, will be removed.

#### **Alternative D – Small Golf Course and Marina with No Land Sale**

The floodplain and wetland impacts and the impact mitigation requirements of this alternative are the same as described in Alternative B with the exception that the potential for indirect impacts to wetlands W2 and W8 will be greatly minimized because of their distance from developed areas.

#### **Alternative E – Land Exchange with Mitigation**

The floodplain and wetland impacts of this alternative are expected to be the same as described in Alternative B including required mitigation measures.

TVA is not aware of other planned projects with the potential to cumulatively affect floodplains or the types of wetlands impacted by the Rarity Pointe project beyond those contemplated by the 2000 Land Plan EIS. It might be expected that future potential impacts to wetlands will continue to be avoided, minimized, or losses mitigated because of existing regulatory protections and E.O. 11990. Most of the wetlands in the Rarity Pointe assessment area will be avoided. Wetlands W9 and W10 are associated with manmade ponds. The loss of these two pond emergent wetlands, totaling less than 0.15 acres, will not contribute significantly to cumulative wetland losses in the region or Tellico Reservoir area because they are likely to be replaced by fringe wetlands associated with the storm water and recreational ponds on the Rarity Pointe development. The potential loss of wetland W4 and indirect impacts to wetland W5 that could occur under Alternatives B, C, D, and E will be mitigated by wetland creation and/or shoreline stabilization and, thus, will not contribute to cumulative wetland losses.

### **4.6. Recreation**

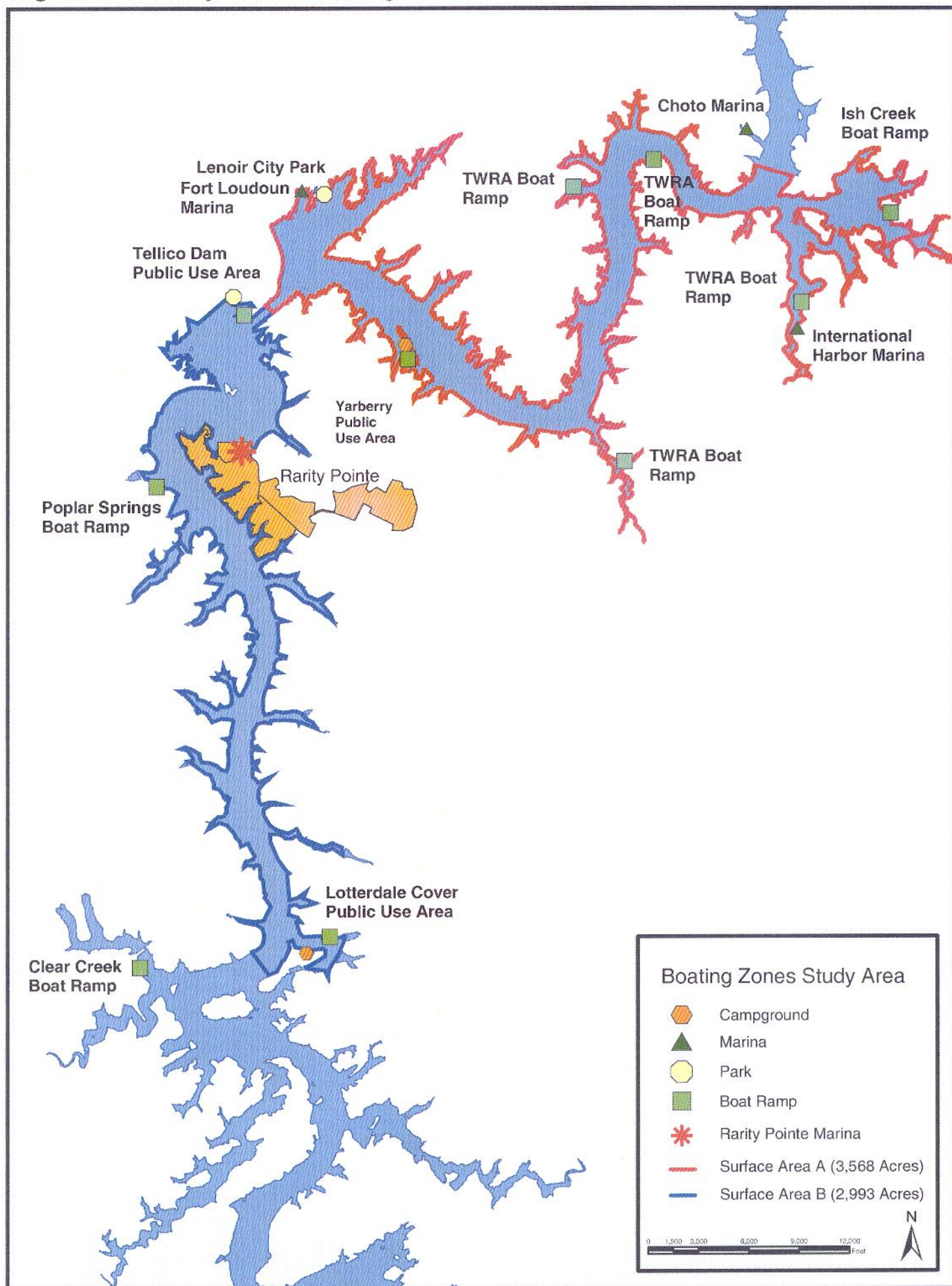
#### **Boating**

The public scoping process identified increased boating as a concern which prompted an evaluation in this analysis. An estimated twenty-two mile long boating use zone was assumed as a reasonable area for analysis of boating impacts associated with the new marina. This zone reflects reasonable distances which the majority of boat users from the marina would travel on a recreational outing. It stretches from Little Tennessee River mile 10.0 on Tellico Reservoir to Tennessee River mile 612.2 on Fort Loudoun Reservoir. The Tellico boating zone represents 2,993 acres, and the Fort Loudoun zone represents 3,568 acres creating a total zone of 6,561 surface acres of water. This area is depicted in Figure 4-2 the Rarity Pointe Boating Zones. TVA staff observations reflect a consistently low level of boating use during weekdays, and high use during weekends or Holidays, during the primary boating season of April-September. Other months of the year typically do not produce significant boating density issues.

Increased boating use affects the quality of the recreational experience. One way of assessing increased boating use is through the concept of recreation carrying capacity. Recreation carrying capacity can be defined as the amount, type, and distribution of recreation use that can occur without having unacceptable impacts on the recreation experience. A metric of boats per acre has been used here as a proxy measure for recreation carrying capacity and to produce estimates of boating impacts.

Tims Ford Reservoir is the only TVA reservoir for which the experience of boaters was assessed from a study in which boaters were asked questions about their recreational experience (TVA, 2002). This study, as well as several previous studies on non-TVA

**Figure 4-2 Rarity Pointe Boating Zones**



reservoirs, relies on three different density levels in an effort to compare people's perceptions of various crowding issues (Titre, et al., 1995). These recreation use density levels are: 10 to 15 acres per boat for high use; 15.1 to 20 acres per boat for moderate use; and 20.1 to 25 acres per boat for low use.

Titre, et al. (1995), states that their density levels should not be considered as a space standard. However, the upper end of the density range for the high use category (10 acres per boat) corresponds to the level that many reservoir managers use as a guideline indicating that a reservoir is becoming crowded and, therefore, may need an assessment to manage boating use. An Urban Research and Development Corporation study (1977) found that, on the average, the State Comprehensive Outdoor Recreation Plan standard used was 8 acres per boat and that those reservoir managers surveyed used 9 acres per boat. Since boats are bigger and more powerful today and personal watercraft did not exist, a conservative planning tool of 10 acres per boat has been used as a guideline indicating potential for crowding, a reduced value in the recreation experience, and an increased concern expressed by boaters for their safety. However, it should be noted from the above literature review that this planning guideline is somewhat subjective since the studies are based on responses to questionnaires from boaters about their perception of what would constitute an interference with the recreational experience.

In order to estimate the impact of the proposed marina project at Rarity Pointe on boaters' experiences, the level of current and reasonably foreseeable future use is first estimated for the boating use zones (see Figure 4-2, Boating Zones Study Area). These estimates, i.e., maximum total number of boats/jet skis likely to be in this zone at the same time, are provided below in Table 4-4. According to the SMI EIS (TVA, 1998), the average width of a residential shoreline lot on Fort Loudoun is 160 feet. To estimate the number of future private docks, the "open" residential access shoreline (shoreline which can be considered for private water use facilities) on Fort Loudoun was measured. This shoreline measured approximately 333,194 feet. This total linear footage (333,194 feet) was then divided by 160 feet, which equals an estimated 2,082 total potential shoreline lots. From this number of lots, 2,082, the 618 lots with existing permitted docks are subtracted. Under this scenario, as many as 1,464 future private docks could potentially be constructed, if approved by TVA.

The Tellico Village Master Plan, approved by TVA, authorizes up to 900 individual and 1,800 community docks for the entire residential community. With this authorization, 290 residential lots have developed private water use facilities within the boating use zone and the balance of the platted lots in this zone can produce another 242 docks. There are 583 community slips existing within the boating zone area of the village, and in addition, the Master Plan anticipates approximately 270 community slips and 200 dry storage slips.

It is not likely that all of the potential docks would be built within the boating use zone in the near future. In the past 5 years, TVA has averaged issuing 94 (46 for Fort Loudoun; 48 for Tellico) Section 26a permits per year for private docks in this study area. It is assumed, for purposes of this cumulative impact analysis that a similar growth pattern will continue in the area during the next 10 years, resulting in an additional 942 private docks. Because of current interest and continuing development of Tellico Village, for the purposes of this analysis, the 200 dry storage slips and the 270 community slips will have also been anticipated in the next 10 years.

The following factors or assumptions contributed to the Table 4-2 estimates of use below:



1. Visual inspections of approved private docks within the twenty-two mile zone indicate an average of 1.7 vessels (boats and jet skis) per private lot.
2. Since public access areas are well dispersed around the reservoir and there is ample weekday parking capacity, no additional public ramp parking would be made available.
3. Tellico Village is pre-approved for 470 additional slips.
4. The last five years produced an average of 94 private dock permits per year.

<b>Table 4-2. Estimated Total Boat Storage and Launching Capacity of Motorized Water Vessels (Boats and Jet Skis) Now and Future Within the Boating Use Zone</b>								
	<b>Existing Use</b>				<b>Projected Future Use (10 years)</b>			
<b>Source</b>	<b>Marinas</b>	<b>Public Ramps</b>	<b>Private Docks</b>	<b>Community Slips</b>	<b>Private Docks</b>	<b>Village Dry Storage</b>	<b>Village Com. Slips</b>	<b>Rarity Pointe Marina</b>
<b>Fort Loudoun vessels</b>	711	119	854	0	462	0	0	0
<b>Tellico vessels</b>	0	185	433	583	480	200	270	529
<b>Total vessels</b>	711	304	1287	583	942	200	270	529

The following conservative assumptions are used to develop likely scenarios of boating use as reflected in Table 4-3:

1. On an average summer weekend day, no more than 25 percent of marina boats, existing dock owner boats/jet skis, or boats from existing public ramps would likely be on the water at one time and at the same time.
2. On a holiday weekend day, no more than 35 percent of marina boats, existing dock owner boats/jet skis, or boats from existing public ramps would likely be on the water at the same time.

<b>Table 4-3. Estimated Vessels at One Time From Various Reservoir Facility Types in the Boating Use Zone</b>								
	<b>Existing Use</b>				<b>Projected Future Use (10 years)</b>			
<b>Source</b>	<b>Marinas</b>	<b>Public Ramps</b>	<b>Private Docks</b>	<b>Community Slips</b>	<b>Private Docks</b>	<b>Village Dry Storage</b>	<b>Village Com. Slips</b>	<b>Rarity Pointe Marina</b>
<b>Average Weekend Day (25%)</b>	178	76	322	146	236	50	68	132
<b>Holiday Weekend Day (35%)</b>	249	106	450	205	330	70	95	185

Based on the data and assumptions, the potential numbers of boaters for hypothetical scenarios were derived as shown in Table 4-4.

<b>Table 4-4. Scenarios Representing Different Use Levels in the Boating Use Zone by Weekend Day and Holiday Weekend Day and Number of Acres per Vessel</b>		
<b>Scenario</b>	<b>Weekend day Vessels and Number of Vessels/Surface Acre (25%)</b>	<b>Holiday Weekend day Vessels and Number of Vessels/Surface Acre (35%)</b>
<b>Scenario 1 (Existing use)</b>	722 (9.1 acres/vessel)	1010 (6.5 acres/vessel)
<b>Scenario 2 (Existing use, plus all Future Docks)</b>	1076 (6.1 acres/vessel)	1505 (4.4 acres/vessel)
<b>Scenario 3 (Existing use, plus all Future Docks and Marina)</b>	1208 (5.5 acres/vessel)	1690 (3.9 acres/vessel)

#### **Alternative A - No Action**

The commercial recreation development of the former TVA/TRDA property already sold to Rarity Communities, Inc. will likely continue and accomplish one of the original land use allocations of reservoir property. However, the par-3 golf course and marina would not be developed resulting in a reduction of commercial recreation services. The existing Tellico land use allocations would remain on Parcels 8 and 9 which would continue to be available for the uses described in the plan, including the potential development of a day use recreation area with trail hub, and designation of land for the Greenway and trail system. The proposed WATeR reservoir trail system master plan could be considered as proposed. The continuation of the trail across Rarity Pointe to other TVA property further downstream could not occur. Approximately 1.7 miles of shoreline will remain available for the boating publics' continued use of water fronting undeveloped land.

Hunting opportunities on Parcels 8 and 9 would be negatively affected somewhat if future trail development and use occurred. It is anticipated that specific trail signage regarding hunting and hunting seasons would be needed with Safety Zones established around trailhead facilities and the final trail footprint. Development on the adjacent privately owned land would also affect current hunting use on the property with the possible addition of Safety Zones along the private land boundary. Wildlife observation opportunities would not be materially changed by trail development.

Based on the Rarity Pointe master plan, the proposed unit allocations for development are as follows: former TRDA land (216 acres) = 2.4 units /acre; requested TVA land (118 acres) = 2.8 units /acre; and Rarity Communities, Inc. privately acquired land (323 acres) = 1.06 units /acre. Rarity Communities, Inc. has provided a Development Plan Summary which reflects the developer's position if the No Action Alternative is selected. It states, "dwelling unit size and values would need to change to achieve the total number of units and unit values necessary to produce the projected gross revenues required to fund the existing golf course design and construction of planned amenity structures." Alternatives would include planning high-rise condominium buildings to achieve a higher unit count vertically, reducing the size of one-story unit lots, thus decreasing the overall value per unit resulting in need for

more than 1,200 units, (i.e.) 1,600 units on 548 acres would increase the overall density to 3 dwelling units per acre, thus limiting open space and park area. Additionally, the revised routing plan for the golf course would not allow for tournament play where typically the golf club house is positioned at the number 1 and 18 hole. The current condition of the 118-acre tract left undeveloped would detract from the overall “place-making” of the community, leaving the land unmanaged and giving way to trespassers at Rarity Pointe.”

It is expected that the boating activity in the boating use zone could result in a boating density ranging from 6.5 to 9.1 acres per boat (Table 4-4, Scenario 1). Some members of the public have expressed opinions that current boating use is too high and may have already changed their boating habits. Although this range is below the recommended threshold of 10 acres per boat, there does not appear to be any significant evidence to indicate that boating activities are being reduced and the accident rates do not indicate any specific negative trends. It is usually when use attains the high-density range that previous studies have found a substantial increase in boaters 1) expressing concerns for safety, 2) exhibiting avoidance behavior (staying away from certain areas of the reservoir), and 3) experiencing levels of dissatisfaction in the quality of the recreational experience. Public boating pressures will likely continue to increase, but any additional boating capacity impacts associated with the proposed expansion of the marina would not occur under the No Action Alternative. Increased boating activity associated with development of private docks independent of the applicant's proposal could still occur. Such individual actions would be reviewed on a case-by-case basis.

Rarity Communities intent to proceed with an alternative development plan without use of TVA land will add recreation services and amenities, even though they would be modified somewhat with an alternative golf course layout. With the addition of recreation amenities, preservation of open space/informal use, and possible greenway development, short-term recreation benefits would be beneficial and cumulative recreation benefits should be enhanced.

### **Alternative B - Applicant's Proposal**

TVA would change the allocation on Parcel 8 and a portion of Parcel 9 to allow for the property's development. The golf course, planned unit construction, marina, and par-3 golf course would be developed as proposed on TVA fee land and TVA land below the 820-foot contour. TVA would issue a Section 26a permit resulting in the 349 wet slips and 200 dry slips. The Greenway designation would be eliminated and the potential trail development would not occur on the affected land. The allocation change on approximately 118 acres would reduce the greenway allocation area by about eleven percent and preclude the development of a 45-acre day use recreation area on Parcel 8. It is estimated that approximately 12-14 miles of trails of varied types and lengths could be developed within the greenway corridor. The loss of the approximately 118 acres would eliminate approximately 2.5 miles (18 percent) of the trails. Approximately 1.7 miles of shoreline would not be available for the boating publics' continued use of water fronting undeveloped land.

An upscale, more formal form of recreation use which serves the public would displace an existing, informal recreation use which also serves the public. Although the new amenities would provide additional recreation opportunities, they do so at the loss of existing and planned opportunities of another type. Changing the recreation and natural resource conservation land use allocations to residential/commercial recreation use, and changing the character of undeveloped shoreline to that of developed shoreline will result in adverse effects on informal recreation use. As part of the larger block of eastern shore land

committed to public use, informal recreation activities include camping, hiking, bird watching, bank fishing, and wildlife viewing would be eliminated. The coves fronting the property would no longer be available for boaters to seek refuge from development along the reservoir. Although the public has rights to use land below the 820-foot contour this seldom occurs when residential use exists on the immediate back-lying property, because of the public's perception that the property is privately controlled.

Although additional beneficial recreation amenities would result at Rarity Pointe, the loss of open space, day use area, informal recreation opportunities, and diminished greenway potential would offset these benefits. This loss of existing/planned recreation opportunities would result in cumulative adverse effects on recreation.

Under this alternative, cumulative impact to hunting and wildlife observation opportunities on the lower portion of Tellico Reservoir would occur. This is based primarily on actions that would have similar impacts on these recreational opportunities upstream from Rarity Pointe. The prime example of this is TRDA's Wears Bend property located on the right bank of the reservoir just downstream of the U.S. Highway 411 which contains approximately 2,000 acres. This area is designated for future industrial development and is currently managed by the Tennessee Wildlife Resources Agency under an interim use agreement from TRDA as the Wear Bend Unit of the Tellico Lake Wildlife Management Area. The area receives significant use by hunters, wildlife/bird watchers, hikers, and horseback riders. With the eventual development of the Wears Bend area, the bulk of these uses would be eliminated, leaving only about 1,340 acres of publicly owned property on the right downstream bank of Tellico Reservoir to meet these stakeholder recreation needs. Alternative B would reduce the remaining acreage by another approximately 118 acres or approximately 6.3 percent and would exacerbate this loss.

Boating activity is anticipated to reach a density range of 4.4 to 6.1 acres (Table 4-4, Scenario 2) without the development of the marina. With the marina, it is anticipated that the boating activity in the boating use zone could result in a density ranging from 3.9 to 5.5 acres per boat (Table 4-4, Scenario 3). Although this range is below the recommended threshold of 10 acres per boat, it is close to the existing low end of the existing Scenario 1 range and could be within tolerable limits of public acceptability. If not, the increased boating associated with adding 500 slips, or the normal annual increase in private docks, may result in users having to change the time of day in which they boat, use other areas of the reservoirs, boat on weekdays, or select other reservoirs for boating on weekends and Holidays. Based on current minimal weekday boating use, increases in boating during the weekdays would not create significant effects. Increased boating activity could result in adverse recreation effects both on a short-term and cumulative basis.

### **Alternative C – Partial Land Sale with Mitigation**

This alternative does not permit residential development of TVA land, but adds commercial and public recreation amenities and services. Development of recreation amenities at Rarity Pointe and boating effects would be the same as in Alternative B. TVA would provide approximately 49 acres of the upland portions of requested Parcels 8 and 9 to construct the golf course as planned. Rarity Communities would provide a right-of-way across Rarity Pointe from Antioch Church Road for vehicle and trail access so that a trail terminal and greenway could be established on the remainder of Parcel 9 land. Approximately 1.5 miles of shoreline would remain available for the boating public's continued use of water fronting undeveloped land.



The allocation change on 49 acres would reduce the greenway allocation area by about five percent and preclude the development of a 45-acre day use recreation area on Parcel 8. The loss of the 49 acres would eliminate approximately 1.0 mile (eight percent) of planned trail. The alternative commits 60 acres of land at Wildcat Rock (Figure 2-4) to natural resource conservation which is otherwise committed to industrial use, creating a net gain of 11 acres. The mitigation property consists of a meadow/pastureland, marshy area, small wooded area, and has a portion of a protected cove encompassing 0.5 mile of shoreline, creating a net gain of 0.3 mile. The property has access to a public road and is accessible by boat.

Under this alternative waterfowl hunting on Parcel 5 would essentially be eliminated following construction of the par-3 golf course and expansion of the marina site. Other hunting activities on Parcels 8 and portions of 9 would also be eliminated as only a small portion of Parcels 8 and 9 would remain for public use. The development of a trail terminal on this small remaining portion of Parcel 9 would require the establishment of some type of Safety Zone and because of the limited land that would be left hunting activities, if Safety Zones and signage were established, would be extremely diminished. Wildlife observation opportunities would also be negatively affected, as the bulk of the property would be converted from its existing habitat to other uses. However, trailhead development on a portion of Parcel 9 would allow access for stakeholders to pursue wildlife observation opportunities further up the trail system.

The proposed 60-acre mitigation tract at Wildcat Rock (Figure 2-4) would meet stakeholder needs for wildlife observation; however, the limited size of the tract, in conjunction with anticipated adjacent industrial development, would not allow for a positive hunting experience and conflicts with other users would be expected.

Although additional beneficial recreation opportunities would result at Rarity Pointe and the opportunities for a greenway trail and trail hub development would be enhanced, the primary negative aspect to this alternative is it erodes the integrity of an existing large block of public land eliminating some recreation opportunities on a short-term basis, and does not adequately address replacement of these opportunities on a cumulative basis. While there would be some recreational benefits, the 60-acre isolated mitigation tract is not sufficient to offset the loss of the existing large block of TVA land.

#### **Alternative D – Small Golf Course and Marina with No Land Sale**

TVA would not change the existing use allocations of Parcels 8 and 9 and the land would not be available for sale and development. It would continue to be available for the uses described in the 2000 Land Plan, including the design and establishment of the greenway and trail system and informal recreation use. The continuation of the trail across Rarity Pointe to other TVA land further downstream would not occur. The marina, a modified golf course layout, and par-3 golf course would be developed on privately owned land and TVA land below the 820-foot contour where rights exist, and planned unit development density would increase on the private property. TVA would issue a Section 26a permit resulting in the 349 wet slips and 200 dry slips.

Potential effects of this alternative on hunting and wildlife observation opportunities is similar to those described for the No Action Alternative, with the exception that waterfowl hunting opportunities currently available on Parcel 5 would essentially be eliminated due to the development of the par-3 golf course and the expanded marina complex.

The effects on boating activities would be the same as described in Alternative B, the Applicant's Proposal. The effects to existing recreation use would be the same as described in the No Action Alternative. The potential cumulative recreation effects under this action would be beneficial as new recreation amenities would be provided and existing opportunities would still be available for informal recreation use and potential greenway development.

### **Alternative E – Applicant's Proposal with Mitigation**

The golf course, planned commercial recreation unit construction, marina, and par-3 golf course would be developed as proposed on TVA fee land and TVA land below the 820-foot contour. TVA would issue a Section 26a permit resulting in the 329 wet slips and 200 dry slips. Boating effects will be the same as described in Alternative B, the Applicant's Proposal. An up-scale, more formal form of recreation use would displace an existing, informal recreation use on a portion of public land.

As mitigation for lost wildlife observation opportunities, the applicant would agree to the development of a portion of a proposed trail system, and continuing trail access across Rarity Pointe would be available to TVA's downstream property. A trail terminus and recreation day use area trail hub would be developed by Rarity Communities at no cost to the public or WATeR on Parcel 6, with vehicular access available via Antioch Church Road. A right-of-way does not exist to develop a trail along Antioch Church Road; however, the public could still use the road to access segments of a greenway trail system, for details see figure G-2 in Appendix G.

Potential effects on hunting opportunities on Parcels 8 and 9 would be similar to those described for Alternative B. While wildlife observation opportunities would be essentially lost on Parcels 8 and the sold portion of 9, these opportunities could be enhanced with the establishment of trail terminals either upstream or downstream of the developed properties with a connection across Rarity Pointe property.

As mitigation for environmental impacts, 256 acres of land committed to industrial use known as Wildcat Rock at Wear Bend (Figure 2-6) would be committed to natural resource conservation management. The property offers a mix of meadow, hardwood forest, and ridge land, protected coves, and 2.45 miles of shoreline. The property has access to a public road, is accessible by boat, and receives some informal camping and horseback riding use. Its physical features offer opportunities for a variety of informal recreation use and could stand alone as a park that could support day use facilities and a trail system.

By securing the Wildcat Rock site and protecting and managing this land for natural resource conservation management and informal recreation, the loss of hunting and wildlife observation opportunities on Parcels 8 and 9 under this alternative would be mitigated. Although this site is available for these recreational pursuits now, currently planned future uses of the site would preclude these activities.

This alternative produces a loss of approximately 118 acres (11 percent) of a larger block of existing public land allocated for natural resource management and recreation use, a net gain of 141 acres of land (a return of 2.2 to 1), and nets an additional 0.75 shoreline miles. Although it reduces informal recreation opportunities in one location, it should significantly enhance these opportunities in another location on the reservoir. The primary negative aspect to the alternative is it erodes the integrity of an existing large block of public land and eliminates some recreation opportunities in the short-term.

With the creation of additional recreation opportunities at Rarity Pointe, provision for access over Rarity Pointe for a public trail, and development of a new hub terminal for greenway expansion which should enhance greenway/trail potential, cumulative recreation benefits should be enhanced. The acquisition of the Wildcat Rock property will help offset the loss of 118-acres of TVA land dedicated to public use. However, increased boating activity would still result in some adverse recreation effects.

#### **4.7. Cultural Resources**

##### **Alternative A- No Action**

No historic properties were identified on the private portions of the development. Accordingly, this alternative would have no impact on cultural resources.

##### **Alternative B- Applicant Proposal**

The entire development has been surveyed for historic properties and no historic properties were identified. No historic properties would be affected within the golf/residential complex development. The SHPO concurred that no historic properties would be affected in this alternative.

There is a potential for buried archaeological deposits which has not been field verified, for a small area of the proposed dredge at the marina site. Since this type of work was not previously requested, it was not subjected to an archaeological investigation. Prior to any dredging or other disturbance, TVA Cultural Resources will review the area during low winter pool to determine if a potential does exist for buried cultural remains.

##### **Alternative C- Partial Land Sale with Mitigation**

The entire development has been surveyed for historic properties and no historic properties were identified. The SHPO concurred that no historic properties would be affected within the golf/residential complex development and the TVA retained land. However, the land to be acquired by TVA (60 acres) would be subject to a phased process of cultural resources survey per the conditions set forth in the Tellico Land Plans Memorandum of Agreement (MOA).

TVA Cultural Resources will review the proposed dredge site area during low winter pool, prior to any disturbance, to verify the previous archeological survey.

##### **Alternative D- Small Golf Course and Marina with No Land Sale**

The entire development has been surveyed for historic properties and no historic properties were identified. The SHPO concurred that no historic properties would be affected within the golf/residential complex development and the TVA retained land.

TVA Cultural Resources will review the proposed dredge site area during low winter pool, prior to any disturbance, to verify the previous archeological survey.

##### **Alternative E- Applicants Proposal with Mitigation**

The entire development has been surveyed for historic properties and no historic properties were identified. The SHPO concurred that no historic properties would be affected within the golf/residential complex development. However, the Trail Terminal and the land to be acquired by TVA (Wildcat Rock site- 256 acres) would be subject to a phased process of cultural resources survey per the conditions set forth in the MOA.

TVA Cultural Resources will review the proposed dredge site area during low winter pool, prior to any disturbance, to verify the previous archeological survey.

#### **4.8. Visual Resources**

Visual consequences are examined in terms of visible changes between the existing landscape character and proposed actions, the visibility of proposed changes, sensitivity of the public viewing points, and the viewing distances. The visual assessment criteria used to evaluate the extent and magnitude of these changes was previously described in Section 3.8, Table 3-6.

##### **Alternative A – No Action**

**TVA Tracts** - This alternative (Figure 2-2) would preserve the landscape character and the visual qualities of public land in the residential and reservoir viewsheds. It would reduce the extent of adverse visual change along the east bank and provide a buffer to help screen the proposed back-lying development. The TVA parcels would be retained and their scenic value would increase over time. The adverse visual impacts would be limited to those resulting from development of the two privately owned sections of the project. This alternative would have the least visual impacts for the immediate future.

Under this alternative, the two TVA parcels would not be sold and their attractive natural character would remain intact. The wooded ridges would not be disturbed, allowing the moderate-sized hardwoods on Parcel 8 to mature. Continuing natural succession would replace the dead pine with hardwoods on Parcel 9, which would improve scenic integrity and attractiveness over the next 12-15 years. The trees would continue to provide a pleasing natural appearance. The visual harmony and tranquil sense of place would be preserved for recreational visitors to these parcels, and for the more distant residential and reservoir viewsheds. Boat traffic using the two wooded coves upstream would remain relatively secluded from development, while those in the downstream cove would see the new residential area along the north bank. Both TVA parcels would continue to provide views of undisturbed shoreline and naturally scenic woodland for the residential areas and other viewing points described in the Affected Environment Section 3.8. They would continue to serve as a 0.5-mile setback buffer between the water and planned development to the east on Rarity Communities private land. The wooded ridge tops would screen most views of new structures depending on the height, color, and the season of view.

Also under this alternative, the 5-acre TVA tract below elevation 820-feet would retain its natural appearance for now. Alterations to support commercial recreation development may occur in the future. Until then, the young trees would continue to grow and provide an increasing visual buffer over time. The buffer would screen a small portion of back-lying area, and would appear as a green space within the surrounding development. The proposed lighthouse to be constructed on the former TRDA property would likely remain visible above the trees. Most impacts of adjacent development would still be seen from the reservoir and canal area.

**Private Tracts** - Under this alternative, development has begun and would likely continue on the privately owned lower Jackson Bend peninsula (216 acres) and back-lying tract (323 acres). This part of the project would substantially alter the visual landscape character by changing several hundred acres of wooded reservoir land and back-lying pastoral property



to a suburban-scale residential area and resort. These alterations would reduce the scenic value class from good to poor and result in significant visual impacts, as described below.

Continued project construction on the private land and former TRDA property would probably disturb 75 percent or more of the site and would severely impact the visual landscape with a wide variety of discordant alterations. Construction activities would include extensive tree clearing and earth-moving operations along with construction of roads, multiple buildings of various heights, a 50 to 60 foot high lighthouse feature, golf course, and commercial area that would all contribute substantial adverse contrast. As taller structures become complete, they would likely be visible above the remaining vegetation. Visibility would increase further if trees are removed to the 820-foot contour, and erosion has already removed some shoreline vegetation up to that elevation. Material delivery trucks and construction force traffic would substantially increase visual congestion for at least 2 years on Antioch Church road and 3.5 years longer on U.S. Highway 321. Additional ROW would be cleared and a new power line would be built along Antioch Church road. The changes would be seen from the same reservoir and residential viewing points described in the Affected Environment Section 3.8. The construction disturbance would reduce scenic integrity to very low, and the natural scenic attractiveness would be minimal. The scenic value class would be poor, and most visual tranquility would be lost. The visual discord of principal construction activities would be seen for about 5.5 years based on the projected completion date. Intermittent residential construction would continue to be seen for an unknown period of at least 10 years or more.

The completed development would replace the visual character of woodland ridges and meadow areas with a suburban-scale residential area and resort. The extensive changes would add substantial adverse contrast to the natural reservoir landscape along the east side, and to the back-lying rural countryside. Several hundred acres of various-sized condominiums would be seen along with a variety of residential units ranging from small cottages to large estate homes. The multi-story facilities would add vertical forms that increase adverse variety, add discordant contrast to the rural landscape, and replace the woodland skyline. The size, color, and density of these buildings could increase or lessen their impact. Yard areas, roads, a lodge, marina facilities, lighthouse, golf course, and a commercial area would also be seen among the remaining trees. The 50 to 60-foot high lighthouse structure would remain visible above the trees for at least 20 years. The overall appearance would be similar to the Tellico Village development across the reservoir, with taller structures and somewhat higher density but no individual water use facilities.

Without the TVA parcels, Rarity Communities would consider high-rise condominiums and greater housing density which would further increase the impact. Several stories of the back-lying high-rise units would likely be seen above woodlands on the TVA parcels. Visibility of the development would be greatest during seasons when leaves are down. More lighting would be visible across the night landscape, and night sky brightness would increase somewhat depending type of lighting used. Together these features would dominate the visible landscape and result in a major adverse impact to the surrounding viewsheds. These include locations and viewing points on the reservoir, west bank residential areas, the dam reservation, and nearby roads, as described in the Affected Environment Section 3.8. Additional watercraft use resulting from the marina and residential development would increase visual congestion on the waters nearby. Scenic integrity would be very low due to the heavily altered landscape, and scenic value class would be poor due to the extensive disturbance. Most of the visual tranquility and harmony would be lost on the private tracts, which would adversely change the aesthetic sense of place.

### **Alternative B – Applicant's Proposal**

Under this alternative, the project would be developed as shown in Figure 2-3, which would result in the most severe visual impacts among the proposed alternatives. The proposed master plan for development is shown in Figure 2-1. Impacts resulting from development of the privately owned peninsula (216 acres) and back-lying tract (323 acres) would be the same as described in Alternative A. However, in this alternative, residential development would also occur on the TVA parcels, which would add similar but somewhat greater changes and substantially increase the extensive adverse impacts. About 1.7 miles of additional west-facing shoreline (a 67 percent increase) and an additional approximately 118 acres of shoreline land (a 55 percent increase) would be largely altered. The TVA parcels would no longer provide views of naturally scenic woodland and undisturbed shoreline for the residential areas and other viewing points on the reservoir. These alterations would reduce the scenic value class from excellent to poor and result in significant visual impacts.

Impacts from construction activity on the TVA parcels would be similar but somewhat more severe than those described for the peninsula development. Construction would probably disturb 85 percent or more of the approximately 118 acres, since it would include about twice as much golf course area and a greater residential density. It would also disturb the 5-acre TVA tract below 820-foot elevation and additional shoreline along the marina area. The activities would be seen from additional reservoir and residential viewing points. Scenic integrity would be very low, scenic value class would be poor, and visual tranquility would be lost over a larger area. Visual discord of initial and intermittent construction on the TVA parcels would be seen for about the same time periods as for other parts of the project.

As with the private tracts, completed development on the TVA parcels would replace the visual character of undisturbed woodland ridges with a residential area and golf course. These extensive changes would add further adverse contrast to the natural reservoir landscape. About 325 additional condominiums and/or residential units of various sizes would be seen, along with the golf clubhouse and several parts of the course. The area of natural wooded skyline lost to these features would increase substantially. Residential density seen on the two parcels would be over 4 units/acre (excluding the golf course and clubhouse area), notably higher than the 2.5 units/acre seen on the peninsula (excluding the golf course, lodge and marina land). The resulting visual congestion would be about 65 percent greater on the TVA land. The building forms and open fairways would increase adverse variety and add discordant contrast visible through remaining trees. The size and color of the buildings could increase or lessen their impact. Visibility of these features would increase during seasons when leaves are down. More lighting would be visible across the night landscape, and night sky brightness would increase somewhat depending on the type of exterior lighting used. The level of added brightness would be most noticeable for residents and traffic closest to the project.

Development seen on the TVA parcels combined with the rest of the project would further dominate the visible landscape, resulting in a greater impact to the reservoir and residential viewsheds. It would increase the negative impact on 52 (60 percent) of the waterfront home sites and 21 (35 percent) of the lake view sites that would see the peninsula development. It would impact about 20 additional waterfront and 48 additional lake view home sites further upstream, an increase of 24 and 84 percent respectively. The alterations would also impact the middle ground view of about 100 home sites located at higher elevations to the west of Tellico Parkway. This portion of undisturbed reservoir landscape would be lost to current and future observers alike. The shoreline and coves seen by boat traffic would no longer be wooded or secluded, and additional watercraft use resulting from greater residential

development would increase visual congestion on the waters nearby. The visiting public would no longer have access to walk the property and see the woodland character in close foreground views. Overall, the scenic integrity would be very low due to the heavily altered landscape, and the scenic value class would be reduced to poor due to the extensive disturbance. Most of the visual tranquility and harmony would be lost. Development of the TVA parcels would substantially alter the aesthetic sense of place from natural, unpopulated, and available for public use, to one of developed, private homes, and unavailable for public use.

Also under this alternative, the natural appearance and tree cover of the 5-acre TVA tract below the 820-foot elevation would be replaced with a par-3 golf course. The permanent tree removal and other changes would increase the visibility and discordant contrast of adjacent back-lying residential development and lighthouse structure as seen from the reservoir and canal area. The expanded marina facilities would add further visual discord along the shoreline and would be seen from the same areas. However, the visual changes associated with anticipated water use facilities and shoreline development would be normal in an area designated for a marina. Although the marina size may dominate the original landscape character, the scale, form, color, and reflectance of planned facilities could notably lessen or increase their visual contrast.

### **Alternative C - Partial Land Sale and Mitigation**

Under this alternative (Figure 2-4), the extensive visual impacts resulting from development of the privately owned peninsula (216 acres) and back-lying tract (323 acres) would be the same as described under Alternative B. The negative impacts of developing the 5-acre TVA tract below elevation 820-feet and the enlarged marina would also be the same, as would the impacts of developing the eastern part of the TVA parcels. However, commitments would be required to avoid night sky impacts (see Section 4.15, commitment number 5). The applicant would be required to use fully shielded light fixtures or those with internal low-glare optics (so no light is emitted from the fixture at angles above the horizontal). This would reduce upward light and wasted energy at least 35 percent and help minimize potential lighting impacts. The wooded shoreline character along the western part would be retained and would provide a partial visual buffer of development to the east. This alternative would have the second-greatest impact on the residential viewshed and the least gain of visual resources from mitigation exchange.

This alternative would preserve some of the landscape character and visual qualities of public land seen in the residential and reservoir viewsheds. About 220 homes would not be built on the shoreline and ridge tops of the western part (67 acres), which would reduce the extent of adverse visual change seen along the east bank. The scenic value of the remaining wooded shoreline would increase over time. The western part would also provide a setback buffer averaging about 1,200 feet between the water and planned development to the east. The remaining woodland would limit some views of that development. However, elevations of the eastern part are 30-50 feet higher so clearing for the golf course and at least 106 structures would eliminate most the woodland skyline. The vertical forms of multi-story facilities would increase adverse variety and add discordant contrast to the rural landscape, and would likely be visible above the western treetops. The size, color, and density of these buildings could increase or lessen their impact. Rarity Communities indicated that without TVA land they would consider high-rise condominiums and/or greater housing density, which would further increase the negative impact. Several stories of the back-lying high-rise units would likely be seen above the remaining TVA woodlands.

Development seen on the eastern part combined with the rest of the project would further dominate the visible landscape, resulting in a greater impact to the reservoir and residential viewsheds than the peninsula development alone. It would increase the negative impact on 52 (60 percent) of the waterfront home sites and 21 (35 percent) of the lake view sites that would see the peninsula development. It would also be seen from about 20 additional waterfront and 48 additional lake view home sites further upstream, an increase of 24 and 84 percent respectively. The alterations would also impact the middle ground view of about 100 home sites located at higher elevations west of Tellico Parkway. Additional watercraft use resulting from the marina and residential development would increase visual congestion on the waters nearby. About three fourths of the shoreline and coves seen by boat traffic would remain wooded and partially secluded. The visiting public would have access to walk the western part of the TVA property and could see the woodland character in close foreground views. Visual impacts may also result from future public road access on the western portion to the trail terminal.

Overall, scenic integrity of the TVA parcels would be low due to the heavily altered landscape, and the scenic value class would be reduced to poor due to the dominant visual disturbance. Much of the visual tranquility and harmony would be diminished since the eastern part would be developed.

The proposed exchange of a portion of the Wildcat Rock tract (60 acres) would protect the visual character of that parcel from potential development. It would preserve views of boats in the cove but not a residential viewshed. Protecting a larger parcel with similar attractiveness, less watercraft viewshed, and slightly more interesting landscape character in a different area of the same reservoir would provide some positive impacts. The gain of visual resources on the exchange property would mitigate the visual impacts for those visiting the TVA parcel and using the reservoir nearby. However, the exchange would not preserve or replace the scenic undisturbed residential viewshed from Tellico Village, which is a principal loss of developing the TVA parcel. The substantially altered landscape would adversely change the viewshed of about 250 home sites without mitigation. These alterations would reduce the scenic value class from excellent to poor and result in significant visual impacts.

The exchange property is described in Section 3.8. It has about 22 percent more reservoir land and about the same amount of undisturbed shoreline (about 2,600 feet overall). It also has about the same cove access and shoreline slope as the TVA parcel. The exchange property would preserve the scenic features, visual harmony, and tranquil sense of place for recreational visitors. However, the property is a low-lying area with limited visibility while the TVA parcel is a ridge area with high visibility. Land between the exchange property and the reservoir would remain available for industrial development along with the rest of the tract. This could substantially diminish scenic value of the property in the future. Land between the TVA parcel and the reservoir is identified to remain as natural resource conservation which would help preserve the scenic value.

#### **Alternative D – Small Golf Course and Marina with No Land Sale**

Under this alternative (Figure 2-5), the adverse visual impacts resulting from development the privately-owned peninsula (216 acres) and back-lying tract (323 acres) would be about the same as described under Alternative A. Development of the 5-acre TVA tract below elevation 820 and the marina expansion would add further negative changes, so this alternative would have the second-least overall visual impacts.



The natural appearance and tree cover of the 5-acre TVA tract below the 820-foot elevation would be replaced with a par-3 golf course. The permanent tree removal would increase the visibility and discordant contrast of adjacent back-lying residential development and lighthouse structure, as seen from the reservoir and canal area. The expanded marina facilities would add further visual discord along the shoreline and would be seen from the same areas. However, the visual changes associated with anticipated water use facilities and shoreline development would be normal in an area designated for a marina. Although the marina size may dominate the original landscape character, the scale, form, color, and reflectance of planned facilities could notably lessen or increase their visual contrast. Commitments to reduce night sky impacts to minimize visual impacts would be the same as Alternative C (see Section 4.15, commitment number 5).

### **Alternative E - Applicant Proposal with Mitigation**

Under this alternative (Figure 2-6), the project would be developed as proposed, and would have the same extensive impacts as described for Alternative B. However, commitments would be required to minimize night sky lighting (see Section 4.15, Commitment 5). The applicant would be required to use fully shielded light fixtures or those with internal low-glare optics (so no light is emitted from the fixture at angles above the horizontal). This would reduce upward light and wasted energy at least 35 percent and help minimize potential lighting impacts. In addition, Rarity Communities would be required to maintain a vegetated buffer 50 feet wide along the shoreline of Parcels 8 and 9 (see Section 4.15, Commitment 1). If the buffer is maintained essentially undisturbed it could help screen development from the nearby views of boat traffic. The vegetation is not likely to provide much buffer for the residential viewshed due to the elevation of existing homes and proposed development. This alternative would also have the second greatest gain of visual resources from the mitigation exchange. The proposed exchange of the Wildcat Rock tract (256 acres) would protect the visual character of that property from potential development, and would preserve the views from nearby areas on the reservoir but it would not protect the residential viewshed. Protecting a larger parcel with a greater variety of scenic features, the watercraft viewsheds, and a more unique landscape character in a different area of the same reservoir would provide some positive impacts. This gain of visual resources on the exchange property would mitigate the visual impacts for those visiting the TVA property and using the reservoir nearby. However, the exchange would not preserve the scenic natural landscape visible from existing residential areas, which is a principal loss of developing the two TVA parcels. The substantially altered landscape would adversely change the viewshed of about 250 home sites. These alterations would reduce the scenic value class from excellent to poor and result in significant visual impacts.

The exchange property at Wildcat Rock is described in the Affected Environment Section 3.8. It has longer, more secluded coves and somewhat steeper waterfront than the two TVA parcels. The property also has 44 percent more undisturbed shoreline (about 12,900 feet overall), and about 2.2 times more reservoir land. It has somewhat greater scenic attractiveness and scenic integrity, but less visual sensitivity than the two TVA parcels. The exchange property would preserve the variety of attractive scenic features, visual harmony, and tranquil sense of place for recreational visitors to the tract. It would also preserve somewhat more distinctive viewsheds for boats on the reservoir and in the coves, but not for any waterfront or lake view home-sites.

Minor visual discord would occur during construction of the proposed greenway trailhead facilities on Parcel 6. The facilities would include an access drive and parking, several picnic sites, signs, and a toilet building. The development would be located in the former

timber harvest area on the south side and below the ridge crest where there would be little if any off-site visibility. Less than an acre of small trees would be cleared. Within 3 years, the surrounding growth of young trees would fully screen the small building and other features from all but the intended visitors.

Another mitigation option, the Morganton Cemetery parcel (232 acres), discussed in Section 2.3, was not selected as a mitigation option (Figure 2-7) since it did not meet the requirements of several other resource areas. If it had been selected, the exchange would protect that undisturbed shoreline property from potential development, and most importantly, it would preserve the natural scenic character for a sizeable part of two residential viewsheds on the same reservoir. However, the obtaining this tract would not preserve or benefit the viewshed seen from Tellico Village.

This property tract has one more undisturbed cove than the two TVA parcels, although the longest is about half the length of the one along parcel 9. The property also has 78 percent more undisturbed shoreline (about 16,000 feet overall), and about twice as much reservoir land. It has the same scenic integrity, sensitivity, and scenic value class as the TVA parcels. The exchange property would preserve very similar viewsheds for almost as many waterfront homes as the entire proposed project (89 rather than 96), and a potentially larger number of lake-view homes (more than 120). It would also preserve very similar viewsheds for boats on the reservoir and in the wooded coves, as well as similar visual character and tranquil sense of place for recreational visitors to the tract.

### **Visual Impact Summary**

As a valley-wide trend, TVA's SMI EIS (TVA, 1998) reported that since the mid-1980's land-use pressures have been shifting to private residential shoreline development, and that pressures to protect water quality and aesthetic resources have increased significantly. Participants in the SMI scoping stated they wanted TVA to preserve the shoreline's natural beauty, that the visual quality of the environment is important to ensuring the quality of outdoor experiences, and that residential development would affect the visual quality of reservoir shorelines. The SMI EIS also noted that similar concerns were expressed by USACE and TWRA regarding the proliferation of various shoreline development activities and the associated negative aesthetics.

When Tellico reservoir was completed (1979), TVA sold 11,000 acres to TRDA with about 96 percent designated for development. Most of it is located on the lower portion of the reservoir downstream of the U.S. Highway 411 Bridge. About 5,500 acres were for residential use, 4,450 acres for industrial use, and the balance for commercial recreation development. The residential area consisted primarily of the Tellico Village development along with several small subdivisions. In 1994, about 1,060 acres were changed from industrial to residential for the Rarity Bay development. The area of geographic focus is the reservoir area from about 4 miles above the U.S. Highway 411 Bridge down to the dam where visual impact potential is the highest. Most TVA land upstream from the bridge is committed to wildlife areas, designated for sensitive resource management, or generally unsuited for development.

The Land Plan EIS (TVA, 2000) indicated that the reservoir areas of greatest scenic value are those not yet developed and those that are predominant views of homeowners. In locations where both conditions occur together, the land has the highest level of visual sensitivity. Loss of the undisturbed scenic character in these areas would result in the greatest visual impact, since the alterations would be seen year round from residential

viewsheds for years to come. Preservation of undisturbed reservoir lands and their scenic natural character were among the most frequently expressed public concerns during the Management Plan's environmental review and those that have followed, including the current proposal.

A majority of the TRDA residential land has been or is being developed, while a much smaller part of the industrial land has been developed. As the TRDA property becomes fully developed nearly all of those reservoir lands would be substantially altered. The result would be a loss of the attractive natural character and scenic value, which would contribute to the cumulative impact on visual resources.

TVA retained land for resource management and conservation along much of the east bank and some areas upstream from the U.S. Highway 411 Bridge. The scenic natural character of that shoreline property remains undisturbed. If any proposals were approved on these reaches of shoreline, they would likely reduce the scenic value of those parcels and further impact the overall visual character of the reservoir landscape.

The residential viewshed of Tellico Village below the U.S. Highway 411 Bridge includes about 1,380 acres of TVA land along 8 miles of the east bank, as well as the 216-acre TRDA tract. Development of this tract is continuing and the scenic natural character will be lost. Alternatives B and E of the current proposal would increase the loss by 50 percent, amounting to about 8.3 percent of the TVA land in this viewshed. The loss would be somewhat less with Alternative C and minimal with Alternatives A and D. Any additional loss of TVA lands for development would add to this cumulative visual impact.

Upstream, the final development of TRDA lands will alter about half viewshed seen from Rarity Bay and Foothills Point developments which will also contribute visual impacts. The viewshed of Tellico Village upstream of the U.S. Highway 411 Bridge includes relatively narrow parcels of TVA shoreline land. Development of the privately owned back-lying property would add to cumulative impacts seen in the reservoir landscape.

Much of the private back-lying property is at elevations 40-100 feet higher than TVA's reservoir land. Further visual impacts could result from potential lake-view residential or commercial development along these ridges. The undisturbed woodland skyline may be replaced with a variety of discordant features, resulting in a loss of scenic visual resources and attractive natural character. The alterations could impact both year round residential viewsheds and seasonal views from the water, depending on the location. Potentially the total cumulative impact to visual resources would be the sizeable loss of a part of the undisturbed, naturally attractive reservoir landscape seen in residential viewsheds.

## **4.9. Socioeconomics**

### **Alternative A - No Action**

Under the no action alternative, TVA would not change the existing land management plan, approve plans for a marina, or allow the par-3 golf course on TVA public land. However, Rarity Communities plans to continue the construction and operation of a golf course, related facilities, lodge, and residential construction on the land it already owns including the former TRDA property. Acreage limitations would prevent laying out a "championship" golf course, and with less land for residential development, Rarity Communities proposes to generate required revenue by decreasing lot sizes and/or building high-rise condominiums (i.e., constructing more, lower value units).

The socioeconomic impacts of the no action alternative can be described most easily in terms of variations from the full-scale impacts associated with Alternative B (Applicant's Proposal). It is conceivable that the golf course would get less play than Alternative B because a non-championship course would be built under Alternative A, and any income generated by a tournament (requiring a championship course) would be lost. However, there is no practical way to quantify these impacts. The absence of a marina could have an adverse impact on the sale of homes to those who desire a place for a boat, but, again, this is difficult to quantify. The proposal to build more but lower value residential units is aimed at generating comparable revenue; hence, there is reason to think that the total value of residential property may not differ appreciably between Alternatives A and B, and, as a result, residential property tax revenues may be comparable under Alternatives A and B. If, in fact, a greater number of residential units (of lower average value) are constructed, this would contribute to a somewhat larger population increase.

Other differential impacts vis-à-vis Alternative B would be slightly less construction and operational employment and income in the absence of the par 3 golf course and marina. The applicant estimates that 9 fewer construction jobs would be created (over 2 years) without the par 3 golf course, and 38 fewer jobs (over 3 years) without the marina. Together this represents a maximum reduction in projected construction employment of 7 percent (over 2 years). In addition, 4 fewer employees would be needed once the golf facilities were operational, and the absence of a par three golf course would reduce the value of the golf facilities by about 7 percent or \$0.5 million, which would reduce county property tax revenues by about 3,600 dollars per year.

Therefore under Alternative A, the beneficial socioeconomic impacts (increased tax revenues and jobs) would continue as long as Rarity Communities continued the project on private lands, although slightly less than other alternatives.

### **Alternative B - Applicant's Proposal**

Under the applicant's proposal, TVA would sell Rarity Communities approximately 118 acres, permit construction of a marina, and allow construction of a par-3 golf course on TVA land. The land purchased from TVA would enable the applicant to construct a championship golf course and allow for less dense construction of residential units, with higher average values.

**Employment** - Construction employment would include those involved in building the golf courses, marina, and lodge, along with those involved in the construction of homes and condominiums. Most of the workforce likely would be drawn from existing residents of Loudon and surrounding counties. With few workers moving into the area, the impact on the local economy and on community and government services would be minimized. Construction of the golf courses would be completed in 2004, the lodge in 2005, and the marina in 2006. All additional construction, excluding residential units would be completed by 2008. Construction of 1,200 homes and condominiums would begin in 2004 and continue through 2013, with peak annual construction of 144 units from 2007-2010, according to applicant projections.

Construction employment (excluding residential units) would average 142 annually over seven years, attaining a peak of 236 in 2005, according to applicant projections. Residential construction would employ an average of 503 annually over ten years, with a peak of 604 sustained over four years. (The impact of residential construction described here does not take account of any reductions in construction that might occur in nearby Tellico Lake



developments as a result of the proposed development. Quantifying the net impact on the area would be very difficult and would involve substantial speculation.)

Total average annual employment of 645 would represent 4.1 percent of current employment for Loudon County, or 0.1 percent of labor market area employment. This number of jobs could contribute to a modest decline in the unemployment rate for Loudon and surrounding counties.

Operational employment at the golf courses and lodge would reach 66 by 2006 and remain at that level, according to applicant projections. 66 permanent jobs would represent 0.4 percent of current Loudon County employment. A small number of additional jobs would be associated with the marina office and floating restaurant.

In addition to the direct employment described above, additional (indirect and induced) jobs would be created as a result of spending by those directly employed on the project. The applicant has assumed that an additional 20 percent would be employed in the area as a result of this multiplier effect. This estimate is reasonable, although the multiplier effect from temporary construction jobs would also be temporary.

**Income** – Annual income for construction workers, excluding residential construction workers, would vary from 3.3 million to 7.0 million dollars over seven years, averaging 4.2 million dollars, according to applicant projections. Income for residential construction workers would vary from 5.8 million to 20.7 million dollars over ten years, averaging 16.6 million dollars. Together, these sources of income would boost (current) Loudon County personal income by about two percent annually on average. Operational income for golf course and lodge workers would average 1.7 million dollars annually. A small amount of additional income would be earned by marina office and restaurant workers.

As with employment, income directly generated by the project would generate additional income through a multiplier effect, as the initially generated income is spent in the area. The assumption of an additional 20 percent income is, again, reasonable.

The overall impact of income generated by construction and ongoing operations would not be very large across Loudon County and far less so across the LMA and the majority of the impact would cease with the completion of construction.

**Population** - There would be very little impact on the population of the area from construction given that most of the workers would come from those already living in the area. Proximity to a large labor market ensures this, and any population increase due to construction workers could be only temporary.

Operational employees required at the golf course and related facilities would also likely be drawn from existing residents of the labor market area. Even if 66 permanent employees moved into Loudon County, that would amount to only 0.2 percent of county population which is insignificant.

Of 1,200 projected housing units, just over half would be occupied by permanent residents. The others would be rental units. With very few children living in similar Tellico Lake developments, an estimate of 2 persons occupying each house is reasonable. This would lead to a population increase of just over 1,200 (permanent residents), once development is completed, representing a population increase of about 3 percent for Loudon County.

**Tax Revenue** - Loudon County property tax revenues would be generated by the golf courses, lodge, marina, and residential units. The applicant estimates the total market value of the commercial properties upon completion at 18.5 million dollars. This would generate approximately 133 thousand dollars in property tax revenue annually. The average value of the 1,200 proposed residential units (condominiums and single-family homes) is projected by the applicant to be 406,666 dollars. This would generate 2.2 million dollars in annual property tax revenue for Loudon County.

Additional county and state tax revenues would come from sales at the golf course, lodge, and marina. A lack of sales volume projections precludes estimating these taxes

Still additional sales tax revenues would be generated by purchases made by new homeowners and any employees who locate to the area. With a possible population increase of 3 percent, additional sales tax revenues of 3 percent would be a reasonable assumption.

In 2000, Loudon County spent an average of 1,105 dollars per capita on county services. So the county could be expected to spend at least 1.3 million dollars on the 1,200 permanent Rarity Pointe residents. A precise estimate for county costs or benefits is difficult, as Loudon County would receive more from these residents and visitors as a result of increased sales tax revenues than the 2.2 million dollars in property taxes, and the Rarity Pointe residents may be more costly to serve than the average Loudon County resident. However, it is unlikely that the county will incur costs in excess of tax revenues generated by the new residents.

Overall, under Alternative B, socioeconomic benefits (increased tax revenues and jobs) from the entire project would accrue to Loudon County and the LMA, with TVA actions providing a small increment to total benefits. These would be offset to some degree by the cost of public services and infrastructure.

### **Alternative C - Partial Land Sale with Mitigation**

This alternative would allow for construction of the par-3 golf course and marina, and sale of enough TVA land (about 49 acres) to build the championship golf course, but none for (additional) residential developmental. As with Alternative A, Alternative C would result in higher density, lower value residential construction on land already owned by the applicant, with the intent of generating revenue comparable to that under the applicant's proposal (Alternative B). On this count, the impacts of this alternative are likely to be similar to those of Alternative B.

This alternative also involves a land exchange, whereby TVA, in exchange for 49 acres it would agree to sell, would receive approximately 60 acres within the Wildcat Rock Site at the Loudon County-Monroe County line. This land is currently zoned industrial, but TVA would designate it for conservation to make up for the loss of 49 acres to development. If this land were well suited to industrial development, then TVA's acquisition and designation change could ultimately mean less industrial development within Loudon County. These 60 acres are located close to a major highway, rail, water, and a water treatment plant; however, the topography of the land is not ideally suited to industrial development. About half of the 60 acres are probably too steep for development, which leaves only a long narrow strip (ranging from perhaps 300-700 feet wide) for potential industrial sites. The Tennessee Valley Industrial Development Association currently lists, as available, 2,430 acres of industrial sites in Loudon County, and 1,911 acres in Monroe County. Hence, the

loss of perhaps 30 acres is unlikely to affect industrial development adversely in Loudon County.

Under Alternative C, socioeconomic benefits (increased tax revenues and jobs) from the entire project would accrue to Loudon County and the LMA, with TVA actions providing a small increment to total benefits. These would be offset to some degree by the cost of public services and infrastructure. Overall, the impact would be a slightly greater than Alternative A and perhaps a slightly less than Alternative B if residential development falls slightly short of Alternative B.

#### **Alternative D – Small Golf Course and Marina with No Land Sale**

This alternative would differ from the no action alternative only in allowing the construction of the marina and a par-3 golf course on TVA land. This would mean an additional 9 golf construction jobs for 2 years and 38 marina construction jobs for 3 years vis-à-vis the no action alternative, along with an additional 4 operational golf course employees. Moreover, county property tax revenues would increase by approximately \$3,600 per year as a result of the par-3 golf course. In addition, the availability of a marina would enhance the marketability of homes in the development, although this would be difficult to quantify.

Under Alternative D, socioeconomic benefits (increased tax revenues and jobs) from the entire project would accrue to Loudon County and the LMA, with TVA actions providing a small increment to total benefits. These would be offset to some degree by the cost of public services and infrastructure. Overall, the impact would be a slightly greater than Alternative A and slightly less than Alternative B and C.

#### **Alternative E- Applicant's Proposal with Mitigation**

This alternative is essentially Alternative B (Applicant's Proposal) with mitigation for the loss of public lands, terrestrial habitat, public recreation, and for adverse environmental impacts. The mitigation proposed involves the transfer of approximately 256 acres at the Wildcat Rock Site to TVA, whereupon its industrial designation would be changed to conservation. This tract of land includes the 60 acres proposed for exchange under Alternative C. However, the 256 acres includes very little land suitable for industrial development over what is included in the 60-acre tract already discussed. An optimistic assessment of all 256 acres puts the total at 50 acres of marginal industrial land. The loss of 50 acres of potential industrial land would have little impact on Loudon County in the foreseeable future, given the availability of at least 2,430 acres of industrial sites.

Overall, under Alternative E, the socioeconomic impacts would be identical to Alternative B.

The question of cumulative impacts is the question of whether the full impact of TVA actions presently under consideration would exceed the incremental impacts described here. A socioeconomic threshold exists at the point where existing or incremental additions to infrastructure are inadequate to serve a given population. Crossing such a threshold could require a major public investment in the form of a new water treatment plant, school, library, highway, etc. This would generate cumulative impacts greater than the incremental impacts described here. As suggested in the above analysis of alternatives, none of the proposed actions by TVA are likely to contribute significant socioeconomic impacts above and beyond those created by the applicant's actions (which will occur regardless of TVA's actions). For this reason, none of the alternative TVA actions would generate additional cumulative impacts. It is more difficult to say whether the unilateral actions of Rarity Communities would contribute to cumulative impacts in crossing a socioeconomic threshold. However,

the fact that the zoning for the land already owned by Rarity Communities is consistent with the proposed development suggests that local government believes it can adequately serve the development.

There will be a temporary increase in the amount of traffic on Antioch Church Road. The Applicant estimates that construction traffic will peak at 198 trips per day by December 2003 as more houses and facilities are developed. This temporary increase in traffic will be noticeable to local residents until a new entrance to the Applicant's development from U.S. Highway 321 is completed in 2004. The additional construction traffic is not expected to affect the service level of U.S. Highway 321.

### **Environmental Justice**

TVA is not subject to Executive Order No. 12898 but addresses the requirements of this order as a matter of policy. The action proposed by Rarity Communities would constitute a significant physical alteration to the area. However, the impacts of construction and any adverse operational environmental or health impacts would not disproportionately affect minorities or low-income populations. The Loudon County minority population (4.8 percent) is well below that of the surrounding (labor market area) counties (9.5 percent), and the state (20.8 percent). The poverty rate for Loudon County (10.0) is similarly below that of the surrounding area (12.5) and the state (13.5). The minority population and low income populations for the census tract containing the proposed project are 2.4 and 7.3 percent respectively, both lower even than Loudon County. The situation is the same for the census tract immediately across the lake from the proposed project.

### **4.10. Air Quality**

Pollution from fossil-fuel combustion in construction equipment, fugitive dust emissions from operation of this equipment during dry conditions, and increased traffic during construction would cause some minor and temporary air quality degradation in the development locality. However, state air pollution rules require construction projects to use reasonable precautions to prevent fugitive dust emissions. After construction is completed, normal commercial, residential, and rental area activities, such as use of wood stoves, fireplaces, gas-powered lawnmowers, and increased traffic from new residents, second-home residents, rental visitors, tourists, and commercial vehicles would contribute somewhat to deterioration in local air quality. Significant contribution to deterioration of regional air quality is not expected.

Emissions of air pollutants including nitrogen oxides and volatile organic compounds involved in ozone formation would occur with all of the alternatives. Alternative B, the applicant's proposal alternative, would have the greatest impact, but this impact would not be significant under regulatory criteria. However, the development and its residents would be expected to be subject to whatever 8-hour ozone standard attainment strategies are developed for the Knoxville MSA under the EPA Early Action Compact. These may include such actions as vehicle performance testing and inspections, car-pooling, and curtailment or scheduling of lawn mowing during periods of high ozone concentrations. The least impact will be associated with Alternative A, the No Action Alternative, but this alternative would also have the same types of emissions of air pollutants because Rarity Communities will proceed with development tailored to the property under its control. This alternative and the remaining alternatives would also be subject to ozone attainment strategies that are implemented to comply with the Early Action Compact. The relative ranking of these

alternatives, from most to least impact on local air quality, is the following: Alternative B, Alternative E, Alternative C, Alternative D, and Alternative A.

#### **4.11. Unavoidable Adverse Effects**

Unavoidable adverse effects of Alternatives B, C, D, and E could include the destruction of terrestrial vegetation within construction areas, some additional vehicle traffic and minor impact to local infrastructure. Appearance on Jackson Bend would change from forested hills and shoreline to residential with buildings, yards, roads, and golf courses and marina. The impacts by the development of private project lands would occur with or without TVA's approval of the proposal, although they may cover less area and/or be more concentrated.

#### **4.12. Relationship of Short-Term Uses and Long-Term Productivity**

Given current trends, it is unlikely that any private land on Tellico Reservoir would remain undeveloped over the long term. Disposition and commitment of the TVA lands and shoreline to residential and commercial recreation development is a long-term decision that would decrease the productivity of the land for forest, wildlife, recreational, agriculture, and natural area management while increasing the economic productivity of the land. As a matter of course, the long-term productivity of the land for terrestrial habitat in the form of a mature hardwood forest would be lost once it is transferred from public to private ownership.

#### **4.13. Irreversible and Irretrievable Commitments of Resources**

Fossil fuels and materials used for construct equipment and transportation of materials and personnel while developing the site would likely be irreversible or irretrievable. Forested and open space land would likely be irreversibly converted to commercial recreational and residential land uses in the immediate project area.

#### **4.14. Energy Resources and Conservation Potential**

Energy would be used by machines for fuel to maintain houses, buildings, lawns, roads, other service or recreation infrastructure, and at least one full sized golf course under all alternatives. There would also be short-term energy uses required for the construction and establishment of the residences, facilities, and infrastructure in all the alternatives. Alternative E, where the applicant's proposal is implemented with the designation of new public land available for public recreation, would have the greatest energy demand, followed in order by Alternatives B, C, D, and A. Alternatives A and D would tend to conserve energy as development on private lands would be more compact under Alternative D and no par-3 golf course or marina would occur in Alternative A. A commitment to use fully shielded light fixtures or those with internal low-glare optics (so no light is emitted from the fixture at angles above the horizontal) would reduce upward light and wasted energy at least 35 percent and help minimize potential lighting impacts.

#### **4.15. Proposed Mitigation Measures**

The following environmental safeguards will be considered by TVA in its decision should an action alternative be selected:



1. A vegetated buffer zone of at least 50 feet will be maintained along the shoreline from the summer pool level and around the periphery of Parcels 8 and 9 land transferred by TVA in order to maintain continuity on the site, and reduce the impacts to water quality and wetlands. (Alternatives B, C and E).
2. In order to minimize the impacts to water quality and avoid wildlife exposure to pesticides, Rarity Communities will utilize golf course management practices included in Tennessee Department of Agriculture guidelines and approved by TVA or certification of the golf courses by Audubon or similar organizations which would reduce the environmental impacts and provide a method of tracking compliance. The site administrators will handle and administer any pesticides used on the site in a responsible manner and in accordance with state and federal laws in order to avoid pesticide exposure to wildlife (Alternatives C and E).
3. Rarity Communities will replace forested wildlife habitat and recreation land lost from the development of Parcels 8 and 9 through a land exchange at the Wildcat Rock site as described in Alternatives C or E if either of these alternatives are selected. TVA and/or TRDA will maintain the acquired parcel for long-term protection and public use. (Alternatives C and E).
4. Dead trees and mature trees greater than 14 inches in diameter will not be harvested on the project area, especially oak and hickories with loose, shaggy bark, until Indiana bats are not likely to be present (October 15 – March 31) (Alternatives C, D, E).
5. Fully shielded light fixtures or those with internal low-glare optics (so no light is emitted from the fixture at angles above the horizontal) will be used in the development (Alternatives C, D, and E).
6. The following commitments are required for the dredge. (Alternatives B, C, D, and E):
  - A. Testing of the sediment from the dredge would be required for chlordane and PCBs. The level of contamination found (if any) would determine how the spoil would be handled.
  - B. Material to be dredged will be tested for toxic materials (PCBs and Chlordane) before dredging commences. If toxic materials are detected, dredging plans will be evaluated in light of the extent and level of those contaminants at the site. Dredging will not proceed without a dredging plan that guarantees that no toxic material will be released to the environment.
  - C. Silt curtains must be placed around the perimeter of the dredge area, so as to not allow silt laden water outside the work area.
  - D. All saturated spoil will be dewatered using berms, straw bales silt fencing, or other silt control devices positioned in such a way as to not allow silt-laden water to re-enter the reservoir. The method of dewatering must be approved by TVA.

- E. All dredged material must be removed to an upland site (above 820-foot elevation) and contained in a manner to prevent its return to any waterbody or wetland, and permanently stabilized to prevent erosion.
- 7. Rarity Communities will mitigate impacts to wetlands (W4 and W5) by implementing the wetland mitigation plan in Appendix C. (Alternatives B, C, D, and E).
- 8. The indicated conditions of TVA's General and Standard Conditions for Section 26a and Land Use approvals will be implemented. These include the reduction of impacts related to soil and chemical runoff will be reduced to insignificant levels with implementation of Best Management Practices by Rarity Communities and residents to control soil erosion, and to limit chemical runoff. See Appendix G. (Alternatives C, D, and E)
- 9. To minimize pollutant loading and prevent spilling fuel or wastewater any fuel storage or dispensing facility will comply with TVA Resource Stewardship (TVARS) Guidelines for Storage Tanks (4.5.5), including the preparation and implementation of a Spill Prevention and Control Plan. A Marina Sewage Pump out station will be installed and operated according to TVARS Guidelines 4.5.3, and the marina will comply with TVARS Guidelines for Discharges (4.5.1) (See Appendix F). (Alternatives C, D, E)
- 10. Rarity Communities will provide a right-of-way trail for vehicle access to Parcel 9, and provide 60 acres of the Wildcat Rock property to TVA (Alternative C).
- 11. Rarity Communities will construct a trail terminal on TVA Parcel 6, consisting of a paved access road, paved parking lot for 18 vehicles, walks, 6 picnic sites, and restroom in accordance with TVA design specifications, and permit public ingress/egress across Rarity Pointe property to access the proposed greenway trail system on TVA's adjoining upstream and downstream property. (Alternative E)
- 12. Rarity Communities will provide 256 acres of the Wildcat Rock property to TVA (Alternative E)
- 13. The deed for land transferred by TVA will state that no residential access for personal water use facilities will be considered anytime in the future by TVA.(Alternatives B, C, and E)
- 14. To prevent an increase in future flood damages, the following routine commitments, would be included in the final Section 26a permit and land use approval (Alternatives B, C, D, and E):
  - A. The applicant will securely anchor all floating facilities to prevent them from floating free during major floods
  - B. Any future facilities or equipment subject to flood damage would be located above the TVA Flood Risk Profile elevation of 817.0 feet MSL
  - C. Any future development proposed within the limits of the 100-year floodplain, elevation 816.2 feet MSL, would be consistent with the requirements of EO 11988

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- D. All future development would be consistent with the requirements of TVA's Flood Control Storage Loss Guideline.
15. TVA Cultural Resources will review the proposed dredge site area during low winter pool, prior to any disturbance, to verify the previous archeological survey.  
(Alternatives B, C, D, and E)

## CHAPTER 5

### 5. LIST OF PREPARERS

#### **Jane Awl**

Position: Wetlands Biologist, TVA  
Education: B.S. Biology and Environmental Science, M.S. Ecology  
Experience: 12 years experience in wetlands assessment and delineation  
Involvement: Wetlands

#### **Spencer Boardman**

Position: Planning Specialist, TVA Watershed Technical Services  
Education: B.S., Biology; M.S., Forest Land Management and Administration, Registered Recreational Professional  
Experience: 23 years experience with TVA; Commercial Recreation Planner; Specialist for Tourism Development; Field Representative for Industrial Development (Existing Industries Program); Project Leader for Reservoir Lands Planning  
Involvement: Project Manager

#### **Robert E. Buchanan, Jr.**

Position: Program Administrator, Navigation, TVA River Operations  
Education: B.S., Civil Engineering, Registered Professional Engineer  
Experience: 33 years of experience in TVA Economic and Navigation Development, including Waterfront and Non-waterfront Industry and Business and Barge Terminal Development, including 17 years in support of Land Use Planning Efforts  
Involvement: Navigation

#### **Darrell Cuthbertson**

Position: Land Use Representative, TVA Little Tennessee Watershed Team  
Education: B.S., Forestry  
Experience: 12 years TVA Forester, 4 years Land Use Specialist  
Involvement: Land Use and Planning

#### **Harold M. Draper**

Position: NEPA Team Leader, TVA Environmental Policy and Planning  
Education: D.Sc., Engineering and Policy; B.S., Conservation, Botany  
Experience: 13 years experience in Environmental Impact Assessment and 7 years experience in State Renewable Energy Programs  
Involvement: NEPA Review

#### **Charles H. Ellenburg**

Position: Land Use Specialist (Recreation), TVA  
Education: B.S., Recreation and Park Administration  
Experience: 30 years experience in Recreation Planning  
Involvement: Recreation

**James Hagerman**

Position: Environmental Engineer, TVA  
Education: B.S. and M.S., Agricultural Engineering; Registered Professional Engineer  
Background: 13 years nonpoint source pollution and water quality  
Contribution: Water Quality

**T. Hill Henry**

Position: Zoologist, TVA Watershed Technical Services  
Education: M.S., Zoology  
Experience: 10 years experience in Monitoring Terrestrial Endangered Species  
Involvement: Terrestrial Animals, and Threatened and Endangered Species

**A. Eric Howard**

Position: Archaeologist, TVA Watershed Technical Services  
Education: M.A., Anthropology  
Experience: 6 years experience with TVA and Section 106 compliance; previous experience includes 10 years in Southeastern United States and Caribbean Archaeology  
Involvement: Cultural Resources

**Wesley K. James**

Position: Regional Wildlife Biologist, TVA  
Education: B.S., Wildlife & Fisheries Science  
Experience: 25 years experience in Terrestrial Wildlife and Wetlands Management and Environmental Impact Evaluation  
Involvement: Terrestrial Resources

**Brenda L. McHone**

Position: Clerk, TVA Little Tennessee Watershed Team  
Education: High School  
Experience: 5 years experience in Nuclear Power, 13 years experience in Land Management  
Involvement: Clerical and Proofreading

**Mark S. McNeely**

Position: Program Administrator, TVA Resource Stewardship  
Education: B.S., Biology; M.S., Secondary Science Education  
Experience: 5 years Environmental Education, 9 years Resource Stewardship  
Involvement: Design and layout of publications

**Jack W. Miller**

Position: Land Use Specialist, TVA Little Tennessee Watershed Team  
Education: B.S., Forest Management  
Experience: 27 years Land Use Specialist – TVA  
Involvement: Land Use and Planning



**Roger A. Milstead**

Position: Technical Specialist  
Education: B.S., Civil Engineering  
Experience: 26 years experience in floodplain and environmental evaluations.  
Registered Professional Engineer.  
Involvement: Floodplains

**Jason Mitchell**

Position: Terrestrial Zoologist, TVA Resource Stewardship  
Education: B.S. Wildlife and Fisheries Science; MPA (Environmental Policy)  
Experience: 3.5 years experience with state wildlife agency and 6.5 years performing zoological assessment for federal land-management organizations.  
Involvement: Terrestrial Animals, and Threatened and Endangered Species

**William Nichols**

Position: Computer Technician, GIS  
Experience: 16 years with TVA as a GIS Specialist building spatial databases and generating various mapping products  
Involvement: Generating GIS map products

**Norris Nielsen**

Position: Project Manager, TVA Environmental Technology  
Education: B.S., Meteorology; M.S., Meteorology  
Experience: 30 years of experience in Applied Meteorology  
Involvement: Air Quality

**George E. Peck**

Position: Aquatic Biologist, TVA Watershed Technical Services  
Education: B.S., Secondary Education (Biology); M.S., Biology  
Experience: 20 years of experience in Aquatic Biology  
Involvement: Aquatic Resources

**James Perhac**

Position: Economist, TVA  
Education: Ph.D., Philosophy; MBA, Economics; B.S., Economics  
Experience: 10 years economic and environmental assessments  
Involvement: Socioeconomics

**Ralph Porter**

Position: Landscape Architect, TVA Facilities Management  
Education: B.L.A., Bachelor of Landscape Architecture  
Experience: 34 years of experience in Land Planning and Site Design, and 7 recent years in visual impact analysis, Registered Professional Landscape Architect  
Involvement: Aesthetics and Visual Resources

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**Garry W. Pyle**

Position: Program Administrator  
Education: B.F.A., Art  
Experience: 26 years in communication graphics  
Involvement: Cover Design and NEPA process graphics

**Barbara Rosensteel**

Position: Wetlands Biologist, ADECCO Technical  
Education: B.S. and M.S., Environmental Science  
Experience: 14 years experience in wetlands assessment and delineation  
Involvement: Wetlands

**Richard L. Toennisson**

Position: Senior NEPA Specialist, TVA Environmental Policy and Planning  
Education: B.S., Forestry; M.S., Forestry/Industrial Engineering  
Experience: 20 years experience in Forestry Research, Management and Industry  
Development; 8 years experience in environmental science.  
Involvement: NEPA Project Leader

## CHAPTER 6

### 6. LIST OF AGENCIES, ORGANIZATIONS, AND PERSONS TO WHOM COPIES ARE SENT

#### Federal Agencies

Cherokee National Forest, Anne J. Zimmerman, Cleveland, Tennessee

Great Smoky Mountains National Park, Philip Francis, Gatlinburg, Tennessee

U.S. Army Corps of Engineers, Lieutenant Colonel Stephan W. Gay, Nashville, Tennessee  
William L. James, Nashville, Tennessee

U.S. Department of the Interior, Director, Office of Environmental Policy and Compliance; Willie R. Taylor, Washington, DC

U.S. Fish and Wildlife Service, Dr. Lee A. Barclay, Cookeville, Tennessee

#### State Agencies

East Tennessee Development District, Robert Freeman, Knoxville, Tennessee

Tennessee Department of Agriculture, Louis Buck, Nashville, Tennessee

Tennessee Department of Environment and Conservation, Justin P. Wilson, Nashville, Tennessee  
Division of Air Pollution Control, Tracy R. Carter, Nashville, Tennessee  
Division of Natural Heritage, Reggie Reeves, Nashville, Tennessee  
Division of Recreation Services, Joyce Hoyle, Nashville, Tennessee  
Division of Water Pollution Control, Greg Denton, Nashville, Tennessee

Tennessee Department of Economic and Community Development, Wilton Burnette, Nashville, Tennessee

Tennessee Department of Transportation, Glen Beckwith, Nashville, Tennessee

Tennessee Historical Commission, Herbert Harper, Nashville, Tennessee

Tennessee Wildlife Resources Agency, Dan Sherry, Nashville, Tennessee

Tellico Reservoir Development Agency, Ron Hammontree, Vonore, Tennessee

## **Local Organizations**

Blount County - Keep Blount Beautiful, Kristi Falco, Maryville, Tennessee

Blount County Partnership, Fred Forster, Maryville, Tennessee

Boy Scouts of America, Troop 354, Gary Hargis, Lenoir City, Tennessee

City of Maryville Electric Department, Eddie Tramel, Alcoa, Tennessee

City of Maryville Utilities, Baron D. Swafford, Maryville, Tennessee

East Tennessee Development Agency, Allen Neel, Knoxville, Tennessee

Fort Loudon Electric Cooperative, Robert R. Long, Madisonville, Tennessee

Foundation for Global Sustainability, Danielle Droitsch, Knoxville, Tennessee

Government Relations, Lynne Fugate, Knoxville, Tennessee

Knoxville Utilities Board, Larry Fleming, Knoxville, Tennessee

Lenoir City Utilities Board, Bill Dunnill, Lenoir City, Tennessee

Loudon County Chamber of Commerce, M. Allison Sousa, Loudon, Tennessee

Loudon County Commission, The Honorable Roy H. Bledsoe, Philadelphia,  
Tennessee

Loudon County Economic Development Agency, Patrick Phillips, Loudon,  
Tennessee

Loudon County Executive, George Miller, Loudon, Tennessee

Loudon County Office of Planning, Stephanie Myers, Loudon, Tennessee

Loudon Regional Planning Commission, Henry Mitchell, Loudon, Tennessee

Loudon Utilities Board, W. Barry Baker, Loudon, Tennessee

Monroe County - Monroe Beautiful, Inc., Judy Patterson, Madisonville, Tennessee

Monroe County Industrial Development Board, B. Shane Burris, Madisonville,  
Tennessee

Sweetwater Utilities Board, Robert Bettis, Sweetwater, Tennessee

Tellico Village Board of Directors, Bob Snodgrass, Loudon, Tennessee

Tellico Village Homeowners Association, Nick Friend, Loudon, Tennessee

Tellico Village Property Owners Association,  
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Joyce Leo, Coram, New York  
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Donald D. Logsdon, Loudon, Tennessee  
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Tracy Riedl, Greenback, Tennessee  
Charles and Laurel Rightler, Loudon, Tennessee  
Mr. and Mrs. David W. Roberts, Knoxville, Tennessee  
John and Georgina Rogers, Loudon, Tennessee  
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Frank and Mary Rita Rzonca, Loudon, Tennessee  
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The Honorable Fred J. Tallent, Mayor of Vonore, Vonore, Tennessee  
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Wayne and Virginia Tolbert, Lenoir City, Tennessee  
Richard and Carol Troester, Loudon, Tennessee  
Carl and Ruth Truebe, Loudon, Tennessee  
Robert and Lois Tuttle, Loudon, Tennessee  
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## CHAPTER 7

### 7. SUPPORTING INFORMATION

#### 7.1. Literature Cited

- Amundsen, C. C. 1994. Reservoir Riparian Zone Characteristics in the Upper Tennessee River Valley in Wetlands of the Interior Southeastern United States. Kluwer Academic Press, pages 273-297.
- Baden, W. 1983. Tomotley: An Eighteenth Century Cherokee Village. Report of Investigations No. 36, Department of Anthropology, University of Tennessee, Knoxville. TVA Publications in Anthropology No. 36.
- Bartram, W. 1995. William Bartram on the Southeastern Indians. Edited by Gregory A. Waselkov and Kathryn E. Holland Braund. University of Nebraska Press, Lincoln and London.
- Braun, E. L. 1950. Deciduous Forests of Eastern North America. The Blakiston Company, Philadelphia, 596 pages.
- Brittingham, M. C., and S. A. Temple. 1983. Have cowbirds caused forest songbirds to decline? *Bioscience* 33:31-35.
- Broder, M. F., and T. Samples. 2002. Tennessee handbook for golf course environmental management. Tennessee Department of Agriculture.
- Chapman, J. 1973. The Icehouse Bottom site, 40MR23. Report of investigations number 13. Department of Anthropology, University of Tennessee, Knoxville.
- \_\_\_\_\_. 1975. The Rose Island site and the bifurcate tradition. Report of investigations number 14. Department of Anthropology, University of Tennessee, Knoxville.
- \_\_\_\_\_. 1977. Archaic period research in the lower Little Tennessee River Valley-1975: Icehouse Bottom, Harrison Branch, Thirty Acre Island, Calloway Island. Report of investigations number 18. Department of Anthropology, University of Tennessee, Knoxville.
- \_\_\_\_\_. 1978. The Bacon Farm site and buried site reconnaissance. Report of investigations number 23. Department of Anthropology, University of Tennessee, Knoxville. TVA publications in anthropology number 23.
- \_\_\_\_\_. 1979a. The Howard and Calloway Island sites. Report of investigations number 27. Department of Anthropology, University of Tennessee, Knoxville. TVA publications in anthropology number 27.
- \_\_\_\_\_. 1979b. The 1978 archaeological investigation at the Citico site (40MR7). Report submitted to TVA by the Department of Anthropology, University of Tennessee, Knoxville.



- \_\_\_\_\_. 1981. The Bacon Bend and Iddins sites: The late archaic period in the lower Little Tennessee River Valley. Report of investigations number 31. Department of Anthropology, University of Tennessee, Knoxville. TVA publications in anthropology number 25.
- Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of wetland and deepwater habitats of the United States. U.S. Fish and Wildlife Publication FWS/OBS-79/31, Washington, D.C.
- Cridlebaugh, P. 1981. The Icehouse Bottom site (40MR23): 1977 excavations. Report of investigations number 34. Department of Anthropology, University of Tennessee, Knoxville. TVA publications in anthropology number 34.
- Davis, S. 1990. Aboriginal settlement patterns in the Little Tennessee River Valley. Report of investigations number 50. Department of Anthropology, University of Tennessee, Knoxville. TVA publications in anthropology number 54.
- DeGraaf, R. M., and J. H. Rappole. 1995. Neotropical Migratory Birds: Natural History, Distribution, and Population Change. Comstock Publishing Associates, Ithaca, 676 pages.
- Dycus, D. L., and T. F. Baker. 2000. Aquatic ecological health determinations for TVA reservoirs – 1999. An informal summary of 1999 Vital signs monitoring results and ecological health determination methods. Primary authors/editors Don L. Dycus and Tyler F. Baker, Water Management, Chattanooga, Tennessee.
- Fenneman, N. M. 1938. Physiography of Eastern United States. McGraw-Hill Book Company, Inc., New York, 714 pages.
- Furness, R. W., and J. J. D. Greenwood (editors). 1993. Birds as Monitors of Environmental Change. Chapman and Hall, London, 356 pages.
- Gates, J. E., and L. W. Gysel. 1978. Avian nest dispersion and fledgling success in field-forest ecotones. *Ecology* 59:871-883.
- Guthe, A., and M. Bistline. 1981. Excavations at Tomotley, 1973-74, and the Tuskagee area: two reports. Report of investigations number 24. Department of Anthropology, University of Tennessee, Knoxville. TVA publications in anthropology number 20.
- Hickman, G. D. 1999. Sport fishing index (SFI) – A method to quantify sport fishing quality. Tennessee Valley Authority, Resource Stewardship, Norris, Tennessee. Unpublished report, 24 pages.
- Küchler, A. W. 1996. Potential natural vegetation map in National Atlas of the United States. University of Kansas.
- Kimball, L. 1985. The 1977 archaeological reconnaissance: An overall assessment of the archaeological resources of Tellico Reservoir. Report of investigations number 40. Department of Anthropology, University of Tennessee, Knoxville. TVA publications in anthropology number 39.

- Martin, W. H. 1989. Forest patterns in the great valley of Tennessee. *Journal of the Tennessee Academy of Science* 64(3):137-143.
- Polhemus, R. 1979. *Archaeological Investigation of the Tellico Blockhouse Site: A Federal Military and Trade Complex*. Report of Investigations No. 26, Department of Anthropology, University of Tennessee, Knoxville. TVA Publications in Anthropology No. 16.
- \_\_\_\_\_. 1987 *The Toqua Site: A Late Mississippian Dallas Phase Town. Volume I and II*. Report of Investigations No. 41, Department of Anthropology, University of Tennessee, Knoxville. TVA Publications in Anthropology No. 44.
- Reckhow, K. H., M. N. Beaulac, and J. T. Simpson. 1980. Modeling phosphorus loading under uncertainty: A manual and compilation of export coefficients. U.S. Environmental Protection Agency.
- Robbins, C. S., D. K. Dawson, and B. A. Dowell. 1989a. Habitat area requirements of breeding forest birds of the Middle Atlantic States. *Wildlife Monographs* 103:1-34.
- Robbins, C. S., J. R. Sauer, R. Greenberg, and S. Droege. 1989b. Population declines in North American birds that migrate to the Neotropics. *Proceedings of the National Academies of Science* 86:7658-7662.
- Robinson, S. K., F. R. Thompson, III, T. M. Donovan, D. R. Whitehead, and J. Faaborg. 1995. Regional forest fragmentation and nesting success of migratory birds. *Science* 267:1987-1990.
- Robinson, S. K., J. A. Grzybowski, S. I., Rothstein, M. C. Brittingham, L. J. Petit, and F. R. Thompson. 1993. Management implications of cowbird parasitism on Neotropical migrant songbirds. Pages 93-102 in D. M. Finch, P. W. Stangel (editors). *Status and management of Neotropical migratory birds*. Proceedings of workshop September 21-25, 1992, Estes Park, Colorado. General technical report RM-229, Fort Collins, Colorado: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station.
- Russ, K. and Chapman, J. 1984. *Archaeological Investigation at the Eighteenth Century Overhill Cherokee Town of Mialoquo (40MR3)*. Report of Investigations No. 38, Department of Anthropology, University of Tennessee, Knoxville. TVA Publications in Anthropology No. 36.
- Schroedl, G. 1985. *Overhill Cherokee Archaeology at Chota-Tanasee*. Report of Investigations No. 38, Department of Anthropology, University of Tennessee, Knoxville. TVA Publications in Anthropology No. 42.
- Small, M. F., and M. L. Hunter. 1988. Forest fragmentation and avian nest predation in forested landscapes. *Oecologia* 76:62-64.
- Temple, S. A., and J. R. Cary. 1988. Modeling dynamics of habitat-interior bird populations in fragmented landscapes. *Conservation Biology* 24:340-347.

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*

- Tennessee Valley Authority. 1972. Tellico project environmental impact statement. Tennessee Valley Authority, Office of Health and Environmental Science, Knoxville, Tennessee.
- \_\_\_\_\_. 1978. Alternatives for completing the Tellico project. Tennessee Valley Authority, December 1978.
- \_\_\_\_\_. 1998. Shoreline management initiative: An assessment of residential shoreline development impacts in the Tennessee Valley—final environmental impact statement. Knoxville, Tennessee.
- \_\_\_\_\_. 2000. Tellico Reservoir land management plan—final environmental impact statement. Lenoir City, Tennessee.
- \_\_\_\_\_. 2002. Tims Ford Reservoir recreational boating capacity study.
- Tennessee Valley Authority and Tellico Reservoir Development Agency. 1982. Contract No. TV-60000A.
- Tennessee Wildlife Resources Agency. 1999, 2000, 2001. Boating accident reports.
- Timberlake, H. 1927. *Lieutenant Henry Timberlake's Memoirs*. Edited by Samuel Williams. Watauga Press: Johnson City, Tennessee.
- Titre, J. P., J. J. Vogel, V. Roe, and W. M. Durk. 1995. A Study of Boating Recreation on Lake Travis, Texas. Contract Report. Vicksburg: U. S. Army Corps of Engineers, Waterways Experiment Station.
- \_\_\_\_\_. 1999. Agency Draft Indiana Bat (*Myotis sodalis*) Revised Recovery Plan. Fort Snelling, Minnesota, 53 pages.
- United States Fish and Wildlife Service. 2002a. 2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation-National Overview. May 2002.
- \_\_\_\_\_. 2002b. 2002 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation-State Overview. June 2002.
- Urban Research and Development Corporation. 1977. Guidelines for Understanding and Determining Optimum Recreation Carrying Capacity, U. S. Department of the Interior, Bureau of Outdoor Recreation, Contract BOR #5-114-07-5, Washington, D.C.
- Weidensaul, S. 1999. *Living on the Wind: Across the Hemisphere with Migratory Birds*. North Point Press, April 1999.
- Wilcove, D. S. 1985. Nest predation in forest tracts and the decline of migratory songbirds. *Ecology* 66:1211-1214.
- Yahner, R. H., and D. P. Scott. 1988. Effects of forest fragmentation on depredation of artificial nests. *Journal of Wildlife Management*. 52:158-161.

## 7.2. Glossary of Terms

**30 U.S.C. §1314** - This act approved on October 23, 1962, authorizes the heads of executive agencies of the United States, including wholly-owned corporations, to grant easements over real property of the United States under their control for rights-of-way or other purposes. Term or permanent easements may be granted to state and local governments or private corporations or individuals.

**100-year floodplain** - the area inundated by the 1 percent annual chance (or 100-year) flood.

**benthic** - refers to the bottom of a stream, river, or reservoir.

**best management practices (BMPs)**- a practice, or combination of practices, that has been determined, after problem assessment and examination of alternatives, to be the most effective, practical means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality.

**Contract No. TV-60000A** - an agreement between the TVA and Tellico Reservoir Development Agency to provide comprehensive Industrial, Residential, Commercial, Recreational, and Public Use Recreational development activities. A land use plan and development standards were incorporated into the agreement. The agreement was signed on August 25, 1982.

**cultural resources** - any historic structure, historic site, or archaeological site that is protected by the National Historic Preservation Act (NHPA) or other preservation legislation. The broad mission of TVA Cultural Resources includes evaluating, protecting, and preserving significant cultural, archaeological, and historic sites and structures, and maintaining a record of the history of TVA.

**cumulative impacts** - impacts which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable actions, regardless of what agency or person undertakes such actions (40 CFR 1508.7).

**dam reservation** - lands generally maintained in a park-like setting by TVA to protect the integrity of the dam structure, hydroelectric facilities, and navigation lock. The reservation also provides for public visitor access to the TVA dam facilities and recreational opportunities such as public boat access, bank fishing, picnicking, etc.

**direct impacts** - effects which are caused by the action and occur at the same time and place (40 CFR 1508.4).

**dissolved oxygen (DO)** - the oxygen dissolved in water, necessary to sustain aquatic life. It is usually measured in milligrams per liter or parts per million.

**drawdown** - lowering the water level in a reservoir to make room for winter and spring precipitation that often fall in higher elevations. The reservoir serves as an emergency storage system to prevent flooding downstream.

**dredging** - the removal of material from an underwater location, primarily for deepening harbors and waterways.

**embayment** - a bay or arm of a reservoir.

**emergent wetland** - wetlands dominated by erect, rooted herbaceous plants such as cattail and bulrush.

**Executive Order (EO)** - a governmental order issued by the President with force of law.

**extirpated** - pulled up by the roots; destroyed; exterminated.

**fecal coliform** - common intestinal bacteria in human and animal waste.

**floodplains** - any land area susceptible to inundation by water from any source by a flood of selected frequency. For purposes of the National Flood Insurance Program, the floodplain, as a minimum, is that area subject to a 1 percent or greater chance of flooding (100-year flood) in any given year.

**flowage easement tracts** – privately owned lakeshore properties where TVA has (1) the right to flood the land as part of its reservoir operations, and (2) the authority to control structures, under Section 26a of the TVA Act.

**fragmentation** - the process of breaking up a large area of relatively uniform habitat into one or more smaller, disconnected areas.

**Greenway** - a linear park located along natural features such as lakes or ridges, along man-made features including abandoned railways or utility rights-of-way, which link people and resources together.

**indirect impacts** - effects which are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable (40 CFR 1508.4).

**macroinvertebrates** - aquatic insects, snails, and mussels whose species, genus, etc., can be determined with the naked eye.

**mainstream reservoirs** - impoundments created by dams constructed across the Tennessee River.

**marginal strip** - the narrow strip of land owned by TVA between the water's edge and the adjoining private property, on which the property owner may construct private water use facilities upon approval of plans by TVA.

**maximum shoreline contour (msc)** - an elevation typically 5 feet above the top of the gates of a TVA dam. It is often the property boundary between TVA property and adjoining private property.

**NEPA** (National Environmental Policy Act) - Legislation signed into law in 1970 that requires federal agencies to consider the potential physical environmental impacts of actions that they propose to undertake or approve.

**neotropical migrant birds** - birds which nest in the United States or Canada and migrate to spend the winter in Mexico, central America, the Caribbean, or South America.



**nutrient cycling** - Nutrients which provide the basis of many food chains are contributed to the wetland ecosystem internally in leaf litter, plant debris, and animal waste and remains. These nutrients are cycled internally and are both taken up by plants in the wetland and exported out of the wetland area.

**physiographic provinces** - general divisions of land with each area having characteristic combinations of soil materials and topography.

**plan tract** - a numbered parcel of TVA fee-owned land which, prior to the plan, has had no long-term commitments affecting future land uses as assigned through the reservoir land planning process.

**prime farmland** - generally regarded as the best land for farming, these areas are flat or gently rolling and are usually susceptible to little or no soil erosion. Prime farmland produces the most food, feed, fiber, forage, and oil seed crops with the least amount of fuel, fertilizer, and labor. It combines favorable soil quality, growing season, and moisture supply and, under careful management, can be farmed continuously and at a high level of productivity without degrading either the environment or the resource base. Prime farmland does not include land already in or committed to urban development, roads, or water storage.

**riparian zone** - an area of land that has vegetation or physical characteristics reflective of permanent water influence. Typically a streamside zone or shoreline edge.

**riprap** - stones placed along the shoreline for bank stabilization and other purposes.

**riverine** - having characteristics similar to a river.

**scrub-shrub** - woody vegetation less than about 20-feet tall. Species include true shrubs, young trees, and trees or shrubs that are small or stunted because of environmental conditions.

**shoreline** - the line where the water of a TVA reservoir meets the shore when the water level is at the summer operating range which is 812-813 feet elevation for Tellico Reservoir.

**shoreline stabilization** - The roots of shrubs and herbaceous vegetation help to stabilize shorelines against erosion resulting from wave action.

**sensitive resources** - As defined by TVA, include resources protected by federal law or executive order and other land features/natural resources TVA considers important to the area viewscape or natural environment.

**Shoreline Aquatic Habitat Index (SAHI)** - the index used to determine quality of shoreline aquatic habitat, based on seven characteristics important to support good populations of sport and commercial fish.

**Shoreline Management Initiative (SMI)** - an assessment of residential shoreline development impacts in the Tennessee Valley. TVA completed an EIS on residential shoreline development impacts throughout the Tennessee Valley and adopted a policy for controlling residential shoreline uses along its reservoirs.

**stratification** - the seasonal layering of water within a reservoir due to differences in temperature or chemical characteristics of the layers.

**summer operating range** - the level to which reservoirs are filled during the summer; for Tellico Reservoir, the summer operating range is 812-813 feet elevation. Where storage space is available above this level, additional filling may be made as needed for flood control.

**Tellico Reservoir Development Agency (TRDA)** - a public corporation created by the Tennessee Legislature in April 1982 (Chapter 679, codified as Section 64-1-70 et seq., Tennessee Code Annotated). This legislation provided "*The agency is created for the purpose of developing and effectuating plans and programs for the comprehensive development of, including acquisition, operating, managing, selling, and leasing and development of, all or a portion of the lands lying within the Tennessee Valley Authority Tellico Reservoir project...*"

**Tennessee Department of Environment and Conservation (TDEC)** - the state agency dedicated to protecting the quality of Tennessee's air, land and water and preserving, conserving, enhancing and promoting the state's natural and cultural resources.

**tributary reservoirs** - impoundments created by dams constructed across streams and rivers that eventually flow into the Tennessee River.

**turbidity** - all the organic and inorganic living and nonliving materials suspended in a water column. Higher levels of turbidity affect light penetration and typically decrease productivity of water bodies.

**upland** - the higher parts of a region, not closely associated with streams or lakes.

**wetlands** - as defined in *TVA Environmental Review Procedures*, "Wetlands are those areas inundated by surface or ground water with a frequency sufficient to support and under normal circumstances do or would support a prevalence of vegetation or aquatic life that requires saturated or seasonably saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, mud flats, and natural ponds."

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## **APPENDIX A – APPLICANT’S PROPOSAL**





## **Rarity Pointe – Development Plan Summary**

Rarity Communities, Inc., and LTR Properties, Inc., (the developer) is currently planning the development of approximately 660 acres in the Glendale area of Loudon County, Tennessee. The site is located approximately 5 miles east of Lenoir City, Tennessee and approximately 7 miles west of Maryville, Tennessee on State Highway 321 in Loudon County. Proximity to Interstate I-75 and I-40 is approximately 15 minutes driving distance or 11.5 miles, allowing easy access to local area residents. The site is centrally located in the Knoxville metropolitan service area (9-county MSA) with an approximate 30-minute drive to all major area services and attractions including major healthcare, air transportation and shopping. Additionally, the Knoxville MSA is positioned within 500 miles of more than 113 major cities comprising nearly 50 percent of the current U.S. population. As of July 31 2001, Rarity Communities, Inc., has recorded approximately 26,000 visitors and inquiries through its visitor information center at Rarity Bay. Total inquiries have increased annually by 75% – 100%. Visitor/inquiry analysis suggests the demand for a second-home and resort/rental opportunity with adjacent marina services is escalating. Additionally, the area has continued to attract the interest of active adult retirees as evidenced by the success of Tellico Village and Rarity Bay, also located on the Tellico Reservoir.

The proposed plan of development for Rarity Pointe includes approximately 332 acres owned by the developer with no significant deed restrictions. Dwelling units for this parcel are planned as residential, with open space and park areas around golf views.

An additional 219-acre parcel, currently under the direction of the Tellico Reservoir Development Agency (TRDA), is owned by the developer. The site development plan for this parcel adheres to the zoning restrictions as set forth under the Commercial Recreation guidelines adopted by TRDA and recorded in document TVA 60000A. Dwelling units planned on this parcel by the developer will be managed under the deed restrictions as set forth in the "***Rarity Pointe Supplemental Declaration of Conditions, Covenants and Restrictions, for Phase I.***" (Included Attachment A.) In addition, dwelling units located in the approximate 219- acre Commercial Recreation zoning "district" of the community will have the option to be managed under the "***Rarity Pointe Rental Management Program***" (Rental Management Agreement, Included Attachment B) The general content of these documents restrict owners from permanent use of their dwelling and give exclusive right to the developer operated "Rental Management Company" to market, promote and rent said unit as part of the rental management program. Additionally, the developer will own and operate guest cabins, cottages and lodge accommodations within the rental management program.

The master development plan for Rarity Pointe assumes the acquisition of approximately 115 acres currently held by the Tennessee Valley Authority (TVA) as public land. The developer has submitted a proposal to acquire this land from TVA. This parcel is currently land locked by parcels owned or under contract by the developer. The acquisition of this parcel enables the developer to plan approximately 1,200 dwelling units over an approximate total of 660 acres achieving a planned unit development (PUD)

density of less than 2 dwelling units per acre, providing for additional open space, park areas and low to mid-rise condominium design and construction. In the overall site planning and golf course routing design, the additional acres enhance the value of the recreational amenities by keeping golf course routing away from the shoreline and giving way to less crowding of amenity structures, thus increasing the overall value of each unit/lot parcel.

The approximate 660-acre Rarity Pointe master concept plan offers a recreational resort community offering both residential and rental use opportunities. Recreational and leisure amenities include a full-service marina including dry storage, and restaurant with public use rights; an 18-hole, tournament-play golf course and extensive practice facility; a golf clubhouse with on-site stay and play guest accommodations; a full-service spa and lodge site with in-lodge guest accommodations; meeting and banquet facilities; both casual and fine dining; an infinity pool, gardens and outdoor chapel; outdoor lighted tennis courts; walking trails and park areas; and planned/controlled access to Tellico Lake. Private individual boat docks will not be permitted at the shoreline thus diminishing impact on water quality. The entrance will be gated and employ 24-hour gatehouse attendants. Guest check-in will occur at the retail/commercial site at the highway 321 entrance.

The site presents dramatic topography, affording aesthetic view corridors for much of the planned development. Natural resources include a wide-variety of mature hardwood trees that have been incorporated into the community design guidelines for

preservation. These existing trees are part of an overall landscaping program to provide tree clustering throughout the site development. Extensive water views and lake front buffer areas have been planned to provide walking access at the shoreline in accordance with the Shoreline Management Plan currently adopted by TVA.

An English Country Manor and English Countryside architectural design theme has been incorporated into the Lodge and Golf Club facilities to set the tone for all future development. The character of the English Manor House architectural design is chosen to enhance the natural environment of the site with the use of wood and stone both on interiors and exteriors of all vertical structures. The construction of recreational and leisure amenities, as well as housing and resort accommodations will be managed under these guidelines.

Rarity Pointe will offer a mix of residential and rental opportunities to include: low-rise and mid-rise condominiums; cottage-style cabins; twin homes (duplexes); attached and detached villas; single-family estate homes; custom home sites; and overnight suite accommodations. A highway retail and commercial site is planned adjacent to highway 321 at the entrance to Rarity Pointe to accommodate owners and guests in Rarity Pointe, as well as local area residents and traffic along highway 321. An information center, visitor and guest check-in and general store would be located in this center outside the gated entrance to the community.

Rental management and property services will operate permanently on site at the lodge facility to provide a full-service rental and guest management program to all



residents, tenants, guests and visitors. Use rights for all recreational and leisure amenities are incorporated in the "Rental Management Agreement" draft. The resort rental offering and recreational use rights will be marketed on a local, regional and national basis. Maintenance and housekeeping for the rental program will be located in the Lodge facility.

Recreational use rights are incorporated into the Rarity Pointe Membership Plan. The membership plan presents varied levels of membership based on community involvement. Property owner members, resort club members and public access members and related use rights are defined in the Rarity Pointe Rules and Regulations for the Rarity Pointe Club. A "community access" membership classification for local area residents will be available for approximately \$250.00 annually offering golf, spa services and fitness programs, access to all dining facilities and attendance at community events.

Rarity Pointe is being master-planned and developed by LTR Properties, Inc./Rarity Communities, Inc., under the direction of Michael L. Ross as president. Currently responsible for the successful development of Rarity Bay on Tellico Lake, the Rarity Communities is in the design stages for much of the product offering and rental accommodations, as well as the design and construction management of all recreational and leisure amenities. Additionally, the company will manage the overall development design guidelines and design review process for Rarity Pointe as well as the rental management and resort operations. Rarity Communities is currently positioned "in-house" with staffing and systems in place to effectively manage the financial reporting, total club operations, site development, association management, community

maintenance, sales and marketing and the vertical construction operations. A critical path time line and financial operating plan has been drafted by senior management to achieve key response dates for Rarity Pointe development assuming official start-up in August of 2002.

### **Alternative Development Strategy**

Rarity Communities, Inc., has launched a pre-sales program for Phase I development. The pre-sales program allows for non-binding reservations to be taken from interested buyers on site located on the Commercial Recreation zoned parcel. As of July 31, 2002, the company has obtained 56 reservations. These interested buyers will receive copies of all Conditions, Covenants and Restrictions for Phase I, in addition to membership and rental program information. Lot/parcel sizes have been preliminarily planned to assume the acquisition of the additional 115 acres.

In that, TVA would take no action on the proposal by the developer to acquire the 115-acre tract, dwelling unit size and values would need change to achieve the total number of units and unit values necessary to produce the projected gross revenues required to fund the existing golf course design and construction of planned amenity structures. Alternatives would include planning high-rise condominium buildings to achieve a higher unit count vertically, reducing the size of one-story unit lots, thus decreasing the overall value per unit resulting in need for more than 1,200 units. (i.e.) 1,600 units on 548 acres would increase the overall density to 3 dwelling units per acre, thus limiting open space and park area. Additionally, the revised routing plan for the

golf course would not allow for tournament play where typically the golf club house is positioned at the number 1 and 18 hole. The current condition of the 115-acre tract left undeveloped would detract from the overall "place-making" of the community, leaving the land unmanaged and giving way to trespassers to Rarity Pointe.

### **The Professional Team of Consultants**

Tunnell, Spangler and Associates, Inc.  
Land planning and Architectural Design  
Atlanta, Georgia

Sterling Engineering, Inc.  
Civil and Professional Engineering  
Maryville, Tennessee

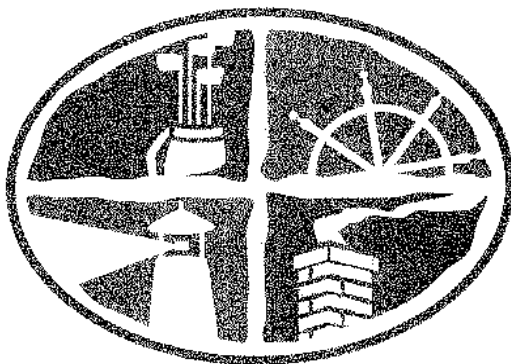
Law Offices  
Epstein, Becker and Green  
Atlanta, Georgia

Robert Cupp, Golf Course Architect  
Golf Course Routing Design  
Atlanta, Georgia

Group One Design  
Interior and Architectural Design  
Knoxville, Tennessee

Vaughn and Melton  
Professional Engineers  
Knoxville Tennessee





# Rarity Pointe

PLAY LIKE A CHAMPION

Another Fine Living Experience Offered by Rarity Communities, Inc.

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS

FOR

RARITY POINTE

STATE OF TENNESSEE LOUDON COUNTY REGISTER'S OFFICE  
THIS INSTRUMENT RECEIVED AT 2:19 O'CLOCK P. M. OF THE 27 DAY OF JUNE 2002  
DULY CERTIFIED AND REGISTERED IN SAID OFFICE IN Trust BOOK NO. 590 PAGE 1  
AND NOTED IN BOOK NO. Y PAGE 337 STATE TAX PAID \$         
See #441200 Bonnie Wear REGISTER  
See #112.

INST: 0007006201  
RECEIVED: 06/27/2002 :  
BONNIE WEAR  
REGISTER OF DEEDS LOUDON CO. TN

Upon recording, please return to:

M. Maxine Hicks, Esq.  
EPSTEIN BECKER & GREEN, P.C.  
Resurgens Plaza  
945 East Paces Ferry Road, Suite 2700  
Atlanta, Georgia 30326  
Phone: 404/923-9000  
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"B"	Additional Property
"C"	By-Laws of Rarity Pointe Community Association, Inc.

**DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS**

**FOR**

**RARITY POINTE**

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS for Rarity Pointe ("Declaration") is made as of the date set forth on the signature page hereof by LTR Properties, Inc., a Tennessee corporation (the "Declarant").

Declarant is the owner of the real property described on Exhibit "A," which is attached and incorporated by reference or if Declarant is not the owner, such owner has consented to this Declaration. This Declaration imposes upon the Properties mutually beneficial restrictions under a general plan of improvement for the benefit of the owners of each portion of the Properties and establishes a flexible and reasonable procedure for the overall development, administration, maintenance and preservation of the Properties. In furtherance of such plan, this Declaration provides for the creation of Rarity Pointe Community Association, Inc. to own, operate and maintain Common Areas and to administer and enforce the provisions of this Declaration, the By-Laws, and the Design Guidelines (capitalized terms are defined in Article 1 below).

Declarant hereby declares that all of the property described on Exhibit "A" and any Additional Property subjected to this Declaration by Supplemental Declaration shall be held, sold, used and conveyed subject to the following easements, restrictions, covenants, and conditions which shall run with the title to the real property subjected to this Declaration. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Properties, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of each owner of any portion of the Properties.

**ARTICLE 1: DEFINITIONS**

The terms in this Declaration and in the exhibits to this Declaration shall generally be given their natural, commonly accepted definitions except as otherwise specified. Capitalized terms shall be defined as set forth below.

1.1. "Additional Property": All of that certain real property which is more particularly described on Exhibit "B", which is attached and incorporated herein by this reference, and which real property is subject to annexation to the terms of this Declaration in accordance with Article 7.

1.2. "Adjacent Properties": Any residential, nonresidential or recreational areas, including without limitation, retail, office, commercial, or institutional areas and Private Amenities, which are located adjacent to, in the vicinity of, or within the Properties; which are owned and operated, in whole or in part, by Persons other than the Association; which are not subject to this Declaration; and which are neither Units or Common Area as defined in this Declaration.

1.3. "Area of Common Responsibility": The Common Area, together with any additional areas for which the Association has or assumes responsibility pursuant to the terms of this Declaration, any Supplemental Declaration, any Cost Sharing Agreement, or other applicable covenant, contract, or agreement.

1.4. "Association": Rarity Pointe Community Association, Inc., a Tennessee nonprofit mutual benefit corporation, its successors and assigns.

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1.5. "Board of Directors" or "Board": The body responsible for administration of the Association, selected as provided in the By-Laws and serving as the board of directors under Tennessee corporate law.

1.6. "Builder": Any Person who purchases one (1) or more Units for the purpose of constructing improvements thereon for later sale to consumers or who purchases one (1) or more parcels of land within the Properties for further subdivision, development, and/or resale in the ordinary course of such Person's business. Any Person occupying or leasing a Unit for residential purposes shall cease to be considered a Builder with respect to such Unit immediately upon occupancy of the Unit for residential purposes, notwithstanding that such Person originally purchased the Unit for the purpose of constructing improvements for later sale to consumers.

1.7. "By-Laws": The By-Laws of Rarity Pointe Community Association, Inc. attached as Exhibit "C," as they may be amended.

1.8. "Charter": The Charter of Rarity Pointe Community Association, Inc. as filed with the Secretary of State of Tennessee, as amended from time to time.

1.9. "Consolidated Lot": The tract resulting from the consolidation of multiple adjacent Lots as more particularly described in Section 10.16.

1.10. "Common Area": All real and personal property, including easements and licenses, which the Association owns, leases or holds possessory or use rights in for the common use and enjoyment of the Owners. The term also shall include any Exclusive Common Area, as defined below.

1.11. "Common Expenses": The actual and estimated expenses incurred, or anticipated to be incurred, by the Association for the general benefit of all Owners, including any reasonable reserve, as the Board may find necessary and appropriate pursuant to the Governing Documents.

1.12. "Community-Wide Standard": The standard of conduct, maintenance, or other activity generally prevailing throughout the Properties. Such standard shall initially be established by the Declarant and may be more specifically determined by the Board of Directors and the DRB.

1.13. "Cost Sharing Agreement": Any agreement, contract or covenant between the Association and an owner or operator of property adjacent to, in the vicinity of, or within the Properties, including any Private Amenity, for the allocation of expenses for amenities and/or services that benefit both the Association and the owner or operator of such property.

1.14. "Days": Calendar days; provided however, if the time period by which any action required hereunder must be performed expires on a Saturday, Sunday or legal holiday, then such time period shall be automatically extended to the close of business on the next regular business day.

1.15. "Declarant": LTR Properties, Inc., a Tennessee corporation or any successor or assign who is designated as the Declarant in a recorded instrument executed by the immediately preceding Declarant and the owner of all or any portion of the property described on Exhibits "A" or "B"; provided however, there shall be only one (1) Person entitled to exercise the rights and powers of the "Declarant" hereunder at any time.

1.16. "Declarant-Related Entity": Any Person or entity which is a parent, subsidiary or affiliate of the Declarant, and/or in which the Declarant or any parent, subsidiary or affiliate of the Declarant or any officer, director, shareholder, partner, member, manager, or trustee of any of the

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foregoing, or any combination thereof, owns, directly or indirectly, not less than fifty percent (50%) of such entity, including but not limited to Rarity Communities, Inc.

1.17. "Design Guidelines": The design, architectural and construction guidelines and application and review procedures applicable to all or any portion of the Properties promulgated and administered pursuant to Article 9.

1.18. "Development Period": The period of time during which the Declarant owns any property which is subject to this Declaration, any Additional Property, or any Private Amenity, or has the unilateral right to subject Additional Property to this Declaration pursuant to Section 7.1. The Declarant may, but shall not be obligated to, unilaterally relinquish its rights under this Declaration and terminate the Development Period by recording a written instrument in the Public Records.

1.19. "DRB": The Design Review Board, as described in Section 9.2.

1.20. "Exclusive Common Area": A portion of the Common Area intended for the exclusive use or primary benefit of one (1) or more, but less than all, Neighborhoods or Units, as more particularly described in Article 2.

1.21. "General Assessment": Assessments levied on all Units subject to assessment under Article 8 to fund Common Expenses for the general benefit of all Units, as more particularly described in Sections 8.1 and 8.2.

1.22. "Governing Documents": The Declaration, By-Laws, Charter, all Supplemental Declarations, all Design Guidelines, the rules of the Association, all Cost Sharing Agreements, and all additional covenants governing any portion of the Properties or any of the above, as each may be supplemented and amended from time to time.

1.23. "Lake Use Restrictions": Access restrictions, use restrictions and procedures governing access dock use, or use of Tellico Lake as may be promulgated by the Association from time-to-time, and during the Development Period, consented to by the Declarant. This term shall also include any rules, regulations and restrictions to the access dock use, and use of Tellico Lake promulgated by TVA.

1.24. "Majority": Those votes, Owners, Members, or other group, as the context may indicate, totaling more than fifty percent (50%) of the total eligible number.

1.25. "Master Plan": The land use plan or development plan for "Rarity Pointe," prepared by the land planning firm of Sterling Engineering, Inc., 1017 Hampshire Drive, Maryville, Tennessee 37801, as such plan may be amended from time to time, which plan includes the property described on Exhibit "A" and all or a portion of the Additional Property described on Exhibit "B" that Declarant may from time to time anticipate subjecting to this Declaration. Inclusion of property on the Master Plan shall not, under any circumstances, obligate Declarant to subject such property to this Declaration, nor shall the exclusion of property described on Exhibit "B" from the Master Plan bar its later annexation in accordance with Article 7.

1.26. "Member": A Person subject to membership in the Association pursuant to Section 3.2.

1.27. "Mortgage": A mortgage, a deed of trust, a deed to secure debt, or any other form of security instrument affecting title to any Unit.

1.28. "Mortgagee": A beneficiary or holder of a Mortgage.

1.29. "Neighborhood": A separately developed area within the Properties, whether or not governed by a Neighborhood Association (as defined below), in which the Owners of Units may have common interests other than those common to all Members of the Association. For example, and by way of illustration and not limitation, each single-family attached or detached housing development may constitute a separate Neighborhood, or a Neighborhood may be comprised of more than one (1) housing type with other features in common and may include noncontiguous parcels of Property.

Where the context permits or requires, the term Neighborhood shall also refer to the Neighborhood Committee, if any, (established in accordance with the By-Laws) or Neighborhood Association if any, (as defined below) having concurrent jurisdiction over the property within the Neighborhood. Neighborhood boundaries may be established and modified as provided in Section 3.3.

1.30. "Neighborhood Assessments": Assessments levied against the Units in a particular Neighborhood or Neighborhoods to fund Neighborhood Expenses, as described in Sections 8.1 and 8.3.

1.31. "Neighborhood Association": Any condominium association or other owners association having concurrent jurisdiction with the Association over any Neighborhood.

1.32. "Neighborhood Expenses": The actual and estimated expenses incurred or anticipated to be incurred by the Association for the benefit of Owners of Units within a particular Neighborhood or Neighborhoods, which may include a reasonable reserve for capital repairs and replacements, as the Board may specifically authorize from time to time and as may be authorized herein or in Supplemental Declarations applicable to such Neighborhood(s).

1.33. "Owner": One (1) or more Persons who hold the record title to any Unit, including the Declarant and any Builders, but excluding in all cases any party holding an interest merely as security for the performance of an obligation. If a Unit is sold under a recorded contract of sale, and the contract specifically so provides, the purchaser (rather than the fee owner) will be considered the Owner. If a Unit is owned by more than one (1) Person, all such Persons shall be jointly and severally obligated to perform the responsibilities of such Owner.

1.34. "Person": A natural person, a corporation, a partnership, a limited liability company, a fiduciary acting on behalf of another person or any other legal entity.

1.35. "Private Amenity": Certain real property and any improvements and facilities thereon located adjacent to, in the vicinity of, or within the Properties which are owned and operated, in whole or in part, by Persons other than the Association for recreational or other purposes. Any Private Amenity shall be designated by the Declarant in its sole discretion. The use of the term "Private Amenity" shall not be construed to imply or require a private club. Private Amenities may be operated on a club membership, daily fee, use fee, public, or private basis or otherwise and may include, without limitation, any golf course(s), marina or lodge and all related and supporting facilities and improvements.

1.36. "Private Sewer System": Any sanitary sewer system providing sewer service to all or any subset of Members located within or abutting the Properties, including any sanitary sewer gravity based and pressure based collector lines and pressure pumping mechanisms installed by Declarant and sanitary sewer service connections and pressure lines to or within a Unit and any related components or equipment required for the collection, transmission, treatment or processing of waste effluent, including any wastewater treatment facility, pumps, tanks, motors, casings, electrical lights and switches, whether installed by a Builder or Owner to the extent such lines and equipment are not conveyed to, or owned by a public or private utility company.

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1.37. "Properties": The real property described on Exhibit "A" as such exhibit may be amended or supplemented from time to time to reflect any additions or removal of property in accordance with Article 7.

1.38. "Public Records": The Registers Office of Loudon County, Tennessee, or such other place which is designated as the official location for recording of deeds and similar documents affecting title to real estate.

1.39. "Rarity Pointe": That certain planned community located in Loudon County, Tennessee, which is commonly referred to as Rarity Pointe.

1.40. "Special Assessment": Assessments levied in accordance with Section 8.5.

1.41. "Specific Assessment": Assessments levied in accordance with Section 8.6.

1.42. "Supplemental Declaration": An instrument filed in the Public Records which subjects Additional Property to this Declaration, designates Neighborhoods, and/or imposes, expressly or by reference, additional restrictions and obligations on the land described in such instrument. The term shall also refer to an instrument filed by the Declarant pursuant to Section 3.5 which designates Voting Groups, any declaration of covenants, conditions and restrictions, and any declaration of condominium.

1.43. "Tellico Lake": That certain body of water known as "Tellico Lake" which is currently governed by the Tennessee Valley Authority (TVA), a corporate agency and instrumentality of the United States of America organized and existing pursuant to the Tennessee Valley Authority Act of 1933, located adjacent to the Properties and subject to the Lake Use Restrictions.

1.44. "TVA": The term used to define any Person exercising ownership, control and approval rights over activities on Tellico Lake as well as its use.

1.45. "Unit": A portion of the Properties, whether improved or unimproved, which may be independently owned and conveyed and which is intended for development, use, and occupancy as an attached or detached residence for a single family. The term shall refer to the land, if any, which is part of the Unit as well as any improvements thereon. The term shall include within its meaning, by way of illustration but not limitation, townhouse units, cluster homes, patio or zero lot line homes, and single-family detached houses on separately platted lots, as well as vacant land intended for development as such, but shall not include Common Area, common property owned by any Neighborhood Association, or property dedicated to the public. In the case of a building within a condominium or other structure containing multiple dwellings, each dwelling shall be deemed to be a separate Unit.

In the case of an unplatted parcel of land, the parcel shall be deemed to be a single Unit until such time as a subdivision plat or condominium plat is filed with respect to all or a portion of the parcel. Thereafter, the portion encompassed by such plat shall contain the number of Units determined as set forth in the preceding paragraph and any portion not encompassed by such plat shall continue to be treated in accordance with this paragraph.

1.46. "Voting Delegate": Any representative selected by the Class "A" Members within each Neighborhood to be responsible for casting all Class "A" votes attributable to Units in the Neighborhood on matters requiring a vote of the membership. The term "Voting Delegate" shall also refer to any alternate Voting Delegate acting in the absence of a Voting Delegate.

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1.47. "Voting Group": One (1) or more Members who vote on a common slate for election of directors to the Board of Directors of the Association, as more particularly described in Section 3.5 of this Declaration.

## ARTICLE 2: PROPERTY RIGHTS

2.1. Common Area. Every Owner shall have a right and nonexclusive easement of use, access, and enjoyment in and to the Common Area, which is appurtenant to and shall pass with the title to each Unit, subject to:

- (a) This Declaration and all other Governing Documents;
- (b) Any restrictions or limitations contained in any deed conveying such property to the Association;
- (c) The right of the Board to adopt, amend and repeal rules regulating the use and enjoyment of the Common Area, including rules limiting the number of guests who may use the Common Area;
- (d) The right of the Association to rent, lease or reserve any portion of the Common Area to any Owner for the exclusive use of such Owner and his or her respective lessees, invitees, and guests upon such conditions as may be established by the Board;
- (e) The right of the Board to suspend the right of an Owner to use any recreational and social facilities within the Common Area and Exclusive Common Area pursuant to Section 4.3;
- (f) The right of the Board to impose reasonable requirements and charge reasonable admission or other use fees for the use of any facility situated upon the Common Area;
- (g) The right of the Board to permit use of any facilities situated on the Common Area by persons other than Owners, their families, lessees and guests upon payment of reasonable use fees, if any, established by the Board;
- (h) The right of the Association, acting through the Board, to mortgage, pledge, or hypothecate any or all of its real or personal property as security for money borrowed or debts incurred;
- (i) The right of the Association, acting through the Board, to dedicate or transfer all or any portion of the Common Area, subject to any approval requirements set forth in the Governing Documents;
- (j) The rights of certain Owners to the exclusive use, access and enjoyment of those portions of the Common Area designated "Exclusive Common Areas," as more particularly described in Section 2.2; and
- (k) The right of the Declarant to conduct activities and establish facilities within the Properties as provided in Article 13.

Any Owner may extend his or her right of use and enjoyment to the members of his or her family, lessees, and social invitees, as applicable, subject to reasonable regulation by the Board. An Owner who leases his or her Unit shall be deemed to have assigned all such rights to the lessee of such Unit; provided however, the Owner shall remain responsible for payment of all assessments and other charges.

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2.2. Private Streets. Every Owner shall have a right and nonexclusive easement of use, access, and enjoyment in and to, over and across any private streets and roads within the Properties ("Private Streets"), whether or not such Private Streets are Common Area, for the purpose of ingress and egress to public rights-of-way. The rights and nonexclusive easements granted herein are appurtenant to the title to each Unit, subject to:

- (a) This Declaration and all other Governing Documents;
- (b) The right of the Declarant, so long as the Declarant owns the Private Streets, to adopt, amend and repeal rules regulating the use and enjoyment of the Private Streets, provided that the Declarant shall not by the adoption of any rule or regulation bar access of the Owners across the Private Streets;
- (c) The right of the Declarant to dedicate all or any part of Private Streets;
- (d) The right of the Declarant to mortgage, pledge, or hypothecate any or all of the Private Streets as security for money borrowed or debts incurred, provided that the Declarant shall not subject the Private Streets to any security instrument without obtaining the agreement of the lender to subordinate its interest in the Private Streets to the easements for the Owners contained in this Section; and
- (e) The rights of the Declarant and the Association to maintain the Private Streets.

Any Owner may extend his or her right of use and enjoyment to the members of his or her family, lessees, and social invitees, as applicable.

2.3. Exclusive Common Area. Certain portions of the Common Area may be designated as Exclusive Common Area and reserved for the exclusive use or primary benefit of Owners and occupants of specified Units or Neighborhoods. By way of illustration and not limitation, Exclusive Common Areas may include entry features, recreational facilities, roads, landscaped medians and cul-de-sacs, shared driveways, ponds, lakes and other portions of the Common Area within a particular Neighborhood or Neighborhoods. All costs associated with maintenance, repair, replacement, and insurance of an Exclusive Common Area shall be assessed against the Owners of Units to which the Exclusive Common Areas are assigned either as a Neighborhood Assessment or as a Specific Assessment, as applicable.

Initially, any Exclusive Common Area shall be designated as such, and the exclusive use thereof shall be assigned, in the deed by which the Common Area is conveyed to the Association, or in this Declaration, or any Supplemental Declaration and/or on the subdivision plat relating to such Common Area; provided however, any such assignment shall not preclude the Declarant from later assigning use of the same Exclusive Common Area to additional Units and/or Neighborhoods during the Development Period. Thereafter, a portion of the Common Area may be assigned as Exclusive Common Area of particular Units or a particular Neighborhood or Neighborhoods and Exclusive Common Area may be reassigned upon approval of the Board and the vote of Members holding a Majority of the total Class "A" votes in the Association, including, if applicable, a Majority of the Class "A" votes within the Neighborhood(s) to which the Exclusive Common Area is assigned, if previously assigned, and within the Neighborhood(s) to which the Exclusive Common Area is to be assigned or reassigned. Any reassignment of an Exclusive Common Area shall be set forth in a Supplemental Declaration executed by the Declarant and/or the Board, as appropriate, or shall be shown on a revised subdivision plat relating to such Exclusive Common Area.

The Association may, upon approval of a Majority of the Class "A" votes within the Neighborhood(s) to which any Exclusive Common Area is assigned, permit Owners of Units in other



Neighborhoods to use all or a portion of such Exclusive Common Area upon payment of reasonable use fees, which fees shall be used to offset the Neighborhood Expenses or Specific Assessments attributable to such Exclusive Common Area.

2.4. Lake. Access to and use of Tellico Lake shall be strictly subject to the Lake Use Restrictions and no Person shall gain any right to enter or to use Tellico Lake or to gain access to Tellico Lake from the Properties other than by virtue of membership in the Association or ownership or occupancy of a Unit. Although ownership or occupancy of a Unit shall not ensure that a right to access to Tellico Lake from the Properties exists, each Owner of a Unit acknowledges and agrees to strictly abide by the Lake Use Restrictions. Any Person, including, without limitation, any Owner, occupant of any Unit, or tenant, guest or invitee of any Owner gaining access to or using Tellico Lake from the Properties for any purpose shall assume the risk of such use. Under no circumstance shall the Declarant, the Association, any Builder, or any Person acting on their behalf assume any liability for use of Tellico Lake by an Owner, its invitees, or licensees.

2.5. View Impairment. Neither the Declarant nor the Association guarantees or represents that any view over and across Tellico Lake, the Common Area, any recreational facilities, or any vistas from Units will be preserved without impairment. The Association, and during the Development Period the Declarant shall have: (i) no obligation to take any actions including but not limited to pruning or thinning trees or other landscaping to provide visibility of Tellico Lake or of any other vista; and (ii) the right to add or remove trees and other landscaping adjacent to Tellico Lake or any other portion of the Properties in accordance with the Design Guidelines.

2.6. No Partition. Except as permitted in this Declaration, there shall be no judicial partition of the Common Area. No Person shall seek any judicial partition unless the portion of the Common Area which is the subject of such partition action has been removed from the provisions of this Declaration. This Section shall not prohibit the Board from acquiring and disposing of tangible personal property or from acquiring and disposing of other real property which may or may not be subject to this Declaration.

2.7. Condemnation. The Association shall be the sole representative with respect to condemnation proceedings concerning Common Area and shall act as attorney-in-fact for all Owners in such matters. Whenever any part of the Common Area shall be taken by or conveyed under threat of condemnation to any authority having the power of condemnation or eminent domain, each Owner shall be entitled to written notice of such taking or conveyance. The Board may convey Common Area under threat of condemnation only if approved by Members holding at least sixty-seven percent (67%) of the total Class "A" votes in the Association and, during the Development Period, the written consent of the Declarant. The award made for such taking or proceeds of such conveyance shall be payable to the Association.

If the taking or conveyance involves a portion of the Common Area on which improvements have been constructed, the Association shall restore or replace such improvements on the remaining land included in the Common Area to the extent available, unless within sixty (60) Days after such taking Members holding at least sixty-seven percent (67%) of the total Class "A" vote of the Association and, during the Development Period, the Declarant shall otherwise agree. Any such construction shall be in accordance with plans approved by the Board and the DRB. The provisions of Section 6.1(c) regarding funds for the repair of damage or destruction shall apply.

If the taking or conveyance does not involve any improvements on the Common Area, or if a decision is made not to repair or restore, or if net funds remain after any such restoration or replacement is complete, then such award or net funds may be used by the Association for such purposes as the Board shall determine.

### ARTICLE 3: MEMBERSHIP AND VOTING RIGHTS

3.1. Membership. Every Owner shall be a Member of the Association. In addition, owners of Adjacent Properties may be Members of the Association as set forth in Section 3.2(c). There shall be only one (1) membership per Unit. If a Unit is owned by more than one (1) Person, all co-Owners shall share the privileges of such membership, subject to reasonable Board regulation and the restrictions on voting set forth in Section 3.2(e) and in the By-Laws. The membership rights of an Owner which is not a natural person may be exercised by any officer, director, member, manager, partner or trustee of such Owner, or by any individual designated from time to time by the Owner in a written instrument provided to the secretary of the Association.

3.2. Voting. The Association shall have three (3) classes of membership, Class "A", Class "B", and Class "C" as set forth below.

(a) Class "A". Class "A" Members shall be all Owners except the Class "B" and Class "C" Members. Each Class "A" Member shall have one (1) equal vote for each Unit in which he or she holds the interest required for membership under Section 3.1; provided however, there shall be only one (1) vote per Unit and no vote shall be exercised for any property which is exempt from assessment under Section 8.10.

(b) Class "B". The sole Class "B" Member shall be the Declarant. The rights of the Class "B" Member, including the right to approve, or withhold approval of, actions proposed under this Declaration, the By-Laws and the Charter, are specified in the relevant sections of this Declaration, the By-Laws and the Charter. The Class "B" Member may appoint a Majority of the members of the Board of Directors during the Development Period.

At such time, the Class "B" membership shall terminate, and the Declarant shall be a Class "A" Member entitled to Class "A" votes for each Unit which it owns.

(c) Class "C". Class "C" Members shall be those owners or operators of any portion of the Adjacent Properties, including but not limited to any Private Amenities, that have entered into an agreement with the Association for the purposes of creating a relationship enabling the Association to provide services, including, without limitation, sewerage services or state licensure-related services, to such owner's or operator's portion of the Adjacent Properties. Such agreement shall set forth the number of votes that any such owner or operator is entitled to cast on any matters requiring a vote of the Class "C" Members; provided, however, that each Class "C" Member shall be entitled to at least one vote. Class "C" Members shall not have the right to vote on any matters except as specifically set forth in the Governing Documents.

(d) Additional Classes of Membership. The Declarant may, by Supplemental Declaration, create additional classes of membership for the owners of Units within any Additional Property made subject to this Declaration pursuant to Article 7, with such rights, privileges and obligations as may be specified in such Supplemental Declaration, in recognition of the different character and intended use of the property subject to such Supplemental Declaration.

(e) Exercise of Voting Rights by Class "A" Members. If there is more than one (1) Owner of a Unit, the vote for such Unit shall be exercised as the co-Owners determine among themselves and advise the secretary of the Association in writing prior to the vote being taken. Absent such advice, the Unit's vote shall be suspended if more than one (1) Person seeks to exercise it. If Voting Delegates have been elected pursuant to Section 3.4, the vote for each Unit owned by a Class "A" Member shall be exercised by the Voting Delegate representing the Neighborhood of which the Unit is a part, as provided

in such Section. No vote shall be exercised on behalf of any Unit if any assessment for such Unit is delinquent.

3.3. Neighborhoods. Every Unit shall be located within a Neighborhood; provided however, unless and until additional Neighborhoods are established, the Properties shall consist of one (1) Neighborhood. The Declarant, in its sole discretion, may establish Neighborhoods within the Properties by designation on Exhibit "A" to this Declaration, a Supplemental Declaration, or a plat. During the Development Period, the Declarant may unilaterally amend this Declaration, any Supplemental Declaration, or any plat from time to time to assign property to a specific Neighborhood, to redesignate Neighborhood boundaries, or to remove property from a specific Neighborhood.

Upon termination of the Development Period, the Board of Directors, upon receipt of a petition signed by a Majority of the Owners of the Units to be affected, may, in its sole discretion and with the written consent of the Declarant, establish Neighborhoods, redesignate Neighborhood boundaries or remove property from a specific Neighborhood. Such petition shall be in writing and shall include a survey of the entire property affected by the petition which indicates the proposed boundaries of the new Neighborhoods or otherwise identifies the Units to be included within the proposed Neighborhoods. Such petition shall be deemed denied forty-five (45) Days following the filing of all required documents with the Board unless both the Board of Directors and the Declarant approve such application in writing within such forty-five (45) Day period. Either the Board or the Declarant may deny an application for any reason in its sole discretion. All applications and copies of any denials shall be filed with the books and records of the Association. The Owners requesting the division shall be responsible for any expenses incurred with respect to implementing a division of a Neighborhood, including but not limited to costs associated with preparation and presentation of the application, regardless of whether such application is approved or denied, and preparation a Supplemental Declaration or revised plat, if the application is approved.

The Units within a particular Neighborhood may be subject to additional covenants and/or the Unit Owners may be members of a Neighborhood Association in addition to the Association. However, a Neighborhood Association shall not be required except as required by law. Any Neighborhood which does not have a Neighborhood Association may, but shall not be obligated to, elect a Neighborhood Committee, as described in the By-Laws, to represent the interests of Owners of Units in such Neighborhood. No Neighborhood Association or Neighborhood Committee shall be formed or otherwise established without the prior submission to and written approval of Declarant of all documents creating or establishing such Neighborhood Association or Neighborhood Committee, including without limitation, the submission of any declaration of condominium, Charter, by-laws and other organizational and governing documents.

Any Neighborhood may request that the Association provide a higher level of service or special services for the benefit of Units in such Neighborhood and, upon the affirmative vote, written consent, or a combination thereof, of Owners of a Majority of the Units within the Neighborhood, the Association may, in its sole discretion, provide the requested services. The cost of such services, which may include a reasonable administrative charge in such amount as the Board deems appropriate (provided any such administrative charge shall apply at a uniform rate per Unit to all Neighborhoods receiving the same service), shall be assessed against the Units within such Neighborhood as a Neighborhood Assessment pursuant to Article 8 hereof.

3.4. Voting Delegates. The Board in its sole discretion shall determine whether Voting Delegates shall be elected for each Neighborhood; provided, however, all Neighborhoods which are similarly situated shall be treated the same. Until such time as the Board first calls for election of a Voting Delegate for any Neighborhood, the Owners within such Neighborhood shall be entitled

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personally to cast the votes attributable to their respective Units on any issue requiring a vote under this Declaration, the By-Laws or the Charter.

If the Board determines that Voting Delegates shall be elected, the elections and Voting Delegates shall be subject to the following procedures unless the Governing Documents for such Neighborhood provide for stricter requirements:

(a) The Board shall send notice of the election of a Voting Delegate to all Owners within the Neighborhood; provided, however, the first election of a Voting Delegate for any Neighborhood shall not be held until at least fifty percent (50%) of the Units planned for such Neighborhood have been conveyed to Persons other than the Declarant or a Builder. After the initial election of a Voting Delegate for a Neighborhood, subsequent elections shall take place on an annual basis.

(b) Elections may take place by written ballot cast by mail or at a meeting of the Class "A" Members within each Neighborhood, as the Board determines; provided, however, upon written petition signed by Class "A" Members holding at least ten percent (10%) of the votes attributable to Units within any Neighborhood, the election for such Neighborhood shall be held at a meeting.

(c) The presence, in person or by proxy, of Class "A" Members representing at least ten percent (10%) of the total Class "A" votes attributable to Units in the Neighborhood shall constitute a quorum at any Neighborhood meeting. Each Class "A" Member who owns a Unit within the Neighborhood shall be entitled to cast one (1) equal vote per Unit owned.

(d) At each election, the Owners within each Neighborhood shall elect a Voting Delegate who shall be responsible for casting all votes attributable to Units owned by Class "A" Members in the Neighborhood on all Association matters requiring a membership vote. In addition, each Neighborhood shall elect an alternate Voting Delegate who shall be responsible for casting such votes in the absence of the Voting Delegate. The candidate who receives the greatest number of votes shall be elected as Voting Delegate and the candidate receiving the next greatest number of votes shall be elected as the alternate Voting Delegate. The Voting Delegate and the alternate Voting Delegate shall serve a term of one (1) year and until their successors are elected. No Person shall be eligible to serve as a Voting Delegate or an alternate Voting Delegate if any assessment for such Person's Unit is delinquent.

(e) Any Voting Delegate or alternate Voting Delegate may be removed, with or without cause, upon the vote or written petition of Owners holding at least a Majority of the total Class "A" votes attributable to Units in the Neighborhood which the Voting Delegate or alternate Voting Delegate represents. Any Voting Delegate or alternate Voting Delegate shall be automatically removed and ineligible to cast the votes attributable to Units in such Voting Delegate's Neighborhood if any assessment for such Voting Delegate's Unit is delinquent. Upon removal of a Voting Delegate or an alternate, a successor shall be elected by the Owners of Units within the Neighborhood to fill the vacancy for the remainder of such delegate's term.

(f) Prior to taking a vote on any issue requiring membership approval, the Association shall distribute proxies to all Members represented by Voting Delegates allowing each Member to direct in writing how such Member's vote is to be cast with respect to such issue by the Voting Delegate who represents such Member. The Voting Delegates shall be required to cast all votes for which specific proxies are returned in the manner directed in such proxies. All other votes may be cast as the Voting Delegate deems appropriate in its sole discretion. The Board may adopt resolutions establishing additional procedures for polling Members.

Notwithstanding anything to the contrary above, with respect to any portion of the Properties that is subject to the jurisdiction of a Neighborhood Association, the Voting Delegate and alternate Voting Delegate for such Neighborhood shall be the president and secretary of the Neighborhood Association, respectively.

3.5. Voting Groups. The Declarant may designate Voting Groups consisting of one (1) or more Neighborhoods for the purpose of electing directors to the Board. The designation of Voting Groups, if any, shall be to promote representation on the Board of Directors for various groups having dissimilar interests and to avoid a situation in which the Members from similar Neighborhoods are able, due to the number of Units in such Neighborhoods, to elect the entire Board of Directors, excluding representation of others. Following termination of the Class "B" membership, the number of Voting Groups within the Properties shall not exceed the total number of directors to be elected by the Class "A" Members pursuant to the By-Laws. The Members within each Voting Group shall vote on a separate slate of candidates for election to the Board, with each Voting Group being entitled to elect the number of directors specified in the By-Laws.

The Declarant shall establish Voting Groups, if at all, not later than the date of expiration of the Class "B" membership by filing with the Association and in the Public Records a Supplemental Declaration identifying each Voting Group by legal description or other means such that the Units within each Voting Group can easily be determined. Such designation may be unilaterally amended from time to time by the Declarant during the Development Period.

After expiration of the Declarant's right to amend any designation of Voting Groups as provided above, the Board shall have the right to file or amend any Supplemental Declaration for the purpose of designating Voting Groups. Neither recordation nor amendment of such Supplemental Declaration shall constitute an amendment to this Declaration, and no consent or approval of any Person shall be required except as stated in this Section. Until such time as Voting Groups are established, all of the Properties shall constitute a single Voting Group. After a Supplemental Declaration establishing Voting Groups has been filed, any and all portions of the Properties which are not assigned to a specific Voting Group shall constitute a single Voting Group.

#### ARTICLE 4: RIGHTS AND OBLIGATIONS OF THE ASSOCIATION

4.1. Function of Association. The Association shall be the entity responsible for management, maintenance, operation and control of the Area of Common Responsibility and all improvements thereon. The Association shall be the primary entity responsible for enforcement of this Declaration and such reasonable rules regulating use of the Properties as the Board may adopt pursuant to Article 10. Except as otherwise provided herein, the Association shall also be responsible for administering and enforcing the architectural standards and controls set forth in this Declaration and in the Design Guidelines. The Association shall perform its functions in accordance with the Governing Documents and the laws of the State of Tennessee.

4.2. Personal Property and Real Property for Common Use. The Association may acquire, hold, and dispose of tangible and intangible personal property and real property. The Declarant and its designees, with the Declarant's prior written consent, may convey to the Association improved or unimproved real estate, or interests in real estate, located within the property described in Exhibits "A" or "B," personal property and leasehold and other property interests. Such property shall be accepted by the Association and thereafter shall be maintained by the Association at its expense for the benefit of its Members, subject to any restrictions set forth in the deed or other instrument transferring such property to the Association. Declarant shall not be required to make any improvements or repairs whatsoever to property to be conveyed and accepted pursuant to this Section. Upon written request of Declarant, the

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Association shall reconvey to Declarant any unimproved portions of the Properties originally conveyed by Declarant to the Association for no consideration, to the extent conveyed by Declarant in error or needed by Declarant to make adjustments in property lines.

4.3. Enforcement. The Board or any committee established by the Board, with the Board's approval, may impose sanctions for violation of the Governing Documents after compliance with the notice and hearing procedures set forth in Section 3.24 of the By-Laws. Such sanctions may include, without limitation:

(a) imposing monetary fines which shall constitute a lien upon the Unit of the violator (In the event that any occupant, guest or invitee of a Unit violates the Governing Documents and a fine is imposed, the fine shall first be assessed against the occupant; provided however, if the fine is not paid by the occupant within the time period set by the Board, the Owner shall pay the fine upon notice from the Board.);

(b) filing notices of violations in the Public Records providing record notice of any violation of the Governing Documents;

(c) suspending an Owner's right to vote;

(d) suspending any Person's right to use any recreational facilities within the Common Area and any part of the Exclusive Common Area; provided however, nothing herein shall authorize the Board to limit ingress or egress to or from a Unit; and

(e) suspending any services provided by the Association to an Owner or the Owner's Unit if the Owner is more than thirty (30) Days delinquent in paying any assessment or other charge owed to the Association.

In the event that any occupant, guest or invitee of a Unit violates the Governing Documents, the Board or any committee established by the Board, with the Board's approval, may sanction such occupant, guest or invitee and/or the Owner of the Unit that the violator is occupying or visiting.

In addition, the Board, or the covenants committee if established, may elect to enforce any provision of the Governing Documents by exercising self-help (specifically including, but not limited to, the filing of liens in the Public Records for non-payment of assessments and other charges, the towing of vehicles that are in violation of parking rules, the removal of pets that are in violation of pet rules, or the correction of any maintenance, construction or other violation of the Governing Documents) without the necessity of compliance with the procedures set forth in the By-Laws. The Association may levy a Specific Assessment to cover all costs incurred in bringing a Unit into compliance with the Governing Documents.

The Association may also elect to enforce any provisions of the Governing Documents by suit at law or in equity to enjoin any violation or to recover monetary damages or both without the necessity of compliance with the procedures set forth in the By-Laws.

All remedies set forth in this Declaration and the By-Laws shall be cumulative of any remedies available at law or in equity. In any action or remedy taken by the Association to enforce the provisions of the Governing Documents, if the Association prevails, it shall be entitled to recover all costs, including, without limitation, reasonable attorneys fees and court costs, incurred in such action.



The Association shall not be obligated to take action to enforce any covenant, restriction, or rule which the Board in the exercise of its business judgment determines is, or is likely to be construed as, inconsistent with applicable law, or in any case in which the Board reasonably determines that the Association's position is not strong enough to justify taking enforcement action. Any such determination shall not be construed a waiver of the right of the Association to enforce such provision under any circumstances or prevent the Association from enforcing any other covenant, restriction or rule.

The Association, by contract or other agreement, may enforce county, city, state and federal ordinances, if applicable, and permit local and other governments to enforce ordinances on the Properties for the benefit of the Association and its Members.

4.4. Implied Rights: Board Authority. The Association may exercise any right or privilege given to it expressly by this Declaration or the By-Laws, or reasonably implied from or reasonably necessary to effectuate any such right or privilege. Except as otherwise specifically provided in this Declaration, the By-Laws, the Charter, or by applicable law, all rights and powers of the Association may be exercised by the Board without a vote of the membership.

4.5. Governmental Interests. During the Development Period, the Declarant may designate sites within the Properties for fire, police, and utility facilities, public schools and parks, streets, and other public or quasi-public facilities. No membership approval shall be required for such designation. The sites may include Common Area, in which case the Association shall take whatever action is required with respect to such site to permit such use, including conveyance of the site, if so directed by Declarant. The sites may include other property not owned by Declarant provided the owner of such property consents.

4.6. Indemnification. The Association shall indemnify every officer, director, DRB member and committee member against all damages, liabilities, and expenses, including reasonable attorneys fees, incurred in connection with any action, suit, or other proceeding (including settlement of any suit or proceeding, if approved by the then Board of Directors) to which he or she may be a party by reason of being or having been an officer, director, DRB member or committee member, except that such obligation to indemnify shall be limited to those actions for which liability is limited under this Section, Charter and Tennessee law.

The officers, directors, DRB members and committee members shall not be liable for any mistake of judgment, negligent or otherwise, except for their own individual willful misfeasance, malfeasance, misconduct, or bad faith. The officers, directors, DRB members, and committee members shall have no personal liability with respect to any contract or other commitment made or action taken in good faith on behalf of the Association (except to the extent that such officers, directors, DRB members or committee members may also be Members of the Association). The Association shall indemnify and forever hold each such officer, director, DRB member and committee member harmless from any and all liability to others on account of any such contract, commitment or action. This right to indemnification shall not be exclusive of any other rights to which any present or former officer, director, DRB member or committee member may be entitled. The Association shall, as a Common Expense, maintain adequate general liability and directors' and officers' liability insurance to fund this obligation, if such insurance is reasonably available.

4.7. Dedication of or Grant of Easements on Common Area. The Association may dedicate or grant easements across portions of the Common Area to Loudon County, Tennessee, or to any other local, state, or federal governmental or quasi-governmental entity, or to any private utility company.

4.8. Security. Each Owner and occupant of a Unit, and their respective lessees, licensees, guests and invitees, shall be responsible for their own personal safety and the security on their Unit and on the Properties. The Association may, but shall not be obligated to, maintain or support certain activities within the Properties designed to make the Properties safer than they otherwise might be. Neither the Association, the Declarant, nor any successor Declarant shall in any way be considered insurers or guarantors of security within the Properties, nor shall any of them be held liable for any loss or damage by reason of failure to provide adequate security or ineffectiveness of security measures undertaken, if any. No representation or warranty is made that any fire protection system, burglar alarm system or other security system or measure, including any mechanism or system for limiting access to the Properties, cannot be compromised or circumvented, nor that any such system or security measure undertaken will in all cases prevent loss or provide the detection or protection for which the system or measure is designed or intended. Each Owner acknowledges, understands and covenants to inform its tenants and all occupants of its Unit that the Association, its Board of Directors and committees, the Declarant, and any successor Declarant are not insurers or guarantors of security within the Properties and that each Person using the Properties assumes all risks of personal injury and loss or damage to property, including Units and the contents of Units, resulting from acts of third parties. Any costs incurred by the Association to provide such services shall be paid by the Association and shall be charged either to all Units as a General Assessment or a Specific Assessment, or only to those certain Neighborhoods or Units benefited thereby, as a Special Assessment or a Neighborhood Assessment, as determined by the Board in its sole discretion.

4.9. Utility Lines. Each Owner, occupant, guest, and invitee acknowledges that neither the Association, the Board nor Declarant shall in any way be considered insurers or guarantors of health within the Properties and neither the Association, the Board, nor Declarant shall be held liable for any personal injury, illness or any other loss or damage caused by the presence or malfunction of utility lines or utility sub-stations adjacent to, near, over, or on the Properties. Each Owner, occupant, guest, lessee, licensee and invitee assumes all risk of personal injury, illness, or other loss or damage arising from the presence of utility lines or utility sub-stations and further acknowledges that neither Declarant nor the Association have made any representations or warranties, nor has any Owner, occupant, guest, lessee, licensee, or invitee relied upon any representations or warranties, expressed or implied, relative to the condition or impact of utility lines or utility sub-stations.

4.10. Street Lighting Agreement. Declarant reserves the right to subject the Properties to a contract with an electric utility company for the installation of underground electric cables and/or the installation of street lighting, either or both which may require an initial payment and/or a continuing monthly payment to an electric company by each Owner or the Association.

4.11. Trails. The Declarant reserves for itself, its successors and assigns, and the Association, the right to designate certain areas within the Properties, including the Common Area, to be used as recreational bike and pedestrian pathways and trails ("trail system"). Each Owner acknowledges, understands and covenants to inform the occupants of such Owner's Unit, that the Properties may contain a trail system and that there may be certain inconveniences and loss of privacy associated with the ownership of Units adjacent to such trail system resulting from the use of the trail system by the Declarant, the Association, its Members, their tenants, occupants, guests and invitees.

4.12. Relationship With Tax-Exempt Organizations. The Declarant or the Association may create, enter into agreements or contracts with, or grant exclusive and/or non-exclusive easements over the Common Area, or convey portions of the Common Area, to non-profit, tax-exempt organizations for the benefit of the Properties. The Association may contribute money, real or personal property or services to any such entity. Any such contribution shall be a Common Expense and included as a line item in the Association's annual budget. For the purposes of this Section a "tax-exempt organization" shall mean an

entity which is exempt from federal income taxes under the Internal Revenue Code, including but not limited to, Sections 501(c)(3) or 501(c)(4) thereof.

4.13. Powers of the Association Relating to Neighborhood Associations. The Association may veto any action taken or contemplated by any Neighborhood Association which the Board reasonably determines to be adverse to the interests of the Association or its Members or inconsistent with the Community-Wide Standard. The Association also may require specific action to be taken by any Neighborhood Association to fulfill its obligations and responsibilities under any Governing Document. For example, the Association may require that specific maintenance or repairs or aesthetic changes be performed by the Neighborhood Association. If the Neighborhood Association fails to comply with such requirements within a reasonable time as specified in writing by the Association, the Association may effect such action on behalf of the Neighborhood Association and assess the Units within such Neighborhood for any expenses incurred by the Association in taking such action. Such assessments may be collected as a Specific Assessment.

4.14. Provision of Services. The Association may provide services and facilities for the Members of the Association and their guests, lessees and invitees. The Association shall be authorized to enter into contracts or other similar agreements with other entities, including Declarant, to provide such services and facilities. The costs of services and facilities provided by the Association may be funded by the Association as a Common Expense or a Neighborhood Expense, depending on whether the service or facility is provided to all Units or only the Units within a specified Neighborhood. In addition, the Board shall be authorized to charge use and consumption fees for services and facilities through Specific Assessments or by requiring payment at the time the service or facility is provided. As an alternative, the Association may arrange for the costs of the services and facilities to be billed directly to Owners by the provider(s) of such services and facilities. By way of example, some services and facilities which may be provided include landscape maintenance, garbage collection, pest control service, cable, digital, satellite or similar television service, internet, intranet, and other computer related services, security, fire protection, utilities, and similar services and facilities. The Board, without the consent of the Class "A" Members of the Association, shall be permitted to modify or cancel existing services or facilities provided, if any, or to provide additional services and facilities. Nothing contained herein can be relied upon as a representation as to the services and facilities, if any, which will be provided by the Association.

4.15. Rezoning. No Owner or any other Person may apply or join in an application to amend, vary or modify any applicable zoning law or code pertaining to the properties to any application for rezoning or for a zoning variance or waiver as to all or any portion of the Properties without the prior written consent of Declarant. Each Person that acquires any interest in the Properties acknowledges that Rarity Pointe is a master planned community, the development of which is likely to extend over many years, and agrees not to protest or challenge: (a) changes in uses or density of property outside the Neighborhood in which such Person owns a Unit, or (b) changes in the Master Plan relating to property outside the Neighborhood in which such Person owns a Unit. Declarant may apply for such rezoning as to any portion of the Properties owned by it at any time.

4.16. Presence and Management of Wildlife. Each Owner and occupant, and each tenant, guest and invitee of any Owner or occupant acknowledges that the Properties are located adjacent to and in the vicinity of wetlands, bodies of water and other natural areas. Such areas may contain wildlife. Neither the Association, the Board, the original Declarant, nor any successor Declarant shall be liable or responsible for any personal injury, illness or any other loss or damage caused by the presence of such wildlife on the Properties. Each Owner and occupant of a Unit and each tenant, guest, and invitee of any Owner or occupant shall assume all risk of personal injury, illness, or other loss or damage arising from the presence of such wildlife and further acknowledges that the Association, the Board, the original

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Declarant or any successor Declarant have made no representations or warranties, nor has any Owner or occupant, or any tenant, guest, or invitee of any Owner or occupant relied upon any representations or warranties, expressed or implied, relative to the presence of such wildlife.

The Declarant, acting in its sole and absolute discretion, retains the right, but not the obligation, to engage in wildlife management plans and practices on the Properties to the extent that such practices are permitted by applicable state and federal law. The Declarant may assign these management rights to the Association.

**ARTICLE 5: MAINTENANCE**

**5.1. Association's Responsibility.**

(a) The Association shall maintain and keep in good condition, order and repair the Area of Common Responsibility, which shall include, but need not be limited to:

- (i) all Common Area;
- (ii) all landscaping and other flora, parks, pond structures, and improvements, including any entry features, private streets, parking areas, sidewalks, bike and pedestrian pathways/trails, situated upon the Common Area;
- (iii) all furnishings, equipment and other personal property of the Association;
- (iv) any landscaping and other flora, parks, bike and pedestrian pathways/trails, sidewalks, buffers, entry signs and features, structures and improvements within public rights-of-way within or abutting the Properties or upon such other public land adjacent to the Properties as deemed necessary in the discretion of the Board;
- (v) such additional portions of any property included within the Area of Common Responsibility as may be dictated by this Declaration, any Supplemental Declaration, any Cost Sharing Agreement, or any contract or agreement for maintenance thereof entered into by the Association; and
- (vi) any property and facilities owned by the Declarant and made available, on a temporary or permanent basis, for the primary use and enjoyment of the Association and its Members, such property and facilities to be identified by written notice from the Declarant or Declarant-Related Entity to the Association and to remain a part of the Area of Common Responsibility and be maintained by the Association until such time as Declarant revokes such privilege of use and enjoyment by written notice to the Association.

The Association may, as a Common Expense, maintain other property and improvements which it does not own, including, without limitation, property dedicated to the public, or provide maintenance or services related to such property over and above the level being provided by the property owner, if the Board of Directors determines that such maintenance is necessary or desirable to maintain the Community-Wide Standard.

(b) The Association shall maintain the facilities and equipment within the Area of Common Responsibility in continuous operation, except for any periods necessary, as determined in the sole discretion of the Board, to perform required maintenance or repairs, unless Members holding sixty-seven percent (67%) of the Class "A" votes in the Association and during the Development Period the Declarant

agree in writing to discontinue such operation. Prior to discontinuation of any sewerage treatment services, the Association shall also obtain the consent of Members holding 67% of Class "C" votes in the Association which are exercised by Class "C" Members which have entered into a Cost Sharing Agreement which entitles those Class "C" Members to sewerage system use privileges.

(c) The Association may be relieved of all or any portion of its maintenance responsibilities herein to the extent that: (i) such maintenance responsibility is otherwise assumed by or assigned to an Owner or a Neighborhood Association; or (ii) such property is dedicated to any local, state, or federal government or quasi-governmental entity; provided however, that in connection with such assumption, assignment or dedication, the Association may reserve or assume the right or obligation to continue to perform all or any portion of its maintenance responsibilities, if the Board determines that such maintenance is necessary or desirable to maintain the Community-Wide Standard.

Except as provided above, the Area of Common Responsibility shall not be reduced by amendment of this Declaration or any other means during the Development Period except with the written consent of the Declarant.

(d) Except as otherwise specifically provided herein, all costs associated with maintenance, repair and replacement of the Area of Common Responsibility shall be a Common Expense to be allocated among all Units as part of the General Assessment, without prejudice to the right of the Association to seek reimbursement from the owner(s) of, or other Persons responsible for, certain portions of the Area of Common Responsibility pursuant to the Governing Documents, any recorded covenants, or any agreements with the owner(s) thereof. All costs associated with maintenance, repair and replacement of Exclusive Common Areas shall be a Neighborhood Expense assessed as a Neighborhood Assessment solely against the Units within the Neighborhood(s) to which the Exclusive Common Areas are assigned, or a Specific Assessment against the particular Units to which the Exclusive Common Areas are assigned, notwithstanding that the Association may be responsible for performing such maintenance hereunder.

(e) The Association shall have the right but not the obligation to maintain the grass and other landscaping on each unimproved Unit, including any grass within that portion of the Unit located between the lot boundary adjacent to the street to the rear property line. For purposes of this Section, unimproved Unit shall mean a Unit without a dwelling.

(f) In the event that the Association fails to properly perform its maintenance responsibilities hereunder and to comply with the Community-Wide Standard, the Declarant may, upon not less than ten (10) Days' notice and opportunity to cure such failure, cause such maintenance to be performed and in such event, shall be entitled to reimbursement from the Association for all costs incurred.

5.2. Owner's Responsibility. Each Owner shall maintain his or her Unit, and all structures, parking areas, sprinkler and irrigation systems, landscaping and other flora, and other improvements comprising the Unit in a manner consistent with the Community-Wide Standard and all Governing Documents, unless such maintenance responsibility is otherwise assumed by or assigned to the Association or a Neighborhood Association. Each Owner shall also maintain the driveway and mailbox serving the Unit and all landscaping located in the right-of-way immediately adjacent to the Owner's Unit. In addition to any other enforcement rights, if an Owner fails properly to perform his or her maintenance responsibility, the Association may perform such maintenance responsibilities and assess all costs incurred by the Association against the Unit and the Owner in accordance with Section 8.6(c). The Association shall afford the Owner reasonable notice and an opportunity to cure the problem prior to entry, except when entry is required due to an emergency situation. Entry under this Section shall not constitute a trespass.

Each Owner shall be responsible for all parts of the Private Sewer System exclusively servicing the Unit regardless of whether such part of the Private Sewer System is located within the Unit. Such responsibility shall specifically include that portion of the system located between the Unit and the point of the attachment of the line exclusively servicing the Unit and the main sewer line generally servicing the Properties and initially maintained by Association.

5.3. Neighborhood's Responsibility. Upon resolution of the Board of Directors, the Owners of Units within each Neighborhood shall be responsible for paying, through Neighborhood Assessments, the costs of operating, maintaining and insuring certain portions of the Area of Common Responsibility within or adjacent to such Neighborhood. This may include, without limitation, the costs of maintaining any signage, entry features, right-of-way and greenspace between the Neighborhood and adjacent public roads, private streets within the Neighborhood, regardless of ownership or the Person performing the maintenance; provided however, all Neighborhoods which are similarly situated shall be treated the same.

Any Neighborhood Association having responsibility for maintenance within a particular Neighborhood pursuant to additional covenants applicable to such Neighborhood shall perform such maintenance responsibility in a manner consistent with the Community-Wide Standard. If it fails to do so, the Association may perform such responsibilities and assess the costs as a Specific Assessment against all Units within such Neighborhood as provided in Section 8.6.

5.4. Standard of Performance. Unless otherwise specifically provided herein or in other instruments creating and assigning such maintenance responsibility, responsibility for maintenance shall include responsibility for repair and replacement, as necessary. All maintenance shall be performed in a manner consistent with the Community-Wide Standard and all Governing Documents. Neither the Association, any Owner nor any Neighborhood Association shall be liable for any damage or injury occurring on, or arising out of the condition of, property which such Person does not own except to the extent that it has been negligent in the performance of its maintenance responsibilities.

5.5. Party Walls and Similar Structures.General Rules of Law to Apply. Each wall, fence, driveway or similar structure built as a part of the original construction on the Units which serves and/or separates any two (2) adjoining Units shall constitute a party structure. To the extent not inconsistent with the provisions of this Section, the general rules of law regarding party walls and liability for property damage due to negligence or willful acts or omissions shall apply thereto.

(b) Sharing of Repair and Maintenance. The cost of reasonable repair and maintenance of a party structure shall be shared equally by the Owners who make use of the party structure.

(c) Damage and Destruction. If a party structure is destroyed or damaged by fire or other casualty, then to the extent that such damage is not covered by insurance and repaired out of the proceeds of insurance, any Owner who has used the structure may restore it. If other Owners thereafter use the structure, they shall contribute to the restoration cost in equal proportions. However, such contribution will not prejudice the right to call for a larger contribution from the other users under any rule of law regarding liability for negligent or willful acts or omissions.

(d) Right to Contribution Runs With Land. The right of any Owner to contribution from any other Owner under this Section shall be appurtenant to the land and shall pass to such Owner's successors-in-title.

5.6. Cost Sharing Agreements. The Association may enter into Cost Sharing Agreements with the owners or operators of portions of the Adjacent Properties:



(a) to obligate the owners or operators of such Adjacent Properties to perform and/or to share in certain costs associated with, the maintenance, repair, replacement and insuring of portions of the Area of Common Responsibility, if any, which are used by or benefit jointly the owners or operators of such Adjacent Properties and the owners within the Properties;

(b) to permit use of any recreational and other facilities located on the Common Areas by the owners or operators of such Adjacent Properties;

(c) to permit use of any recreational and other facilities located on such Adjacent Properties by the Owners of all Units or by the Owners of Units within specified Neighborhoods;

(d) to obligate the Association to share in certain costs associated with the maintenance, repair, replacement and insuring of portions of such Adjacent Properties, if any, which are used by or benefit jointly the owners or operators of such Adjacent Properties and the owners within the Properties; and/or

(e) to establish rules and regulations regarding the use of areas that benefit jointly the owners or operators of such Adjacent Properties and the owners within the Properties.

The owners or operators of such Adjacent Properties shall not be Members of the Association and shall not be entitled to vote on any Association matter unless any such owner qualifies as a Class "C" Member of the Association as set forth in Section 3.2(c) of this Declaration.

The owners or operators of such Adjacent Properties shall be subject to assessment by the Association only in accordance with the provisions of such Cost Sharing Agreement(s). If the Association is obligated to share costs incurred by the owners of such Adjacent Properties, such payments by the Association shall be deemed to constitute Common Expenses or Neighborhood Expenses of the Association unless the Cost Sharing Agreement provides otherwise. The owners or operators of the Adjacent Properties shall not be subject to the restrictions contained in this Declaration except as otherwise specifically provided herein.

## ARTICLE 6: INSURANCE AND CASUALTY LOSSES

### 6.1. Association Insurance.

(a) Required Coverages. The Association, acting through its Board or its duly authorized agent, shall obtain and continue in effect the following types of insurance, if reasonably available, or if not reasonably available, the most nearly equivalent coverages as are reasonably available:

(i) Blanket property insurance covering "risks of direct physical loss" on a "special form" basis (or comparable coverage by whatever name denominated) for all insurable improvements on the Common Area, if any, and on other portions of the Area of Common Responsibility to the extent that it has assumed responsibility for maintenance, repair and/or replacement in the event of a casualty. If such coverage is not generally available at reasonable cost, then "broad form" coverage may be substituted. The Association shall have the authority to and interest in insuring any property for which it has maintenance or repair responsibility, regardless of ownership. All property insurance policies obtained by the Association shall have policy limits sufficient to cover the full replacement cost of the insured improvements;

(ii) Commercial general liability insurance on the Area of Common Responsibility, insuring the Association and its Members for damage or injury caused by the negligence

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of the Association or any of its Members, employees, agents, or contractors while acting on its behalf. If generally available at reasonable cost, the commercial general liability coverage (including primary and any umbrella coverage) shall have a limit of at least one million dollars (\$1,000,000.00) per occurrence with respect to bodily injury, personal injury, and property damage, provided should additional coverage and higher limits be available at reasonable cost which a reasonably prudent person would obtain, the Association shall obtain such additional coverages or limits;

(iii) Workers compensation insurance and employers liability insurance, if and to the extent required by law;

(iv) Directors and officers liability coverage;

(v) Fidelity insurance covering all Persons responsible for handling Association funds in an amount determined in the Board's best business judgment but not less than an amount equal to one-sixth (1/6th) of the annual General Assessments on all Units plus reserves on hand. Fidelity insurance policies shall contain a waiver of all defenses based upon the exclusion of Persons serving without compensation; and

(vi) Such additional insurance as the Board, in its best business judgment, determines advisable, which may include, without limitation, flood insurance.

In addition, the Association may obtain and maintain property insurance on the insurable improvements within any Neighborhood in such amounts and with such coverages as the Owners in such Neighborhood may agree upon pursuant to Section 3.3. Any such policies shall provide for a certificate of insurance to be furnished to the Neighborhood Association and to the Owner of each Unit insured upon request.

Premiums for all insurance on the Area of Common Responsibility shall be Common Expenses and shall be included in the General Assessment, except that (i) premiums for property insurance obtained on behalf of a Neighborhood shall be charged to the Owners of Units within the benefited Neighborhood as a Neighborhood Assessment; and (ii) premiums for insurance on Exclusive Common Areas may be included in the Neighborhood Assessment of the Neighborhood(s) benefited unless the Board of Directors reasonably determines that other treatment of the premiums is more appropriate. In the event of an insured loss, the deductible shall be treated as a Common Expense or a Neighborhood Expense and assessed in the same manner as the premiums for the applicable insurance coverage. However, if the Board reasonably determines, after notice and an opportunity to be heard in accordance with the By-Laws, that the loss is the result of the negligence or willful misconduct of one (1) or more Owners, their guests, invitees, or lessees, then the Board may specifically assess the full amount of such deductible against such Owner(s) and their Units pursuant to Section 8.6.

The Association shall have no insurance responsibility for any portion of the Private Amenities.

(b) Policy Requirements. The Association shall arrange for periodic reviews of the sufficiency of insurance coverage by one (1) or more qualified Persons, at least one (1) of whom must be familiar with insurable replacement costs in the Knoxville, Tennessee metropolitan area.

All Association policies shall provide for a certificate of insurance to be furnished to the Association and to each Member upon request. The policies may contain a reasonable deductible and the amount thereof shall not be subtracted from the face amount of the policy in determining whether the policy limits satisfy the requirements of Section 6.1(a).

(i) All insurance coverage obtained by the Board shall:

(1) be written with a company authorized to do business in the State of Tennessee which satisfies the requirements of the Federal National Mortgage Association, or such other secondary mortgage market agencies or federal agencies as the Board deems appropriate;

(2) be written in the name of the Association as trustee for the benefited parties. Policies on the Common Areas shall be for the benefit of the Association and its Members. Policies secured on behalf of a Neighborhood shall be for the benefit of the Owners of Units within the Neighborhood and their Mortgagees, as their interests may appear;

(3) not be brought into contribution with insurance purchased by Owners, occupants, or their Mortgagees individually;

(4) contain an inflation guard endorsement;

(5) include an agreed amount endorsement, if the policy contains a co-insurance clause; and

(6) an endorsement requiring at least thirty (30) Days prior written notice to the Association of any cancellation, substantial modification, or non-renewal.

(ii) In addition, the Board shall use reasonable efforts to secure insurance policies which list the Owners as additional insureds and provide:

(1) a waiver of subrogation as to any claims against the Association's Board, officers, employees, and its manager, the Owners and their tenants, servants, agents, and guests;

(2) a waiver of the insurer's rights to repair and reconstruct instead of paying cash;

(3) an endorsement precluding cancellation, invalidation, suspension, or non-renewal by the insurer on account of any one (1) or more individual Owners, or on account of any curable defect or violation without prior written demand to the Association to cure the defect or violation and allowance of a reasonable time to cure;

(4) an endorsement excluding Owners' individual policies from consideration under any "other insurance" clause;

(5) a cross liability provision; and

(6) a provision vesting the Board with the exclusive authority to adjust losses; provided however, no Mortgagee having an interest in such losses may be prohibited from participating in the settlement negotiations, if any, related to the loss.

(c) Damage and Destruction. In the event of any insured only the Board or its duly authorized agent may file and adjust insurance claims and obtain reliable and detailed estimates of the cost of repair or reconstruction. Repair or reconstruction, as used in this subsection, means repairing or restoring the property to substantially the condition in which it existed prior to the damage, allowing for changes or improvements necessitated by changes in applicable building codes.

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(d) Any damage to or destruction of the Common Area shall be repaired or reconstructed unless the Members holding at least sixty-seven percent (67%) of the total Class "A" votes in the Association, and during the Development Period the Declarant decide within sixty (60) Days after the loss not to repair or reconstruct. If such damage or destruction affects any sewerage treatment plant maintained by the Association, then the Association shall also obtain the approval of Members holding 67% of Class "C" votes in the Association which are exercised by Class "C" Members which have entered into a Cost Sharing Agreement which entitles those Class "C" Members to sewerage system use privileges.

If either the insurance proceeds or reliable and detailed estimates of the cost of repair or reconstruction, or both, are not available to the Association within such sixty (60) Day period, then the period shall be extended until such funds or information are available. However, such extension shall not exceed sixty (60) additional Days. No Mortgagee shall have the right to participate in the determination of whether the damage or destruction to the Common Area shall be repaired or reconstructed.

If determined in the manner described above that the damage or destruction to the Common Area shall not be repaired or reconstructed and no alternative improvements are authorized, the affected property shall be cleared of all debris and ruins and thereafter shall be maintained by the Association in a neat and attractive, landscaped condition consistent with the Community-Wide Standard.

Any insurance proceeds remaining after paying the costs of repair or reconstruction, or after such settlement as is necessary and appropriate, shall be retained by and for the benefit of the Association or the Neighborhood, as appropriate, and placed in a capital improvements account. This is a covenant for the benefit of Mortgagees and may be enforced by the Mortgagee of any affected Unit.

If insurance proceeds are insufficient to cover the costs of repair or reconstruction, the Board of Directors may, without a vote of the Members, levy Special Assessments to cover the shortfall against those Owners responsible for the premiums for the applicable insurance coverage under Section 6.1(a).

6.2. Owners' Insurance. By virtue of taking title to a Unit, each Owner covenants and agrees with all other Owners and with the Association to carry property insurance for the full replacement cost of all insurable improvements on his or her Unit, less a reasonable deductible, unless either the Neighborhood Association (if any) for the Neighborhood in which the Unit is located or the Association carries such insurance (which they may, but are not obligated to do hereunder). If the Association assumes responsibility for obtaining any insurance coverage on behalf of Owners, the premiums for such insurance shall be levied as a Specific Assessment against the benefited Unit and the Owner thereof pursuant to Section 8.6.

Each Owner further covenants and agrees that in the event of damage to or destruction of structures on or comprising his or her Unit, the Owner shall proceed promptly to repair or to reconstruct in a manner consistent with the original construction or such other plans and specifications as are approved in accordance with Article 9. Alternatively, the Owner shall clear the Unit of all debris and ruins and maintain the Unit in a neat and attractive, landscaped condition consistent with the Community-Wide Standard. The Owner shall pay any costs which are not covered by insurance proceeds.

The requirements of this Section shall also apply to any Neighborhood Association that owns common property within the Neighborhood in the same manner as if the Neighborhood Association were an Owner and the common property were a Unit. Additional recorded covenants applicable to any Neighborhood may establish more stringent requirements for insurance and more stringent standards for

rebuilding or reconstructing structures on the Units within such Neighborhood and for clearing and maintaining the Units in the event the structures are not rebuilt or reconstructed.

6.3. Limitation of Liability. Notwithstanding the duty of the Association to maintain and repair portions of the Common Area, neither the Association, its Board of Directors, its successors or assigns, nor any officer or director or committee member, employee, agent, contractor (including the management company, if any) of any of them shall be liable to any Member or any member of a Member's immediate household for any injury or damage sustained in the Area of Common Responsibility, the Common Area or other area maintained by the Association, or for any injury or damage caused by the negligence or misconduct of any Members or their family members, guests, invitees, agents, servants, contractors or lessees, whether such loss occurs in the Common Area or in individual Units.

Each Owner, by virtue of the acceptance of title to his or her Unit, and each other Person having an interest in or right to use any portion of the Properties, by virtue of accepting such interest or right to use, shall be bound by this Section and shall be deemed to have automatically waived any and all rights, claims, demands, and causes of action against the Association arising from or connected with any matter for which the liability of the Association has been disclaimed under this Section.

#### ARTICLE 7: ANNEXATION AND WITEDRAWAL OF PROPERTY

7.1. Annexation by Declarant. Until thirty (30) years after the recording of this Declaration in the Public Records, Declarant may from time to time unilaterally subject to the provisions of this Declaration all or any portion of the Additional Property. The Declarant may transfer or assign this right to annex property, provided that the transferee or assignee is the developer of at least a portion of the real property described in Exhibits "A" or "B" and that such transfer is memorialized in a written, recorded instrument executed by Declarant.

Such annexation shall be accomplished by filing a Supplemental Declaration in the Public Records describing the property being annexed. Such Supplemental Declaration shall not require the consent of the Members, but shall require the consent of the owner of such property, if other than Declarant. Any such annexation shall be effective upon the filing for record of such Supplemental Declaration unless otherwise provided therein.

Nothing in this Declaration shall be construed to require the Declarant or any successor to annex or develop any of the Additional Property in any manner whatsoever.

7.2. Annexation by Membership. The Association may annex any real property to the provisions of this Declaration with the consent of the owner of such property, the affirmative vote of Members holding a Majority of the Class "A" votes of the Association represented at a meeting duly called for such purpose, and, during the Development Period, the written consent of the Declarant.

Such annexation shall be accomplished by filing a Supplemental Declaration describing the property being annexed in the Public Records. Any such Supplemental Declaration shall be signed by the president and the secretary of the Association, and by the owner of the annexed property, and by the Declarant, if the Declarant's consent is required. Any such annexation shall be effective upon filing unless otherwise provided therein.

7.3. Withdrawal of Property. The Declarant reserves the right to amend this Declaration during the Development Period for the purpose of removing any portion of the Properties from the coverage of this Declaration. Such amendment shall not require the consent of any Person other than the

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owner of the property to be withdrawn, if not the Declarant. If the property is Common Area, the Association shall execute a written consent to such withdrawal.

7.4. Additional Covenants and Easements. The Declarant may unilaterally subject any portion of the Properties to additional covenants and easements, including covenants obligating the Association to maintain and insure such property on behalf of the Owners and obligating such Owners to pay the costs incurred by the Association through Neighborhood Assessments. Such additional covenants and easements shall be set forth in a Supplemental Declaration filed either concurrently with or after the annexation of the subject property, and shall require the written consent of the owner(s) of such property, if other than the Declarant. Any such Supplemental Declaration may supplement, create exceptions to, or otherwise modify the terms of this Declaration as it applies to the subject property in order to reflect the different character and intended use of such property.

7.5. Amendment. This Article shall not be amended during the Development Period without the prior written consent of Declarant.

**ARTICLE 8: ASSESSMENTS**

8.1. Creation of Assessments. There are hereby created assessments for Association expenses as the Board may specifically authorize from time to time. There shall be four (4) types of assessments: (a) General Assessments to fund Common Expenses for the general benefit of all Units; (b) Neighborhood Assessments for Neighborhood Expenses benefiting only Units within a particular Neighborhood or Neighborhoods; (c) Special Assessments as described in Section 8.5; and (d) Specific Assessments as described in Section 8.6. Each Owner, by accepting a deed or entering into a recorded contract of sale for any portion of the Properties, is deemed to covenant and agree to pay these assessments.

All assessments and other charges, together with interest, late charges, costs of collection, and reasonable attorneys fees, shall be a charge and continuing lien upon each Unit against which the assessment or charge is made until paid, as more particularly provided in Section 8.7. Each such assessment or charge, together with interest, late charges, costs, and reasonable attorneys fees, also shall be the personal obligation of the Person who was the Owner of such Unit at the time the assessment arose. Upon a transfer of title to a Unit, the grantee shall be jointly and severally liable for any assessments and other charges due at the time of conveyance. However, no first Mortgagee who obtains title to a Unit by exercising the remedies provided in its Mortgage shall be liable for unpaid assessments which accrued prior to such acquisition of title.

The Association shall, upon request, furnish to any Owner liable for any type of assessment a written statement signed by an Association officer or designee setting forth whether such assessment has been paid. Such statement shall be conclusive evidence of payment. The Association may require the advance payment of a reasonable processing fee for the issuance of such statement.

Assessments shall be paid in such manner and on such dates as the Board may establish, which may include discounts for early payment or similar time/price differentials. The Board may require advance payment of assessments at closing of the transfer of title to a Unit and impose special requirements for Owners with a history of delinquent payment. If the Board so elects, assessments may be paid in two (2) or more installments. Unless the Board otherwise provides, the General Assessment and any Neighborhood Assessment shall be due and payable in advance on the first day of each fiscal year. If any Owner is delinquent in paying any assessments or other charges levied on his or her Unit, the Board may require any unpaid installments of all outstanding assessments to be paid in full immediately.



Any assessment or installment thereof shall be considered delinquent on the fifteenth (15th) day following the due date unless otherwise specified by Board resolution.

No Owner may exempt himself or herself from liability for assessments by non-use of Common Area, including Exclusive Common Area reserved for such Owner's use, abandonment of his or her Unit, or any other means. The obligation to pay assessments is a separate and independent covenant on the part of each Owner. No diminution or abatement of assessments or set-off shall be claimed or allowed for any alleged failure of the Association or Board to take some action or perform some function required of it, or for inconvenience or discomfort arising from the making of repairs or improvements, or from any other action taken by the Association or Board.

The Association is specifically authorized to enter into subsidy contracts or contracts for "in kind" contribution of services, materials, or a combination of services and materials with the Declarant or other entities for payment of Common Expenses.

8.2. Computation of General Assessments. At least thirty (30) Days before the beginning of each fiscal year, the Board shall prepare a budget covering the estimated Common Expenses during the coming year, which may include a contribution to establish a reserve fund in accordance with a budget separately prepared as provided in Section 8.4.

General Assessments shall be levied equally against all Units subject to assessment and shall be set at a level which is reasonably expected to produce total income for the Association equal to the total budgeted Common Expenses, including any reserves, provided that the annual General Assessment increase, if any, shall be limited to the greater of a five percent (5%) annual increase or the increase in the Consumer Price Index for the twelve (12) month period ending December 31 of the preceding year using the "All Urban Consumer, U.S. City Average" for "General Summary, All Items" as promulgated by the U.S. Department of Labor and Statistics. In determining the total funds to be generated through the levy of General Assessments, the Board, in its discretion, may consider other sources of funds available to the Association, including any surplus from prior years, any assessment income expected to be generated from any additional Units reasonably anticipated to become subject to assessment during the fiscal year, and any income expected to be generated from any Cost Sharing Agreement.

At its option, the Board may include in the budget for the General Assessment, expenses the Association will incur for maintenance of entry features, or other expenses, which while attributable to particular Neighborhoods, are similar in nature and amount among all the Neighborhoods. The base amount common to all Neighborhoods shall be paid as a General Assessment, with expenses in excess of the base amount, if any, to be paid as a Neighborhood Expense and funded through a Neighborhood Assessment.

During the Development Period, the Declarant may, but shall not be obligated to, reduce the General Assessment for any fiscal year by payment of a subsidy and/or contributions of services and materials, which may be treated as either a contribution or a loan, in the Declarant's discretion. Any such anticipated payment or contribution by the Declarant shall be disclosed as a line item in the Common Expense budget. Payments by the Declarant in any year shall under no circumstances obligate the Declarant to continue such payments in future years and the treatment of such payment shall be made known to the membership, unless otherwise provided in a written agreement between the Association and the Declarant.

The Board shall send a copy of the budget and notice of the amount of the General Assessment for the following year to each Owner at least thirty (30) Days prior to the beginning of the fiscal year for which it is to be effective. Such budget and assessment shall become effective unless disapproved at a

meeting by Members holding at least sixty-seven percent (67%) of the total Class "A" votes in the Association and, during the Development Period, by the Declarant. There shall be no obligation to call a meeting for the purpose of considering the budget except on petition of the Members as provided for special meetings in Section 2.4 of the By-Laws, which petition must be presented to the Board within twenty (20) Days after the date of the notice of assessments. If a meeting is requested, assessments pursuant to such proposed budget shall not become effective until after such meeting is held, provided such assessments shall be retroactive to the original effective date of the budget if the budget is not disapproved at such meeting.

If the proposed budget is disapproved or the Board fails for any reason to determine the budget for any year, then until such time as a budget is determined, the budget in effect for the immediately preceding year shall continue for the current year. In such event or if the budget proves inadequate for any reason, the Board may prepare a revised budget for the remainder of the fiscal year. The Board shall send a copy of the revised budget to each Owner at least thirty (30) Days prior to its becoming effective. The revised budget shall become effective unless disapproved in accordance with the above procedure.

8.3. Computation of Neighborhood Assessments. At least thirty (30) Days before the beginning of each fiscal year, the Board shall prepare a separate budget covering the estimated Neighborhood Expenses for each Neighborhood on whose behalf Neighborhood Expenses are expected to be incurred during the coming year. The Board shall be entitled to set such budget only to the extent that this Declaration, any Supplemental Declaration, or the By-Laws specifically authorizes the Board to assess certain costs as a Neighborhood Assessment. Any Neighborhood may request that additional services or a higher level of services be provided by the Association and, upon approval of Owners in accordance with Section 3.3, any additional costs shall be added to such budget. In addition, any excess expenses over and above the base amount for similar Neighborhood Expenses paid through the General Assessment shall be added to such budget. Such budget may include a contribution establishing a reserve fund for repair and replacement of capital items maintained as a Neighborhood Expense, if any, within the Neighborhood. Neighborhood Expenses shall be allocated equally among all Units within the Neighborhood(s) benefited thereby and levied as a Neighborhood Assessment.

The Board shall cause a copy of such budget and notice of the amount of the Neighborhood Assessment for the coming year to be delivered to each Owner of a Unit in the Neighborhood at least thirty (30) Days prior to the beginning of the fiscal year. Such budget and assessment shall become effective unless disapproved by Owners of a Majority of the Units in the Neighborhood to which the Neighborhood Assessment applies and, during the Development Period, by the Declarant. There shall be no obligation to call a meeting for the purpose of considering the budget except on petition of Owners of at least ten percent (10%) of the Units in such Neighborhood. This right to disapprove shall apply only to those line items in the Neighborhood budget which are attributable to services requested by the Neighborhood. If a meeting is requested, assessments pursuant to such proposed budget shall not become effective until after such meeting is held, provided such assessments shall be retroactive to the original effective date of the budget if the budget is not disapproved at such meeting.

If the Owners within any Neighborhood disapprove any line item of a Neighborhood budget, the Association shall not be obligated to provide the services anticipated to be funded by such line item of the budget. If the Board fails for any reason to determine a Neighborhood budget for any year, then until such time as a budget is determined, the budget in effect for the immediately preceding year shall continue for the current year.

All amounts which the Association collects as Neighborhood Assessments shall be expended solely for the benefit of the Neighborhood for which they were collected and shall be accounted for separately from the Association's general funds.

8.4. Reserve Budget. The Board may, in its sole discretion, annually prepare reserve budgets for both general and Neighborhood purposes which take into account the number and nature of replaceable assets within the Area of Common Responsibility, the expected life of each asset, and the expected repair or replacement cost. The Board shall include in the general and Neighborhood budgets reserve amounts sufficient to meet the projected needs of the Association.

8.5. Special Assessments. In addition to other authorized assessments, the Association may levy Special Assessments from time to time to cover unbudgeted expenses or expenses in excess of those budgeted. Any such Special Assessment may be levied against all Units, if such Special Assessment is for Common Expenses, or against the Units within any Neighborhood if such Special Assessment is for Neighborhood Expenses. Special Assessments shall be allocated equally among all Units subject to such Special Assessment. Any Special Assessment shall become effective unless disapproved at a meeting of Members representing at least sixty-seven percent (67%) of the total Class "A" votes allocated to Units which will be subject to such Special Assessment and by the Declarant during the Development Period. There shall be no obligation to call a meeting for the purpose of considering any Special Assessment except on petition of the Members as provided for special meetings in Section 2.4 of the By-Laws, which petition must be presented to the Board within twenty (20) Days after delivery of the notice of such Special Assessment. Special Assessments shall be payable in such manner and at such times as determined by the Board, and may be payable in installments extending beyond the fiscal year in which the Special Assessment is approved.

8.6. Specific Assessments. The Association shall have the power to levy Specific Assessments against a particular Unit or Units as follows:

(a) to cover the costs, including overhead and administrative costs, of providing benefits, items, or services to the Unit(s) or occupants thereof upon request of the Owner pursuant to a menu of special services which the Board may from time to time authorize to be offered to Owners and occupants (which might include, without limitation, landscape maintenance, garbage collection, pest control service, cable, satellite or similar television service, computer related services, security, utilities, and similar services and facilities), which assessments may be levied in advance of the provision of the requested benefit, item or service as a deposit against charges to be incurred by the Owner;

(b) to cover the costs associated with maintenance, repair, replacement and insurance of any Exclusive Common Area assigned to one (1) or more Units; and

(c) to cover all costs incurred in bringing the Unit(s) into compliance with the terms of the Governing Documents, or costs incurred as a consequence of the conduct of the Owner or occupants of the Unit, their agents, contractors, employees, licensees, invitees, or guests.

In addition, fines levied by the Association pursuant to Section 4.3 shall constitute Specific Assessments.

The Association may also levy a Specific Assessment against the Units within any Neighborhood to reimburse the Association for costs incurred in bringing the Neighborhood into compliance with the provisions of the Declaration, any applicable Supplemental Declaration, the Charter, the By-Laws, and rules.

8.7. Lien for Assessments. The Association shall have a lien against each Unit to secure payment of assessments and other charges, as well as interest at a rate to be set by the Board (subject to the maximum interest rate limitations of Tennessee law), late charges in such amount as the Board may establish (subject to the limitations of Tennessee law), costs of collection and reasonable attorneys fees.

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Such lien shall be superior to all other liens, except (a) the liens of all taxes, bonds, assessments, and other levies which by law would be superior, and (b) the lien or charge of any first Mortgage of record (meaning any recorded Mortgage with first priority over other Mortgages) made in good faith and for value. Such lien may be enforced by suit, judgment, and judicial or nonjudicial foreclosure.

The Declarant or the Association may bid for the Unit at the foreclosure sale and acquire, hold, lease, mortgage, and convey the Unit. While a Unit is owned by the Association following foreclosure: (a) no right to vote shall be exercised on its behalf; (b) no assessment shall be levied on it; and (c) each other Unit shall be charged, in addition to its usual assessment, its pro rata share of the assessment allocated to the Unit owned by the Association. The Association may sue for unpaid assessments and other charges authorized hereunder without foreclosing or waiving the lien securing the same.

The sale or transfer of any Unit shall not affect the assessment lien or relieve such Unit from the lien for any subsequent assessments. However, the sale or transfer of any Unit pursuant to foreclosure of the first Mortgage shall extinguish the lien as to any installments of such assessments due prior to such sale or transfer. A Mortgagee or other purchaser of a Unit who obtains title pursuant to foreclosure of the Mortgage shall not be personally liable for assessments on such Unit due prior to such acquisition of title. Such unpaid assessments shall be deemed to be Common Expenses collectible from Owners of all Units subject to assessment under Section 8.8, including such acquirer, its successors and assigns.

All other Persons acquiring liens or encumbrances on any Unit after this Declaration has been recorded shall be deemed to consent that such liens or encumbrances shall be inferior to future liens for assessments, as provided herein, whether or not prior consent is specifically set forth in the instruments creating such liens or encumbrances.

8.8. Date of Commencement of Assessments. The obligation to pay assessments shall commence as to each Unit on the date which the Unit is conveyed to a Person other than the Declarant or a Declarant-Related Entity. The first annual General Assessment and Neighborhood Assessment, if any, levied on each Unit shall be adjusted according to the number of days remaining in the fiscal year at the time assessments commence on the Unit.

8.9. Failure to Assess. Failure of the Board to establish assessment amounts or rates or to deliver or mail each Owner an assessment notice shall not be deemed a waiver, modification, or a release of any Owner from the obligation to pay assessments. In such event, each Owner shall continue to pay General Assessments and Neighborhood Assessments on the same basis as during the last year for which an assessment was made, if any, until a new assessment is levied, at which time the Association may retroactively assess any shortfalls in collections.

8.10. Exempt Property. The following property shall be exempt from payment of General Assessments, Neighborhood Assessments, and Special Assessments:

(a) All Common Area and such portions of the property owned by the Declarant as are included in the Area of Common Responsibility pursuant to Section 5.1;

(b) Any property dedicated or otherwise conveyed to and accepted by any governmental authority or public utility;

(c) Any property that is owned by a charitable nonprofit corporation or public agency whose primary purposes include the acquisition and preservation of open space for public benefit and held by such agency or organization for such recreational and open space purposes; and

(d) Property owned by any Neighborhood Association, or by the members of a Neighborhood Association as tenants-in-common, for the common use and enjoyment of all members within the Neighborhood.

8.11. Capitalization of Association. Upon acquisition of record title to a Unit by the first Owner thereof other than the Declarant or any Declarant-Related Entity, a contribution shall be made by or on behalf of the purchaser to the working capital of the Association in an amount equivalent to the annual General Assessment established per Unit for that year. This amount shall be in addition to, not in lieu of, the annual General Assessment and shall not be considered an advance payment of such assessment. This amount shall be collected and disbursed to the Association at closing of the purchase and sale of the Unit to the first Owner. Capital contributions shall be used by the Association in covering operating expenses and other expenses incurred by the Association pursuant to the Governing Documents.

8.12. Contributions by Declarant. In accordance with Section 8.2, the Declarant may support the Association by funding operating deficits during the Development Period. At the sole election of Declarant, Declarant may recoup from the Association all such payments, which amounts may be paid from the operating account of the Association, or from the working capital contributions collected at the sale of Units, but not from capital reserves. Regardless of whether the Declarant recoups any other deficit amounts, it is not the intention of the Declarant to forfeit refundable reserves or deposits paid by Declarant, nor to pay for deficits created by the nonpayment of assessments by other Owners. It is also not the intention of Declarant to pay for expenses which are otherwise covered in the annual budget of the Association, but which, due to the requirement of an advance payment, create temporary or seasonal deficits. Accordingly, Declarant shall be reimbursed for all amounts paid by Declarant in the funding of deficits caused by the nonpayment of assessments by Owners which, if not sooner paid, shall be paid to Declarant at the time the unpaid assessment is collected. In addition, if not sooner paid, Declarant shall be reimbursed for any refundable deposit upon the Association's receipt of the same.

All deficits shall be collectible by Declarant at any time from the working capital contributions or from excess funds not designated for capital reserves. The Declarant shall have the right to pursue the collection of any unpaid assessments on behalf of the Association, as well as the right to act on behalf of the Association (if necessary) in obtaining refunds of all deposits paid for by Declarant. The Board of Directors, specifically including members of the Board appointed by the Declarant, shall be authorized to execute a promissory note or notes on behalf of the Association to evidence the repayment obligation of the Association; provided however, the failure to execute such a note shall in no way diminish such obligation.

8.13. Default Interest Rate: NSF Checks; Late Fees. Except as otherwise provided in the Governing Documents, any assessment levied upon an Owner which is not paid within fifteen (15) Days after the date upon which it is due shall bear interest at the lesser of (a) the rate of eighteen percent (18%) per annum; or (b) the maximum rate of interest permissible under the laws of the State of Tennessee. In addition, if any Owner pays any assessment (General, Neighborhood, Special or Specific) with a check on an account that has insufficient funds ("NSF"), the Board may, in its sole discretion, demand that all future payments be made by certified check or money order along with imposing a reasonable processing charge. Finally, the Association may charge a delinquent Owner an administrative/late fee in an amount determined by the Board of Directors for each installment due to the Association which is delinquent. Any payment received by the Association shall be applied first to any attorneys fees and other costs of collection, then to any interest accrued on the late installment, then to any administrative late fee and then to the delinquent assessment.

**ARTICLE 9: ARCHITECTURAL STANDARDS**

9.1. General. No exterior structure or improvement, as described in Section 9.5, shall be placed, erected, installed or made upon any Unit or adjacent to any Unit where the purpose of the structure is to service such Unit except in compliance with this Article, and with the prior written approval of the appropriate reviewing body under Section 9.2, unless exempted from the application and approval requirements pursuant to Section 9.4.

All dwellings constructed on any portion of the Properties shall be designed by and built in accordance with the plans and specifications of a licensed architect or other qualified building designer, unless otherwise approved by the DRB in its sole discretion.

This Article shall not apply to the activities of the Declarant or Declarant-Related Entity, nor to improvements to the Common Area by or on behalf of the Association or to improvements to any Private Amenity. This Article may not be amended during the Development Period without the Declarant's written consent.

9.2. Architectural Review. Responsibility for administration of the Design Guidelines and review of all applications for construction and modifications under this Article shall be handled by the reviewing bodies described below. Both the criteria and the application form are subject to change in the sole discretion of the DRB. The reviewing bodies shall consist of one (1) or more Persons who may, but are not required to, be Members of the Association or representatives of Members, and may, but need not, include architects, landscape architects, engineers or similar professionals, whose compensation, if any, shall be established from time to time by the DRB. The reviewing bodies may establish and charge reasonable fees for review of applications hereunder and may require such fees to be paid in full prior to review of any application. Such fees may include the reasonable costs incurred in having any application reviewed by architects, engineers or other professionals. In addition, the reviewing bodies may require deposits while construction is pending on any Unit to ensure completion without damage to the Properties.

(a) Design Review Board. The DRB shall have exclusive jurisdiction over all construction on any portion of the Properties. Until one hundred percent (100%) of the Properties have been developed and conveyed to Owners other than Builders and the Declarant and initial construction on each Unit has been completed in accordance with the Design Guidelines, the Declarant retains the right to appoint all members of the DRB who shall serve at the Declarant's discretion. There shall be no surrender of this right prior to that time except in a written instrument in recordable form executed by Declarant. Upon the expiration or surrender of such right, the Board shall appoint the members of the DRB, who shall thereafter serve and may be removed in the Board's discretion.

(b) Modifications Committee. The Board of Directors may establish a Modifications Committee ("MC"). The Members of any MC shall be appointed by and shall serve at the discretion of the Board. If established, the MC shall have jurisdiction over modifications, additions, or alterations of Units, including existing structures and landscaping, after completion of initial construction on the Unit. The MC may delegate its authority as to a particular Neighborhood to the Neighborhood Association, if any, so long as the MC has determined that such Neighborhood Association has in force review and enforcement practices, procedures, and appropriate standards at least equal to those of the MC. Such delegation may be revoked and jurisdiction reassumed at any time by written notice. The DRB shall have the right to veto any action taken by the MC or a Neighborhood Association which the DRB determines, in its sole discretion, to be inconsistent with the guidelines promulgated by the DRB. Upon expiration of the Declarant's right to appoint the members of the DRB, the MC may be eliminated and its duties assumed by the DRB.



### 9.3. Guidelines and Procedures.

(a) Design Guidelines. The Declarant shall prepare the initial Design Guidelines for the Properties. The Design Guidelines may contain general provisions applicable to all of the Properties, as well as specific provisions which vary according to land use and from one (1) portion of the Properties to another depending upon the location, unique characteristics, and intended use. For example, by way of illustration but not limitation, the Design Guidelines may impose stricter requirements on those portions of the Properties adjacent to or visible from any Private Amenity or any lake, pond, river, stream or other body of water. The Design Guidelines are intended to provide guidance to Owners and Builders regarding matters of particular concern to the reviewing bodies in considering applications hereunder. The Design Guidelines are not the exclusive basis for decisions of the reviewing bodies and compliance with the Design Guidelines does not guarantee approval of any application.

The DRB shall adopt the Design Guidelines at its initial organizational meeting and thereafter shall have sole and full authority to amend such Design Guidelines. Any amendments to the Design Guidelines shall be applied prospectively only. There shall be no limitation on the scope of amendments to the Design Guidelines except that no amendment shall require the modification or removal of any structure previously approved by the DRB or MC once the approved construction or modification has commenced. The DRB is expressly authorized to amend the Design Guidelines to remove requirements previously imposed or otherwise to make the Design Guidelines less restrictive.

The DRB shall make the Design Guidelines available to Owners and Builders who seek to engage in development or construction within the Properties.

Any MC may promulgate detailed procedures and standards governing its area of responsibility, consistent with those set forth in the Design Guidelines and subject to review and approval or disapproval by the DRB. Any architectural guidelines and standards adopted by the MC may be more restrictive than the Design Guidelines, but under no circumstances shall they be inconsistent with the Design Guidelines.

(b) Procedures. Plans and specifications showing the nature, kind, shape, color, size, materials, and location of all proposed structures and improvements shall be submitted to the appropriate reviewing body for review and approval (or disapproval). In addition, information concerning irrigation systems, drainage, lighting, landscaping and other features of proposed construction shall be submitted as applicable and as required by the Design Guidelines. In reviewing each submission, the reviewing bodies may consider the quality of workmanship and design, harmony of external design with existing structures, and location in relation to surrounding structures, topography, and finish grade elevation, among other considerations. In reviewing and acting upon any request for approval, the DRB or MC shall be acting solely in the Declarant's interests and shall owe no duty to any other person. Decisions may be based solely on aesthetic considerations. Each Owner acknowledges that opinions on aesthetic matters are subjective and may vary over time.

Each application to the DRB shall contain a representation and warranty by the Owner that use of the plans submitted does not violate any copyright associated with the plans. Neither the submission of the plans to the DRB, nor the distribution and review of the plans by the DRB shall be construed as publication in violation of the designer's copyright, if any. Each Owner submitting plans to the DRB shall hold the members of the DRB, the Association and the Declarant harmless and shall indemnify said parties against any and all damages, liabilities, and expenses incurred in connection with the review process of this Declaration.

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In the event that the DRB or MC fails to approve or to disapprove any application within thirty (30) Days after submission of all information and materials reasonably requested, the application shall be deemed approved, except that notwithstanding the foregoing, the DRB shall have the right to extend this thirty (30) Day period another thirty (30) Days if, in its sole discretion, seasonal factors hinder the ability of the DRB to provide an effective review during the thirty (30) Day period following submission of the required information. However, no approval, whether expressly granted or deemed granted pursuant to the foregoing, shall be inconsistent with the Design Guidelines unless a variance has been granted in writing by the DRB pursuant to Section 9.8.

Notwithstanding the above, the DRB by resolution may exempt certain activities from the application and approval requirements of this Article, provided such activities are undertaken in strict compliance with the requirements of such resolution. Any Owner may remodel, paint or redecorate the interior of structures on his or her Unit without approval. However, modifications to the interior of screened porches, patios, and similar portions of a Unit visible from outside the structures on the Unit shall be subject to approval.

Approval by the DRB shall be effective for a period of one (1) year from the date the approval is given. If work has not commenced within the one (1) year period, the approval shall expire, and no work shall thereafter commence without resubmitting plans to the DRB for re-approval, which may be granted or denied at the sole discretion of the DRB.

9.4. Architect, Builder and General Contractor Approval. In order to ensure that appropriate standards of construction are maintained throughout the Properties, all architects, Builders and general contractors must be approved by the DRB prior to engaging in any construction activities within the Properties. The DRB may implement an approval process utilizing established criteria and requiring the submission of a written application for approval. Approval of any plans may be withheld until such time as the Owner's architect, Builder or contractor has been approved by the DRB. Approval of an architect, Builder or general contractor may be conditioned upon an agreement with the DRB to maintain certain insurance coverages required by the DRB, pay construction deposits to ensure completion of a project without damage to the Properties, and pay fees determined by the DRB, from time to time. Both the criteria and the application form are subject to change in the sole discretion of the DRB. Approval of architects, Builders and contractors may not be construed as a recommendation of a specific architect, Builder or contractor by the DRB or the Declarant, nor a guarantee or endorsement of the work of such architect, Builder or contractor. The criteria and requirements established by the DRB for approval of architects, Builders and contractors are solely for the Declarant's protection and benefit and are not intended to provide the Owner with any form of guarantee with respect to any approved architect, Builder, or contractor. Owner's selection of an architect, Builder, or contractor shall be conclusive evidence that the Owner is independently satisfied with any and all concerns Owner may have about the qualifications of such architect, Builder or contractor. Furthermore, Owner waives any and all claims and rights that Owner has or may have now or in the future, against the DRB or the Declarant. Once approved (unless such approval is withdrawn by the DRB), an approved architect, Builder or contractor shall not be required to re-submit to the approval process.

9.5. Specific Guidelines and Restrictions.

(a) Exterior Structures and Improvements. Exterior structures and improvements shall include, but shall not be limited to, staking, clearing, excavation, grading and other site work; initial construction of any dwelling or accessory building; exterior alteration of existing improvements; installation or replacement of hardscape, such as driveways, walkways, or parking areas; mailboxes; basketball hoops; swing sets and similar sports and play equipment; clotheslines; garbage cans; wood piles; swimming pools; docks, piers, or boathouses; gazebos or playhouses; window air-conditioning

units or fans; hot tubs; wells; solar panels; antennas; satellite dishes or any other apparatus for the transmission or reception of television, radio, satellite, or other signals of any kind; hedges, walls, dog runs, animal pens, or fences of any kind, including invisible fences; artificial vegetation or sculpture; and planting or removal of landscaping materials. Notwithstanding the foregoing, the Declarant and the Association shall regulate antennas, satellite dishes, or any other apparatus for the transmission or reception of television, radio, satellite or other signals of any kind only in strict compliance with all federal laws and regulations.

(b) In addition to the foregoing activities requiring prior approval, the following items are strictly regulated, and the reviewing body shall have the right, in its sole discretion, to prohibit or restrict these items within the Properties. Each Owner must strictly comply with the terms of this Section unless approval or waiver in writing is obtained from the appropriate reviewing body. The DRB may, but is not required to, adopt additional specific guidelines as part of the Design Guidelines.

(i) Signs. No sign of any kind shall be erected by an Owner or occupant without the prior written consent of the appropriate reviewing body, except (1) such signs as may be required by legal proceedings; and (2) not more than one (1) professional security sign of such size deemed reasonable by the DRB in its sole discretion. Unless in compliance with this Section, no signs shall be posted or erected by any Owner or occupant within any portion of the Properties, including the Common Area, any Unit, any structure or dwelling located on the Common Area or any Unit (if such sign would be visible from the exterior of such structure or dwelling as determined in the reviewing body's sole discretion) or within any Private Amenity.

Except as provided in Section 13.2 or unless a written variance is granted pursuant to Section 9.8, no "for sale" or "for lease" signs shall be permitted within the Properties. The Declarant and the DRB reserve the right to prohibit other types of signs and to restrict the size, content, color, lettering, design and placement of any approved signs. All signs must be professionally prepared. This provision shall not apply to entry, directional, or other signs installed by the Declarant or its duly authorized agent as may be necessary or convenient for the marketing and development of the Properties.

(ii) Tree Removal. No trees that are more than six (6) inches in diameter at a point two (2) feet above the ground shall be removed without the prior written consent of the appropriate reviewing body; provided however, any trees, regardless of their diameter, that are located within ten (10) feet of a drainage area, a sidewalk, a residence, or a driveway, or any diseased or dead trees needing to be removed to promote the growth of other trees or for safety reasons may be removed without the written consent of the appropriate reviewing body. The appropriate reviewing body may adopt or impose requirements for, or condition approval of, tree removal upon the replacement of any tree removed.

(iii) Lighting. Exterior lighting visible from the street shall not be permitted except for: (1) approved lighting as originally installed on a Unit; (2) one (1) approved decorative post light; (3) pathway lighting; (4) street lights in conformity with an established street lighting program for the Properties; (5) seasonal decorative lights during the usual and common season; (6) front house illumination of model homes; or (7) any additional lighting as may be approved by the appropriate reviewing body.

(iv) Temporary or Detached Structures. Except as may be permitted by the DRB during initial construction, or the MC thereafter, no temporary house, dwelling, garage or outbuilding shall be placed or erected on any Unit. Except as provided in Section 10.7(b), no mobile home, trailer home, travel trailer, camper or recreational vehicle shall be stored, parked or otherwise allowed to be placed on a Unit as a temporary or permanent dwelling.

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(v) Accessory Structures. With the prior approval of the DRB, detached accessory structures may be placed on a Unit to be used for a playhouse, swimming pool, tennis court, tool shed, dog house, garage or other approved use. A garage may also be an attached accessory structure. Such accessory structures shall conform in exterior design and quality to the dwelling on the Unit. With the exception of a garage that is attached to a dwelling and except as may be provided otherwise by the DRB, an accessory structure placed on a Unit shall be located only behind the dwelling as such dwelling fronts on the street abutting such Unit or in a location approved by the DRB. All accessory structures shall be located within side and rear setback lines as may be required by the DRB or by applicable zoning law.

(vi) Utility Lines. Overhead utility lines, including lines for cable television, are not permitted except for temporary lines as required during construction and lines installed by or at the request of Declarant.

(vii) Standard Mailboxes. The DRB reserves the right to approve the style, design, color and location prior to any original installation or replacement of any mailbox. Application shall be made to the DRB prior to installation or replacement of a mailbox. By accepting a deed to a Unit, each Owner agrees that the DRB may remove any nonapproved mailbox in a reasonable manner; all costs for same shall be paid by Owner of such Unit, and all claims for damages caused by the DRB are waived.

(viii) Docks. No dock may be constructed as an appurtenance to any Unit unless approved in writing by the DRB and unless the following conditions are met: (1) the Owner of such Unit shall comply with all provisions of the Governing Documents with respect to such dock; (2) the Owner must obtain all necessary permits and approvals from all local, state, or federal governmental departments, authorities or agencies which have jurisdiction over construction on the body of water; and (3) all docks shall conform with all other Governing Documents and any other restrictions or rules relating to the design, construction or location of docks. Neither the Declarant, the DRB, the MC nor the Association warrants or guarantees that any governmental agencies or other approving authority will approve any dock permits required for the construction of docks aforesaid.

(ix) Minimum Dwelling Size. The Design Guidelines may establish a minimum square footage of enclosed, heated and cooled living space for residential dwellings, which minimum may vary from one Neighborhood to another. Upon written request of an Owner, the DRB may waive the minimum square footage requirement if, in the DRB's sole discretion, the resulting appearance of such residential dwelling will preserve and conform to the overall appearance, scheme, design, value and quality within the Properties.

(x) Water Facilities. No individual water supply system shall be permitted within the Properties.

(xi) Private Sewer Equipment. No sewer equipment may be installed on any Unit without the prior approval of the DRB. All pumps, lines, electrical systems, tanks and other equipment, if necessary, used in connection with the Private Sewer System must satisfy the specifications set forth in the Design Guidelines including but not limited to standards for pumps as to the manufacturer and model, power, clean-out criteria, and location. The DRB reserves the right to prohibit the use of any equipment and/or vendor that does not meet the minimum requirements of the Design Guidelines, which may change from time to time.

(xii) Fences and Hedges. All fences and hedges shall be installed in accordance with the Design Guidelines unless otherwise approved by the DRB.

(xiii) Erosion Control. Compliance with any and all applicable state, local or other governmental erosion control statutes, ordinances or regulations shall be the responsibility of the Owner. All plans submitted to the DRB shall comply with such statutes, ordinances or regulations.

9.6. Construction Period. After commencement of construction, each Owner shall diligently continue construction to complete such construction in a timely manner. The initial construction of all structures must be completed within one (1) year after commencement of construction, unless extended by the DRB in its sole discretion. All other construction shall be completed within the time limits established by the appropriate reviewing body at the time the project is approved by the reviewing body.

For the purposes of this Section, commencement of construction shall mean that (a) all plans for such construction have been approved by the DRB; (b) a building permit has been issued for the Unit by the appropriate jurisdiction; and (c) construction of a structure has physically commenced beyond site preparation. Completion of a structure shall be deemed to have occurred upon final inspection as required by any local permitting agency, or, if such an inspection either is not performed or is deemed inadequate by the Declarant, in its sole discretion, upon "substantial completion." For the purposes of this Section, substantial completion shall be defined to be the date that the DRB certifies that the improvements are sufficiently complete in accordance with the Governing Documents and any other building specifications of the DRB as such may be established and amended by the DRB from time to time.

9.7. No Waiver of Future Approvals. Approval of proposals, plans and specifications, or drawings for any work done or proposed, or in connection with any other matter requiring approval, shall not be deemed to constitute a waiver of the right to withhold approval as to any similar proposals, plans and specifications, drawings, or other matters subsequently or additionally submitted for approval.

9.8. Variance. The DRB may authorize variances from compliance with any of its guidelines and procedures when circumstances such as topography, natural obstructions, hardship, or aesthetic or environmental considerations require, but only in accordance with rules and regulations adopted by the DRB. Such variances may only be granted, however, when unique circumstances dictate and no variance shall (a) be effective unless in writing; (b) be contrary to this Declaration; or (c) prevent the DRB from denying a variance in other circumstances. For purposes of this Section, the inability to obtain approval of any governmental agency, the issuance of any permit, or the terms of any financing shall not be considered a hardship warranting a variance.

9.9. Limitation of Liability. The standards and procedures established pursuant to this Article are intended to provide a mechanism for maintaining and enhancing the overall aesthetics of the Properties only, and shall not create any duty to any Person. Review and approval of any application pursuant to this Article is made on the basis of aesthetic considerations only, and neither the Declarant, the Association, the Board, the DRB nor the Modifications Committee (MC) shall bear any responsibility for ensuring the structural integrity or soundness of approved construction or modifications, the adequacy of soils or drainage, nor for ensuring compliance with building codes and other governmental requirements, nor for ensuring that all dwellings are of comparable quality, value or size, of similar design, or aesthetically pleasing or otherwise acceptable to neighboring property owners. Neither the Declarant, the Association, the Board, the DRB or MC or any committee, or member of any of the foregoing shall be held liable for any injury, damages, or loss arising out of the manner or quality of approved construction or modifications to any Unit. In all matters, the committees and their members shall be defended and indemnified by the Association as provided in Section 4.6.

9.10. Enforcement. The Declarant, any member of the DRB, the MC or the Board, or the representatives of each shall have the right, during reasonable hours and after reasonable notice, to enter upon any Unit to inspect for the purpose of ascertaining whether any structure or improvement is in

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violation of this Article. Any structure, improvement or landscaping placed or made in violation of this Article shall be deemed to be nonconforming. Upon written request from the DRB or MC, Owners shall, at their own cost and expense, remove such structure or improvement and restore the property to substantially the same condition as existed prior to the nonconforming work. Should an Owner fail to remove and restore the property as required, any authorized agent of Declarant, the DRB, MC or the Board shall have the right to enter the property, remove the violation, and restore the property to substantially the same condition as previously existed. Entry for such purposes and in compliance with this Section shall not constitute a trespass. In addition, the Board may enforce the decisions of the Declarant, the DRB and the MC by any means of enforcement described in Section 4.3. All costs, together with the interest at the maximum rate then allowed by law, may be assessed against the benefited Unit and collected as a Specific Assessment pursuant to Section 8.6.

Unless otherwise specified in writing by the committee granting approval, all approvals granted hereunder shall be deemed conditioned upon completion of all elements of the approved work and all work previously approved with respect to the same Unit, unless approval to modify any application has been obtained. If, after commencement, any Person fails to diligently pursue to completion all approved work, the Association shall be authorized, after notice to the Owner of the Unit and an opportunity to be heard in accordance with the By-Laws, to enter upon the Unit and remove or complete any incomplete work and to assess all costs incurred against the Unit and the Owner thereof as a Specific Assessment pursuant to Section 8.6.

Neither the DRB, MC or any member of the foregoing nor the Association, the Declarant, or their members, officers or directors shall be held liable to any Person for exercising the rights granted by this Article. Any contractor, subcontractor, agent, employee, or other invitee of an Owner who fails to comply with the terms and provisions of this Article or the Design Guidelines may be excluded by the DRB from the Properties, subject to the notice and hearing procedures contained in the By-Laws.

In addition to the foregoing, the Association shall have the authority and standing to pursue all legal and equitable remedies available to enforce the provisions of this Article and the decisions of the DRB and MC.

#### **ARTICLE 10: USE RESTRICTIONS**

10.1. General. This Article sets out certain use restrictions which must be complied with by all Owners and occupants of any Unit. The Properties shall be used only for residential, recreational, and related purposes (which may include, without limitation, model homes, sales offices for Declarant and/or Builders, an information center and/or a sales office for any real estate broker retained by the Declarant to assist in the sale of property described on Exhibits "A" or "B," offices for any property manager retained by the Association, business offices for the Declarant or the Association and related parking facilities) consistent with this Declaration and any Supplemental Declaration.

10.2. Rules and Regulations. In addition to the use restrictions set forth in this Article, the Board may, from time to time, without consent of the Members, promulgate, modify, or delete rules and regulations applicable to the Properties. Such rules shall be distributed to all Owners and occupants prior to the date that they are to become effective and shall thereafter be binding upon all Owners and occupants until and unless overruled, canceled, or modified in a regular or special meeting by Members holding a Majority of the total Class "A" votes in the Association, and during the Development Period, the written consent of the Declarant.

10.3. Occupants Bound. All provisions of the Declaration, By-Laws, and of any rules and regulations, use restrictions or Design Guidelines governing the conduct of Owners and establishing



sanctions against Owners shall also apply to all occupants of the Unit even though occupants are not specifically mentioned. Fines may be levied against Owners or occupants. If a fine is first levied against an occupant and is not timely paid, then the fine may be levied against the Owner of the Unit occupied by the occupant.

10.4. Leasing. Units may be leased for residential purposes only. All leases shall require, without limitation, that the tenant acknowledge receipt of a copy of the Declaration, By-Laws, use restrictions, and rules and regulations of the Association. The lease shall also obligate the tenant to comply with the foregoing documents. The Board may require notice of any lease together with such additional information deemed necessary by the Board. Notwithstanding the foregoing, certain Neighborhoods may be subject to a Supplemental Declaration which establishes a recreational development and requires all Owners who desire to lease their residences to be participants in a rental or leasing program. In such Neighborhood(s), the management company chosen by the Declarant shall have the exclusive right to manage leasing within the Neighborhood(s).

10.5. Residential Use. Units may be used only for residential purposes of a single family and for ancillary business or home office uses. A business or home office use shall be considered ancillary so long as: (a) the existence or operation of the activity is not apparent or detectable by sight, sound, or smell from outside the Unit; (b) the activity conforms to all zoning requirements for the Properties; (c) the activity does not involve regular visitation of the Unit by clients, customers, suppliers, or other invitees or door-to-door solicitation of residents of the Properties; (d) the activity does not increase traffic or include frequent deliveries within the Properties; and (e) the activity is consistent with the residential character of the Properties and does not constitute a nuisance, or a hazardous or offensive use, or threaten the security or safety of other residents of the Properties, as may be determined in the sole discretion of the Board.

No real estate brokerage firms, real estate sales offices, or any other business directly or indirectly selling and/or managing real property or improvements shall be permitted within the Properties except with the Declarant's prior written approval which may be denied at the Declarant's sole discretion. No other business, trade, or similar activity shall be conducted upon a Unit without the prior written consent of the Board. The terms "business" and "trade," as used in this provision, shall be construed to have their ordinary, generally accepted meanings and shall include, without limitation, any occupation, work, or activity undertaken on an ongoing basis which involves the provision of goods or services to persons other than the provider's family and for which the provider receives a fee, compensation, or other form of consideration, regardless of whether: (a) such activity is engaged in full or part-time, (b) such activity is intended to or does generate a profit, or (c) a license is required.

The leasing of a Unit shall not be considered a business or trade within the meaning of this Section. Certain Neighborhoods may be subject to a Supplemental Declaration which sets forth additional provisions regarding leasing. This Section shall not apply to any activity conducted by the Declarant or a Builder approved by the Declarant with respect to its development and sale of the Properties or its use of any Units which it owns within the Properties, including the operation of a timeshare or similar program.

No garage sale, moving sale, rummage sale, auction or similar activity shall be conducted upon a Unit without the prior written consent of the Board and compliance with any rules adopted by the Board.

10.6. Occupancy of Unfinished Units. No dwelling erected upon any Unit shall be occupied in any manner before commencement of construction or while in the course of construction, nor at any time prior to the dwelling being fully completed.

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10.7. Vehicles.

(a) Automobiles and non-commercial trucks and vans shall be parked only in the garages or in the driveways, if any, serving the Units unless otherwise approved by the DRB; provided however, the Declarant and/or the Association may designate certain on-street parking areas for visitors or guests subject to reasonable rules. No automobile or non-commercial truck or van may be left upon any portion of the Properties, except in a garage, if it is unlicensed or if it is in a condition such that it is incapable of being operated upon the public highways. Such vehicle shall be considered a nuisance and may be removed from the Properties. No motorized vehicles shall be permitted on pathways, sidewalks, or unpaved Common Area except for public safety vehicles authorized by the Board, and vehicles used by the Association or the owner of a Private Amenity in maintenance of all or a portion of the Properties or Private Amenity.

(b) Recreational vehicles shall be parked only in the garages, if any, serving the Units or, with the prior written approval of the DRB, other hard-surfaced areas which are not visible from the street or Private Amenities; "Visibility" shall be determined by the DRB in its sole discretion. The term "recreational vehicles," as used herein, shall include, without limitation, motor homes, mobile homes, boats, "jet skis" or other watercraft, trailers, other towed vehicles, motorcycles, minibikes, scooters, go-carts, golf carts, campers, buses, commercial trucks and commercial vans. Any recreational vehicle parked or stored in violation of this provision shall be considered a nuisance and may be removed from the Properties. The Declarant and/or the Association may designate certain parking areas within the Properties for recreational vehicles subject to reasonable rules and fees, if any.

(c) Service and delivery vehicles may be parked in the Properties during daylight hours for such periods of time as are reasonably necessary to provide service or to make a delivery within the Properties.

(d) All vehicles shall be subject to such reasonable rules and regulations as the Board of Directors may adopt.

(e) No golf carts, except those owned by a Private Amenity, shall be permitted on any portion of the Properties.

10.8. Private Streets. The Private Streets shall be subject to the provisions of this Declaration regarding use of Common Area. Additionally, Owners of Units and other permitted users of the Private Streets pursuant to Section 2.2 shall be obligated to refrain from any actions which would deter from or interfere with the use and enjoyment of the Private Streets by other authorized users of the Private Streets. Prohibited activities shall include without limitation obstruction of any of the Private Streets.

10.9. Use of Common Area. There shall be no obstruction of the Common Area, nor shall anything be kept, parked or stored on any part of the Common Area without the prior written consent of the Association, except as specifically provided herein.

With the prior written approval of the Board of Directors, and subject to any restrictions imposed by the Board, an Owner or Owners may reserve portions of the Common Area for use for a period of time as set by the Board. Any such Owner or Owners who reserve a portion of the Common Area as provided herein shall assume, on behalf of himself/herself/themselves and his/her/their guests, occupants and family, all risks associated with the use of the Common Area and all liability for any damage or injury to any person or thing as a result of such use. The Association shall not be liable for any damage or injury resulting from such use unless such damage or injury is caused solely by the willful acts or gross negligence of the Association, its agents or employees.

10.10. Animals and Pets. No animals, livestock, or poultry of any kind may be raised, bred, kept, or permitted on any Unit, with the exception of dogs, cats, or other usual and common household pets in reasonable number, as determined by the Board. All pets shall be reasonably controlled by the owner whenever outside a Unit and shall be kept in such a manner as to not become a nuisance by barking or other acts. The owners of the pet shall be responsible for all of the pet's actions. Pets shall not be permitted on any golf course, in any lake, or within any Private Amenity except in compliance with conditions established by the owner of such Private Amenity. If, in the sole opinion of the Board, any animal becomes dangerous or an annoyance or nuisance in the Properties or to nearby property or destructive of wildlife, such animal shall be removed from the Properties. By way of explanation and not limitation, this Section may be enforced by exercising self-help rights provided in Section 4.3.

10.11. Nuisance. It shall be the responsibility of each Owner and occupant to prevent the development of any unclean, unhealthy, unsightly, or unkempt condition on his or her property. No property within the Properties shall be used, in whole or in part, for the storage of any property or item that will cause such Unit to appear to be in an unclean or untidy condition or that will be obnoxious to the eye; nor shall any substance, thing, or material be kept that will emit foul or obnoxious odors or that will cause any noise or other condition that will or might disturb the peace, quiet, safety, comfort, or serenity of the occupants of surrounding property.

No noxious or offensive activity shall be carried on within the Properties, nor shall anything be done tending to cause embarrassment, discomfort, annoyance, or nuisance to any Person using any property within the Properties. There shall not be maintained any plants or animals or device or thing of any sort whose activities or existence in any way is noxious, dangerous, unsightly, unpleasant, or of a nature as may diminish or destroy the enjoyment of the Properties. Without limiting the generality of the foregoing, no speaker, horn, whistle, siren, bell, amplifier or other sound device, except such devices as may be used exclusively for security purposes or as approved by the DKB, shall be located, installed or maintained upon the exterior of any Unit unless required by law. Any siren or device for security purposes shall contain a device or system which causes it to shut off automatically.

The reasonable and normal development, construction and sales activities conducted or permitted by the Declarant shall not be considered a nuisance or a disturbance of the quiet enjoyment of any Owner or occupant.

10.12. Storage of Materials, Garbage, Dumping, Etc. All garbage cans shall be located or screened so as to be concealed from view of neighboring streets and property. All rubbish, trash, and garbage shall be placed in appropriate containers at a designated location as directed by the Board from time to time and regularly removed and shall not be allowed to accumulate. There shall be no dumping of grass clippings, leaves or other debris; rubbish, trash or garbage; petroleum products, fertilizers, or other potentially hazardous or toxic substances in any drainage ditch, stream, pond, or lake within the Properties, except that fertilizers may be applied to landscaping on Units provided care is taken to minimize runoff. No hazardous materials shall be treated, deposited, stored, disposed of, or used in or on any Unit or the improvements thereon. "Hazardous materials" shall be defined as materials, substances, gases, or vapors identified as hazardous, toxic or radioactive by any applicable federal, state or local laws, regulations or ordinances.

Each Owner shall maintain its Unit in a neat and orderly condition throughout initial construction of a residential dwelling and not allow trash and debris from its activities to be carried by the wind or otherwise scattered within the Properties. Storage of construction materials on the Unit shall be subject to such conditions, rules, and regulations as may be set forth in the Design Guidelines. Each Owner shall keep roadways, easements, swales, and other portions of the Properties clear of silt, construction materials and trash from its activities at all times. No lumber, metals, bulk materials, refuse, trash, or similar

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materials shall be kept, stored or allowed to accumulate outside the buildings at any Unit except during the period of initial construction of improvements to the Unit. Trash and debris during initial construction of a residential dwelling shall be contained in standard size dumpsters or other appropriate receptacles and removed regularly from Units and shall not be buried or covered on the Unit. Any Unit on which construction is in progress may be policed prior to each weekend, and during the weekend all materials shall be neatly stacked or placed and any trash or waste materials shall be removed. In addition, Owners shall remove trash and debris from the Unit upon reasonable notice by Declarant in preparation for special events.

10.13. Combustible Liquid. There shall be no storage of gasoline, propane, heating or other fuels, except for a reasonable amount of fuel that may be stored in containers appropriate for such purpose on each Unit for emergency purposes and operation of lawn mowers and similar tools or equipment and except as may be approved in writing by the DRB. The Association shall be permitted to store fuel for operation of maintenance vehicles, generators and similar equipment.

10.14. Guns. The discharge of firearms on the Properties is prohibited. The term "firearms" includes without limitation "B-B" guns, pellet guns, and firearms of all types. The Board may impose fines and exercise other enforcement remedies as set forth in this Declaration, but shall have no obligation to exercise self-help to prevent or stop any such discharge.

10.15. Subdivision of Unit. No Unit shall be subdivided or its boundary lines changed after a subdivision plat including such Unit has been approved and filed in the Public Records without the Declarant's prior written consent. In addition, no home shall be subdivided or partitioned to create housing for more than a single family. Declarant, however, hereby expressly reserves the right to replat any Unit or Units which it owns, including, without limitation, the subdivision of Units by the Declarant into substantially smaller Units such that the character of residential product available within a particular Neighborhood or portion of a Neighborhood changes significantly. All Owners acknowledge the potential for such a change to occur at any time to the Units adjacent to or surrounding the Unit owned by the Owner. Any such division, boundary line change, or replatting shall not be in violation of the applicable subdivision and zoning regulations, if any.

10.16. Consolidated Lots. Any Owner of one (1) or more adjacent Lots may, at Owner's sole cost and expense, with prior written approval of the controlling governmental authority, the DRB, and during the Development Period, the Declarant, consolidate multiple adjacent Lots into one (1) Lot. Once the multiple Lots are approved by all required parties to become a Consolidated Lot, the Owner shall have the privilege of constructing improvements on such resulting Consolidated Lot as if it were one (1) Lot. Upon "substantial completion" (as such term is defined in Section 9.6 of this Declaration) of the dwelling on the Consolidated Lot, the Consolidated Lot shall be considered one (1) Lot for all purposes including Association assessments and membership. All costs incurred by the Association because of the consolidation of multiple Lots shall be levied against the Owner benefitting from such consolidation as a Specific Assessment.

10.17. Sight Distance at Intersections. All property located at street intersections or driveways shall be landscaped, improved and maintained so as to permit safe sight across such areas. No fence, wall, hedge or shrub shall be placed or permitted to remain where it would cause a traffic or sight problem.

10.18. Drainage and Grading.

(a) Catch basins and drainage areas are for the purpose of natural flow of water only. No improvements, obstructions or debris shall be placed in these areas. No Owner or occupant may obstruct

or rechannel the drainage flows after location and installation of drainage swales, storm sewers, or storm drains.

(b) Each Owner shall be responsible for maintaining all drainage areas located on its Unit. Required maintenance shall include, but not be limited to, maintaining ground cover in drainage areas and removing any accumulated debris from catch basins and drainage areas.

(c) Each Owner shall be responsible for controlling the natural and man-made water flow from its Unit. No Owner shall be entitled to overburden the drainage areas or drainage system within any portion of the Properties or any Private Amenities with excessive water flow from its Unit. Owners shall be responsible for all remedial acts necessary to cure any unreasonable drainage flows from Units. Neither the Association nor the Declarant bears any responsibility for remedial actions to any Unit.

(d) Use of any areas designated as "drainage easement areas" on any recorded subdivision plat of the Properties, shall be subject to strict prohibitions against encroachment of structures into, over or across the drainage easement areas, and the right of the Declarant to enter upon and maintain the drainage easement areas. Such maintenance activities may include disturbance of landscaping pursuant to the terms contained in any declaration of easements, notwithstanding approval of the landscaping as set forth in Article 9.

(e) No Person shall alter the grading of any Unit without prior approval pursuant to Article 9 of this Declaration. Notwithstanding the foregoing, the Declarant hereby reserves for itself and the Association a perpetual easement across the Properties for the purpose of altering drainage and water flow. The exercise of such an easement shall not materially diminish the value of or unreasonably interfere with the use of any Unit without the Owner's consent.

(f) All Persons shall comply with any and all applicable erosion control ordinances in construction of improvements on any Unit and in conducting any activity within non-disturbance buffer zones.

10.19. Irrigation. Owners shall not install irrigation systems which draw upon ground or surface waters nor from any lakes or ponds within the Properties unless such installation is permitted by and installed in accordance with the Design Guidelines. However, the Declarant shall have the right to draw water from such sources within the Properties for any purpose.

10.20. Streams. No streams which run across any Unit may be dammed, or the water therefrom impounded, diverted, or used for any purpose without the prior written consent of the Board, except that the Declarant shall have such rights as provided in Article 11.

10.21. Lakes and Other Water Bodies. All lakes, ponds, and streams within the Properties, if any, shall be used only in accordance with such rules and regulations as may be adopted and published by the Board. Swimming, boating, fishing, and other active uses of lakes or other bodies of water within the Properties shall be prohibited. The Association shall not be responsible for any loss, damage, or injury to any person or property arising out of the authorized or unauthorized use of lakes, ponds, or streams within the Properties. Except as designated by the Declarant, no trails or pathways shall be established along the perimeter of any lake or pond. With the exception of any community dock constructed on behalf of the Association, no docks, piers, or gazebos shall be constructed, attached or floated upon or adjacent to any lake.

10.22. Shoreline of Lakes. Owners, as well as their families, tenants, guests, invitees, and pets, shall be obligated to refrain from any actions which would erode or damage the shoreline of any lake.

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10.23. Wetlands. All areas designated on any recorded plat as "wetlands" shall be generally left in a natural state, and any proposed alteration of the wetlands must be in accordance with any restrictions or covenants recorded against such property and be approved by all appropriate regulatory bodies. Prior to any proposed alteration of a Unit, the Owner shall determine if any portion thereof lies within a wetland boundary and meets the requirements for designation as a regulatory wetland. Notwithstanding anything contained in this Section, the Declarant, the Association, and the successors, assigns, affiliates and designees of each may conduct such activities as have been or may be permitted by the U.S. Army Corps of Engineers or any successor thereof responsible for the regulation of wetlands.

10.24. Golf Course Areas. Owners, as well as their families, tenants, guests, and invitees shall refrain from any actions which would distract from the playing qualities of any golf course adjacent to the Properties and shall also be responsible to ensure that their pets do not cause such distractions. Such prohibited activities shall include, but shall not be limited to, burning materials where the smoke will cross the golf course property, maintenance and restraint of dogs or other pets under conditions which interfere with golf course play due to loud barking or other actions, playing of loud radios, televisions, stereos or musical instruments, running, bicycling, skateboarding, walking or trespassing in any way on the golf course property, picking up balls or similar interference with play, or growing or permitting to grow varieties of grass or other vegetation which the owner of the golf course determines to be inimical to the golf course grasses or vegetation. In addition, no Person shall, by virtue of this Declaration, have any right to prune or otherwise alter any landscaping located on the golf course property, or use any portion of any golf cart path system, including any portion thereof which may be situated upon Common Area, without the prior written approval of the owner of such golf course. This covenant is for the benefit of any golf course adjacent to the Properties and the owner thereof and persons playing golf on said golf courses and shall be enforceable by the owner of such golf course. These same restrictions shall also apply to any other Private Amenity such as any marina, clubhouse, or recreational areas within the Private Amenities.

10.25. Timesharing. No Unit shall be made subject to or be operated as a timesharing, fraction-sharing, or similar program whereby the right to exclusive use of the Unit rotates among participants in the program on a fixed or floating time schedule over a period of years; provided however, the Declarant may exempt certain Neighborhoods from this prohibition and by Supplemental Declaration create a timesharing, fraction-sharing, or similar program and supplement, create exceptions to, or modify the terms of this Declaration as it applies to such Neighborhoods in order to reflect the different character and intended use of such property.

10.26. Mining. Oil, gas, coal or mineral exploration, drilling, boring, quarrying or mining operations and all construction and equipment incident thereto are prohibited within the Properties.

10.27. Lake. Tellico Lake shall be used only in accordance with the Lake Use Restrictions promulgated by the Declarant, the Association or TVA and rules implemented as a condition of zoning the Properties. Swimming, fishing, boating or other active uses of Tellico Lake which occur by gaining access to Tellico Lake from the Properties shall be strictly governed by the Lake Use Restrictions and may be prohibited altogether in the discretion of the Declarant, the Association or TVA. Notwithstanding the foregoing, the Declarant shall have the right to use Tellico Lake in its sole discretion for any use permitted by the TVA. No Person may use Tellico Lake in any fashion for irrigation of a Unit; provided, however, any Owner of a Lakeside Unit (as such term is defined in Section 10.30 below) may apply to both the DRB and the TVA for permission to install an irrigation system which draws water from Tellico Lake to irrigate its Unit. The DRB shall approve such a request for permission in its sole discretion, and any approval granted by the DRB or the TVA shall be revocable at any time by either entity in its sole discretion. Tellico Landing L.L.C., the Declarant, or any successor Declarant, and the Association and



the owner of any Private Amenity shall not be responsible for any loss, damage, or injury to any person or property arising out of the authorized or unauthorized use of Tellico Lake.

10.28. Watercraft on Tellico Lake. All watercraft which are brought onto Tellico Lake through docks or ramps attached to or located on the Properties shall be registered to operate in the State of Tennessee and be registered and approved by the Association. The use of such watercraft shall be subject to rules and regulations, including, without limitation, insurance requirements, that the Association may promulgate from time to time.

10.29. Use Restrictions Not in Violation of the Americans With Disabilities Act. Nothing contained in this Article 10 or elsewhere within this Declaration shall interfere with any provision under the Americans with Disabilities Act or any similar applicable federal, state or local law, ordinance or regulation.

10.30. Special Provisions for Lakeside Units. Owners of Units with boundaries bordering Tellico Lake ("Lakeside Units") shall be restricted and prohibited from attaching to the Properties any facility where boats or any other type of watercraft can be launched, retrieved or moored ("Boat Docks"), unless such activity is permitted by the Lake Use Restrictions. Should the construction of such Boat Docks at the Lakeside Units be approved, all plans for construction of boat docks must be approved in writing by the DRB prior to construction, which approval may be withheld by the DRB in its sole discretion. Boat Docks are subject to rules and specifications which may be either established by the Board from time to time or set forth in the Design Guidelines. Owners of Lakeside Units shall also comply with rules and restrictions set forth by TVA regarding approval of Boat Docks, use of Tellico Lake, and other matters, as applicable. Owners shall be responsible for protecting and maintaining the shore line from erosion into Tellico Lake. If erosion occurs, the Association shall have the right, but not the obligation, to repair the erosion and charge the costs of the same to the Owner as a Specific Assessment. The Owner shall maintain insurance for any permitted privately-owned boat dock and shall indemnify and hold the Declarant and the Association harmless for any damage or cause of action arising from use of the dock. The Association shall be permitted at its sole discretion to require the Owner to maintain insurance for the dock and to request proof of insurance and to be named as an additional insured on any policy.

## ARTICLE 11: EASEMENTS

Declarant reserves, creates, establishes, promulgates, and declares the non-exclusive, perpetual easements set forth herein for the enjoyment of the Declarant, the Association, the Members, the Owners, and the owners of any Private Amenities, and their successors-in-title.

11.1. Easements of Encroachment. Declarant reserves, creates, establishes, promulgates and declares non-exclusive, perpetual, reciprocal, appurtenant easements of encroachment, and for maintenance and use of any permitted encroachment, between adjacent Units, between each Unit and any adjacent Common Area, between Common Area and any adjacent Private Amenity, and between each Unit and any adjacent Private Amenity due to the unintentional placement or settling or shifting of the improvements constructed, reconstructed, or altered thereon (in accordance with the terms of these restrictions) to a distance of not more than three (3) feet, as measured from any point on the common boundary along a line perpendicular to such boundary. However, in no event shall an easement for encroachment exist if such encroachment occurred due to willful and knowing conduct on the part of, or with the knowledge and consent of, the Person claiming the benefit of such easement.

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11.2. Easements for Utilities, Etc.

(a) Declarant reserves, creates, establishes, promulgates and declares non-exclusive, perpetual, reciprocal, appurtenant easements, for itself during the Development Period, for the Association, and the designees of each (which may include, without limitation, any governmental or quasi-governmental entity and any utility company) perpetual non-exclusive easements upon, across, over, and under all of the Properties but not through a structure, existing or proposed) to the extent reasonably necessary for the purpose of installing, constructing, monitoring, replacing, repairing, maintaining, operating and removing cable, digital or similar television systems, master television antenna systems, and other devices for sending or receiving data and/or other electronic signals; security and similar systems; roads, walkways, pathways and trails; lakes, streams, ponds, wetlands, irrigation, and drainage systems; street lights and signage; and all utilities, including, but not limited to, water, sewer, telephone, gas, and electricity, and utility meters; and an easement for access of vehicular and pedestrian traffic over, across, and through the Properties, as necessary, to exercise the easements described above.

Declarant may assign to the local water supplier, sewer service provider, electric company, telephone company, and natural gas supplier the easements set forth herein across the Properties for ingress, egress, installation, reading, replacing, repairing, and maintaining utility lines, meters and boxes, as applicable.

(b) Declarant reserves, creates, establishes, promulgates and declares for itself during the Development Period and its designees non-exclusive, perpetual, reciprocal, appurtenant easements, and the non-exclusive right and power to grant such specific easements as may be necessary, in the sole discretion of Declarant, in connection with the orderly development of any property described on Exhibits "A" or "B."

(c) Any damage to a Unit resulting from the exercise of the easements described in subsections (a) and (b) of this Section shall promptly be repaired by, and at the expense of, the Person exercising the easement. Notwithstanding the foregoing, in the event that the Person exercising the easement is not legally or contractually obligated to repair such damage caused in course of exercising its easement rights, the Association may repair such damage and assess the costs as set forth in Article 8 of this Declaration. The exercise of these easements shall not extend to permitting entry into the structures on any Unit, nor shall it unreasonably interfere with the use of any Unit, and except in an emergency, entry onto any Unit shall be made only after reasonable notice to the Owner or occupant.

(d) Declarant reserves unto itself the right, in the exercise of its sole discretion, upon the request of any Person holding, or intending to hold, an interest in the Properties, or at any other time, (i) to release all or any portion of the Properties from the burden, effect, and encumbrance of any of the easements granted or reserved under this Section, or (ii) to define the limits of any such easements.

11.3. Easement for Slope Control, Drainage and Waterway Maintenance. Declarant reserves, creates, establishes, promulgates and declares non-exclusive, perpetual, appurtenant easements, for itself, the owner of any Private Amenity and the Association, and their respective representatives, successors and assigns, contractors and agents, over, across, under, through and upon each Unit for the purposes of:

(a) controlling soil erosion, including grading and planting with vegetation any areas of any Unit which are or may be subject to soil erosion;

(b) drainage of natural or man-made water flow and water areas from any portion of the Properties or any Private Amenity;

(c) changing, modifying or altering the natural flow of water, water courses or waterways on or adjacent to any Unit or Common Area;

(d) dredging, enlarging, reducing or maintaining any water areas or waterways within the Properties; and

(e) installing such pipes, lines, conduits or other equipment as may be necessary for slope control, drainage and waterway maintenance of any portion of the Properties or any Private Amenity.

11.4. Easements to Serve Additional Property. The Declarant reserves, creates, establishes, promulgates and declares non-exclusive, perpetual, appurtenant easements for itself and its duly authorized successors and assigns, including without limitation the owners of Private Amenities, successors-in-title, agents, representatives, and employees, successors, assigns, licensees, and mortgagees, an easement over the Common Area for the purposes of enjoyment, use, access, and development of the Additional Property, whether or not such property is made subject to this Declaration. This easement includes, but is not limited to, a right of ingress and egress over the Common Area for construction of roads, for the posting of signs, and for connecting and installing utilities serving the Additional Property. Declarant agrees that it and its successors or assigns shall be responsible for any damage caused to the Common Area as a result of vehicular traffic connected with development of the Additional Property.

11.5. Easement for Entry Declarant reserves, creates, establishes, promulgates and declares non-exclusive, perpetual, appurtenant easements for the Association to enter upon any Unit for emergency, security, and safety reasons. Such right may be exercised by any member of the Board, the Association's officers, committee members, agents, employees and managers of the Association, and by all police officers, fire fighters, ambulance personnel, and similar emergency personnel in the performance of their duties. Except in emergencies, entry onto a Unit shall be only during reasonable hours and after notice to the Owner. This easement includes the right to enter any Unit to cure any condition which may increase the possibility of fire, slope erosion, immediate risk of personal injury, or other hazard if an Owner fails or refuses to cure the condition within a reasonable time after request by the Board, but shall not authorize entry into any dwelling without permission of the Owner, except by emergency personnel acting in their official capacities. Entry under this Section shall not constitute a trespass.

11.6. Easements for Maintenance and Enforcement. Declarant reserves, creates, establishes, promulgates and declares non-exclusive, perpetual, appurtenant rights and easements for the Association to enter all portions of the Properties, including each Unit, to (a) perform its maintenance responsibilities under Article 5, and (b) make inspections to ensure compliance with the Governing Documents. Except in emergencies, entry onto a Unit shall be only during reasonable hours. This easement shall be exercised with a minimum of interference to the quiet enjoyment to Owners' property, and any damage shall be repaired by the Association at its expense. Entry under this Section shall not constitute a trespass, and prior notice to the Owner shall not be required except as provided in Section 5.2.

The Association also may enter a Unit to abate or remove, using such measures as may be reasonably necessary, any structure, thing or condition which violates the Governing Documents. All costs incurred, including reasonable attorneys fees, may be assessed against the violator as a Specific Assessment.

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11.7. Easement for Walking Trail Access. Declarant hereby grants to the Owners a perpetual, non-exclusive easement over and across any areas designated as "walking trails" or "paths" on any recorded subdivision plat of the Properties. Use of such walking trails or paths shall be governed by reasonable rules and regulations promulgated by the Association.

11.8. Easements for Stream, Lake and Pond Maintenance and Flood Water. Declarant reserves, creates, establishes, promulgates and declares for itself and its successors, assigns, and designees and the Association the nonexclusive, perpetual, appurtenant right and easement, but not the obligation, to enter upon any lakes, ponds, streams, and wetlands located within the Area of Common Responsibility to (a) install, keep, maintain, and replace pumps and irrigation systems in order to provide water for the irrigation of any of the Area of Common Responsibility or any Private Amenity; (b) draw water from such sources for purposes of irrigation; (c) construct, maintain, and repair any bulkhead, wall, dam, or other structure retaining water; and (d) remove trash and other debris therefrom and fulfill maintenance responsibilities as provided in this Declaration. The Declarant, the Association, and their designees shall have an access easement over and across any of the Properties abutting or containing any portion of any lake, pond, stream, or wetland to the extent reasonably necessary to exercise their rights under this Section.

Declarant further reserves, creates, establishes, promulgates and declares for itself and its successors, assigns and designees, and the Association the non-exclusive, perpetual, appurtenant right and easement of access and encroachment over the Common Area and Units (but not the dwellings thereon) adjacent to or within fifty (50) feet of lake beds, ponds, streams and wetlands in order to (a) temporarily flood and back water upon and maintain water over such portions of the Properties; (b) fill, drain, dredge, deepen, clean, fertilize, dye, and generally maintain the lakes, ponds, streams, and wetlands within the Area of Common Responsibility; (c) maintain and landscape the slopes and banks pertaining to such lakes, ponds, streams, and wetlands; (d) disturb existing landscaping; and (e) pile dirt and plant materials. All persons entitled to exercise these easements shall use reasonable care in, and repair any damage resulting from the intentional exercise of such easements. All affected areas shall be restored to a neat and attractive condition to the extent practical, as soon as reasonably possible after completion of any construction or maintenance activities authorized in this Declaration. Nothing herein shall be construed to make Declarant or any other Person liable for damage resulting from flooding due to heavy rainfall or other natural disasters.

Declarant reserves unto itself the right, in the exercise of its sole discretion, upon the request of any Person holding, or intending to hold, an interest in the Properties, or at any other time, (a) to release all or any portion of the Properties from the burden, effect, and encumbrance of any of the easements granted or reserved under this Section, or (b) to define the limits of any such easements.

11.9. Lateral Support. Declarant reserves, creates, establishes, promulgates and declares non-exclusive, perpetual, reciprocal, appurtenant easements over every portion of the Common Area, every Unit, and any improvement which contributes to the lateral support of another portion of the Common Area, of another Unit, or of a Private Amenity shall be burdened with an easement for lateral support, and each shall also have the right to lateral support which shall be appurtenant to and pass with title to such property.

11.10. Easements for Private Amenities. Declarant reserves, creates, establishes, promulgates and declares for the owners of any Private Amenity the following non-exclusive, perpetual, reciprocal, appurtenant easements which shall benefit the Private Amenity.

(a) Every Unit and the Common Area and the common property of any Neighborhood Association adjacent to any Private Amenity are burdened with an easement permitting golf balls

unintentionally to come upon such Common Area, Units or common property of a Neighborhood and for golfers at reasonable times and in a reasonable manner to come upon the Common Area, common property of a Neighborhood, or the exterior portions of a Unit to retrieve errant golf balls; provided however, if any Unit is fenced or walled, the golfer shall seek the Owner's permission before entry. The existence of this easement shall not relieve golfers of liability for damage caused by errant golf balls. Under no circumstances shall any of the following Persons be held liable for any damage or injury resulting from any activity relating to a Private Amenity, including but not limited to, any errant golf balls or the exercise of this easement: Tellico Landing L.L.C., the Declarant, or any successor Declarant; the Association or its Members (in their capacity as such); the owner(s) of the Private Amenities or their successors, successors-in-title, or assigns; any Builder or contractor (in their capacities as such); the golf course designer or builder; any officer, director, member, manager, or partner of any of the foregoing; or any officer, director, member or manager of any partner of any of the foregoing.

(b) The owner(s) of the Private Amenities, their respective successors and assigns, shall have a perpetual, exclusive easement of access over the Properties for the flight of golf balls resulting from inadvertent shots and for the purpose of retrieving golf balls from the Common Area and any Unit, lying reasonably within range of golf balls hit from any golf course within such Private Amenity.

(c) The owner of any Private Amenity within or adjacent to any portion of the Properties, its agents, successors and assigns, shall at all times have a right and non-exclusive easement of access and use over those portions of the Common Area reasonably necessary to the operation, maintenance, repair and replacement of its Private Amenity.

(d) Declarant hereby reserves for itself, its successors and assigns and the owner(s) of any Private Amenities over, across and upon each and every Unit, an easement not to exceed twenty feet (20') as measured from the boundary line of the Unit that separates such Unit from any golf course to a line running parallel thereto being located twenty feet (20') into the interior of such Unit, the exact location of said easement shall be identified on the subdivision plat applicable to said Unit. Such easement may be used for the purposes of operation and maintenance of any golf course, including, without limitation, installation and maintenance of cart paths. By way of example and not limitation, such easement shall be for the purpose of authorizing entry onto such portions of the Unit to maintain or landscape the area encumbered by such easement. Such maintenance and landscaping shall include planting of grass, irrigation, fertilizer application, mowing and edging, and removal of any underbrush, trash, debris and trees of less than two (2) inches in diameter.

(e) There is hereby established for the benefit of the owner of any of the Private Amenities and their members (regardless of whether such members are Owners hereunder), guests, invitees, employees, agents, contractors, and designees, a right and nonexclusive easement of access and use over all roadways located within the Properties reasonably necessary to travel between the entrance to the Properties and the Private Amenities and over those portions of the Properties (whether Common Area or otherwise) reasonably necessary to the operation, maintenance, repair, and replacement of the Private Amenities. Without limiting the generality of the foregoing, members of the Private Amenities and guests and invitees of the Private Amenities shall have the right to park their vehicles on the roadways located within the Properties at reasonable times before, during, and after special events, tournaments and other similar functions held by or at the Private Amenities to the extent that the Private Amenities have insufficient parking to accommodate such vehicles. The Private Amenities, their guests, invitees, employees, agents, contractors and designees shall have the right to be admitted through any gate, after receipt of clearance from the Private Amenity, without the payment of a fee or charge for ingress or egress, provided that the number of such persons permitted entrance to the Properties at any one time may be limited or otherwise restricted to the reasonable number of parking spaces available at the Private Amenity in order to avoid congestion and the unauthorized parking of vehicles.

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(f) Any portion of the Properties immediately adjacent to the Private Amenities are hereby burdened with a non-exclusive easement in favor of the adjacent Private Amenities for overspray of water from the irrigation system serving the Private Amenities. Under no circumstances shall the Association or the owner(s) of the Private Amenities be held liable for any damage or injury resulting from such overspray or the exercise of this easement.

(g) The Declarant hereby reserves for itself, its successors and assigns, and may assign to the owner(s) of the Private Amenities, an easement and all rights to draw water from the lakes and ponds within or adjacent to the Properties for purposes of irrigation of the Private Amenities and for access to and the right to enter upon the lakes and ponds within or adjacent to the Properties, if any, for installation and maintenance of any irrigation systems.

(h) Declarant hereby establishes for the benefit of the owners of any Private Amenity and their employees, agents, contractors, and designees, a right and nonexclusive easement of access over any portion of the Properties which is contiguous to the respective Private Amenity, for the owner of the Private Amenity to enter such portions of the Properties, including each Unit, to perform maintenance. In the event that either an Owner or the Association fails to maintain any portions of the Properties which is contiguous to a Private Amenity in accordance with the requirements of this Declaration, the owner of such Private Amenity may perform the maintenance. The owner of the Private Amenity shall provide the owner of such property with at least thirty (30) days written notice and a reasonable opportunity to cure and correct any deficiency before exercising its rights hereunder. Any and all expenses incurred by the owner of the Private Amenity in performing such maintenance shall be paid by the owner of the property within thirty (30) days of its receipt of written demand therefore.

(i) The owner(s) of the Private Amenities shall have easements for erecting a reasonable number of temporary and permanent directional signs (the "Private Amenity Signs") to provide guidance to the public to the Private Amenities ("Private Amenity Sign Easement"). The owner(s) of the Private Amenities shall propose the number, style and locations of the Private Amenity Signs, which proposal shall be subject to the prior written approval of the DRB. The DRB's approval shall not be unreasonably withheld or delayed, and, the DRB may not withhold its consent to the extent that the Private Amenity Signs proposed (i) are of a size and style consistent with Declarant's signage for the Properties or any portion thereof; (ii) do not unreasonably interfere with Declarant's development and marketing of the Properties; (iii) comply with all applicable laws, governmental rules and regulations; and (iv) comply with the Design Guidelines. At minimum, the owner(s) of the Private Amenities shall be entitled to place primary Private Amenity Signs at locations adjacent to the main entrance to Rarity Pointe and the main entrance to the Private Amenities, which shall be fully visible to traffic flowing in both directions along roads accessing the main entrances. Notwithstanding the foregoing, Declarant shall be entitled from time to time to request that the owner of the Private Amenity relocate one (1) or more of the Private Amenity Signs to accommodate any changes which may from time to time occur in Declarant's development plans for the Properties, and such owner may not withhold or delay consent to the request if Declarant proposes a relocation site of equal quality to the location of any Private Amenity Sign as of that time. The owner of the Private Amenity shall install and maintain all its Private Amenity Signs located in the Private Amenity Sign Easement.

(j) Notwithstanding anything contained herein to the contrary, the easements described hereinabove may not be amended or extinguished without the written consent of the owner(s) of the Private Amenities.

11.11. Easement for Special Events. Declarant reserves, creates, establishes, promulgates and declares for itself, its successors, assigns and designees a perpetual, non-exclusive appurtenant easement over the Common Area for the purpose of conducting or allowing its designees to conduct educational,



cultural, entertainment, promotional or sporting events, and other activities of general community interest at such locations and times as Declarant, in its sole discretion, deems appropriate. Each Owner, by accepting a deed or other instrument conveying any interest in a Unit, acknowledges and agrees that the exercise of this easement may result in a temporary increase in traffic, noise, gathering of crowds, and related inconveniences, and each Owner agrees on behalf of itself and the occupants of its Unit to take no action, legal or otherwise, which would interfere with the exercise of such easement or to recover damages for or as the result of any such activities.

11.12. Rights to Stormwater Runoff, Effluent and Water Reclamation. Declarant hereby reserves for itself and its designees, including but not limited to the owner of any Private Amenity, all rights to ground water, surface water, storm water runoff, and effluent located or produced within the Properties, and each Owner agrees, by acceptance of a deed to a Unit, that Declarant shall retain all such rights. Such right shall include an easement over the Properties for access, and for installation and maintenance of facilities and equipment to capture and transport such water, runoff and effluent.

11.13. Easement for Greenbelt Maintenance.

(a) Declarant reserves for itself and its successors, assigns, and designees the nonexclusive right and easement, but not the obligation, to enter upon greenbelts, buffer zones and nondisturbance areas located within the Area of Common Responsibility to remove trash and other debris therefrom and fulfill maintenance responsibilities as provided in this Declaration. The Declarant's rights and easements provided in this Section shall be automatically transferred to the Association at the expiration of the Development Period or such earlier time as Declarant may elect, in its sole discretion, to transfer such rights by a written instrument. The Declarant, the Association, and their designees shall have an access easement over and across any of the Properties abutting or containing any portion of greenbelt, buffer zone or nondisturbance area to the extent reasonably necessary to exercise their rights under this Section.

(b) Encroachment of structures into, over, or across greenbelts, buffer zones and nondisturbance areas shown on any recorded subdivision plat of the Properties is strictly prohibited. Landscaping in these areas is subject to removal in the reasonable discretion of Declarant in the ordinary course of maintenance of these areas. Any landscaping permitted shall be installed in conformance with Article 9 herein. All Persons entitled to exercise these easements shall use reasonable care in, and repair any damage resulting from the intentional exercise of such easements.

(c) Declarant reserves unto itself the right, in the exercise of its sole discretion, upon the request of any Person holding, or intending to hold, an interest in the Properties, or at any other time, (i) to release all or any portion of the Properties from the burden, effect, and encumbrance of any of the easements granted or reserved under this Section, or (ii) to define the limits of any such easements.

11.14. Liability for Use of Easements. No Owner shall have a claim or cause of action against the Declarant, the Association, their successors or assigns, including without limitation the owner(s) of any Private Amenities, arising out of the exercise or non-exercise of any easement reserved hereunder or shown on any subdivision plat for the Properties, except in cases of willful or wanton misconduct.

11.15. Easement for Lake Access. Declarant hereby reserves the right but shall not have the obligation to grant to the Owners a perpetual, non-exclusive easement over and across areas of the Common Area adjacent to Tellico Lake designated by recorded subdivision plat for the purpose of ingress and egress to Tellico Lake. Such easement is limited solely to access at the locations, if any, designated and constructed by Declarant and/or the Association and shall not include the right for any individual Owner to construct any structure, walkway or path within the Common Area to facilitate Tellico Lake access.

## ARTICLE 12: MORTGAGEE PROVISIONS

The following provisions are for the benefit of holders, insurers and guarantors of first Mortgages on Units in the Properties. The provisions of this Article apply to both this Declaration and to the By-Laws, notwithstanding any other provisions contained therein.

12.1. Notices of Action. An institutional holder, insurer, or guarantor of a first Mortgage who provides a written request to the Association (such request to state the name and address of such holder, insurer, or guarantor and the street address of the Unit to which its Mortgage relates, thereby becoming an "Eligible Holder"), will be entitled to timely written notice of:

(a) Any condemnation loss or any casualty loss which affects a material portion of the Properties or which affects any Unit on which there is a first Mortgage held, insured, or guaranteed by such Eligible Holder;

(b) Any delinquency in the payment of assessments or charges owed by a Unit subject to the Mortgage of such Eligible Holder, where such delinquency has continued for a period of sixty (60) Days, or any other violation of the Declaration or By-Laws relating to such Unit or the Owner or occupant which is not cured within sixty (60) Days;

(c) Any lapse, cancellation, or material modification of any insurance policy maintained by the Association; or

(d) Any proposed action which would require the consent of a specified percentage of Eligible Holders pursuant to Federal Home Loan Mortgage Corporation requirements.

12.2. No Priority. No provision of this Declaration or the By-Laws gives or shall be construed as giving any Owner or other party priority over any rights of the first Mortgagee of any Unit in the case of distribution to such Owner of insurance proceeds or condemnation awards for losses to or a taking of the Common Area.

12.3. Notice to Association. Upon request, each Owner shall be obligated to furnish to the Association the name and address of the holder of any Mortgage encumbering such Owner's Unit.

12.4. Failure of Mortgagee to Respond. Any Mortgagee who receives a written request from the Board to respond to or consent to any action shall be deemed to have approved such action if the Association does not receive a written response from the Mortgagee within thirty (30) Days of the date of the Association's request, provided such request is delivered to the Mortgagee by certified or registered mail, return receipt requested.

12.5. Construction of Article 12. Nothing contained in this Article shall be construed to reduce the percentage vote that must otherwise be obtained under the Declaration, By-Laws, or Tennessee law for any of the acts set out in this Article.

## ARTICLE 13: DECLARANT'S RIGHTS

13.1. Transfer or Assignment. Any or all of the special rights and obligations of the Declarant set forth in the Governing Documents may be transferred or assigned in whole or in part to the Association or to other Persons, provided that the transfer shall not reduce an obligation nor enlarge a right beyond that which the Declarant has under this Declaration or the By-Laws. Upon any such transfer, the Declarant shall be automatically released from any and all liability arising with respect to

such transferred rights and obligations. No such transfer or assignment shall be effective unless it is in a written instrument signed by the Declarant and duly recorded in the Public Records.

13.2. Development and Sales. The Declarant, any Declarant-Related Entity, any designee of the Declarant, and Builders authorized by Declarant may maintain and carry on the Properties such activities as, in the sole opinion of the Declarant, may be reasonably required, convenient, or incidental to the development of the Properties and/or the construction or sale of Units, such as sales activities, tournaments, charitable events, and promotional events, and restrict Members from using the Common Area during such activities. Such activities shall be conducted in a manner to minimize (to the extent reasonably possible) any substantial interference with the Members' use and enjoyment of the Common Area. In the event that any such activity necessitates exclusion of Owners from Common Areas, such activities shall not exceed seven (7) consecutive Days. The Declarant and authorized Builders shall have easements over the Properties for access, ingress and conducting such activities.

In addition, the Declarant and Builders authorized by Declarant may establish within the Properties, including any clubhouse, such facilities as, in the sole opinion of the Declarant, may be reasonably required, convenient, or incidental to the development of the Properties and/or the construction or sale of Units, including, but not limited to, business offices, signs, model units, tents, sales offices, sales centers and related parking facilities. During the Development Period, Owners may be excluded from use of all or a portion of such facilities in the Declarant's sole discretion. The Declarant and authorized Builders shall have easements over the Properties for access, ingress, and egress and use of such facilities.

Declarant may permit the use of any facilities situated on the Common Area by Persons other than Owners without the payment of any use fees.

13.3. Improvements to Common Areas. The Declarant and its employees, agents and designees shall also have a right and easement over and upon all of the Common Area for the purpose of making, constructing and installing such improvements to the Common Area as it deems appropriate in its sole discretion.

13.4. Additional Covenants. No Person shall record any declaration of covenants, conditions and restrictions, declaration of condominium, easements, or similar instrument affecting any portion of the Properties without Declarant's review and written consent. Any attempted recordation without such consent shall result in such instrument being void and of no force and effect unless subsequently approved by written consent signed by the Declarant and recorded in the Public Records. No such instrument recorded by any Person, other than the Declarant pursuant to Section 7.4, may conflict with the Declaration, By-Laws or Charter.

13.5. Right of the Declarant to Disapprove Actions. Until the termination of the Development Period, the Declarant shall have the right to disapprove any action, policy or program of the Association, the Board and any committee which, in the sole judgment of the Declarant, would tend to impair rights of the Declarant or Builders under the Governing Documents, or interfere with development of, construction on, or marketing of any portion of the Properties, or diminish the level of services being provided by the Association. This right to disapprove is in addition to, and not in lieu of, any right to approve or disapprove specific actions of the Association, the Board or any committee as may be granted to the Declarant in the Governing Documents.

(a) The Declarant shall be given written notice of all meetings and proposed actions approved at meetings (or by written consent in lieu of a meeting) of the Association, the Board or any committee. Such notice shall be given by certified mail, return receipt requested, or by personal delivery

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at the address the Declarant has registered with the secretary of the Association, which notice complies with the By-Laws and which notice shall, except in the case of the regular meetings held pursuant to the By-Laws, set forth in reasonable particularity the agenda to be followed at such meeting. The Declarant may waive its right to receive notice in the same manner as provided in the By-Laws.

(b) The Declarant shall be given the opportunity at any such meeting to join in or to have its representatives or agents join in discussion from the floor of any prospective action, policy, or program which would be subject to the right of disapproval set forth herein. The Declarant, its representatives or agents may make its concerns, thoughts, and suggestions known to the Board and/or the members of the subject committee.

(c) No action, policy or program subject to the right of disapproval set forth herein shall become effective or be implemented until and unless the requirements of subsections (a) and (b) above have been met and the time period set forth in subsection (d) below has expired.

(d) The Declarant, acting through any officer, director, agent or authorized representative, may exercise its right to disapprove at any time within ten (10) Days following the meeting at which such action was proposed or, in the case of any action taken by written consent in lieu of a meeting, at any time within ten (10) Days following receipt of written notice of the proposed action. No action, policy or program shall be effective or implemented if the Declarant exercises its right to disapprove. This right to disapprove may be used to block proposed actions but shall not include a right to require any action or counteraction on behalf of any committee, or the Board or the Association. The Declarant shall not use its right to disapprove to reduce the level of services which the Association is obligated to provide or to prevent capital repairs or any expenditure required to comply with applicable laws and regulations.

13.6. Amendments. Notwithstanding any contrary provision of this Declaration, no amendment to or modification of any use restrictions and rules or Design Guidelines shall be effective without prior notice to and the written consent of the Declarant, during the Development Period. This Article may not be amended without the written consent of the Declarant. The rights contained in this Article shall terminate upon the earlier of: (a) thirty (30) years from the date this Declaration is recorded, or (b) upon recording by Declarant of a written statement that all sales activity has ceased.

#### ARTICLE 14: PRIVATE AMENITIES

14.1. General. Private Amenities shall not be a portion of the Common Area, and neither membership in the Association nor ownership or occupancy of a Unit shall confer any ownership interest in or right to use any Private Amenity. Rights to use the Private Amenities will be granted only to such persons, and on such terms and conditions, as may be determined from time to time by the respective owners of the Private Amenities. The owners of the Private Amenities shall have the right, from time to time in their sole and absolute discretion and without notice, to amend or waive the terms and conditions of use of their respective Private Amenities, including, without limitation, eligibility for and duration of use rights, categories of use, extent of use privileges, and number of users; and to require the payment of a purchase price, membership contribution, initiation deposit, dues, use charges and other charges for use privileges; and to change, eliminate or cease operation of any or all of the facilities; and to reserve use rights; and to terminate use rights altogether, subject to the terms of any written agreements.

14.2. Conveyance of Private Amenities. All Persons, including all Owners, are hereby advised that no representations or warranties have been or are made by the Declarant, the Association, any Builder, or by any Person acting on behalf of any of the foregoing, with regard to the continuing ownership or operation of any Private Amenity, and no purported representation or warranty in such regard, either written or oral, shall be effective unless specifically set forth in a written instrument

executed by the record owner of the Private Amenity. Further, the ownership or operation of the Private Amenities may change at any time by virtue of, but without limitation, (a) the sale to or assumption of operations of any Private Amenity by a Person other than the current owner or operator; (b) the establishment of, or conversion of the membership structure to, an "equity" club or similar arrangement whereby the members of the Private Amenity or an entity owned or controlled by its members become the owner(s) and/or operator(s) of the Private Amenity; or (c) the conveyance of any Private Amenity to one (1) or more affiliates, shareholders, employees, or independent contractors of the Declarant. No consent of the Association, any Neighborhood Association, any Voting Delegate, or any Owner shall be required to effectuate any change in ownership or operation of any Private Amenity, for or without consideration and subject to or free of any mortgage, covenant, lien or other encumbrance.

14.3. View Impairment. Neither the Declarant, the Association, nor the owner of any Private Amenity, guarantees or represents that any view over and across any Private Amenity or the Common Area from Units will be preserved without impairment. The owners of such property shall have no obligation to prune or thin trees or other landscaping, and shall have the right, in their sole and absolute discretion, to add trees and other landscaping or to install improvements or barriers (both natural and artificial) to the Private Amenities or the Common Area from time to time. In addition, the owner of any Private Amenity which includes a golf course may, in its sole and absolute discretion, change the location, configuration, size and elevation of the trees, landscaping, bunkers, fairways and greens, improvements and barriers (both natural and artificial) from time to time. Any such additions or changes may diminish or obstruct any view from the Units and any express or implied easements for view purposes or for the passage of light and air are hereby expressly disclaimed. Each Owner, by acceptance of a deed, acknowledges that any view of a Private Amenity or Common Area which the Unit may enjoy as of the date of the purchase of the Unit may be impaired or obstructed by the natural growth of existing landscaping, the installation of additional trees, other landscaping or other types of improvements or barriers (both natural and artificial) on the Private Amenity.

14.4. Golf Course. By acceptance of a deed to any Unit, each Owner acknowledges and agrees that owning property adjacent to a golf course has benefits as well as detriments and that the detriments include: (a) the risk of damage to property or injury to persons and animals from golf balls which are hit onto an Owner's Unit or other portion of the Properties or arising from the design, construction, operation, maintenance and/or use of the golf course; (b) the entry by golfers onto an Owner's Unit or other portion of the Properties utilized by the golfer to retrieve golf balls and/or other acts or omissions of persons using the golf course; (c) noise from golfers; (d) overspray of herbicides, fungicides, pesticides, fertilizers and water in connection with the maintenance of the roughs, fairways and greens on the golf course; (e) noise from golf course maintenance and operation equipment (including, without limitation, compressors, blowers, mulches, tractors, utility vehicles and pumps, all of which may be operated at all times of the day and night and/or continuously); (f) odors arising from irrigation and fertilization of the turf situated on the golf course; (g) disturbance and loss of privacy resulting from motorized golf car traffic, golfers and golf course maintenance personnel; (h) artificial light illuminating from any facilities; (i) the existence of water hazards, ponds, and/or lakes on the golf course; and (j) view restrictions caused by maturation of trees and shrubbery. Additionally each Owner acknowledges that pesticides and chemicals may be applied to the golf course throughout the year and that reclaimed water, treated waste water or other sources of non-potable water may be used for irrigation of the golf course.

Each Owner hereby assumes such risks of owning property adjacent to a golf course and forever waives and relinquishes, and agrees not to institute any action or suit at law or in equity nor to institute or prosecute, any claim or demand against Tellico Landing L.L.C., the Declarant, or any successor Declarant; the Association or its Members (in their capacity as such); the owner(s) of the Private Amenities or their successors, successors-in-title, or assigns; any Builder or contractor (in their capacities as such); the golf course designer or builder; any officer, director, member, manager, or partner of any of

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the foregoing, or any officer, director, member or manager of any partner of the foregoing for or on account of any damages, loss, or injury either to person or property, or both, resulting directly or indirectly from the design, construction, operation, maintenance and/or use of the golf course. Each Owner hereby agrees to take any necessary steps to maintain adequate hazard and other insurance policies to protect such Owner and such Owner's family, guests, invitees, agents and employees against all such risks associated with the golf course. Each Owner hereby agrees to indemnify and hold harmless all of the above-named Persons against any and all claims by such Owner's family, guests and invitees.

14.5. Cost Sharing Agreements. The Association may enter into a contractual arrangement or Cost Sharing Agreement with the owner of any Private Amenity obligating the Private Amenity or the Association to contribute funds for, among other things, shared property or services and/or a higher level of Common Area maintenance in accordance with Section 5.6.

14.6. Architectural Control. Following the termination of the Development Period, neither the Association, nor any committee thereof, shall approve or permit any construction, addition, alteration, change, or installation on or to any portion of the Properties which is contiguous to or within one hundred (100) feet of any Private Amenity without giving the owner of such Private Amenity at least fifteen (15) Days prior written notice of its intent to approve or permit the same together, with copies of the request and all other documents and information finally submitted in such regard. The owner of such Private Amenity shall then have fifteen (15) Days to approve or disapprove the proposal in writing delivered to the appropriate committee or Association, stating in detail the reasons for any disapproval. The failure of the owner of such Private Amenity to respond to the notice within the fifteen (15) Day period shall constitute a waiver of the owner of such Private Amenity's right to object to the matter. If in the reasonable opinion of the owner of the Private Amenity, the construction or modification being reviewed would have material adverse impact on the Private Amenity whether by restriction of view, creation of hazards to persons or otherwise, then the requesting party shall resubmit to the DRB a revised plan to take into account the objection of the owner of such Private Amenity. The review and approval process set forth in this Section shall apply to the re-submitted plans. This Section shall also apply to any work on the Common Area contiguous to any Private Amenity. This Section shall not be applicable during the Development Period.

14.7. Use Restrictions. Upon request of the owner of any Private Amenity, the Association shall enforce its use restrictions and rules against any Owner or occupant violating such regulations within such Private Amenity, including but not limited to the exercise of the Association's self-help rights for violation of sign and pet restrictions.

14.8. Limitations on Amendments. In recognition of the fact that the provisions of this Article are for the benefit of the Private Amenities, no amendment to this Article, and no amendment in derogation of any other provisions of this Declaration benefiting any Private Amenity, may be made without the written approval of the owner(s) of the affected Private Amenity. The foregoing shall not apply, however, to amendments made by the Declarant.

14.9. Jurisdiction and Cooperation. It is Declarant's intention that the Association and the Private Amenities shall cooperate to the maximum extent possible in the operation of the Properties and the Private Amenities. Each shall reasonably assist the other in upholding the Community-Wide Standard as it pertains to maintenance and the Design Guidelines. The Association shall have no power to promulgate use restrictions or rules affecting activities on or use of the Private Amenities without the prior written consent of the owners of the Private Amenities affected thereby.

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#### 14.10. Club Membership and Other Club Matters.

(a) Mandatory Social Membership. Every Owner, other than the Declarant, Declarant-Related Entity, or a Builder, shall be a "Social Member" of the Rarity Pointe Club (the "Club"), but shall have the right to upgrade as set forth in Section 14.11 below. There shall be only one (1) Social Membership per Unit. If a Unit is owned by more than one (1) Person, all co-Owners shall be subject to the usage rules and requirements established by the Club in the Club's sole discretion from time to time. All Owners will be subject to the bylaws, rules, regulations, and charges of the Club and shall be responsible for the payment of Social Membership Dues to the Club. At the closing of a Unit, each Owner shall be required to remit an initiation deposit applicable to a Social Membership to the Club. Upon closing and payment of such deposit, the Owner's membership shall become effective and the Social Membership shall entitle the Owner and his or her family and guests to Membership privileges at the Club in accordance with the Club's membership program. The Social Membership does not include golfing privileges at the Club. The Owner shall have no right of reimbursement or refund for initiation fees or deposits related to the Social Membership except in accordance with the Club's membership plan, and the Social Membership is non-transferable except in connection with the sale of the Unit relating to such Social Membership.

(b) Mandatory Social Membership Dues. Commencing on the date of closing of the Unit the Club shall be entitled to charge and collect dues directly from each Owner on an annual basis ("Social Membership Dues"), prorated from the date of closing on the purchase of a Unit. The Social Membership Dues shall be payable by each Owner to the Club without set-off, diminution or abatement for any reason. Each Owner, by accepting a deed or entering into a contract of sale for any portion of the Properties, is deemed to have notice of liability for these Social Membership Dues and to covenant and agree to pay these assessments. All such Social Membership Dues or other charges, together with interest not to exceed the maximum rate allowable by law, late charges of ten percent (10%) per annum or the highest amount allowable by law, whichever is greater, costs of collection, and reasonable attorneys fees shall be the personal obligation of the Owner of such Unit at the time the Social Membership Dues or other charges arose. Upon a transfer of title to a Unit, the grantee shall be jointly and severally liable for any Social Membership Dues and other charges due at the time of conveyance. However, no first Mortgagee who obtains title to a Unit by exercising the remedies provided in its Mortgage shall be liable for unpaid Social Membership Dues or other charges which accrued prior to such acquisition of title. No Owner shall be exempt from liability for Social Membership Dues by non-use of the Club, abandonment of the Unit, or any other means, except as may be provided in the Club's membership program. The obligation to pay Social Membership Dues is a separate and independent covenant on the part of each Owner.

(c) Lien for Social Membership Dues. The Club shall have a lien against each Unit to secure payment of all or any portion of the initiation deposit which was not paid at closing and delinquent Social Membership Dues, as well as interest at a rate to be set by the Club (subject to the maximum interest rate limitations of Tennessee law), costs of collection and reasonable attorneys fees. Such lien shall be superior to all other liens, except (i) the liens of all taxes, bonds, assessments, and other levies which by law would be superior, (ii) the lien or charge of any first Mortgage of record (meaning any recorded Mortgage with first priority over other Mortgages) made in good faith and for value, and (iii) the lien(s) of the Association pursuant to Section 8.7 of this Declaration, regardless of the date of recording of such lien(s). The Club's lien may be enforced by suit, judgment, and judicial or non-judicial foreclosure as permitted under Tennessee law.

Notwithstanding anything contained herein to the contrary, as a condition precedent to the Club's obtaining lien rights, and/or enforcement rights pursuant to the terms of this Section, the Club must first provide the Association with twenty (20) Days prior written notice of the Club's intent to record a lien against a Unit, and/or proceed with other judicial or non-judicial foreclosure of the lien.

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The sale or transfer of any Unit shall not affect the Club's assessment lien nor relieve such Unit from the lien for any subsequent Club assessments. A Mortgagee or other purchaser of a Unit who obtains title pursuant to foreclosure of the Mortgage shall not be personally liable for Social Membership Dues due prior to such acquisition of title.

14.11. Upgraded Social Membership. The Club will offer a variety of memberships with more extensive benefits than those of the mandatory Social Membership. Owners may upgrade their mandatory Social Membership pursuant to the membership plan, by-laws, and rules and regulations of the Club, as amended from time to time. Any Owner upgrading his or her Social Membership shall receive a credit against the required Social Membership Dues upon the payment of dues related to the upgraded membership category, but shall not be excused from paying Social Membership Dues. If an Owner terminates such upgraded membership, the Social Membership and the obligation to pay Social Membership Dues shall continue and shall not be terminated.

**ARTICLE 15: GENERAL PROVISIONS**

15.1. Duration.

(a) Unless terminated as provided in Section 15.1(b), this Declaration shall have perpetual duration. If Tennessee law hereafter limits the period during which covenants may run with the land, then to the extent consistent with such law, this Declaration shall automatically be extended at the expiration of such period for successive periods of ten (10) years each, unless terminated as provided herein. Notwithstanding the above, if any of the covenants, conditions, restrictions, or other provisions of this Declaration shall be unlawful, void, or voidable for violation of the rule against perpetuities, then such provisions shall continue only until twenty-one (21) years after the death of the last survivor of the now living descendants of Elizabeth II, Queen of England.

(b) Unless otherwise provided by Tennessee law, in which case such law shall control, this Declaration may not be terminated within thirty (30) years of the date of recording without the consent of all Owners. Thereafter, it may be terminated only by an instrument signed by Owners of at least seventy-five (75%) of the total Units within the Properties and by the Declarant, if the Declarant owns any portion of the Properties, which instrument is recorded in the Public Records. Nothing in this Section shall be construed to permit termination of any easement created in this Declaration without the consent of the holder of such easement.

15.2. Amendment.

(a) By Declarant. Until termination of the Class "B" membership, Declarant may unilaterally amend this Declaration for any purpose. Thereafter, the Declarant may unilaterally amend this Declaration at any time and from time to time if such amendment is necessary (i) to bring any provision into compliance with any applicable governmental statute, rule, regulation, or judicial determination; (ii) to enable any reputable title insurance company to issue title insurance coverage on the Units; (iii) to enable any institutional or governmental lender, purchaser, insurer or guarantor of Mortgage loans, including, for example, the Federal National Mortgage Association or Federal Home Loan Mortgage Corporation, to make, purchase, insure or guarantee Mortgage loans on the Units; or (iv) to satisfy the requirements of any local, state or federal governmental agency. However, any such amendment shall not adversely affect the title to any Unit unless the Owner shall consent in writing. In addition, during the Development Period, Declarant may unilaterally amend this Declaration for any other purpose, provided the amendment has no material adverse effect upon any right of any Owner.

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(b) By Members. Except as otherwise specifically provided above and elsewhere in this Declaration, this Declaration may be amended only by the affirmative vote or written consent, or any combination thereof, of Members holding sixty-seven percent (67%) of the total Class "A" votes in the Association, and during the Development Period, the written consent of the Declarant. Notwithstanding the above, the percentage of votes necessary to amend a specific clause shall not be less than the prescribed percentage of affirmative votes required for action to be taken under that clause.

(c) Validity and Effective Date. Any amendment to the Declaration shall become effective upon recordation in the Public Records, unless a later effective date is specified in the amendment. Any procedural challenge to an amendment must be made within six (6) months of its recordation or such amendment shall be presumed to have been validly adopted. In no event shall a change of conditions or circumstances operate to amend any provisions of this Declaration. No amendment may remove, revoke, or modify any right or privilege of the Declarant or the Class "B" Member without the written consent of the Declarant, the Class "B" Member, or the assignee of such right or privilege.

If an Owner consents to any amendment to this Declaration or the By-Laws, it will be conclusively presumed that such Owner has the authority to consent, and no contrary provision in any Mortgage or contract between the Owner and a third party will affect the validity of such amendment.

15.3. Severability. Invalidation of any provision of this Declaration, in whole or in part, or any application of a provision of this Declaration by judgment or court order shall in no way affect other provisions or applications.

15.4. Dispute Resolution. It is the intent of the Association and the Declarant to encourage the amicable resolution of disputes involving the Properties and to avoid the emotional and financial costs of litigation if at all possible. Accordingly, the Association, the Declarant and each Owner covenants and agrees that it shall attempt to resolve all claims, grievances or disputes involving the Properties, including, without limitation, claims, grievances or disputes arising out of or relating to the interpretation, application or enforcement of the Governing Documents through alternative dispute resolution methods, such as mediation and arbitration. To foster the amicable resolution of disputes, the Board may adopt alternative dispute resolution procedures.

Participation in alternative dispute resolution procedures shall be voluntary and confidential. Should either party conclude that such discussions have become unproductive or unwarranted, then the parties may proceed with litigation.

15.5. Litigation. Except as provided below, no judicial or administrative proceeding shall be commenced or prosecuted by the Association unless Members holding at least eighty percent (80%) of the total Class "A" votes in the Association approve the commencement of such a proceeding. If Voting Delegates have been elected, a Voting Delegate shall not vote in favor of bringing or prosecuting any such proceeding unless at least eighty percent (80%) of the total votes attributable to Units in the Neighborhood represented by the Voting Delegate are cast in favor of commencement of such a proceeding. This Section shall not apply, however, to (a) actions brought by the Association to enforce the provisions of the Governing Documents (including, without limitation, the foreclosure of liens); (b) the imposition and collection of assessments as provided in Article 8; (c) proceedings involving challenges to ad valorem taxation; (d) counter-claims brought by the Association in proceedings instituted against it or (e) actions brought by the Association against any contractor, vendor, or supplier of goods or services arising out of a contract for services or supplies. This Section shall not be amended unless such amendment is approved by the percentage of votes, and pursuant to the same procedures, necessary to institute proceedings as provided above.

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15.6. Non-Merger. Notwithstanding the fact that Declarant is the current owner of the Properties, it is the express intention of Declarant that the easements established in the Declaration for the benefit of the Properties and Owners shall not merge into the fee simple estate of individual Units conveyed by Declarant or its successor, but that the estates of the Declarant and individual lot owners shall remain as separate and distinct estates. Any conveyance of all or a portion of the Properties shall be subject to the terms and provisions of this Declaration, regardless of whether the instrument of conveyance refers to this Declaration.

15.7. Grants. The parties hereby declare that this Declaration, and the easements created herein shall be and constitute covenants running with the fee simple estate of the Properties. The grants and reservations of easements in this Declaration are independent of any covenants and contractual agreements undertaken by the parties in this Declaration and a breach by either party of any such covenants or contractual agreements shall not cause or result in a forfeiture or reversion of the easements granted or reserved in this Declaration.

15.8. Cumulative Effect; Conflict. The provisions of this Declaration shall be cumulative with any additional recorded covenants, restrictions, and declarations applicable to any Neighborhood, and the Association may, but shall not be required to, enforce such additional covenants, conditions and provisions; provided however, in the event of a conflict between or among this Declaration and such covenants, restrictions or declarations, and/or the provisions of any Charter by-laws, rules and regulations, policies, or practices adopted or carried out pursuant thereto, this Declaration, the By-Laws, Charter, and use restrictions and rules of the Association shall prevail over those of any Neighborhood. The foregoing priorities shall apply, but not be limited to, the lien for assessments created in favor of the Association. Nothing in this Section shall preclude any Supplemental Declaration or other recorded covenants, restrictions and declarations applicable to any portion of the Properties from containing additional covenants, restrictions or provisions which are more restrictive than the provisions of this Declaration, and the Association shall have the standing and authority to enforce the same.

15.9. Use of the "Rarity Pointe" Name and Logo. No Person shall use the words "Rarity Pointe" or the logo for "Rarity Pointe" or any derivative in any printed or promotional material without the Declarant's prior written consent. However, Owners may use the words "Rarity Pointe" in printed or promotional matter where such terms are used solely to specify that particular property is located within Rarity Pointe, and the Association and any other community association located in Rarity Pointe, the Declarant, and the owner of any Private Amenity shall each be entitled to use the words "Rarity Pointe" in their names.

15.10. Compliance. Every Owner and occupant of any Unit shall comply with the Governing Documents. Failure to comply shall be grounds for an action by the Association or by any aggrieved Owner(s) to recover sums due, for damages or injunctive relief, or for any other remedy available at law or in equity, in addition to those enforcement powers granted to the Association in Section 4.3.

15.11. Notice of Sale or Transfer of Title. Any Owner desiring to sell or otherwise transfer title to a Unit shall give the Board at least seven (7) Days' prior written notice of the name and address of the purchaser or transferee, the date of such transfer of title, and such other information as the Board may reasonably require. After the transfer of title, the transferor shall continue to be jointly and severally responsible with the transferee for all obligations of the Owner of the Unit, including assessment obligations, until the date upon which such notice is received by the Board, notwithstanding the transfer of title.

15.12. Exhibits. Exhibits "A" and "B" attached to this Declaration are incorporated by this reference and amendment of such exhibits shall be governed by the provisions of Section 15.2. Exhibit "C" is attached for informational purposes and may be amended as provided therein.

[SIGNATURE ON FOLLOWING PAGE]

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration this 26th day  
of June, 2002.

LTR PROPERTIES, INC., a Tennessee corporation,

By: [Signature] [SEAL]  
Mr. Michael L. Ross

Its: President

STATE OF TENNESSEE

COUNTY OF Monroe

Before me, the undersigned authority, a Notary Public in and for said State and County, personally appeared Mr. Michael Ross, with whom I am personally acquainted, and who, upon oath, acknowledged himself/herself to be the President of LTR Properties, Inc., a Tennessee corporation, the within named Declarant, and that he/she as such President, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by himself/herself as such President.

Witness my hand and seal, at office this 26th day of June, 2002.

[Signature]  
Notary Public

My Commission Expires: 4-5-06



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## CONSENT OF LENDER

The undersigned, SunTrust Bank, by and through its authorized officer, hereby consents to the foregoing Declaration of Covenants, Conditions and Restrictions for Rarity Pointe in accordance with Section \_\_\_\_\_ of that certain Land Acquisition and Development Loan Agreement by and between Tellico Landing L.L.C. as Borrower and SunTrust Bank as Lender dated 6/27/02.

Executed this 27th day of June, 2002.

By: Mike Sandlin

Name: MIKE SANDLIN

Title: First Vice President

STATE OF TENNESSEE

COUNTY OF Knox

Before me, the undersigned authority, a Notary Public in and for said State and County, personally appeared Mike Sandlin, with whom I am personally acquainted, and who, upon oath, acknowledged himself/herself to be the First Vice President of SunTrust Bank, the within named Declarant, and that he/she as such Officer, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by himself/herself as such First Vice President.

Witness my hand and seal, at office this 27th day of June, 2002.

Devin A. Reuter, Chisley  
Notary Public

My Commission Expires: 10/4/02

OWNER CONSENT

OWNER: TELlico LANDING, LLC, a Tennessee Limited Liability Company

By:  [SEAL]  
Mr. Michael L. Ross

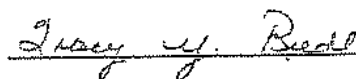
Its: Chief Manager

STATE OF TENNESSEE

COUNTY OF Monroe

Before me, the undersigned authority, a Notary Public in and for said State and County, personally appeared Mr. Michael Ross, Chief Manager of Tellico Landing, LLC, a Tennessee limited liability company, with whom I am personally acquainted, and who, upon oath, acknowledged himself/herself to be the Chief Manager of Tellico Landing, LLC, a Tennessee limited liability company, and that he/she as such Chief Manager, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing the name of the limited liability company by himself/herself as such Chief Manager.

Witness my hand and seal, at office this 26th day of June, 2002.



NOTARY PUBLIC

MY COMMISSION EXPIRES: 4-5-06

[NOTARIAL SEAL]

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**EXHIBIT "A"**

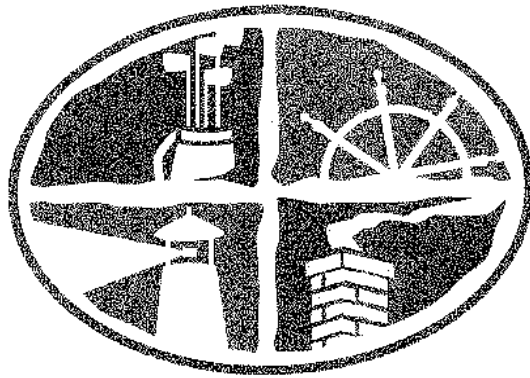
ALL THOSE TRACTS or parcels of land lying and being in the Third Civil District of Loudon County, Tennessee, being more particularly described on that certain Final Plat for Rarity Pointe on Lake Tellico, Phase One, recorded on June 7, 2002, in Plat Cabinet F, Slides 54, 55, 56, and 57, and revised in Plat Cabinet F, Slide 65, 66, 67 & 68, Register's Office of Loudon County, Tennessee, prepared for Tellico Landing, LLC, by Christopher M. Rosser, Tennessee Registered Land Surveyor No. 1929, of Sterling Engineering, Inc., 1017 Hampshire Drive, Maryville, Tennessee, 37801-3525.

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*

**EXHIBIT "B"**

**Additional Property**

Any real property located within five (5) miles of the perimeter boundary of the real property described on Exhibit "A" attached hereto.



# Rarity Pointe

PLAY LIKE A CHAMPION

Another Fine Living Experience Offered By Rarity Communities, Inc.

WHEREAS, Tellico Landing, LLC, a Tennessee limited liability company, is the owner of the Submitted Property; and

WHEREAS, the Submitted Property is a portion of the Properties; and

WHEREAS, the Declarant, with the consent of Tellico Landing, LLC, deems it appropriate to submit the Submitted Property to the additional covenants and easements as set forth herein;

NOW, THEREFORE, pursuant to the powers retained by Declarant under the Declaration, Declarant, with the consent of owner Tellico Landing, LLC, hereby subjects the real property described on Exhibit "A" hereof to the provisions of this Supplemental Declaration, which shall apply to such Submitted Property in addition to the provisions of the Declaration. Such Submitted Property shall be sold, transferred, used, conveyed, occupied, and mortgaged or otherwise encumbered pursuant to the provisions of this Supplemental Declaration and the Declaration, both of which shall run with the title to such Submitted Property and shall be binding upon all persons having any right, title, or any interest in such Submitted Property, their respective heirs, legal representatives, successors, successors-in-title, and assigns. The provisions of this Supplemental Declaration shall be binding upon Rarity Pointe Community Association, Inc. in accordance with the terms of the Declaration.

## **ARTICLE 1**

### **Definitions**

The definitions set forth in Article 1 of the Declaration are incorporated herein by reference. In addition, the following capitalized terms, wherever used in this Supplemental Declaration, shall have the meanings set forth below.

1.1 "Manager": The Person designated by the Declarant to facilitate and oversee the Rental Program.

1.2 "Phase One Plat": The Plat prepared by Charles H. Sterling, Tennessee Registered Land Surveyor Number 851, of Sterling Civil Engineering, 1017 Hampshire Drive, Maryville, Tennessee 37801-3525, dated March 7, 2002, as the same may have been revised as of the date of this Supplemental Declaration.

1.3 "Rental Management Agreement": An agreement between the Manager and the Owner which sets forth the terms and conditions of the submission of the Owner's Unit into the Rental Program.

1.4 "Rental Program": A leasing program established by the Declarant for "completed Units" (as defined in Section 9.6 of the Declaration) within the Submitted Property for short-term temporary use by patrons for recreational purposes as such program may be modified from time to time by Declarant.



1.5 "Tenant": Those patrons who lease Units from the Manager through the Rental Program. The definition of "Tenant" shall not include tenants or other occupants who are guests of the Owner apart from the Manager-administered Rental Program.

1.6 "Zoning Restrictions": Those requirements, regulations, and use restrictions set forth in Contract Number TV-60000A (the "Contract") between Tellico Reservoir Development Agency, an agency of the State of Tennessee and organized pursuant to Tennessee Public Act No. 679 of April 1, 1982, Tenn. Code Ann. §§ 64-1-701 to -711 (1982 and Supp. 1985) (hereinafter referred to as "TRDA") and the Tennessee Valley Authority, a corporate agency and instrumentality of the United States of America, organized and existing pursuant to the Tennessee Valley Authority Act of 1933, (hereinafter referred to as "TVA"), which was entered into between TRDA and TVA on August 25, 1982, of record in the Register's Office for Loudon County, Tennessee, in Trust Book 187, page 819 as the same has been amended to date by Supplement Number 1 dated June 24, 1985, of record in said Register's Office in Trust Book 205, page 624; Supplements Numbers 2-6 dated June 16, 1995, of record in said Register's Office in Trust Book 357, page 229; Supplement Number 7 dated July 29, 1994, of record in said Register's Office in Trust Book 340, page 149, and Supplement Number 8 dated January 14, 1997, of record in said Register's Office in Trust Book 393, page 740. The Contract, as supplemented and amended, provides for development of certain Tellico Reservoir project shoreland designated for industrial, residential, and commercial and public recreation development uses. The particular restrictions applicable to the Submitted Property are found in Section 2.050 of the Contract, as such may be amended or supplemented from time to time.

## ARTICLE 2

### Neighborhood Designation

The Submitted Property shall be designated as a Neighborhood which shall be known as the "Phase One" Neighborhood.

## ARTICLE 3

### Recreational Use of the Units

3.1 Recreational Use. Units which are subject to this Supplemental Declaration may be used only for recreational purposes. A purpose shall be considered recreational so long as (a) the Owner is inhabiting the Unit for the purposes of engaging in the recreational activities available at Rarity Pointe and Tellico Lake, and the Owner is not occupying the Unit with the purpose of residing there full time, or (b) the Owner has voluntarily placed the Unit in the Rental Program. The determination concerning whether a particular Unit is being utilized for recreational purposes shall be at the sole discretion of the governing agency (the "Zoning Agency") responsible for administering the Zoning Restrictions. No Person, including, without limitation, any other Owner, the Association, or the Declarant, shall have standing to bring forth a complaint regarding whether a Unit is being utilized for recreational purposes without the prior written consent of the Zoning Agency.

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This recreational use restriction may be repealed upon the execution of a subsequent supplemental declaration by the Declarant and consented to by the Zoning Agency.

#### ARTICLE 4

##### Rental Program

4.1 Rental Program Participation. Every Owner of a "completed Unit" (as defined in Section 9.6 of the Declaration) within the Submitted Property who desires to participate in the Rental Program shall do so by executing a Rental Management Agreement. The terms and conditions of the Rental Program are subject to change from time-to-time by the Declarant provided that all amendments comply with the Zoning Restrictions. The Rental Program as well as the Owner's inclusion of its Unit in the Rental Program shall be deemed to comply with Section 10.1 of the Declaration.

4.2 Relationship to the Association. The Rental Program shall be created by the Declarant, governed by the terms of the Rental Management Agreement as required by the Zoning Restrictions, and administered by the Manager. The Association shall not participate in any way in the administration or governance of the Rental Program both during the Development Period and following the Development Period, except with the written consent of the Declarant. The Association shall continue to have authority regarding matters under the Governing Documents which are not administered, governed or controlled by the Manager in accordance with the Rental Program.

##### 4.3 Changes or Deletions to the Zoning Restrictions.

(a) Should any change, revision or amendment in the Zoning Restrictions become effective such that the permitted uses of the Submitted Property include other categories beyond those which are permitted as of the date of this Supplemental Declaration, the Declarant shall have the right to amend or, if permitted by the Zoning Restrictions, rescind the Rental Program effective immediately upon the date on which such a change, revision or amendment becomes effective.

(b) The Declarant, including any Declarant-Related Entity, and the Manager shall not be responsible for any changes in valuation or any other loss or damage resulting from any change, revision or amendment in the Zoning Restrictions or the Rental Program which increase or reduce the permitted uses or other restrictions of the Submitted Property from those existing as of the date of this Supplemental Declaration.

(c) Any changes and amendments pursuant to this Section 4.3 may be enacted through an amendment to this Supplemental Declaration, the recording of an additional Supplemental Declaration, or a change to the Phase One Plat.

4.4. Tenant Occupancy. Each Owner of a Unit within the Submitted Property acknowledges that the Units within the Submitted Property may be occupied by transient patrons

consistent with the permitted uses and use restrictions set forth by the Zoning Restrictions and this Supplemental Declaration.

4.5 Timesharing. Declarant exempts the Submitted Property from the prohibition of timesharing set forth in Section 10.25 of the Declaration to the extent that the Manager, with the prior consent of the Declarant, the Declarant, or a Declarant-Related Entity, establishes a timesharing, fraction sharing, or similar program whereby the right to exclusive use of the Unit rotates among participants in the program for a fixed or floating time schedule over a period of years. The exemption set forth in this Section 4.5 shall not extend to any other parties, including, without limitation, an individual Owner or a group of Owners who desire to establish such a timesharing program for a Unit or a group of Units.

## ARTICLE 5

### Modifications to the Declaration with Respect to the Submitted Property

The Declaration is hereby modified with respect to the Submitted Property as follows.

5.1 Lake. In addition to the provisions of Section 2.4 of the Declaration, under no circumstance shall the Manager or any Person acting on its behalf assume any liability for use of Tellico Lake by an Owner, a Tenant, or their invitees, or licensees.

5.2 Enforcement. Section 4.3 of the Declaration is hereby modified with respect to the Submitted Property such that fines first levied against a Tenant for violating the Governing Documents and not timely paid may be levied against the Owner of the Unit occupied by such Tenant only as permitted pursuant to the terms of the Rental Management Agreement. In addition, in the event that the Board or any committee established by the Board, with the Board's approval, sanctions a Tenant for violating the Governing Documents, the Board shall not have the right to also sanction the Owner of the Unit that the Tenant is occupying pursuant to the Rental Program.

5.3 Security. In addition to Section 4.8 of the Declaration which shall remain and apply to the Submitted Property in full force and effect, each Owner further acknowledges, understands and covenants that the Manager is not an insurer or guarantor of security within the Properties and that each Person, including Tenants, using the Properties assumes all risks of personal injury and loss or damage to property, including Units and the contents of Units, resulting from acts of third parties.

5.4 Utility Lines. In addition to Section 4.9 of the Declaration which shall remain and apply to the Submitted Property in full force and effect, each Owner further acknowledges, understands and covenants that the Manager is not an insurer or guarantor of health within the Properties and that the Manager shall not be held liable for any personal injury, illness or any other loss or damage caused by the presence or malfunction of utility lines or utility sub-stations adjacent to, near, over, or on the Properties and further acknowledges that the Manager has not made any representations or warranties, express or implied, relative to the condition or impact of utility lines or utility sub-stations.

5.5 Presence and Management of Wildlife. In addition to Section 4.16 of the Declaration which shall apply to the Submitted Property in full force and effect, each Owner and occupant, and each Tenant, guest and invitee of any Owner or occupant further acknowledges that the Manager shall not be liable or responsible for any personal injury, illness, or any other loss or damage caused by the presence of wildlife on the Properties.

5.6 Specific Assessments. Section 8.6 of the Declaration is hereby modified with respect to the Submitted Property as follows: (a) the Association shall not have the power to levy Specific Assessments against a particular Unit or Units to cover the costs, including overhead and administrative costs, of providing benefits, items, or services selected by Tenants of the Owner's Unit pursuant to the Rental Program; and (b) the Association shall not have the power to levy Specific Assessments against a particular Unit to cover costs incurred as a consequence of the conduct of a Tenant of the Unit pursuant to the Rental Program.

5.7 Rules and Regulations. Section 10.2 of the Declaration is hereby amended with respect to the Submitted Property such that the Manager of the Rental Program shall have the right to impose rules and regulations in addition to those rules and regulations imposed by the Board. Where the rules and regulations imposed by the Manager are inconsistent with the rules and regulations imposed by the Board, the Declarant shall determine which rules shall govern and control. In the absence of such a determination by the Declarant within thirty (30) days of the creation of the inconsistency, the rules and regulations imposed by the Manager shall govern and control over the Units within the Submitted Property.

5.8 Occupants Bound. Section 10.3 of the Declaration is hereby modified with respect to the Submitted Property as follows: (a) sanctions established against Owners shall not apply to Tenants unless the Declarant or Manager imposes such sanctions against the Tenant pursuant to the Rental Program; and (b) fines first levied against Tenants and not timely paid may be levied against the Owner of the Unit occupied by such Tenant only as permitted pursuant to the terms of the Rental Management Agreement. This Section 5.8 of this Supplemental Declaration applies only to Tenants who are permitted to occupy the Unit by the Manager through the Rental Program. The provisions of Section 10.3 of the Declaration shall apply to any other occupant of the Unit.

5.9 Leasing. Section 10.4 of the Declaration is hereby modified with respect to the Submitted Property such that the Owner and Manager shall not be required to notify the Board or provide any additional information regarding any lease to a Tenant executed through the Rental Program. In addition the leases to a Tenant of the Rental Program shall not require that the Tenant acknowledge a receipt of a copy of the Declaration, By-Laws, use restrictions and rules and regulations of the Association. Such documents shall be available for review by the Tenant on the Tenant's request, and the Tenant shall be bound to comply with the rules set forth in such documents, regardless of whether Tenant elects to review such documents. Section 10.4 of the Declaration is hereby further modified to require that all leasing of Units within the Submitted Property shall be administered through the Rental Program in accordance with the terms of the Rental Management Agreement. The lease to the Tenant, as well as the Rental Management Agreement, may include more restrictive provisions, but in no case any less restrictive provisions, than those restrictions contained in the Declaration or this Supplemental Declaration.

5.10 Animals and Pets. The Rental Program shall govern and control over the Declaration to the extent that the Rental Management Agreement permits each Owner to implement a more stringent requirements regarding the keeping of dogs, cats, or other usual and common household pets in the Owner's Unit. All other provisions of Section 10.10 of the Declaration shall remain in full force and effect.

5.11 Golf Course. In addition to Section 14.4 of the Declaration which shall apply to the Submitted Property in full force and effect, each Owner and occupant, and each Tenant, guest and invitee of any Owner or occupant further agrees not to institute any action or suit at law or in equity nor to institute or prosecute any claim or demand against the Manager in accordance with the terms of Section 14.4 of the Declaration.

5.12 Hold Harmless Extension. In any and all instances where the Declarant or the Association are indemnified, held harmless, stated not to be guarantors or insurers, or otherwise benefitted by limited liability in provisions of the Declaration, including any amendments or extensions thereof, the same protection and benefit shall extend and apply to the Manager, the successors and assigns of the Manager as well as to any officer, director, member, manager, partner, agent, or employee of the foregoing.

## ARTICLE 6

### Driveway Access

6.1 Driveway. Certain Units ("Driveway Units"), as shown on the Phase One Plat or as provided in the deed of conveyance to the particular Unit, are served by a joint use driveway located or to be located on or across other Units ("Driveway"). Declarant wishes to provide an easement for use of all portions of the Driveway by the owners of the Driveway Units ("Driveway Unit Owners"). Declarant further wishes to establish certain covenants for construction and maintenance of the Driveway.

6.2 Easement. Declarant reserves a non-exclusive, perpetual, appurtenant easement under, through, over and across all of the area designated as "Driveway" on the Phase One Plat or in the deed of conveyance to the particular Unit (the "Driveway Easement Area") for the use and enjoyment of the Driveway Easement Area by the Declarant, and its successors and assigns, including but not limited to the Driveway Unit Owners, for pedestrian and vehicular ingress and egress, which may be utilized by the Driveway Unit Owners, by all persons residing in any single family residence on any of the Driveway Units, and by the guests and invitees of such Driveway Unit Owners, for the purpose of gaining access to the Driveway Units from the Private Streets (as such term is defined in Section 2.2 of the Declaration) serving the Submitted Property.

The easement rights granted hereunder shall run with, benefit, and be appurtenant to title to the Driveway Units. The easement rights granted hereunder shall further run with and be appurtenant to title to the Driveway Easement Area and shall constitute a burden upon the Driveway Easement Area, subject to the following terms and conditions.

6.3 Prohibited Activities. Driveway Unit Owners and other permitted users of the Driveway Easement Area shall be obligated to refrain from any actions which would deter from or interfere with the use and enjoyment of the Driveway Easement Area by other authorized users. Prohibited activities shall include without limitation obstruction of any part of the Driveway Easement Area. No vehicles shall be parked on the Driveway Easement Area.

6.4 Individual Driveways. Each of the Driveway Unit Owners shall have the right to install a driveway connecting such Driveway Unit Owner's Driveway Unit to the Driveway within the Driveway Easement Area; provided that the installation of any such individual driveway shall be subject to all the terms and provisions of the Declaration, including but not limited to Article 9 with respect to architectural review. Each Driveway Unit Owner shall be responsible for the maintenance, repair and replacement of any individual driveway so installed on such Owner's Driveway Unit.

6.5 Construction. The Declarant shall be responsible for the installation and construction of all Driveways. Declarant reserves, creates, establishes, promulgates and declares non-exclusive, perpetual, reciprocal, appurtenant easements, for itself and its designees and each of the Driveway Unit Owners perpetual non-exclusive easements upon, across, over, and under the Driveway Easement Area for the purpose of installing and constructing the Driveway and any and all utility lines to serve the Driveway Units and an easement for access of vehicular and pedestrian traffic over, across, and through the Driveway Easement Area and the Driveway Units, as necessary, to exercise the easement described above.

Entry for such purposes shall be only during reasonable hours. This easement shall be exercised with a minimum of interference to the quiet enjoyment to Driveway Unit Owners' property. Entry under this Section shall not constitute a trespass. Any damage to a Driveway Unit Owner's property resulting from the exercise of the easements described herein shall promptly be repaired by, and at the expense of, the person exercising the easement.

6.6 Maintenance. The Association shall be responsible for maintaining the Driveway in a good, driveable condition. Declarant reserves, creates, establishes, promulgates and declares non-exclusive, perpetual, reciprocal easements for the Association to enter the Easement Area to perform its maintenance responsibilities under this Supplemental Declaration. All costs associated with maintenance, repair, replacement, and insurance of an Exclusive Common Area shall be assessed against the Driveway Unit Owners as a Specific Assessment as detailed in Section 8.6 of the Declaration. Except in emergencies, entry for such purposes shall be only during reasonable hours. This easement shall be exercised with a minimum of interference to the quiet enjoyment to Driveway Unit Owners' property. Entry under this Section shall not constitute a trespass. Any damage to a Driveway Unit Owner's property resulting from the exercise of the easements described herein shall promptly be repaired by, and at the expense of the Association.

Declarant further reserves, creates, establishes, promulgates and declares for itself and its designees and each of the Driveway Unit Owners non-exclusive, perpetual, reciprocal easements for the maintenance of any and all utility lines to serve the Driveway Units.



ARTICLE 7  
General Provisions

7.1 Amendment to the Supplemental Declaration.

a. By Declarant. This Supplemental Declaration may be unilaterally amended by the Declarant in accordance with Section 15.2(a) of Declaration.

b. By Members. This Supplemental Declaration may be amended the written consent or affirmative vote, or any combination thereof, of Members holding at least sixty-seven percent (67%) of the total Class "A" votes allocated to the Units within the Submitted Property, and, during the Development Period, the written consent of the Declarant.

7.2 Inconsistent Provisions. Where the provisions set forth in this Supplemental Declaration are inconsistent with or in conflict with the terms set forth in the Declaration, the terms set forth in this Supplemental Declaration shall govern and control.

ARTICLE 8  
Declaration

Except as specifically amended hereby, the Declaration and all terms thereof shall remain in full force and effect.

[SIGNATURE ON FOLLOWING PAGE]

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IN WITNESS WHEREOF, the undersigned Declarant has executed this Supplemental Declaration the day and year first above written.

DECLARANT:  
LTR PROPERTIES, INC., a Tennessee corporation

By:  [SEAL]  
Mr. Michael L. Ross

Its: President

STATE OF TENNESSEE

COUNTY OF Monroe

Before me, the undersigned authority, a Notary Public in and for said State and County, personally appeared Mr. Michael Ross, with whom I am personally acquainted, and who, upon oath, acknowledged himself/herself to be the President of LTR Properties, Inc., a Tennessee corporation, the within named Declarant, and that he/she as such President, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by himself/herself as such President.

Witness my hand and seal, at office this 21st day of June, 2002.

  
NOTARY PUBLIC

MY COMMISSION EXPIRES 4-5-06

[NOTARIAL SEAL]

## OWNER CONSENT

OWNER: TELLICO LANDING, LLC, a Tennessee limited liability company

By: *RM* [SEAL]  
 Mr. Michael L. Ross  
 Its: Chief Manager

STATE OF TENNESSEE

COUNTY OF Monroe

Before me, the undersigned authority, a Notary Public in and for said State and County, personally appeared Mr. Michael Ross, with whom I am personally acquainted, and who, upon oath, acknowledged himself/herself to be the Chief Manager of Tellico Landing, LLC, a Tennessee limited liability company, and that he/she as such Chief Manager, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing the name of the limited liability company by himself/herself as such Chief Manager.

Witness my hand and seal, at office this Not in day of June, 2002.

*David W. Becht*  
 NOTARY PUBLIC

MY COMMISSION EXPIRES 4-5-06

[NOTARIAL SEAL]

**EXHIBIT "A"**

ALL THOSE TRACTS or parcels of land lying and being in the Third Civil District of Loudon County, Tennessee, being more particularly described on that certain Final Plat for Rarity Pointe on Lake Tellico, Phase One, recorded on June 7, 2002, in Plat Cabinet F, Slides 54, 55, 56, and 57, and revised in Plat Cabinet F, Slide 65, 66, 67 + 68, Register's Office of Loudon County, Tennessee, prepared for Tellico Landing, LLC, by Christopher M. Rosser, Tennessee Registered Land Surveyor No. 1929, of Sterling Engineering, Inc., 1017 Hampshire Drive, Maryville, Tennessee, 37801-3525.

**PERMIT REQUEST**  
**FOR**  
**TELLICO POINTE MARINA**

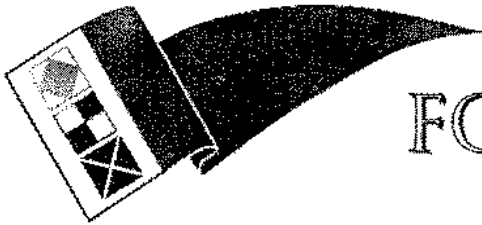
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## **SECTION A**

## **APPLICATION**



# FORT LOUDON MARINA

*February 17, 2003*

*Mr. Jack Miller  
Little Tennessee Watershed Team  
Tennessee Valley Authority  
Lenoir City, Tennessee 37771*

*RE: Request for permitting of Tellico Point Marina, Tellico Lake mile 2.3R.*

*Dear Mr. Miller:*


*Please find enclosed information concerning this permit request for the above mentioned marina. The harbor area has already been established and is vested in the applicant's name.*

*In reviewing this information, please be aware that this plan represents the full and complete development of the marina site. The development schedule will be determined by market demand and will be constructed in phases over an estimated time span of fifteen (15) years. It is very conceivable that, based on these and other ever-changing factors, the marina may never be developed to the extent envisioned here.*

*The development cost for the entire project, in today's dollars, is estimated to be SEVEN MILLION, FIVE HUNDRED THOUSAND DOLLARS (\$7,500.000) with an annual operating cost of \$ 650,000.00. Phase One, which would begin upon issue of the permits, is estimated to cost TWO MILLION, FIVE HUNDRED THOUSAND DOLLARS (\$2,500.000.00).*

*I look forward to working with you on this project and welcome any questions or additional information you might need in this review.*

*Respectfully submitted,*

  
Ed Loy, Jr.

*Enclosures*

## MAY 2013

(1)  $\text{Fe}^{2+}$  和  $\text{Fe}^{3+}$  的氧化还原电势。

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).

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.

Short Code 0011735 RLR# 135752

February 4, 2003

11210

*E. J. J.*  
Signature of Applicant

11 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. The appropriate FIA fee will be assessed when a penalty is levied."

## APPLICATION ADDENDUM

The proposed activity is a commercial marina for the general public's use. Proposed uses would include floating covered slips, floating open slips, dry stack slips, a floating fuel facility, a floating restaurant, ship's store and office area, boat rentals and parking.

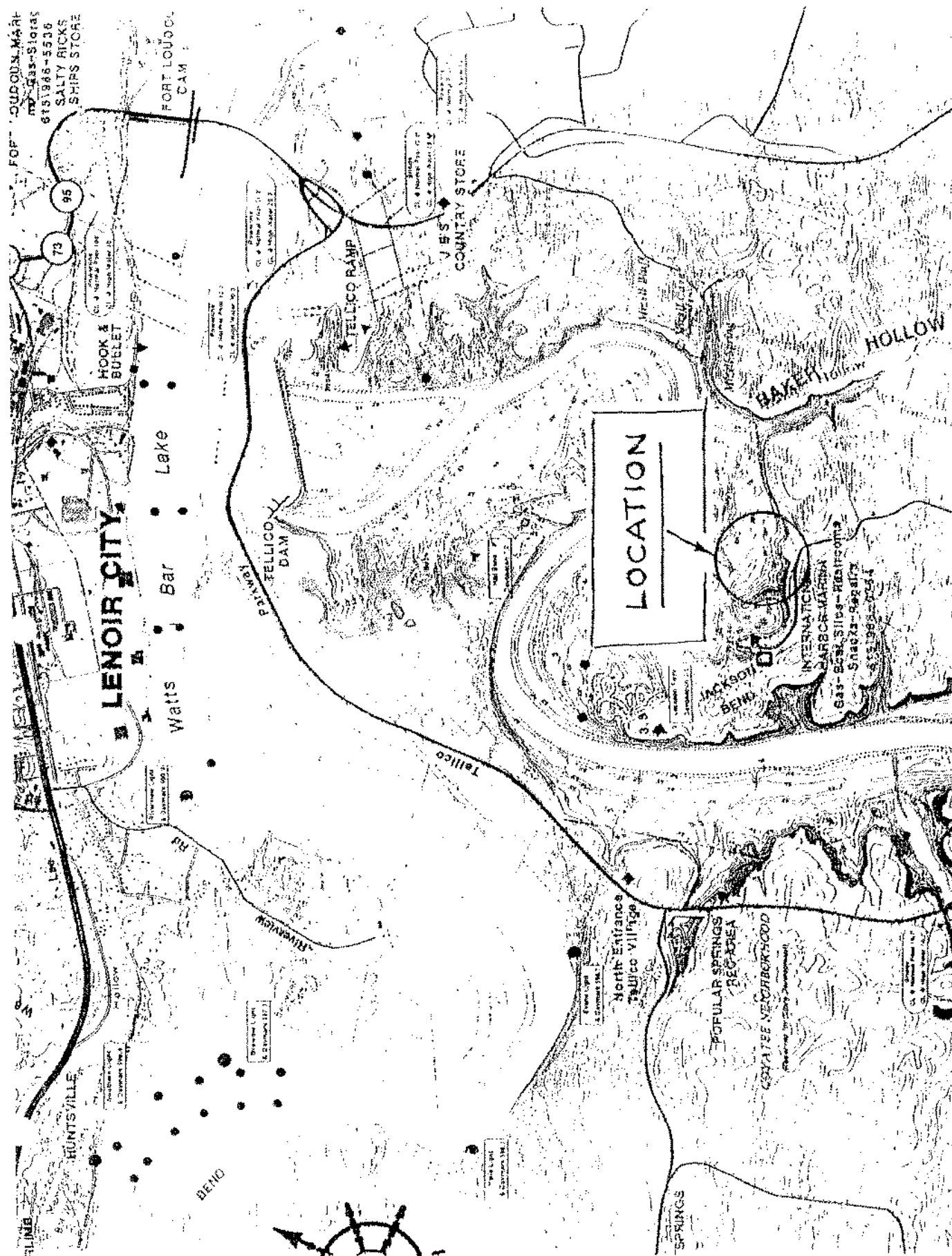
When fully developed, the marina would contain the following:

1. Floating covered slips - PIER A, 65 each, 22' X 90'.
2. Floating covered slips - PIER B, 67 each, 18' X 50'.  
74 each, 16' X 40'.
3. Floating covered slips - PIER C, 58 each, 16' X 40'.  
65 each, 14' X 30'.
4. Open slips for rental boats - 20 each, 14' X 30'.
5. Dry stack slips - 200 each
- Total slips (fully developed) 549
6. Parking 165

In addition, bank stabilization and dredging would occur along the shoreline adjacent to the marina.

## **SECTION B**

### **LOCATION MAP**



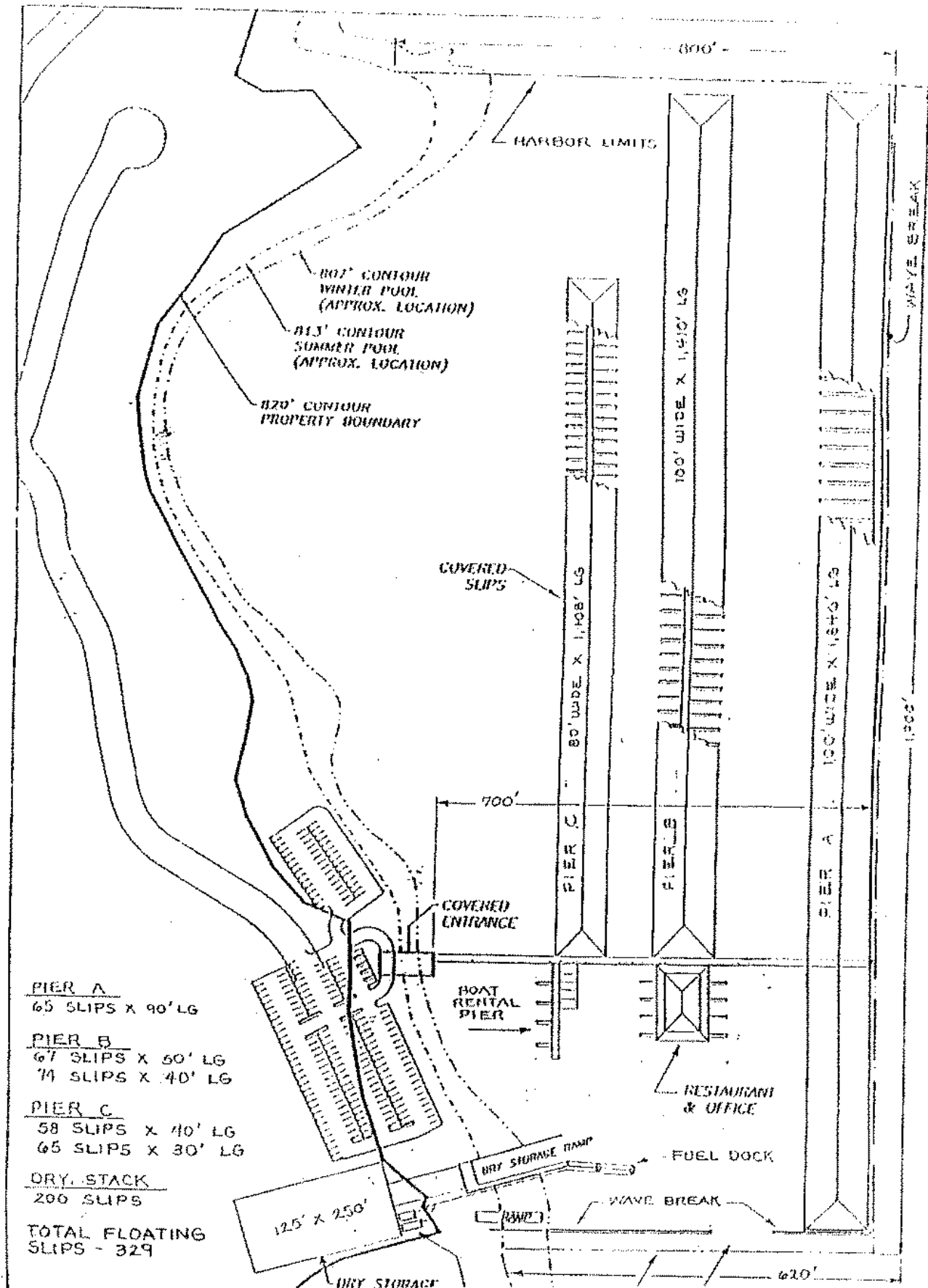




**SECTION C**

**CONCEPT PLAN**

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*



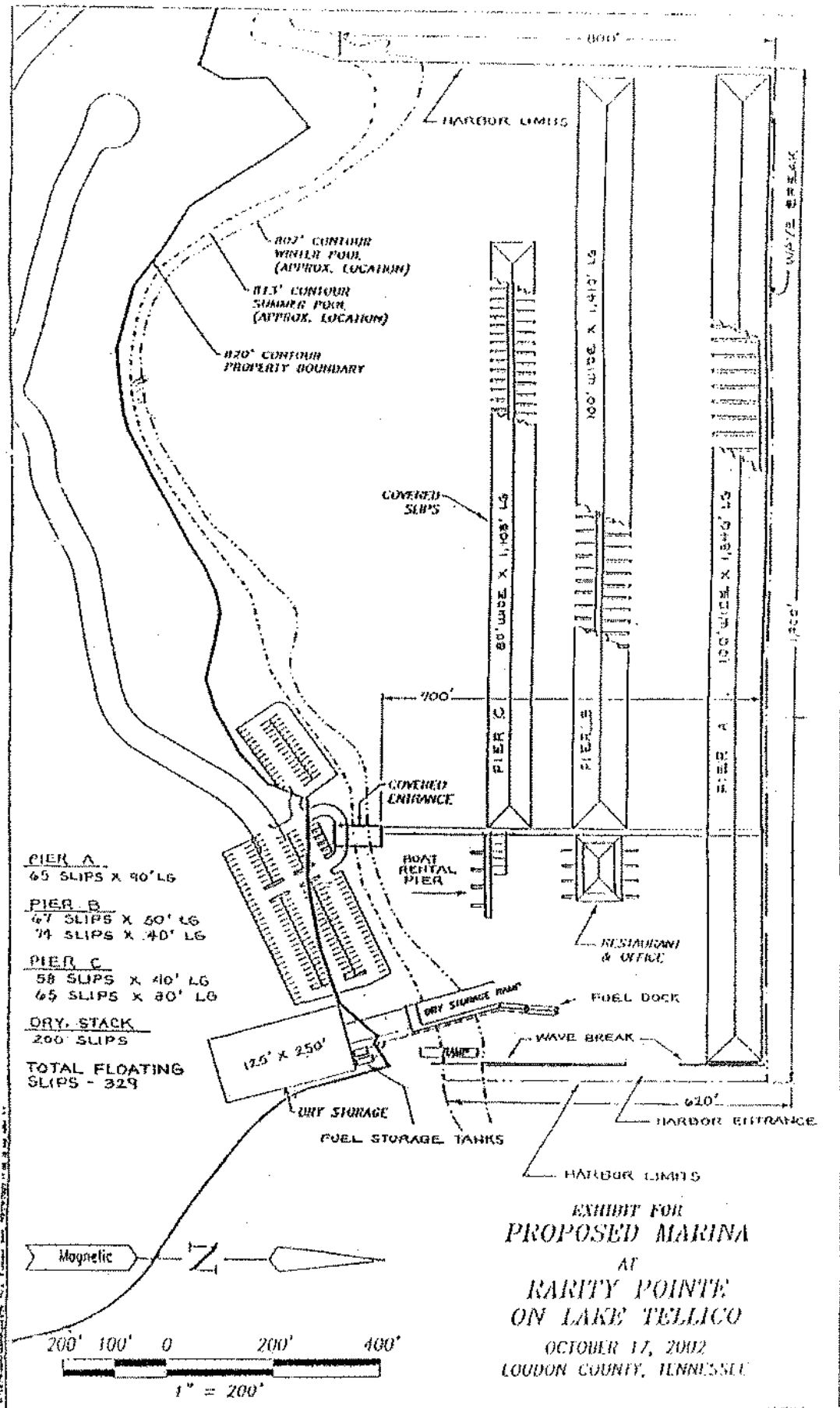
## **SECTION D**

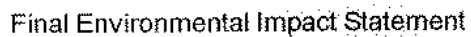
### **PIER A**

## **PIER A**

The location of Pier A is along the northern harbor limits of the marina site. A special feature of this pier is that it provides a wave attenuator for the entire marina. Access to this pier is by way of a fourteen (14) foot wide, 700 foot long covered walkway from the parking lot portico. This walkway will provide for motorized cart service to Pier A.

Pier A, when fully developed, will be 1846 feet long having sixty-five (65), 22'X90' covered slips. These slips will be constructed of steel frames, concrete decking, enclosed floatation and served by power, water and cable T.V. The anchoring system will be double winch and cable to dead-man anchors.







## **SECTION E**

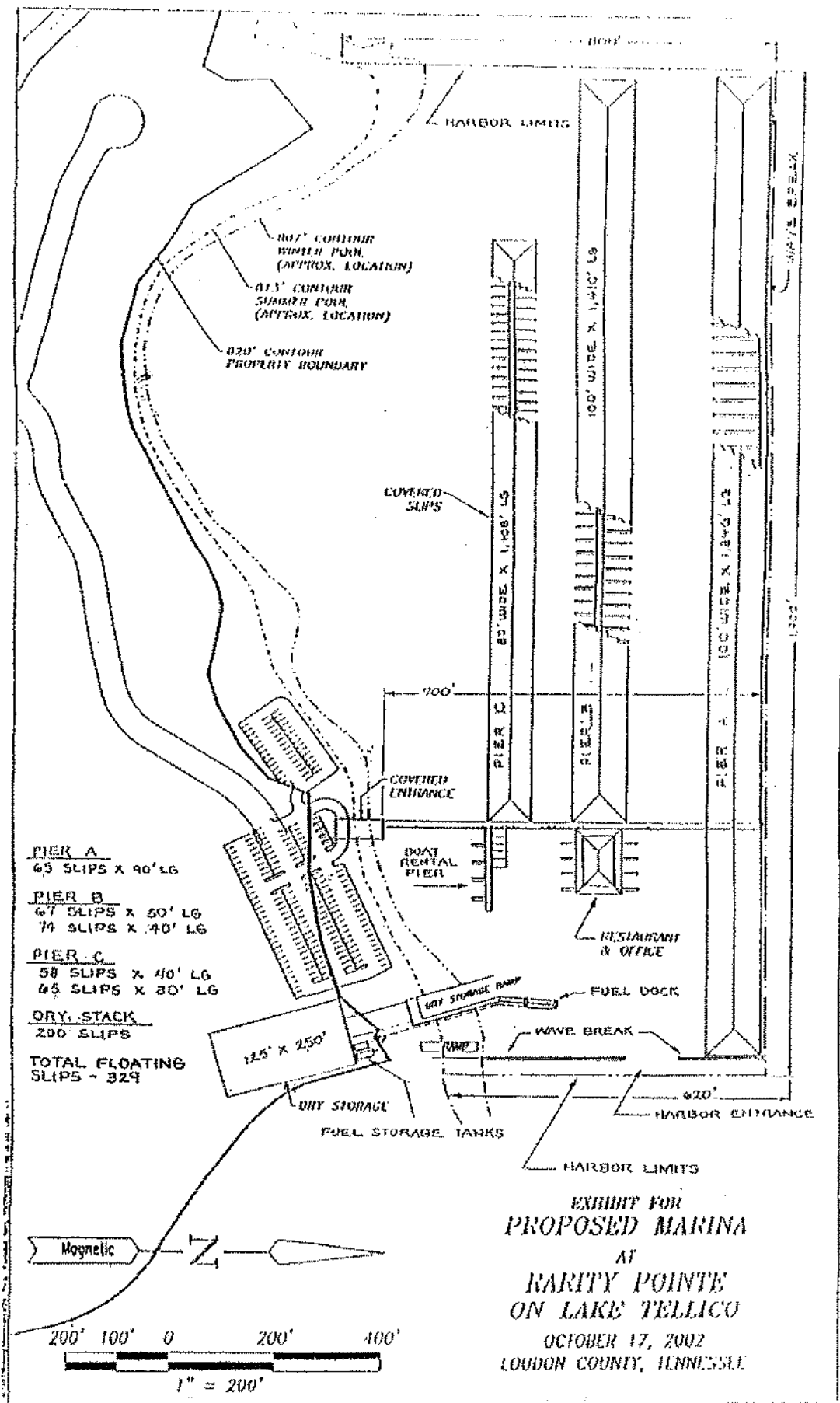
### **PIER B,C**

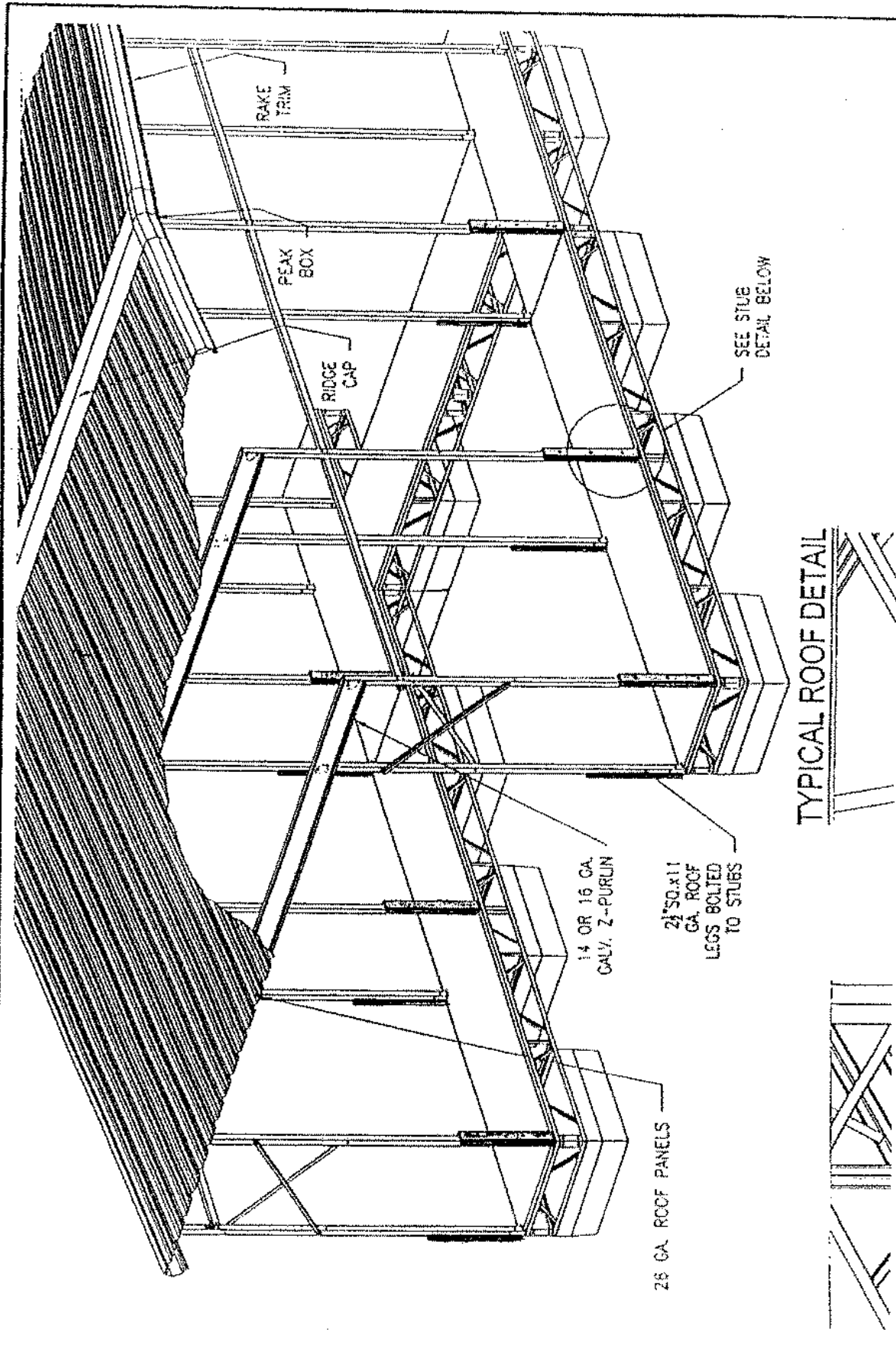
## **PIER B, C**

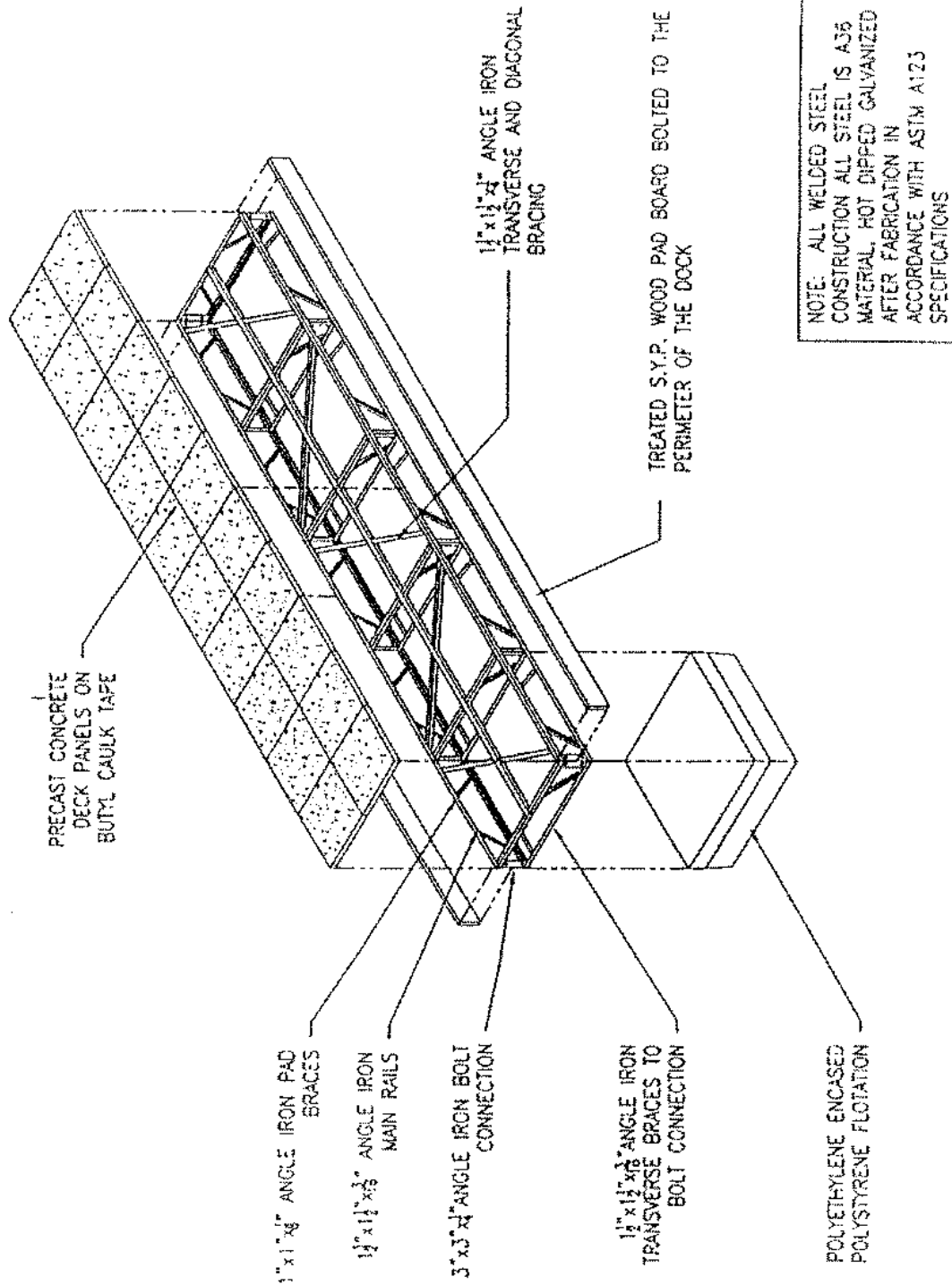
The location of these piers will be parallel to Pier A. Access to these piers will be through the main walkway. Pier B, when fully developed, will be 1410 feet long having sixty-seven (67), 18'X50' covered slips on the north side and seventy-four (74), 16'X40' covered slips on the south side of the walkway.

Construction materials will be the same as Pier A. Phase One will include twenty (20), 18'X50' slips and twenty-two (22), 16'X40' slips. Anchoring will be by steel pipe and collars.

Pier C, when fully developed, will contain fifty-eight (58), 16'X40' covered slips and sixty-five (65), 14'X30' covered slips. Phase One will not include any of Pier B or C slips. Anchoring will be by steel pipe and collars.

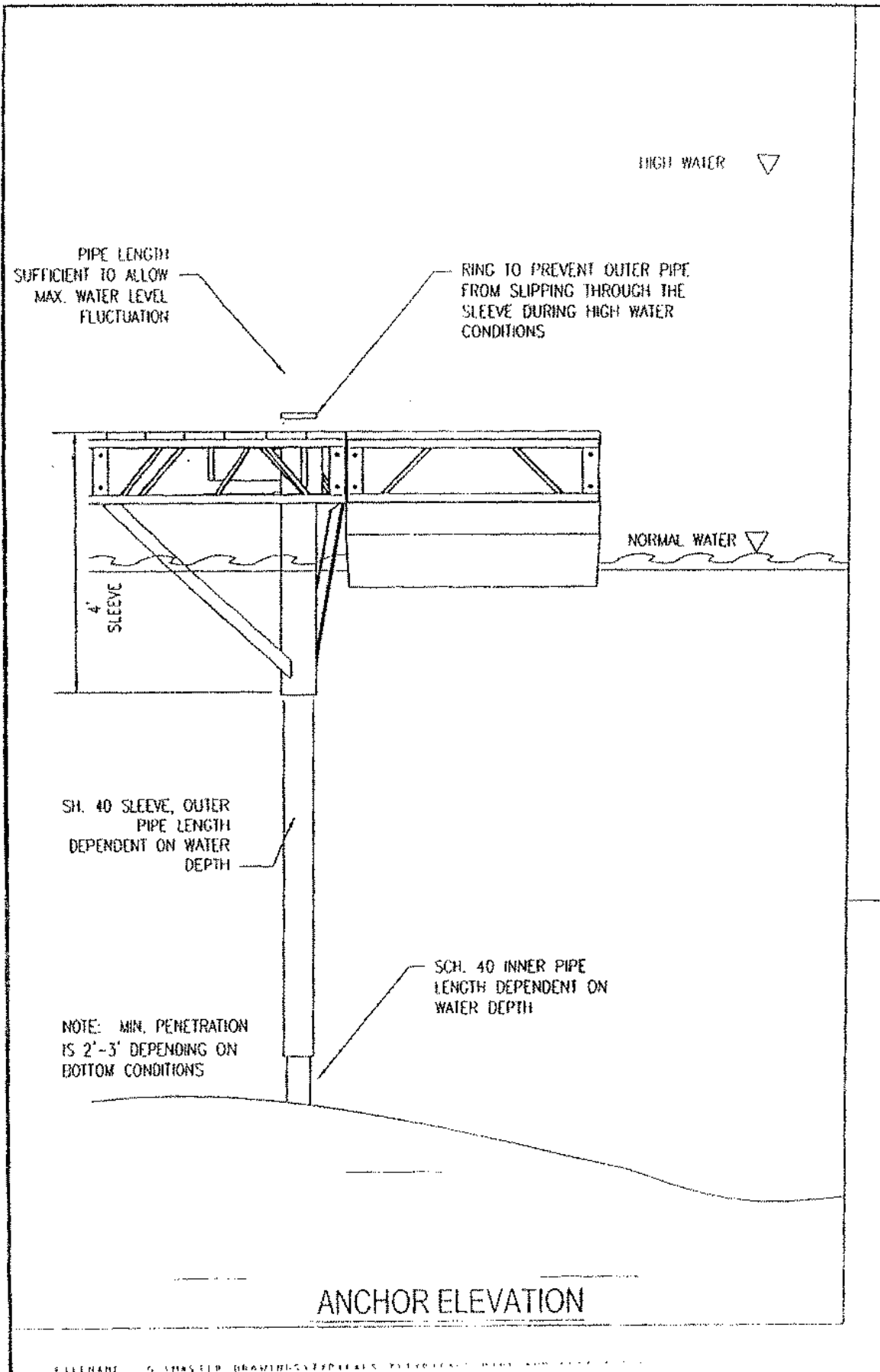






TYPICAL DOCK UNIT EXPLODED VIEW

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*



**SECTION F**

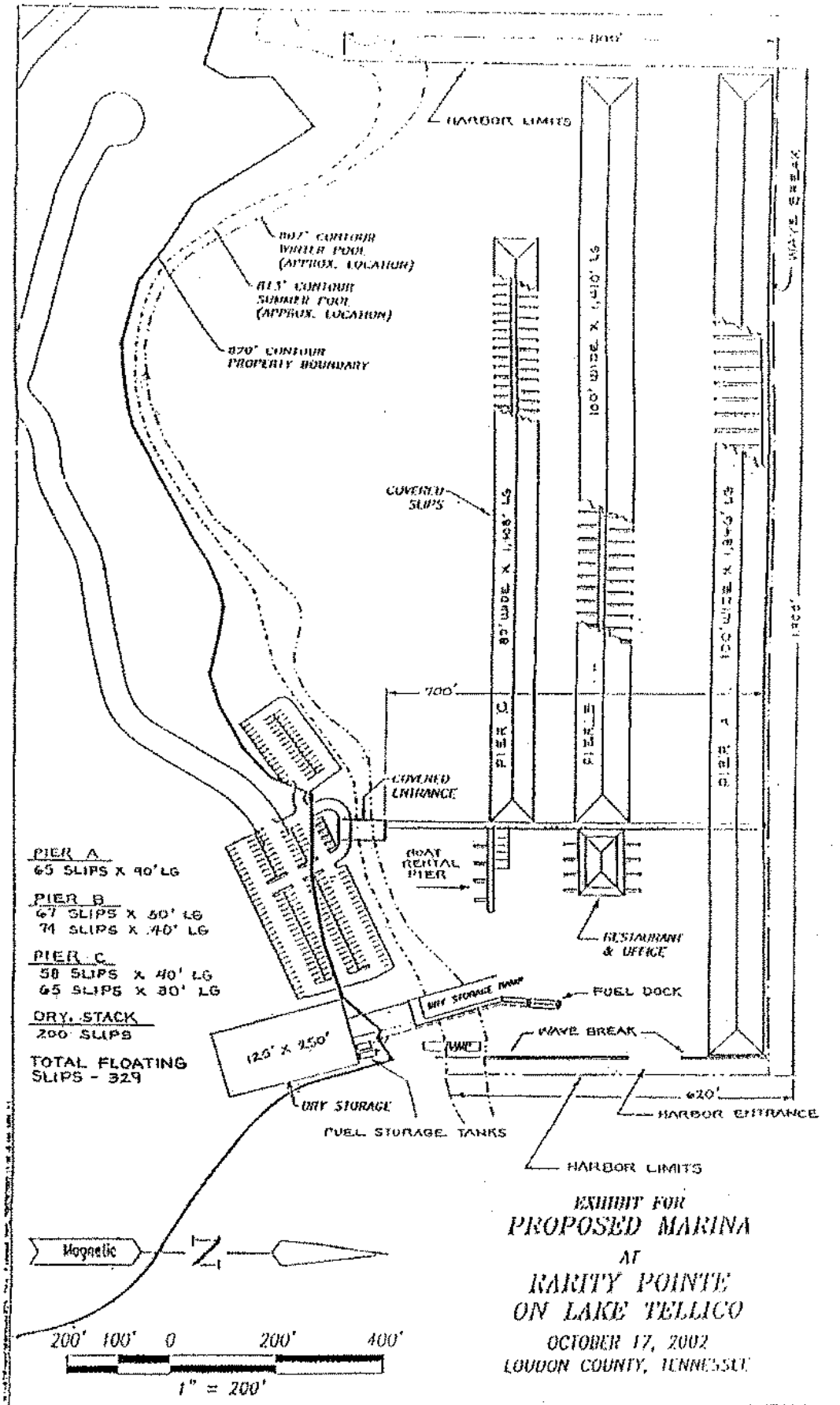
**RESTAURANT/OFFICE**



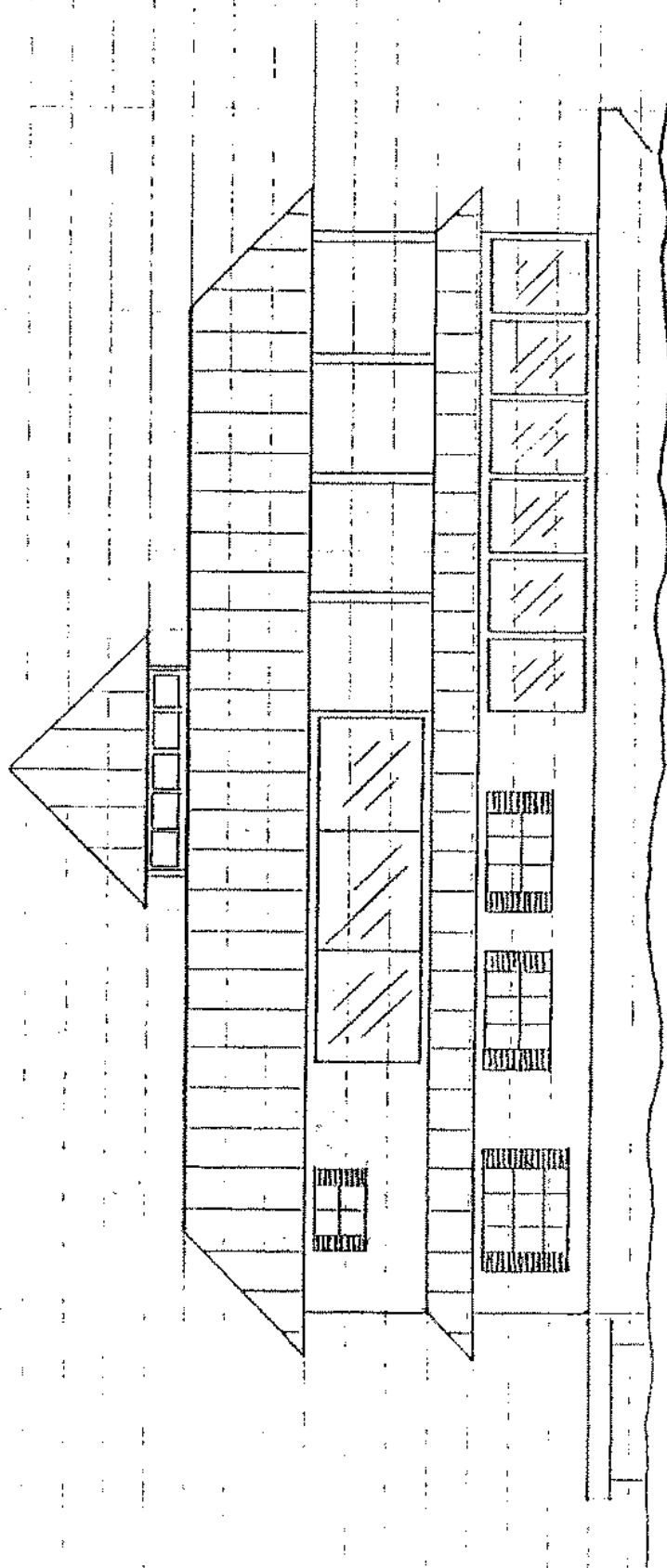
## **RESTAURANT/OFFICE**

The restaurant/office facility will be a two-story facility constructed on a 60'X100' floating dock located along the main walkway. The lower level will include a ship's store, kitchen/ dining area to accommodate fifty guests, public restrooms with showers and laundry, and twenty-five (25) guest slips.

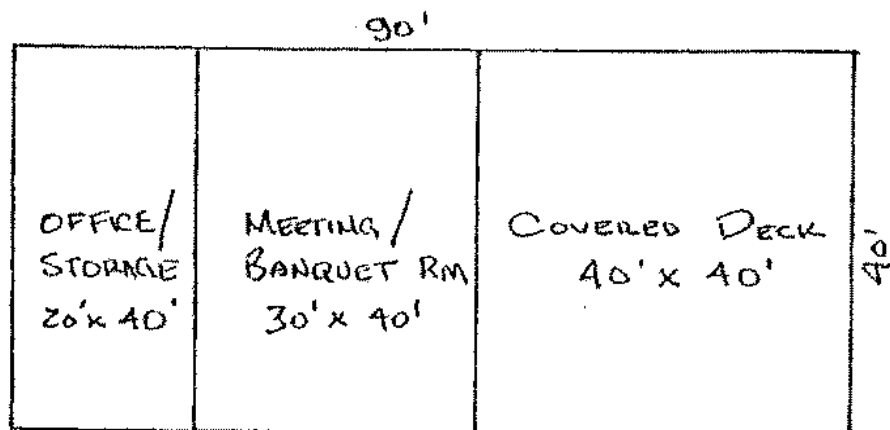
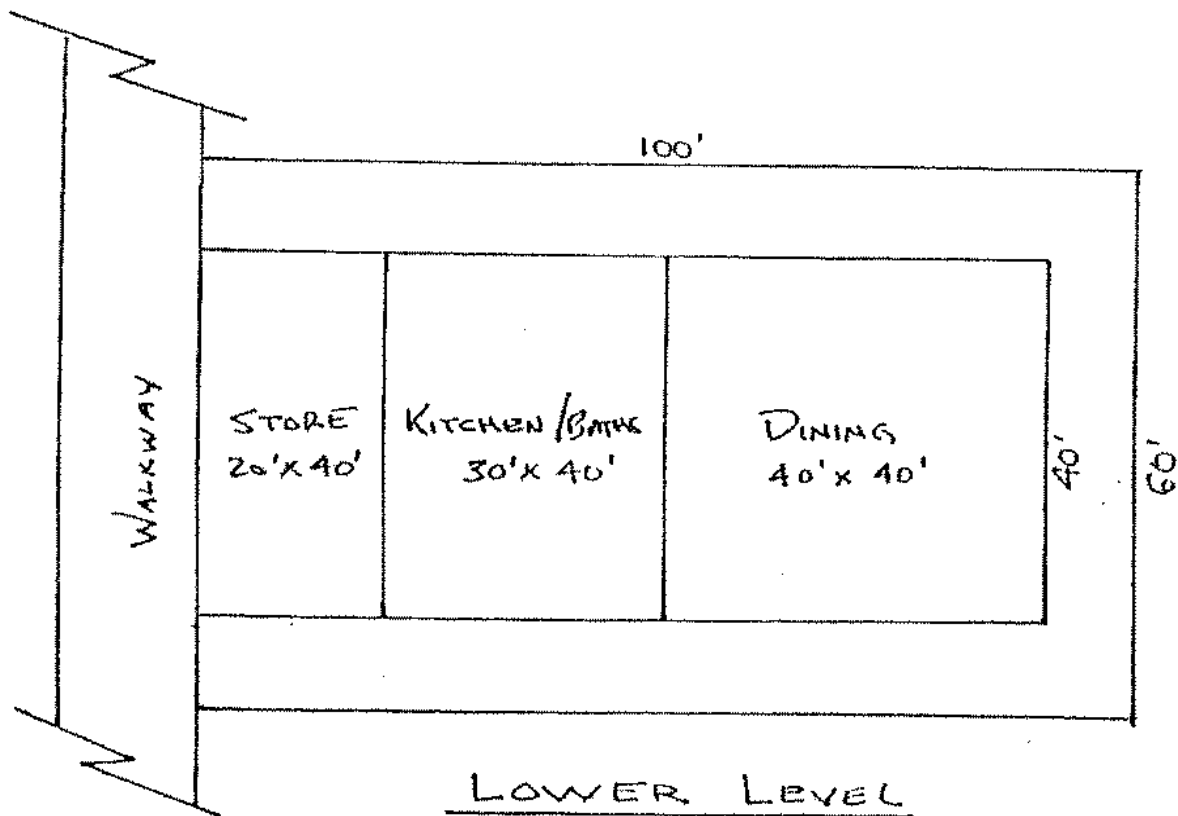
The upper level will include an office area, meeting/banquet room, and a covered deck for dining. All utilities will be provided to this facility by way of the main walkway. Anchoring will be with steel pipe and collars. This facility will be included in Phase One.



RESTURANT / OFFICE COMPLEX



SIDE VIEW

OFFICE / RESTAURANT FLOORPLANUPPER LEVEL

## **SECTION G**

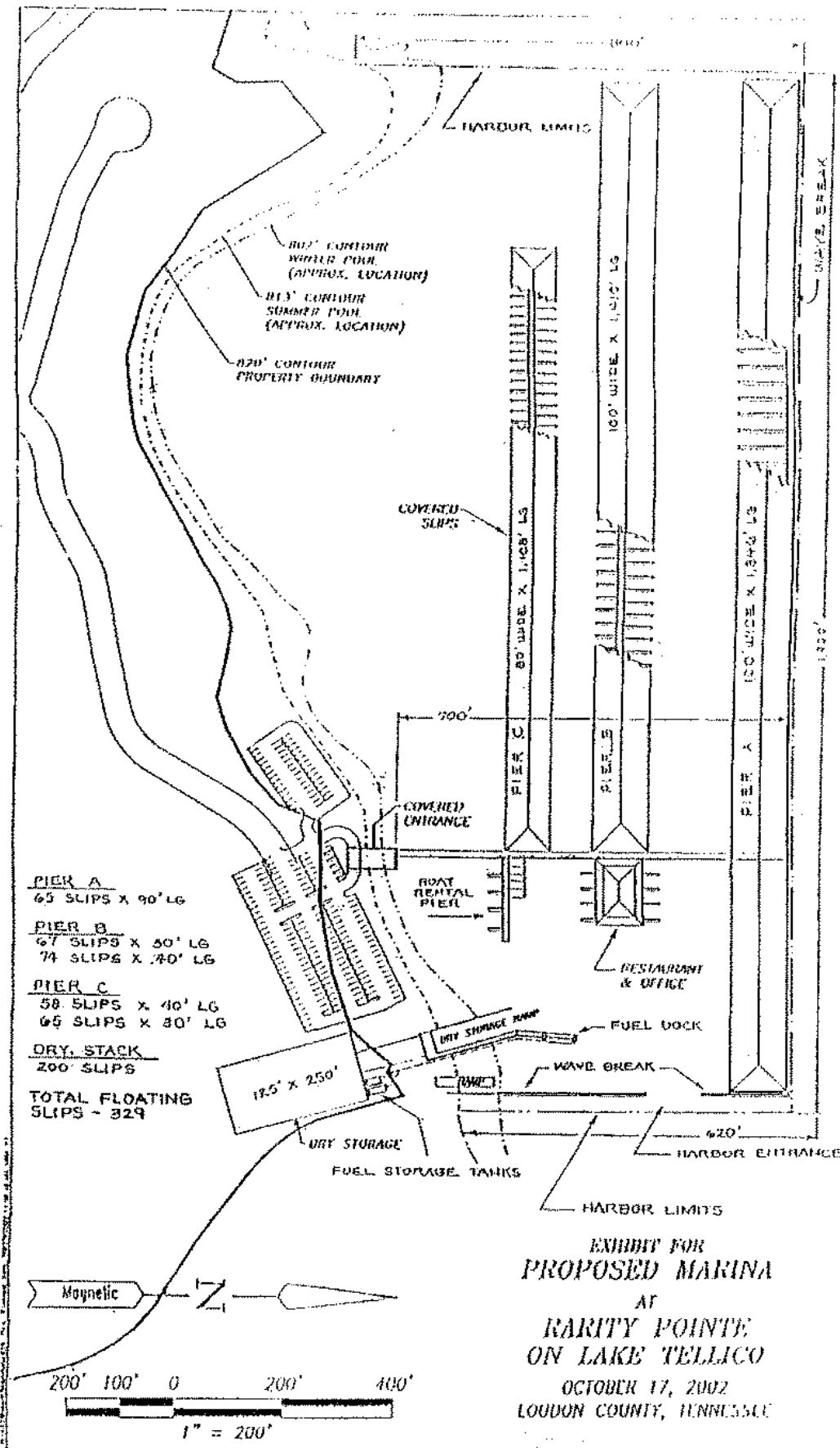
### **DRY STACK**

## **DRY STACK**

The dry stack facility will be located on the west boundary of the marina site. It will be a rack-supported building constructed of steel and masonry and will include special design features to disguise its presence. It will be 125 feet wide and 250 feet long storing 200, twenty-six (26) foot boats, which will be launched with a fork, lift.

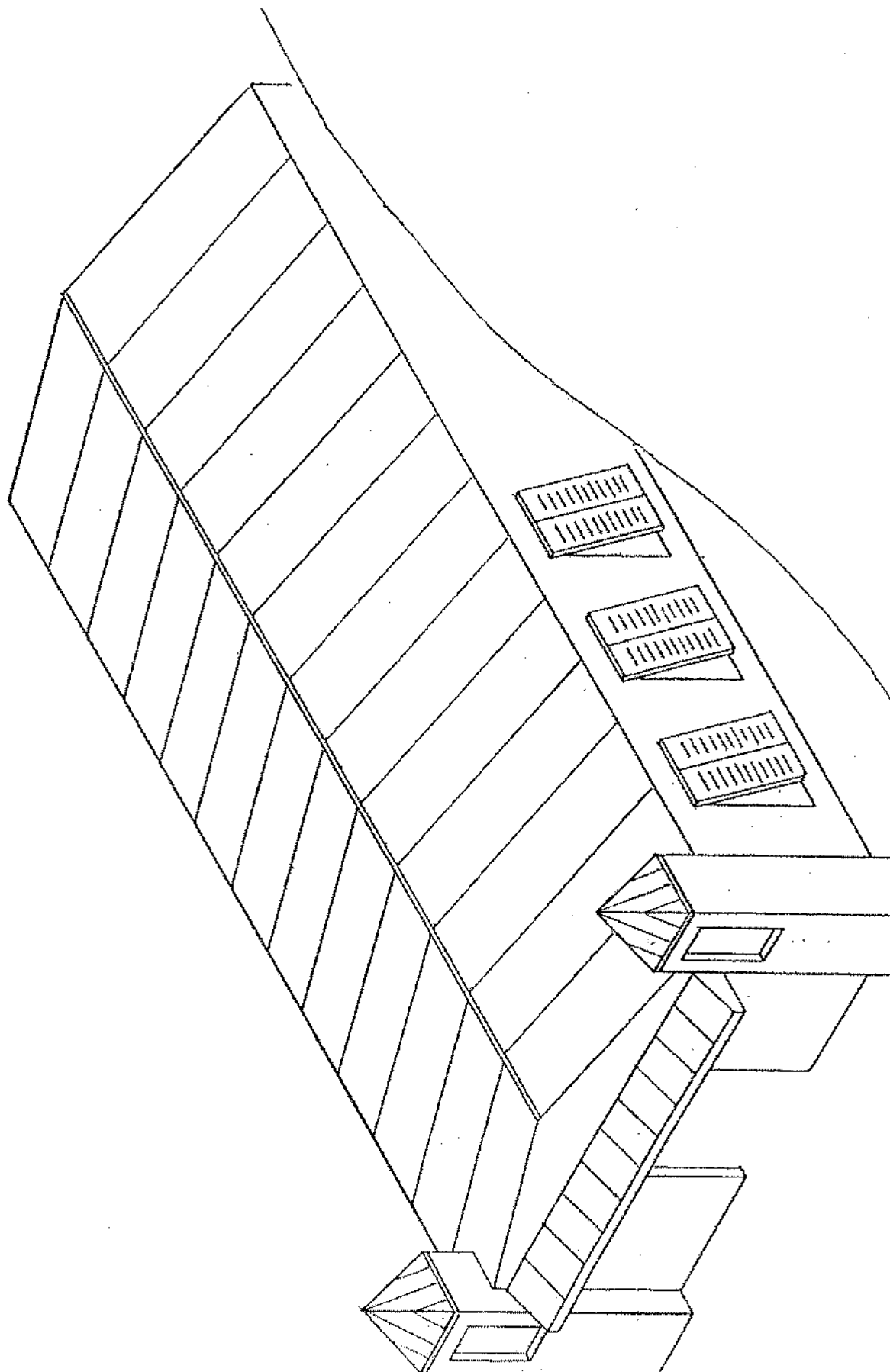
This facility will not be included in Phase One and it is anticipated that construction may not begin until 2006.

Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir

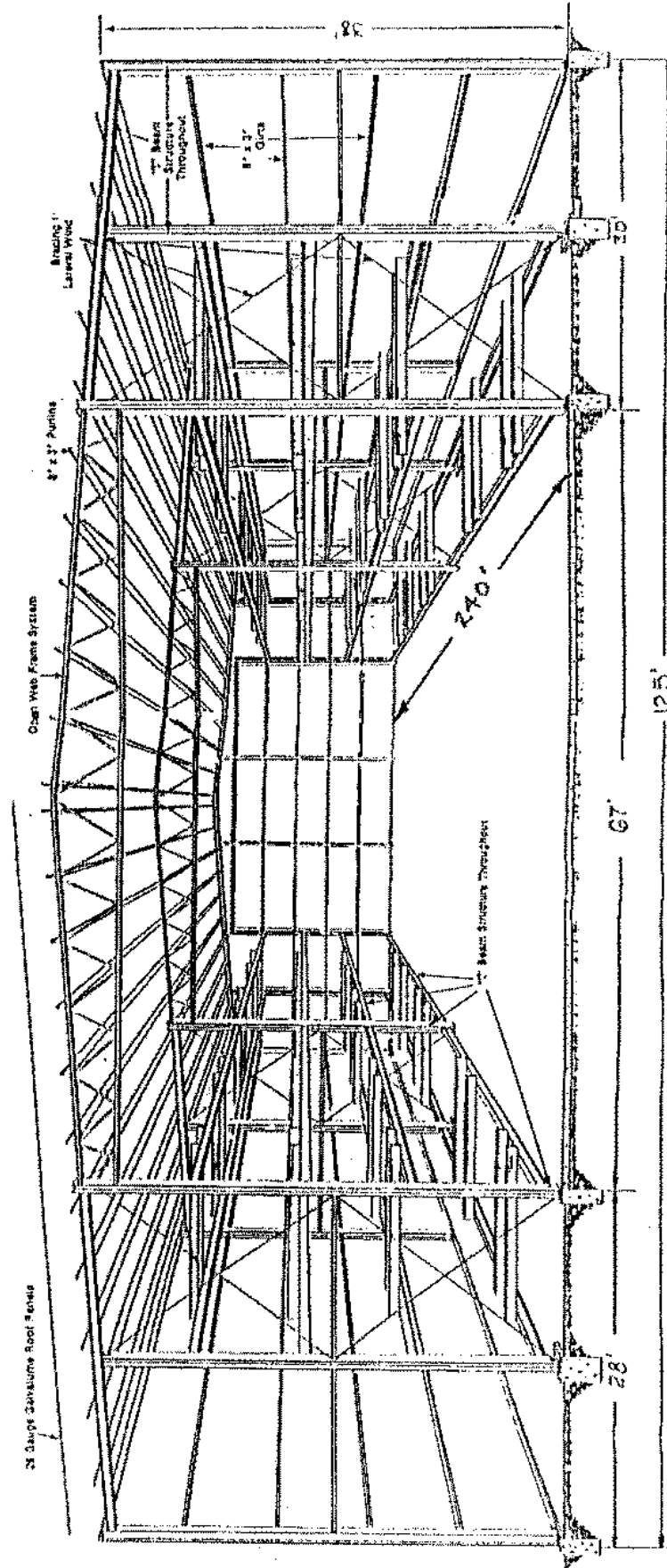




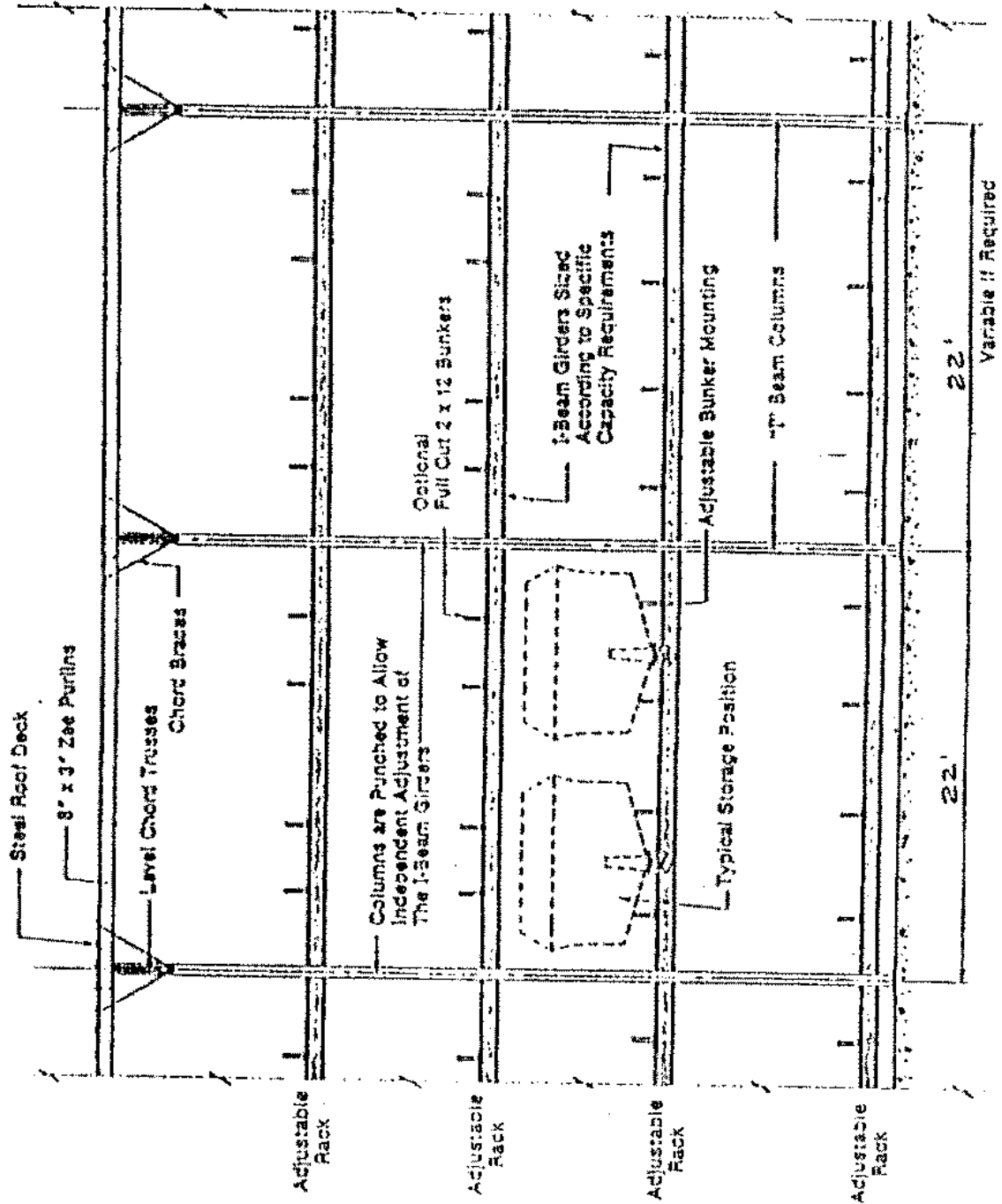
DRY STACK



DRY STACK



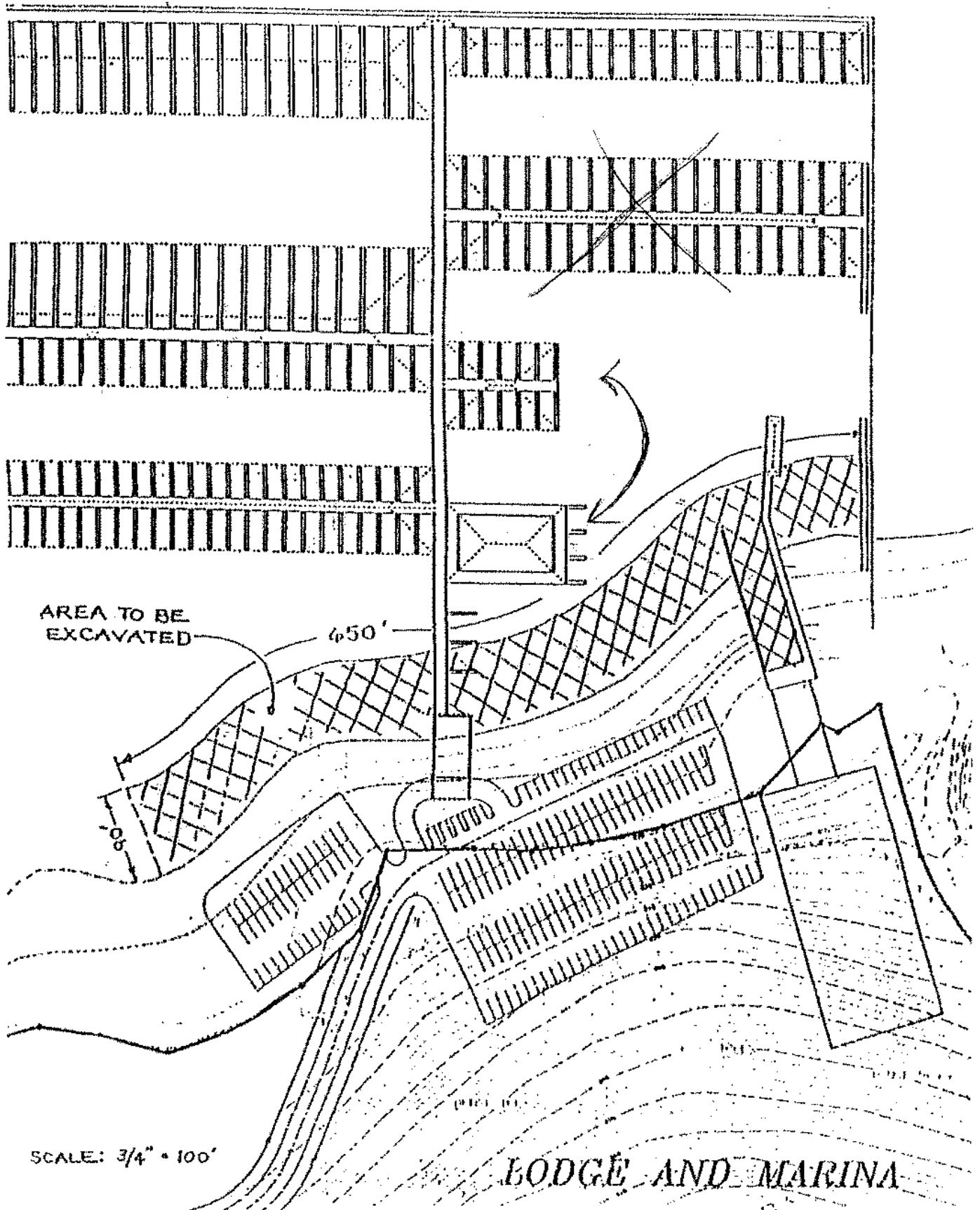
# DRY STACK



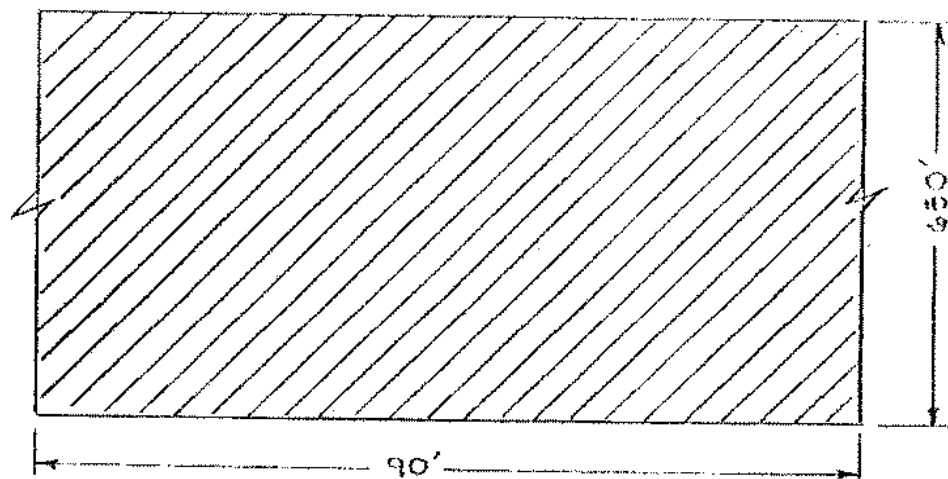
## **SECTION H**

### **DREDGING**

# EXCAVATION PLAN *July*



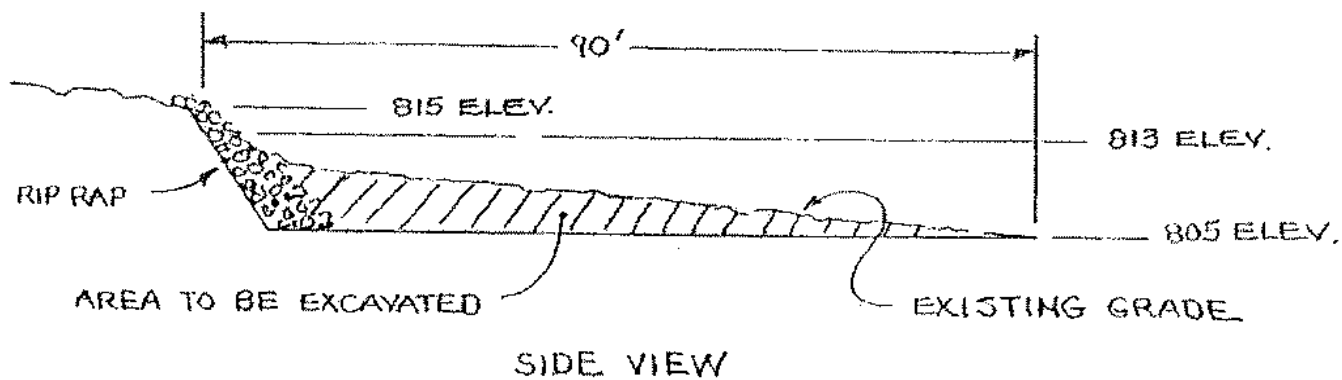
EXCAVATION DETAIL



TOP VIEW

TELICO LAKE

QUANTITY TO BE EXCAVATED - 10,147 CU YDS.  
SPOIL MATERIAL TO BE PLACED ABOVE 820 ELEV.



SCALE: 1" = 20'

**SECTION I**

**FUEL FACILITY**

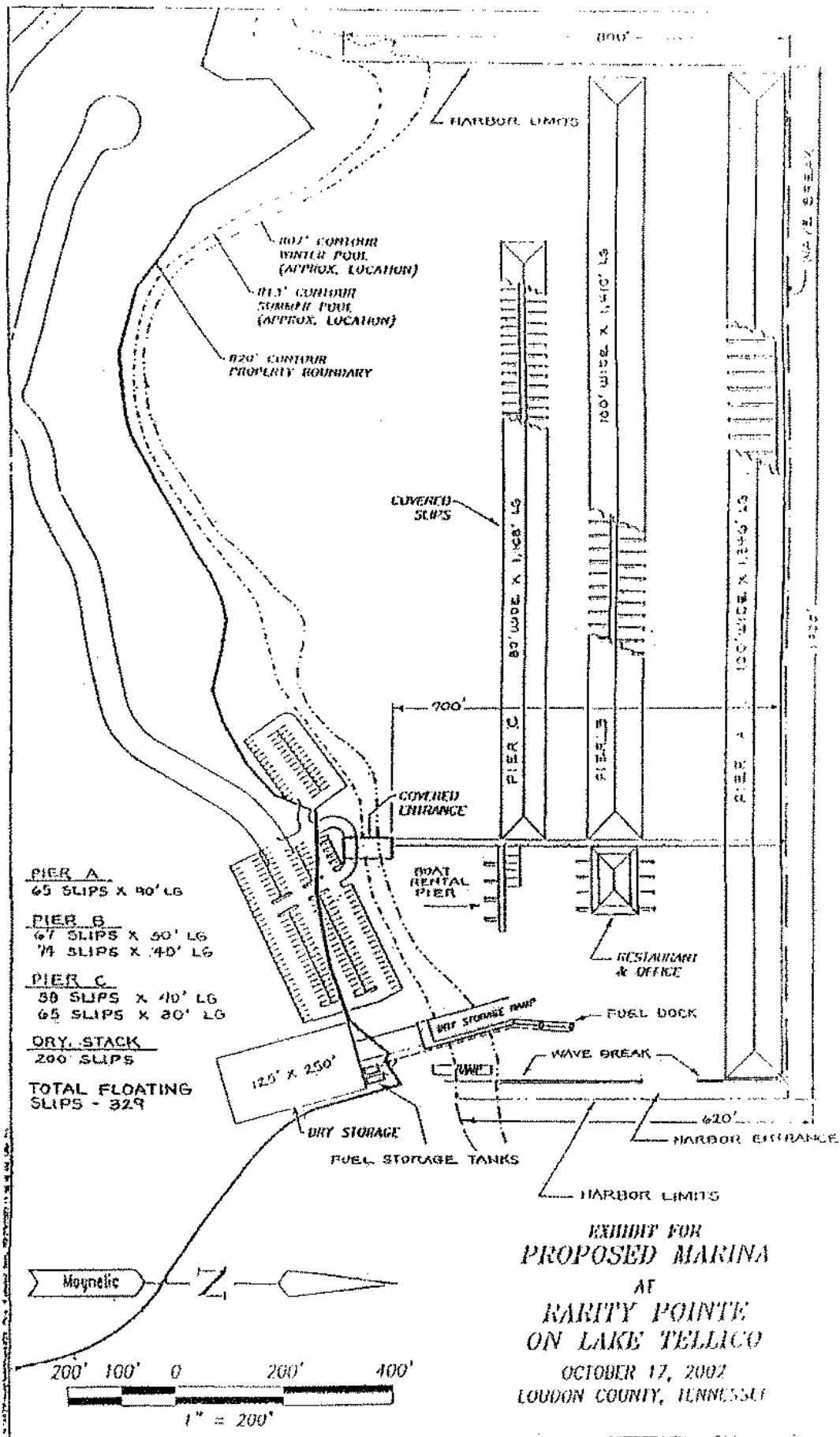


## **FUEL FACILITY**

The fuel dispensing facility will be a floating dock located at the end of the dry stack launching dock. It will be covered, contain six (6) pumping stations and a sewage pump-out station.

Fuel storage will be located next to the dry stack building with above ground tanks holding 10,000 gallons of gasoline and 5,000 gallons of diesel fuel. These tanks will meet all EPA and State of Tennessee guidelines for the storage and dispensing of fuels.

The fuel facility will be included in Phase One of the marina construction.



cut and paste into TOAD SQL Window, go to bottom of screen DBMS Output and turn the red button to green.  
go to the top and run Execute as a Script (letter with 2 green arrows)  
Output will appear in DBMS Output Window.

```
Rem
Rem $Header: get_violation_encroachments_ids.sql 09-JUN-03 lbcalthou Exp $
Rem
Rem get_violation_encroachments_ids.sql
Rem
Rem
Rem  NAME
Rem
Rem  get_violation_encroachments_ids.sql - Obtain sequence IDs.
Rem
Rem  DESCRIPTION
Rem  Obtain a list of sequence numbers from the violation_encroachments_id sequence
Rem  generator.
Rem
Rem  NOTES
Rem  Alter i (loop counter), run script, then copy and paste output
Rem
Rem  MODIFIED (MM/DD/YY)
Rem

declare
  seqnum number;

begin

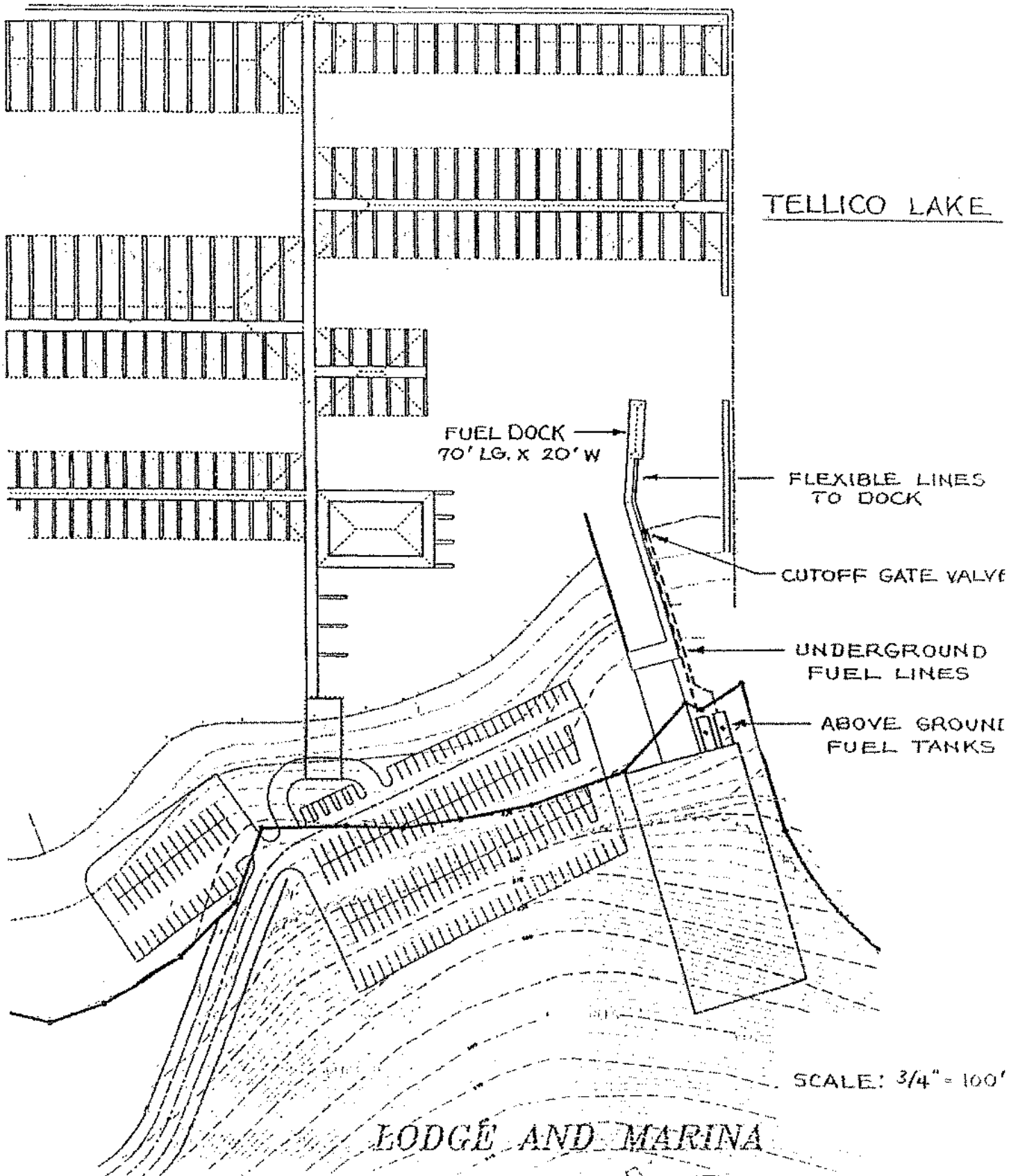
  for i in 1 .. 219 loop

    select violation_encroachments_id.nextval into seqnum from sys.dual;

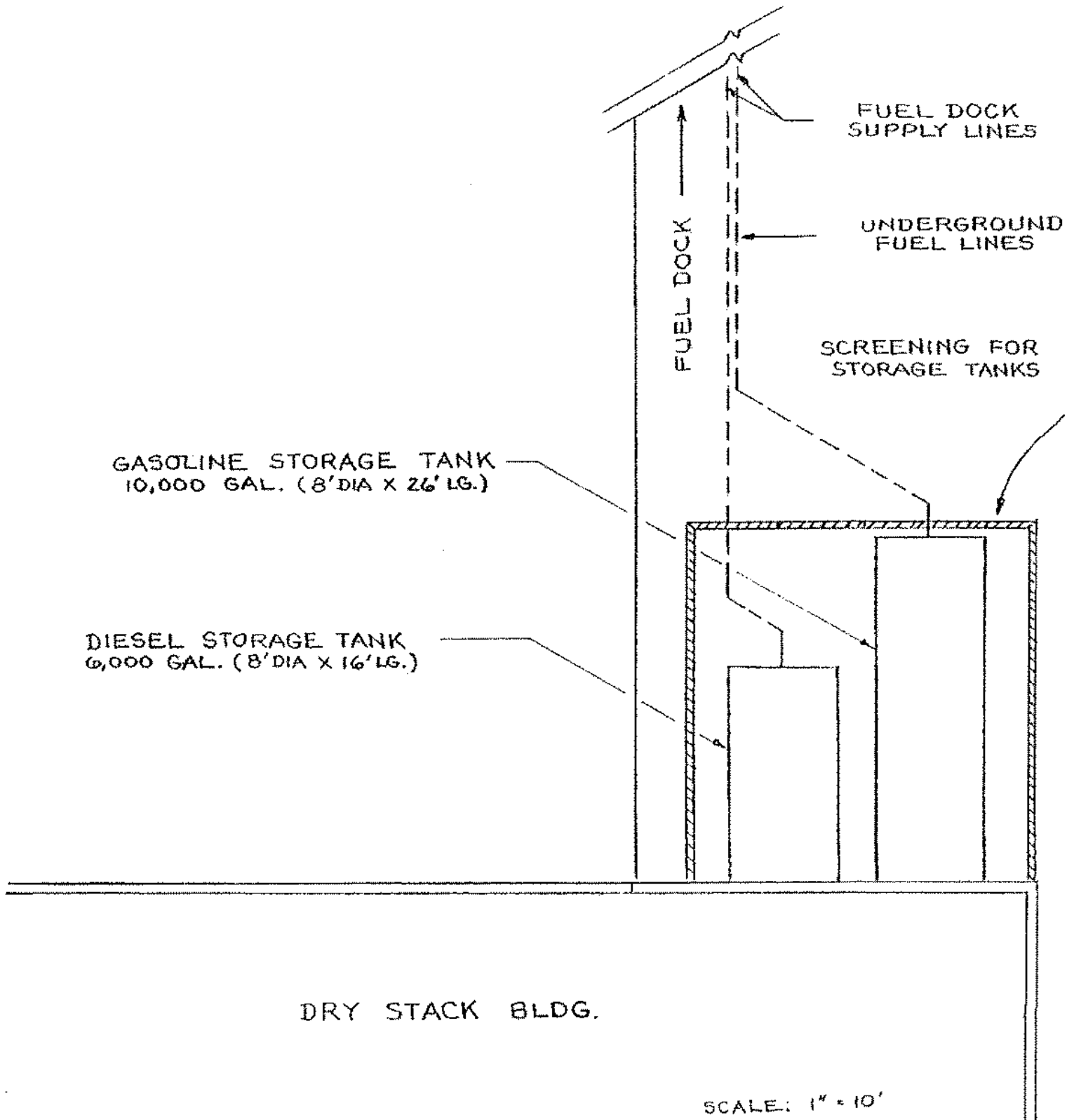
    dbms_output.put_line(seqnum);

  end loop;
end;
```

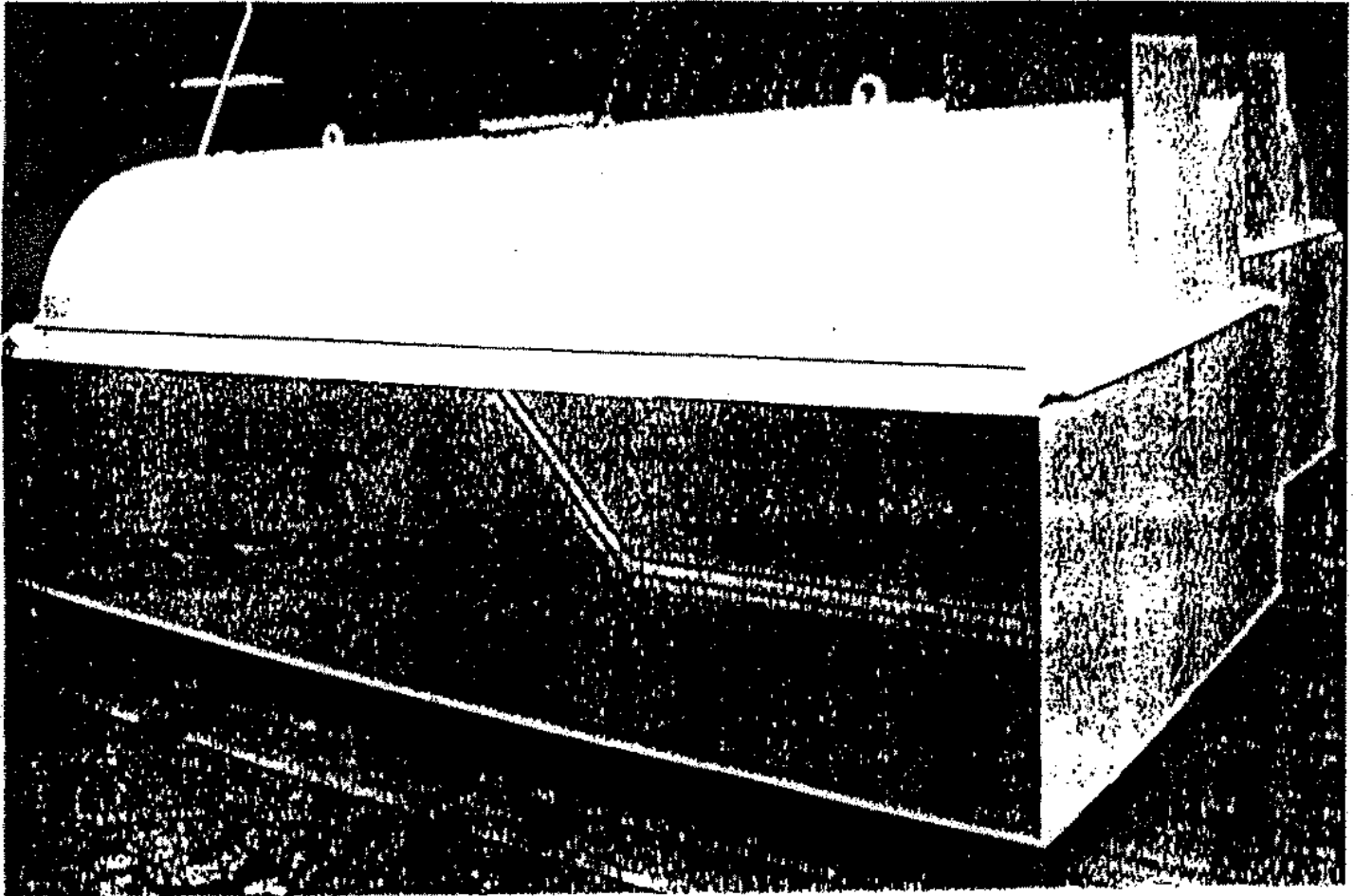
FUEL DOCK



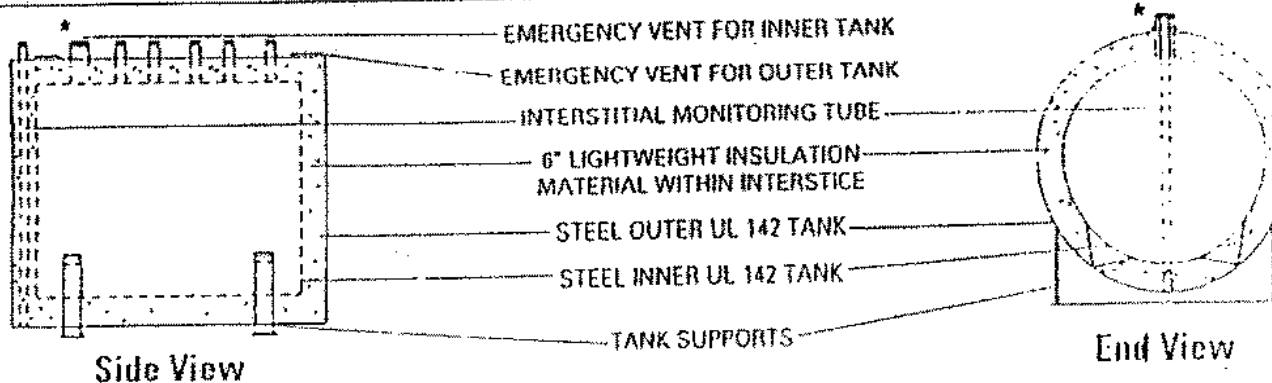
# FUEL STORAGE TANKS



## FUEL STORAGE TANKS



### CYLINDRICAL DESIGN

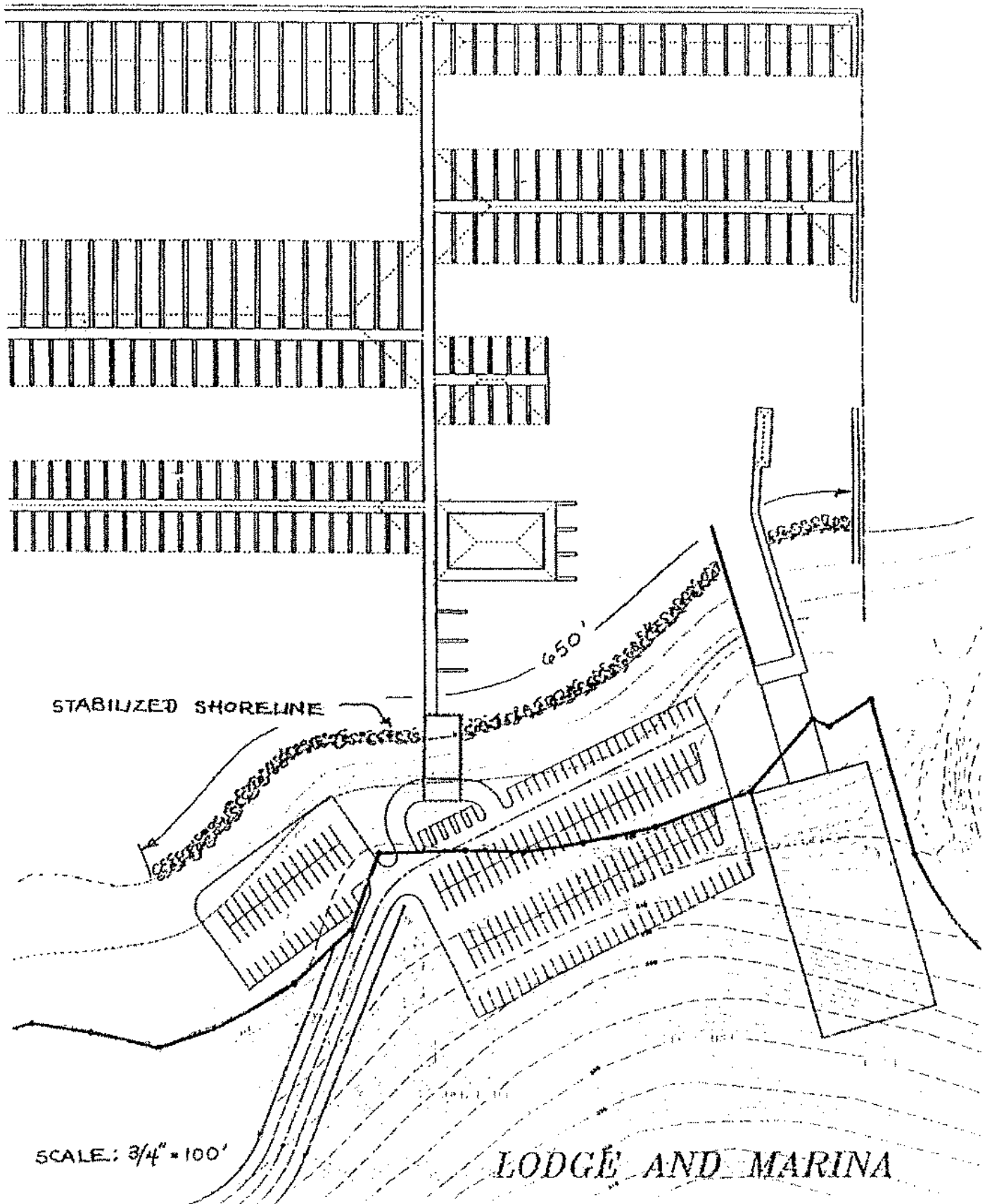


**SECTION J**

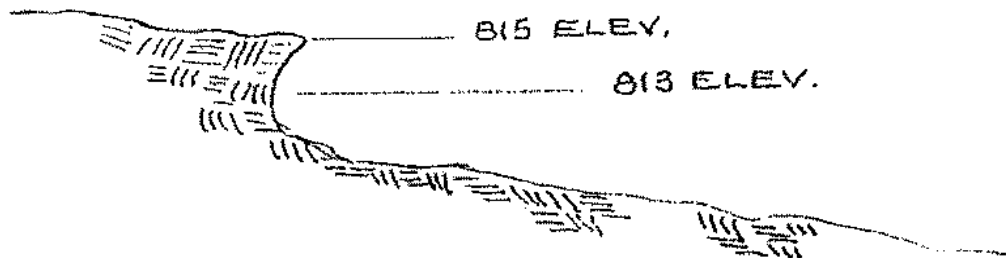
**BANK STABILIZATION**



## SHORELINE STABILIZATION

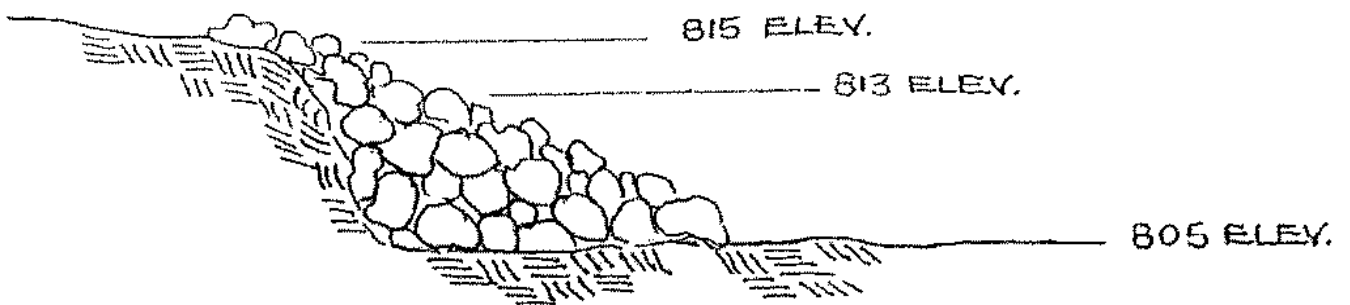


## SHORELINE STABILIZATION



EXISTING SHORELINE.

QUANTITY : 1,200 CU YDS. RIP RAP



STABLIZED SHORELINE

SCALE: 1" = 10'



## **APPENDIX B – PUBLIC INVOLVEMENT AND RESPONSES TO COMMENTS**



**Public Comments and Responses on the  
Draft Environmental Impact Statement for the  
Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir**

## **Introduction**

The draft Environmental Impact Statement for the Rarity Pointe Commercial Recreation and Residential Development on Tellico Reservoir was distributed for comments in March 2003. Members of the public and interested agencies provided written or oral comments on the draft EIS at a public meeting held on April 10, in Loudon Tennessee, or by surface or electronic mail during the comment period. Almost all comments were received by the end of the comment period on May 12, 2003.

TVA received a total of 112 sets of comments for on this draft EIS from 99 individuals, 4 organizations, and 6 interested agencies. A total of 95 people registered at the public meeting. 22 of the comment sheets received at the public meeting did not have signatures.

TVA has reviewed all of the comments. Wherever possible comments with similar themes were grouped or edited together, much care was taken to provide for efficiency and better understanding while preserving their meaning and the intent of the authors. Themes were divided into sections A through R, sometimes with subsections to increase understanding and depending on complexity of the comments. Responses were prepared for all comments by TVA staff.

## **List of Public Meeting Attendees**

<b>No.</b>	<b>Name</b>	<b>City and State</b>
1	Larry Abercrombe	Loudon, TN
2	Jerry Barr	Loudon, TN
3	Mary Lou Barr	Loudon, TN
4	Henry F. Beatty	Vonore, TN
5	Brock L. Benn	Loudon, TN
6	Nancy Benn	Loudon, TN
7	Larry Bollinger	Loudon, TN
8	Art Brandt	Loudon, TN
9	Richard Bresky	Loudon, TN
10	Larry Campbell	Loudon, TN
11	Hamill B. Carey	Loudon, TN
12	Sarah Chaney	Maryville, TN
13	Ed Clebsch	Greenback, TN
14	Barry D. Corle	Loudon, TN
15	Jack Crass	Loudon, TN
16	Bill Drerup	Loudon, TN
17	TWRA - Mark Fagg	Morristown, TN
18	Loudon County Commission - Bob Franke	Greenback, TN

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19	Panella Frick	Loudon, TN
20	Caryl Gallagher	Loudon, TN
21	Linda Garner	Lenoir City, TN
22	Steve Geoffrey	Loudon, TN
23	Cornelise Greebe	Loudon, TN
24	Tellico Village POA - Gary Grove	Loudon, TN
25	Gary Hargis	Lenor City, TN
26	Bryan Helton	Philadelphia, TN
27	Herb Helseth	Loudon, TN
28	Kevin S. Hill	Maryville, TN
29	Michael E. Hill	Maryville, TN
30	Nils Johannesen	Loudon, TN
31	Amber Juckett	
32	Lenny Juckett	
33	Howard F. Kastner	Loudon, TN
34	Susan W. Kastner	Loudon, TN
35	Joe Krzysik	Loudon, TN
36	Len Kulik	Loudon, TN
37	Peggy Kulik	Loudon, TN
38	Randy Lash	Loudon, TN
39	Marlene Lash	Loudon, TN
40	Fork Creek Association - Jane LeNoir	Loudon, TN
41	William C. LeNoir	Loudon, TN
42	John Liska	Loudon, TN
43	Charles E. MacDonald	Loudon, TN
44	Valerie MacDonald	Loudon, TN
45	Shirley Marra	Loudon, TN
46	Brent Martin	Greenback, TN
47	Chris McBride	Lenoir City, TN
48	Joanna W. McCall	Maryville, TN
49	Greg McCool	Knoxville, TN
50	Heachter McCool	Knoxville, TN
51	Jim McGinnis	Loudon, TN
52	Barbara McGinnis	Loudon, TN
53	Keith Milan	Loudon, TN
54	Kathy Milan	Loudon, TN
55	Loudon County Commission - Don Miller	Loudon, TN
56	Earl C. Mizell	Loudon, TN
57	Patricia Mizell	Loudon, TN
58	Doug Moore	Lenoir City, TN
59	Bruce T. Pidd	Loudon, TN
60	Gerold Ploeger	Loudon, TN
61	Jack Racke	Loudon, TN
62	Norma Racke	Loudon, TN
63	Diane Ray	Loudon, TN
64	Kenneth Ray	Loudon, TN
65	Bruce Rein	Loudon, TN
66	Nancy Rein	Loudon, TN
67	Georgia Rogers	Loudon, TN



68	John K. Rogers	Loudon, TN
69	Virgil Rose	Lenoir City, TN
70	Helen A. Rose	Lenoir City, TN
71	Rarity Communities - Mike Runyan	Knoxville, TN
72	John Sherres	Tellico Plains, TN
73	Charles Shubeck	Loudon, TN
74	Jane Simmons	Sweetwater, TN
75	Nine Counties One Vision - Cecil "Bucky" Smith	Lenoir City, TN
76	Janice Smith	Lenoir City, TN
77	Sierra Club - Linda Smithyman	Oak Ridge, TN
78	Tellico Village POA - Charlotte Soltman	Loudon, TN
79	Roger Stewart	Loudon, TN
80	T. M. Stewart	Loudon, TN
81	Daniel Talley	Vonore, TN
82	Ione Thompson	Loudon, TN
83	Virginia Tolbert	Lenoir City, TN
84	David Twiggs	Lenoir City, TN
85	Millie Twiggs	Lenoir City, TN
86	Karen Urban	Lenoir City, TN
87	David Verhulst	Loudon, TN
88	Marjaorie Waldrop	Loudon, TN
89	WATeR - William R. Waldrop	Loudon, TN
90	Bill Webster	Loudon, TN
91	TWRA – J. David Whitehead	Vonore, TN
92	J. Worth Wilkenson	Loudon, TN
93	E. Sloan Wilson	Loudon, TN
94	Kay Wright	Loudon, TN
95	Ken Wright	Loudon, TN

### List of People Providing Comments

No.	Name	City and State
1	Ken Leonhardt	Glen Ellyn, Ill
2	Tennessee Historical Commission - Herbert Harper	Nashville, TN
3	East Tennessee Dev. District - Terrence J. Bobrowski	Knoxville, TN
4	Len Kulik	Loudon, TN
5	Anonymous Attendee	
6	Anonymous Attendee	
7	Anonymous Attendee	
8	Anonymous Attendee	
9	Anonymous Attendee	
10	J. Worth Wilkenson	Loudon, TN
11	Anonymous Attendee	
12	Anonymous Attendee	
13	Anonymous Attendee	
14	David Twiggs	Lenoir City, TN
15	Shirley Marra	Loudon, TN

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16	Valerie MacDonald	Loudon, TN
17	Anonymous Attendee	
18	Anonymous Attendee	
19	Barry D. Corle	Loudon, TN
20	Anonymous Attendee	
21	Anonymous Attendee	
22	Chris McBride	Lenoir City, TN
23	Larry Bollinger	Loudon, TN
24	Anonymous Attendee	
25	John Liska	Loudon, TN
26	Anonymous Attendee	
27	Nils Johannesen	Loudon, TN
28	Loudon County Commission - Don Miller	Loudon, TN
29	Anonymous Attendee	
30	Anonymous Attendee	
31	Hamill B. Corely	Loudon, TN
32	Anonymous Attendee	
33	Anonymous Attendee	
34	Kay Wright	Loudon, TN
35	Anonymous Attendee	
36	W. J. Drerup	Loudon, TN
37	Art Brandt	Loudon, TN
38	Anonymous Attendee	
39	Anonymous Attendee	
40	Marlene Lash	Loudon, TN
41	Anonymous Attendee	
42	Randolph Lash	Loudon, TN
43	Valerie	
44	David C. Verhulst	Loudon, TN
45	Sloan Wilson	Loudon, TN
46	Joy Macklem	Tellico Village, TN
47	Amy Hayes	Maryville, TN
48	Deborah and Kay Miller	
49	Ron Stob	Greenback, TN
50	Edward R. Atkins	Loudon, TN
51	Marvin and Iva Jinnette	Loudon, TN
52	Carl and Mary Peterson	
53	Lenard and Margaret Lulik	Loudon, TN
54	John Hebron	Loudon, TN
55	Ronald C. Williams	Tellico Village, TN
56	Karen Caperell	
57	Joy and Bill Macklem	
58	Gerald E. Veino	
59	Ray and Nancy Barrett	Vonore, TN
60	William Buelow	Vonore, TN
61	Nils P. Johannesen	Loudon, TN
62	Harry and Sandra Westcott	Loudon, TN
63	Robert L. Wright	Tellico Village, TN
64	Hugh Brashear	Loudon, TN

65	John and Darlene Smolik	Loudon, TN
66	Michael Poulsen	Tellico Village, TN
67	Panella Frick	Loudon, TN
68	Gerald E. Veino	Loudon, TN
69	M. K. Waldrop	Loudon, TN
70	Howard and Susan Kastner	Loudon, TN
71	Randolph Lash	Loudon, TN
72	James and Jaye Hallihan	Loudon, TN
73	Homeowners Association of Tellico Village - Nick Friend	Tellico Village, TN
74	Jerry Bar	Loudon, TN
75	Hamill B. Carey	Loudon, TN
76	Kevin Hill	Maryville, TN
77	Janice Smith	Lenoir City, TN
78	Cecil Smith	Lenoir City, TN
79	Lenny Juckett	Lenoir City, TN
80	Tim Molgaard	Tellico Village, TN
81	Melvin R. Koenig	Loudon, TN
82	Michael J. Crosby	South Lyon, MI
83	Harry Kolassa	Loudon, TN
84	Shirley A. Wenzel	Loudon, TN
85	Watershed Assoc. of Tellico Reservoir - William R. Waldrop	Loudon, TN
86	Roger and Margaret Wert	
87	Roger and Sandy Stewart	Loudon, TN
88	Robert and Lois Tuttle	Loudon, TN
89	Loudon County Commission – Don Miller	Loudon, TN
90	Tod and Paula Kilroy	Loudon, TN
91	Barbara and Philip Craig	Loudon, TN
92	Thomas Koch	Loudon, TN
93	Stephen and Carol Ellis	
94	Robert D. Wilson	Loudon, TN
95	William P. Long	
96	Sally Oster	Loudon, TN
97	Harry B. and Judith C. Rowan	Loudon, TN
98	Tellico Village Property Owners Assoc. – Gary E. Grove	Loudon, TN
99	Carl W. Clarke	Loudon, TN
100	Rich Karakis	San Jose, CA
101	Peg and Doug Kahr	
102	Earl C. Mizell	Loudon, TN
103	Don Wendland	Loudon, TN
104	Clyde F. Wilson	Loudon, TN
105	Environmental Protection Agency – Heinz J. Mueller	Atlanta, GA
106	Caryl Gallagher	
107	Wayne Tolbert	
108	Virginia Tolbert	Lenoir City, TN
109	U. S. Department of the Interior – Gregory Houge	Atlanta, GA
110	E. Fischer	Loudon, TN
111	Tennessee House of Representatives – Russell Johnson	Nashville, TN
112	Tennessee Conservation League – Mike Butler	Nashville, TN

### **General Comments**

Sections A through G contain comments which are not directly related to the specific purposes of this EIS, i.e., to analyze potential impacts to the natural resources caused by the proposed actions. Nevertheless, these comments are important to the decision process.

#### **A. General Comments**

Comments of a general and broad nature about the draft EIS and the handling of the proposed actions by TVA.

#### **The Decision to Sell the 118 acres of TVA Land**

1. I oppose the proposal, TVA should not sell the 118 Acres of land along Tellico Lake (Edward Atkins, Jerry Barr, Ray and Nancy Barrett, Hugh and Jody Brashear, Larry Bollinger, Art Brandt, Karen Caperell, Carl W. Clarke, Barbara and Phillip Craig, Michael J. Crosby, Stephan and Carol Ellis, E. Fisher, Panella Fricke, Caryl Gallagher, Marvin and Iva Jinnette, Amy Hayes, John Hebron, James and Jaye Hallihan, Peg and Doug Kahr, Howard and Susan Kastner, Tod and Paula Kilroy, Rich Karakis, Thomas Koch, Leonard and Margaret Kulich, Nils P. Johannesen, Ken Leonhardt, John Liske, William P. Long, Joy and Bill Macklem, Shirley Maria, Cris McBride, Earl C. Mizell, Tim P. Molgaard, Michael Poulson, Harry and Judith Rowan, Janice Smith, John and Darlene Smolik, Roger and Sandy Steward, Ron Stob, Tennessee Conservation League – Mike Butler, Virginia Tolbert, Gerald E. Veino, David C. Verhulst, M. K. Waldrop, Don Wendland, Ronald C. Williams, Kay and Clyde Wilson, Robert D. Wilson, Kay Wright, Robert L. Wright, and 8 attendees at the public meeting)

Response: Comment noted.

2. The developer of Rarity Pointe already has land that is being developed. There is no need to sell the 118 acres as the developer will continue without it. (Edward R. Atkins, E. Fisher, Leonard and Margaret Kulik, Amy Hayes, and William Buelow)

Response: Comment noted. There are two alternatives, A and D, which did not involve a land sale, that were evaluated in the EIS.

3. This land (118 acres) was designated for public recreation use and not commercial development for profit. (an attendee at the public meeting)

Response: One of the decisions before TVA is whether it should change existing land use designations.

4. The developer has said he only wants enough land to build his golf course so why sell him the whole 118 acres. (William Buelow)

Response: This approach was evaluated as Alternative C in the EIS. Under that alternative, the development would be constrained and not as attractive compared to the applicant's proposal. In that case a championship golf course could not be constructed.

5. If any of the land is sold the developer should provide access to the remaining public TVA land. (Earl C. Mizell)

Response: Under Alternative C in the EIS, the developer would provide public access to the remaining portion of the 118 acres.

6. There is no shortage of quality privately owned buildable land in East Tennessee. These people do not need this public land. (Don Wendland)

Response: Comments noted.

7. We oppose the sale of any public land for private development and the loss of natural resources. (Don Wendland)

Response: Comments noted.

8. There should be a permanent moratorium on sale of TVA land. (Don Wendland)

Response: Comments noted.

9. It would appear to me that the only winner with these proposals is Rarity Pointe. (an attendee at the public meeting)

Response: Comment noted. TVA believes that the mitigation tracts at Wildcat Rock, which would be obtained under Alternatives C or E, would offer public benefits through the allocation of additional land for natural resource management and public recreation.

10. The number listed (number 13) for the commitment referenced at the top of page 73 regarding erosion control BMP's (Best Management Practices) is incorrect since the measure listed for number 13 on page 12 pertains to another topic. The FEIS should correct the commitment number. (Environmental Protection Agency – Heinz J. Mueller)

Response: This has been corrected.

11. It would be helpful if the land use and allocation of parcels neighboring the TVA land and the developer's private lands at Rarity Pointe were discussed (e.g. what are the designations for areas in white in Figure 1-1?). This would provide a sense of perspective, i.e. are the TVA lands allocated for conservation and recreation rare in the area or are they the only one of many parcels so-designated by the Tellico Land Plan? (Environmental Protection Agency – Heinz J. Mueller)

Response: Figure 1-1 has been updated to provide this information.

12. Obviously this (Public Meeting) is being "overloaded" by highly biased residents from Tellico Village. . . their big numerical turnout overwhelms the larger silent majority who have a different opinion from them. The Tellico Village people got

their land and a great lake and now they don't want anyone else to have any.  
(Hamill B. Carey)

Response: Comment noted.

The Developer (Rarity Communities, Inc.)

13. How has Mr. Ross's performance been on meeting agreed to obligations when dealing with TVA? (Homeowners Association of Tellico Village – Nick Friend)

Response: TVA has worked with Rarity Communities on the Rarity Bay development on Tellico Reservoir and is satisfied with its performance. Enforcement of agreements will be through deed covenants and the Section 26a permitting process.

14. The developer seems like a slippery, shady, customer that needs to be watched closely as he builds. (an attendee at the public meeting)

Response: Comment noted.

15. The developer has the resources and can change his plans but current lake residents don't have the luxury of changing theirs. (Randolph Lash)

Response: Comment noted. TVA has relied on this flexibility to identify a range of actions that the developer could undertake to avoid or offset potential impacts.

16. By giving this developer additional land we are simply rewarding a person who has no regard whatsoever for the land. (an attendee at the public meeting)

Response: Comment noted.

17. The developer has bought a lot of land thinking he can bully TVA and the public into accepting his ideas. He should put the development on his own lands and leave the public lands to the public. (John and Darlene Smolik)

Response: Comment noted. This approach was evaluated as Alternative A.

18. Mr. Ross has connections at the top of TVA. (Sally Oster)

Response: Comment noted.

Tellico Reservoir Development Agency (TRDA)

19. It seems TRDA won't be happy until the entire lake is developed and degraded. (Ron Stob)

Response: Comment noted. The Tellico Reservoir Development Agency (TRDA) is a public corporation created by the Tennessee Legislature. The agency was created for the purpose of developing and implementing plans and programs for the comprehensive development of, all or a portion of the lands within the TVA Tellico Reservoir project.

20. Has TRDA committed to sell the land proposed for land exchanges in this document? If, not then how does TVA plan to proceed? (Virginia Tolbert, and WATeR – William R. Waldrop)

Response: The TRDA agreed, at the March 2003 TRDA Board of Directors meeting, to make the land available for sale if TVA and the developer agreed to such an exchange.

#### General Impacts to the Environment

21. This project is detrimental to the Tellico Lake water, the watershed, the wildlife, and the public use of the property. (Edward R. Atkins, Leonard and Margaret Kulik, and Tim P. Molgaard)

Response: TVA has considered potential impacts to these resources in its EIS. TVA believes there would be no unacceptable impacts to these resources under all alternatives.

22. Why should we harm this vital natural resource for a project that is not necessary? (Amy Hayes)

Response: See response to comment number A-21 on General Comments.

23. Clearly to anyone who has at least a 5<sup>th</sup> grade education, this is not how to care for a valuable natural resource. (public meeting attendee #7)

Response: Comment noted.

#### TVA Listening to the Public

24. In the land management plan for Tellico Reservoir that TVA developed in 2000, TVA considered selling this same acreage currently under consideration to another group of private developers. Through the NEPA scoping process, the vast majority of the public in the area (over 600 persons representing all sectors of the public) overwhelmingly expressed opposition to selling this public land for private development. TVA rejected that proposal and in issuing their 10-year land management plan TVA again assured the public that this land would remain undeveloped with public access. The NEPA process for this 1999 proposal was a clear example of the value of the NEPA scoping process and a government agency listening and responding. The public spoke and government responded appropriately. (Virginia Tolbert)

Response: Consistent with the NEPA process, TVA has requested public views and comments on this proposed change in its land plan and other proposed land use and permitting actions. Consistent with the NEPA process, TVA will consider various viewpoints before a decision is made.

25. You are making Mr. Ross happy but how about the residents of the surrounding community, including Tellico Village. Don't we count? How about our property values and critically important watershed. (Leonard and Margaret Kulik)

Response: Comment noted. See response to comment number A-24 on General Comments.

26. You have heard from the public and know that they are against this development, yet TVA continues toward a decision that will displease the most people. (James and Jaye Hallihan, Ron Stob, M. K. Waldrop, and Shirley A. Wenzel)

Response: See response to comment number A-24 on General Comments.

27. The public is no less opposed to this land sale than they were four years ago, and TVA knew of this opposition before it entered into this action. However the public will not participate in such process if they are convinced that TVA has no regard for their input and the conclusion is predetermined. (Virginia Tolbert, and WATeR – William R. Waldrop)

Response: See response to comment number A-24 on General Comments.

#### Government and Politics

28. I have become very cynical of government promises and processes. (Ken Leonhardt, and Leonard and Margaret Kulik)

Response: Comment noted.

29. I suspect some politicians have a hand in this. Upon learning who, I will do everything I can to vote them out of office. (an attendee at the public meeting)

Response: Comment noted.



## **B. Alternative Selection**

Comments related to the development, preference, and consequences of the alternatives analyzed by the EIS.

### General

1. Because the developer intends to develop Rarity Pointe with or without annexation of TVA lands, some development would occur whichever action or no action alternative is selected, so that some developmental impacts can be expected. (Environmental Protection Agency – Heinz J. Mueller)

Response: Comment noted.

### Alternative A – No Action

2. I prefer the no action alternative, Alternative A, with a declaration that the current land use plan will remain in effect for a designated period of time – perhaps 20 years. Say no and renew my faith in the system. (Edward R. Atkins, Jerry Barr, Homeowners Association of Tellico Village – Nick Friend, Amy Hayes, John Hebron, Ken Leonhardt, Valerie McDonald, Earl C. Mizell, Janice Smith, Tellico Village Property Owners Association – Gary E. Grove, Tennessee Conservation League – Mike Butler, Virginia Tolbert, David C. Verhulst, WATeR – William R. Waldrop, J. Worth Wilkenson, Kay Wright, and 7 attendees at the public meeting)

Response: Comment noted.

3. While I believe alternative A is best for the community and the long-term health of the lake, some compromise will probably become necessary. The developer is and will continue to move ahead. So maybe the best course would be Alternative D or C with a marina that is reduced by one half, and boat sizes are restricted. That approach will provide better options for hikers and picnickers, will maintain much of the scenic and boating environment, and will give the developer much of what he desires at Rarity Pointe. (Jerry Barr, Panella Fricke, and Nils Johannesen)

Response: Comment noted. The proposed marina would replace the previously-approved International Harbor Marina with the same harbor limits. In addition, Rarity Communities has not requested individual private docks and expects to use the marina for that service which allows more open and undisturbed shoreline in other areas. TVA believes that the applicant's request is reasonable because existing previously approved harbor limits can accommodate 349 wet and 200 dry slips and meets the applicant's primary objectives. The proposed marina is reasonable and necessary since a smaller marina would not accommodate interested residents and guests of the development's many facilities. Because a smaller marina would not meet the purposes of the applicant's development, TVA has not evaluated a smaller facility in this EIS. Alternatives including no marina approval and marina approval are evaluated in the EIS.

4. Many of the mitigation actions are dependent on active Rarity Pointe actions and TVA to ensure land integrity. Yet Alternative A does not require any mitigating actions. (Randolph Lash)

Response: Under Alternative A, TVA would take no action on the Rarity Communities request. Therefore there would be no impacts to mitigate because of TVA actions. Impacts occurring on private land are beyond TVA's control. However, such actions on private lands are subject to compliance with other laws and regulations designed to protect the environment. Other alternatives considered do require mitigating actions.

Alternative B – Applicant's Proposal

5. Adopt Alternative B or E if necessary. (Hamill B. Carey)

Response: Comment noted.

6. Although informative relative to the applicant's proposal, Alternative B is not reasonable in the sense that no mitigation for potential impacts was offered. As a rule, all action alternatives involve environmental impacts such that the NEPA document should consider mitigation of those impacts to the extent feasible. Although Alternative E, which is the applicant's proposal with mitigation, is also presented in the DEIS, Alternative B by itself is insufficient for potential implementation. Alternative B should not be implemented without mitigation. (Environmental Protection Agency – Heinz J. Mueller)

Response: Comment noted. Alternative B does include mitigation for jurisdictional wetlands and floodplains. TVA identified several other alternatives that include possible mitigation.

7. The request (for the par-3 golf course) only increases the value/use of the other lands by the developer rather than them having to use "their" land for the par 3 course. Given the current land management, this is not a viable option for the environment. (Virginia Tolbert)

Response: Comment noted.

Alternative C – Partial Land Sale with Mitigation

8. We favor Alternative C to protect the shoreline. It is a logical compromise which allows the golf course without impacting the shoreline. (Leonard and Margaret Kulik, W. J. Drerup, William Buelow, and 2 attendees at the public meeting)

Response: Comment noted.

9. Page 24. fifth paragraph – It is stated , " the socioeconomic impacts (of Alternative C) would be the same as Alternative B". It further states that "Alternative C achieves most of the applicant's purpose and need, but with less environmental impact on natural resources than Alternative B". This alternative would allow the developer's expressed need to link both ends of his golf course, but would deny him access to the sensitive land adjoining the Tellico shoreline slated for residential housing. Denying sale of the property near the lake would therefore set a precedent that would help deter further requests for development of other public land adjacent to the lake area. Since the socioeconomic benefits are essentially the same with less environmental impact and the precedent for

sale of shoreline property denied, why is this not the preferred alternative?  
(Virginia Tolbert, and WATeR – William R. Waldrop)

Response: Comment noted. Please see the explanation of the preferred Alternative E in Section 2.5.

Alternative D – Small Golf Course and Marina with No Land Sale

10. I prefer Alternative D with approval of the marina and Par-3 golf course with no land sale. (Caryl Gallagher, Chris McBride, and Kay Wright)

Response: Comment noted.

11. Why doesn't TVA support alternative D where the developer would get 49 acres to accommodate the golf course, preserves the shoreline and the integrity of TVA's promise not to develop the land (William Buelow)

Response: Comment noted. See explanation of why Alternative E was selected as the preferred alternative in Section 2.5 of the EIS.

Alternative E – Applicant's Proposal with Mitigation

12. Adopt Alternative B or E if necessary. (Hamill B. Carey)

Response: Comment noted.

13. We do not want Alternative E. (Leonard and Margaret Kulik, Valerie McDonald, Chris McBride, Tennessee Conservation League – Mike Butler, Virginia Tolbert, WATeR – William R. Waldrop, and 3 attendees at the public meeting)

Response: Comment noted.

14. TVA has not demonstrated the value to the public in selecting action E and the proposed sale to Ross. No statistics have been shown to demonstrate the sale is supported by the majority of the community. (an attendee at the public meeting)

Response: Alternative E was presented as a mitigated alternative that would provide additional natural resource and public recreation benefits for the reservoir as a whole. Consistent with the NEPA process, TVA solicits and considers public views on this proposed change in its land plan.

15. Alternative E does not provide equal exchange quality land to compensate for the land being sold to Rarity Pointe. The 118 acres in question is significantly better than the quality and location of the proposed exchange land. The exchange land is several miles upstream and not in projected high population growth areas. It is isolated from the main TVA corridor lands, sandwiched between two industrial areas, and not of the same residential quality. (Edward R. Atkins, Panella Fricke, Peg and Doug Kahr, Howard and Susan Kastner, Leonard and Margaret Kulik, Earl C. Mizell, Shirley A. Wenzel, Harry and Sandra Westcott, and Robert D. Wilson, and an attendee at the public meeting)

Response: TVA believes that the Wildcat Rock site is more suitable than the Rarity Pointe property for some uses, such as natural resource management, and that there are substantial benefits to Alternative E. The proposed exchange would provide about twice the amount of public land and shoreline for recreation and natural resource management uses compared to the proposed sale lands. In addition, a public walking and biking trail would be constructed along with a trailhead adjacent to the Rarity Pointe development. Both the industrial property remaining to the north and south of the Wildcat Rock property and the TVA property adjacent to the Rarity Pointe development would be enhanced by the mitigation features in Alternative E.

16. I am in favor of the project and prefer Alternative E. (Sloan Wilson)

Response: Comment noted.

17. While the preferred alternative (E) offers the best of the “action options”, it still requires a change in the land use plan and sets a precedent for changing the plan every time someone comes up with a new proposal. (J. Worth Wilkenson)

Response: TVA is responsive to requests for use of public land that could promote economic development, recreation, and natural area protection. Such proposals are considered on their own merits and are evaluated publicly. TVA does not view the proposed action as precedent setting. As EPA emphasized in its comments, flexibility and management that adapt to events is essential to good land use plans.

18. I urge TVA to reconsider support of Alternative E and to reevaluate the environmental impacts – particularly the cumulative impacts not addressed in the DEIS and to select Alternative A as the preferred alternative. (Virginia Tolbert)

Response: Comment noted. Cumulative impacts have been addressed throughout the EIS where they are relevant under each resource area in Chapter 4. For example, in Section 4.1, the potential cumulative loss of forested habitat in the Tellico Reservoir region is described.

#### Land Exchange

19. The Wildcat Rock exchange tract needs to be protected in perpetuity, if TVA obtains it. TVA needs to ensure, by some legal means, that this tract will not be developed in the future. (2 attendees at the public meeting)

Response: If all or part of the Wildcat Rock tract becomes TVA property, it would be designated as appropriate for Zone 6 (Recreation) and Zone 4 (Natural Resource Conservation). TVA’s management approach involving other partners would ensure that the property remains available for public use. Please refer to figure G-1 in Appendix G.

20. Three of the options include a land transfer. How can TVA assure us they will not consider another proposal to sell the land transferred to TVA if another developer offers to purchase this land in exchange for other land further upstream or elsewhere? From discussions with TVA staff, it is our understanding

that the current TVA policy requires them to consider all such proposals. Recent public statements by TVA Board members seem to encourage such proposals. (Virginia Tolbert)

Response: See response to comment number B-17 on Alternatives.

21. Page 58, 1<sup>st</sup> paragraph – It is stated that “to ensure that adequate mitigation is achieved, lands considered for this exchange should: 1) contain forest communities of equal or greater ecological value than those lands being requested from TVA, and 2) be transferred to public ownership with provisions to ensure the long-term protection of natural resources.” How is this to be accomplished? In light of TVA’s decision to sell the subject land only three years after denying a similar offer and issuing a policy statement from the TVA Board that no more TVA land along Tellico Reservoir would be offered for sale, another commitment by the TVA Board has no credibility. Furthermore the stated policy is that “TVA considers development requests on a case by case basis...” (Virginia Tolbert)

Response: See response to comment B-17 on Alternatives.

22. The mitigation plan to exchange other land is not an acceptable alternative. TVA is selling the proposed parcel to Ross at a fraction of its value. (an attendee at the public meeting)

Response: TVA and TRDA land would be sold at appraised fair market value.

23. Exchanging 2 acres of land for 1 acre sounds good but land adjacent to the Rarity Pointe development is certainly worth more than the land by Highway 411. In Rarity Pointe, one acre lots have been advertised as high as a million dollars. How much is the proposed land exchange by Highway 411 worth? (Hugh and Jody Brashear)

Response: Comment noted. TVA and TRDA land appraise property which is to be sold to set the price which the agencies will accept. The Applicant would compensate TVA for any difference in fair market value between the TVA land and the TRDA land designated for industrial use. The mitigation property was chosen for its ecological and recreational value.

24. Where is the 256 acre (Wildcat Rock site) parcel? Is it zoned commercial? Is it on Tellico Lake? (Homeowners Association of Tellico Village – Nick Friend)

Response: The location of the Wildcat Rock site is shown in Figure 2-6 of the EIS. It is currently zoned for industrial development by TRDA.

25. How would people access the Wildcat Rock site? (Homeowners Association of Tellico Village – Nick Friend)

Response: The tract is accessible via a public road.

26. Is the Wildcat Rock site comparable to the 118 acre parcel that would be sold? (Homeowners Association of Tellico Village – Nick Friend)

Response: TVA believes that the Wildcat Rock site is better suited than the Rarity Pointe property for some uses, such as natural resource management. The proposed exchange would provide about twice the amount of public land and shoreline for recreation and natural resource management uses than the proposed sale lands. It has diverse wildlife habitat and scenic resources. Also, a public walking trail and a biking trail, along with a trailhead, would be constructed adjacent to the Rarity Pointe development.

27. How can TVA assure us they will not consider another proposal to sell the land transferred to TVA if another developer offers to purchase this land in exchange for other land further upstream or elsewhere? (WATeR – William R. Waldrop)

Response: See response to comment number B-19 of Alternatives. If all or part of the Wildcat Rock tract becomes TVA property, it would be designated as appropriate for Zone 6 (Recreation) and Zone 4 (Natural Resource Conservation). TVA's management approach involving other partners would ensure that the property remains available for public use.

28. Alternative E is the worst case preserving the viewshed. The proposed exchange does not compensate the public for the viewshed that will be lost. (Roger and Sandy Steward)

Response: Comment noted. See response to comment number P-1 on Visual Impacts.

29. The proposed exchange will not benefit wildlife in the long term and only benefits the developer in his current land sales in Rarity Bay. This land "swap" only serves to increase the value of land in Rarity Bay by providing residents a "wild" view rather than an industrial development. It does not provide a connected viable land exchange. (Virginia Tolbert)

Response: Comment noted. See response to comment number P-1 on Visual Impacts.

30. The League believes that this project violates League policy of "no net loss of public lands"; a policy supported by League members and the general public, and which is generally reflected in TVA's own no-net-loss policy.

It is our understanding that the proposed mitigation property at Wildcat Rock is already publicly owned by the Tellico Reservoir Development Agency. This moves us to ask the question, how can the sale of public lands to a private firm be mitigated through the acquisition of existing public lands? Obviously, it cannot. If the preferred Alternative E is approved, then there will still be a net loss of public land. (Tennessee Conservation League – Mike Butler)

Response: As described in the EIS, the Wildcat Rock tract is controlled by TRDA and is zoned as industrial. Thus, the tract is available for industrial development. Although it is currently public land, this is temporary as it is officially slated to be sold for private use and lost from the public domain. Therefore, the purchase of the Wildcat Rock tract from TRDA and its transfer to TVA would mitigate the loss

of public land resulting in a net gain in land available for public use. TVA's own "no net loss" policy applies to loss of public shoreline to residential development.

31. For the sake of argument, should we choose to ignore this problematic situation, two alternatives within the EIS discuss potential mitigation. It is unclear as to how this mitigation was determined, or if this methodology has been available to the public for review and comment. Specifically, we have previously asked TVA to consider conservation, monetary, wildlife habitat, and public use values in the past. There is little to no description or analysis of the conservation and public recreation value of the Wildcat property as compared to the existing TVA public land. Therefore, it is impossible for us to intelligently comment upon the quality of the mitigation and whether it is adequate. (Tennessee Conservation League – Mike Butler)

Response: Comment noted. See Chapter 4 in the DEIS. For example, the sections on terrestrial ecology (4.1), recreation (4.6), and socioeconomics (4.9). TVA believes that mitigation determination is adequately documented in the analysis of the EIS. Conservation, monetary, wildlife habitat, and public use values were considered in the analysis and appeared in the DEIS.

Preferred Alternative

32. Alternative E gives the developer everything he wanted, most of which is in direct conflict with the 2000 Land Plan as well as the original concept for Tellico Reservoir. (Earl C. Mizell)

Response: See explanation of why Alternative E was selected as the preferred alternative in Section 2.5 of the EIS.

33. We appreciate that TVA has identified a preferred alternative at the DEIS stage as opposed to waiting until the FEIS. The public and agency reviewers are thereby in better position to evaluate the direction that the federal lead agency prefers at this time. (Environmental Protection Agency – Heinz J. Mueller)

Response: Comment noted.

### **C. Land Use Plans and Policy**

Comments related to the proposed changes to TVA Tellico Reservoir land management plans and TVA's policy in designing and implementing them.

#### General

1. Others in the area have lived by the basic plan. (W. J. Drerup)

Response: Comment noted.

2. The lake is long and narrow and does not have the geometry to support a large lakeside population. (John and Darlene Smolik)

Response: As indicated in the EIS, the Tellico Project is a regional economic development project. Lands were purchased for industrial, residential, commercial recreation, as well as natural area protection purposes. Lands on the lower portion of the reservoir have been developed for residential uses including Tellico Village, Rarity Bay, and Foothills Pointe.

3. There needs to be a buffer zone, and it would be a good thing to see all the houses out there in Tellico Village have to have a thirty to forty foot buffer zone on natural vegetation planted. It should be a widely accepted practice and principle along Tellico Lake to help protect the lake and the environment. (Lenny Juckett)

Response: If Alternative E is chosen, a 50 foot wide minimum shoreline buffer would be retained by TVA fronting the 118 acre tract of land the developer seeks to purchase. At locations fronting this tract that are adjacent to sensitive habitats/wetlands, the buffer would be 100 feet wide. In addition, a 35-foot setback from the TVA sale boundary would be required for structures placed on the land.

Management of the shoreline fronting Tellico Village is handled in accordance with the June 5, 1985, Tellico Village Master Plan agreement between the Tellico Village developer (Cooper Communities), TRDA and TVA. Some buffer is provided along the shoreline fronting common properties and at certain golf courses located below the 820-foot contour boundary. At other locations, the abutting lot owners are permitted to maintain lawns and to remove undergrowth vegetation three inches and smaller in diameter. Flowering/fruitle trees and shrubs may not be removed.

4. If you insist on giving land away, why not develop a mobile home park so the less fortunate can also enjoy the water? (Don Wendland)

Response: Comment noted.

5. There is already enough development in the area with enough homes, people, and boats on the lake. Away from the lake the country has developed into a highly populated area. There are many dwellings on hodgepodge of small acreages. The country looks like a suburb. With all this development we need more large green areas. We need the TVA natural land. Do not give it away.



(Panella Fricke, Melvin R. Koenig, David C. Verhulst, Gerald E. Venio, Ron Stob, and M. K. Waldrop)

Response: Comment noted.

Considerations for changing the Existing Land Management Plan

6. Do not change the existing 2000 Tellico Reservoir Land Management Plan, which leaves the eastern shore undeveloped, and was prepared with extensive public input. (Edward, R. Atkins, Jerry Barr, Ray and Nancy Barrent, Hugh and Jody Brashear, Karen Caperell, Carl W. Clarke, Michael J. Crosby, John Hebron, Marvin and Iva Jinnette, Peg and Doug Kahr, Howard and Susan Kastner, Tod and Paula Kilroy, Leonard and Margaret Kulik, William P. Long, Valerie McDonald, Deborah and Roy Miller, Donald R. Miller, Earl C. Mizell, Sally Oster, Carl and Marilyn Peterson, Harry and Judith Rowan, John and Darlene Smolik, Virginia Tolbert, Tellico Village Property Owners Association – Gary E. Grove, Tennessee Conservation League – Mike Butler, Gerald E. Veino, M. K. Waldrop, WATeR – William R. Waldrop, Shirley A. Wenzel, Roger and Margaret Wert, Harry and Sandra Westcott, Robert D. Wilson, Robert Wright, and 2 attendees at the public meeting)

Response: Comment noted. TVA uses the land use planning process to signal its intention regarding the management of TVA property. However, any land management planning process whether a county zoning map or a national forest plan is dynamic and not permanent. TVA's process, like others, has flexibility for updates. Under the TVA Act, TVA has broad responsibilities for the social welfare and natural resources of the Tennessee Valley and its adjoining territories. TVA is responsive to requests for use of public land which could promote economic development, recreation, and natural resource conservation. The environmental and socioeconomic impacts of such proposals are evaluated under the NEPA process. Also see response to comment number B-17 of Alternatives.

7. The TVA Board of Directors despite having recently adopted a land use plan for Tellico Reservoir, now thinks it is obliged to consider any proposal of this kind which they receive. Why not abide by the plan and simply say it will not consider further proposals? (an attendee at the public meeting)

Response: See response to comment number C-6 on Land Use Plans and Policy.

8. I am truly disappointed in TVA. You apparently have no intestinal fortitude to stick to your previous plan that was supposed to reserve this land (the 118 acres). (Valerie McDonald)

Response: Comment noted.

9. No credible reason has been given why TVA switched from preserving the public use of natural resources to the current lack of regard for public use of land and one that appears only interested in obtaining money for public land. (Roger and Sandy Steward, and an attendee at the public meeting)

Response: Comment noted.

10. TVA has a land use policy that was thoroughly reviewed just a few years ago and this land was not to be sold. Why now? (Jerry Barr, Hugh and Jody Brashear, Peg and Doug Kahr, and Thomas Koch)

Response: See response to comment number 6 on Land Use Plans and Policy.

11. I further ask that TVA reaffirm their support for open spaces as set out in the 1972 EIS and 2000 Tellico Land Management Plan rather than considering this proposal further and to reject outright proposals for future developments. (Virginia Tolbert)

Response: Comment noted.

12. What happened to make TVA violate its own policy? How much money is changing hands and who is getting it? There is a personal or financial relationship between TVA and the applicant. (Hugh and Jody Brashear, Thomas Koch)

Response: Comment noted. See response to G-13. Sale prices of any property sold would be at fair market value following appraisal.

13. Why did TVA reject the conclusions in the previous EIS for the Tellico Reservoir (the analysis of which was performed by TVA staff and decisions made by the TVA Board) in order to accommodate a proposal, that violates the previous EIS and FONSI? (Virginia Tolbert, and WATeR – William R. Waldrop)

Response: TVA has not rejected the EIS for the Tellico Reservoir Land Management Plan, but has tiered from it for analysis of the applicant's proposed actions. Also see response to comment number 6 on Land Use Plans and Policy.

14. If the 2000 Tellico Land Management Plan is changed so that the 118 acre land sale is approved I will not build my retirement home in Tellico Village (Ken Leonhardt)

Response: Comment noted.

15. I disagree with the statement that this project supports the "original Tellico Project purposes of economic development." The property designated for development was transferred to TRDA when that agency was created in 1984. The land retained by TVA was land not designated for development. The 1972 Tellico Project EIS does not give TVA carte blanc rights for developing all land along this reservoir. Where in the 1972 Tellico Project EIS does TVA feel that it has been given such a mandate for unrestricted development? (WATeR – William R. Waldrop)

Response: Congress has given TVA the authority to buy and sell land in support of its programs and responsibilities. TVA and TRDA work together to achieve a

balance of the economic (industrial) development, residential, and recreation (natural resource) objectives of the Tellico project, as indicated in the 1972 EIS. In the preferred alternative for this EIS, less land on Tellico Reservoir would be slated for economic development under TRDA and more than twice as much land would be available for recreation and natural resource conservation under TVA control.

16. Will the 2000 Tellico Land Plan be modified to be consistent with any changes in the 2000 Tellico Reservoir Land Management Plan EIS resulting from the Rarity Pointe EIS. (Environmental Protection Agency – Heinz J. Mueller)

Response: Yes, the Tellico Reservoir Land Use Plan would be modified if TVA decides to implement one of the action alternatives.

#### Piecemeal Actions resulting in no effective Long Term Plans

17. The current TVA policy seems to be to consider any shoreline purchase offers on an ad hoc, piecemeal basis – regardless of what TVA's 2000 Tellico Reservoir Land Management Plan says. This policy is not consistent with good long term strategic planning. Continuation of this policy will result in uncontrolled development of the shoreline in the lower part of the reservoir. (Carl W. Clarke, Donald R. Miller, Peg and Doug Kahr, Howard and Susan Kastner, Leonard and Margaret Kulik, William P. Long, Tim P. Molgaard, Sally Oster, Harry and Judith Rowan, Tellico Village Property Owners Association – Gary E. Grove, Shirley A. Wenzel, Roger and Margaret Wert, Harry and Sandra Westcott, and Robert D. Wilson)

Response: TVA uses the land use planning process to signal its intention on how it plans to manage TVA property. However, as EPA notes in its comments, no land use planning process whether a county zoning map or a national forest plan, can be completely static. TVA's process, like others, has flexibility for updates. Under the TVA Act, TVA has broad responsibilities for the social welfare and natural resources of the Tennessee Valley and its adjoining territories. Consistent with this broad mandate, TVA is responsive to requests for use of public land which could promote economic development, recreation, and natural resource conservation. The environmental and socioeconomic impacts of such proposals are evaluated under the NEPA process

18. Why bother to make plans if every time a well connected developer wants land you simply change the plans. (Carl and Marilyn Peterson)

Response: See response to comment number C-17 of Land Use Plans and Policy.

19. What was the rationale used by TVA to select this private proposal when by their own admission some other proposals have not been evaluated? (WATeR – William R. Waldrop)

Response: See response to comment number C-17 of Land Use Plans and Policy.

20. How can we get some assurance from TVA that the remaining shoreline will not be available to other developers whenever they make a request to purchase it? (Barbara and Philip Craig, William P. Long, Donald R. Miller, and Harry and Sandra Westcott)

Response: See response to comment number C-17 of Land Use Plans and Policy.

21. Parenthetically, we believe that changing a 10-year plan after only three years seems unusual and undermines its development process somewhat. How often can TVA be expected to hear additional applicant requests to modify the Tellico land Plan and EIS? On the other hand we understand that flexibility and adaptive management for cause is essential to such plans. (Environmental Protection Agency – Heinz J. Mueller)

Response: See response to comment number C-17 of Land Use Plans and Policy.

#### Preserving TVA Land on Tellico Reservoir

22. The preposterous audacity of a developer coming to TVA and asking for land reserved for recreation be sold to him astounds many of us. Equally outrageous is the fact that any one coming off the street can go into your office and negotiate or cause to be negotiated, public lands being converted to private development. (Ron Stob)

Response: Projects that are inconsistent with land allocations will generally be rejected unless public benefits can be demonstrated, and appropriate mitigation for the loss of public uses can be obtained. In this case, the developer already owns 539 acres of property in the area, saw an opportunity to enhance its planned development, and came to TVA with a proposal. Mitigation to offset the loss of public land is proposed in several of the alternatives.

23. TVA should not be considering land development requests on an individual basis. There should be a long range plan to assure appropriate public use, wildlife and environmental concerns and it must be followed, not ignored every time a developer wishes to obtain public land for personal gain. (Edward R. Atkins, Leonard and Margaret Kulik, Shirley A. Wenzel, and Harry and Sandra Westcott)

Response: See response to comment number C-22 of Land Use Plans and Policy.

24. The proposed land trade tract which has direct road and lake access could be prime for development. How long will TVA keep this land public before it too is sold? (public meeting attendee #6, Kay Wright)

Response: See response to comment number C-17 of Land Use Plans and Policy.

25. If TVA violates its own land use policy and plan now how can we be sure new land wouldn't be sold again some time in the future? (Homeowners Association of Tellico Village – Nick Friend, Hugh and Jody Brashear, Harry and Judith Rowan, and WATeR – William R. Waldrop)

Response: See response to comment number C-17 of Land Use Plans and Policy.

26. Under current TVA policy, it appears vulnerable to any developer wanting to purchase the property. We suggest that TVA give the remaining land to organizations such as the State Park Service or Foothills Conservancy with the stipulation that it remain undeveloped public land. (Karen Caperell, Marvin and Iva Jinnette, Howard and Susan Kastner, Melvin R. Koenig, Donald R. Miller, Carl and Marilyn Peterson, Virginia Tolbert, WATeR – William R. Waldrop, and Shirley A. Wenzel)

Response: If TVA received a suitably detailed proposal from one of these agencies, it would be appropriately evaluated. TVA intends to manage lands designated for zones 3 and 4 in the Tellico Land Management Plan as undeveloped public land. In the 2000 Land Use Plan, the east side of Tellico was designated for uses compatible with a greenway. If TVA decides to sell all or part of the 118 acres associated with the Rarity Pointe proposal, the remaining TVA property would still be available for a greenway. That property could feasibly be managed by the state park system or other entity.

#### Enforcement of Land Plans and TVA Policy

27. TVA is currently doing a poor job of requiring homeowners to preserve some trees between their home and the water. There is no reason to think you will do better with new developments. (Lenny Juckett, and Roger and Margaret Wert)

Response: Comment noted.

28. TVA has always had a management plan for land adjacent to Tellico Reservoir to prohibit this type of unplanned and inconsistent development, but TVA lacks a policy for enforcement. (Virginia Tolbert, and WATeR – William R. Waldrop)

Response: Comment noted. See response to comment number C-17.

#### Consistency with previous Land Management Plans

29. The proposal by Rarity Pointe to convert this land to high density residential use is not consistent with the original designation. (Earl C. Mizell)

Response: See response to comment number C-17 of Land Use Plans and Policy.

30. The proposed marina is not consistent with the original concept for Tellico Reservoir. (Earl C. Mizell)

Response: Please see response to comment number C-17 of Land Use Plans and Policy.

31. The 1972 EIS for the Tellico Project presented an excellent plan for managing land acquired by eminent domain. That document recognized the need for diverse uses of the land adjacent to the reservoir to achieve the specified goals of the project. It also specifically acknowledged the need for retaining a connected land base along the eastern shore of the reservoir for natural resource conservation and public access. This original plan specifically recognized the need to prevent “uncontrolled urban sprawl” within the watershed as population increased as a result of the planned economic development in designated areas. This original document represented a covenant with the public through which individuals and commercial enterprises could invest in the land specifically made available for development with an assurance that TVA would protect the remaining land for its designated natural uses. (Virginia Tolbert)

Response: See response to comment number C-17 of Land Use Plans and Policy.

32. All Tellico property designated for development was transferred to TRDA when that agency was created in 1984. The land retained by TVA was land that was NOT designated for development. The assumption has been and was supported by the 2000 land management plan that this land would be retained by TVA for recreation, open space, natural areas, and wildlife benefits. Neither the 1972 EIS for Tellico nor the 2000 Land Management Plan support developing all land along the reservoir. (Virginia Tolbert)

Response: See response to comment number C-17 of Land Use Plans and Policy.

33. Why is restricting use for all this property to its current classification inconsistent with the 2000 Land Plan? It appears this may be the only way to assure compliance with the 2000 Land Plan. (Virginia Tolbert, and WATeR – William R. Waldrop)

Response: Please refer to the response to comment number C-17 of Land Use Plans and Policy.

#### **D. The NEPA Process**

Comments about the EIS process, how well the draft EIS accomplished its purposes, and procedural comments including NEPA compliance.

##### General

1. It is a shame that the public forum was not a question and answer (Q & A). Even the representatives from Rarity Bay (Pointe) were unable to answer questions on their intentions. (an attendee at the public meeting)

Response: The public meeting format was designed to provide information from the applicant and TVA resource experts involved in preparing the EIS. TVA experience suggests that this format tends to create a better understanding of a proposed action, provide an opportunity for everyone to comment in the same manner, and ultimately generate higher quality comments.

2. The displays and the TVA booklets were not even saying the same usages. (an attendee at the public meeting)

Response: Great effort was made to communicate information about the proposed actions and potential impacts to the environment in an understandable manner using several visual and written techniques.

3. The environmental impact statement must not have been conducted by a professional company. (an attendee at the public meeting)

Response: The EIS was prepared by TVA's scientists, technicians, managers, specialists and administrators. Personnel involved with preparing the EIS are listed in Chapter 5 of the EIS.

4. If the impacts are local, are impacts to the current local residents considered in the DEIS? (Randolph Lash)

Response: Yes, both local environmental and socioeconomic impacts are discussed in Chapter 4 of the EIS.

5. The term "mitigated" is an improper use of the word and should be replaced by "degraded." Mitigated implies to improve, moderate, or correct, but the impact on all these factors is to make them worse. This term is misused frequently throughout the document and should be replaced whenever it is used in this context. This misuse implies an effort to mislead the reader from the true effect on these factors. (WATeR – William R. Waldrop)

Response: TVA uses the definition of mitigation as provided in Council on Environmental Quality Regulations for NEPA in 40 CFR 1508.20, where potential impacts to an environmental resource would be avoided minimized, rectified, reduced, or compensated. TVA believes the use of the term mitigated is correct.

6. Water quality was listed as one of the categories of impacts investigated. However, none of the people shown as participants list water quality as their expertise. How can TVA claim to have adequately addressed this critical area

without involving those with expertise in water quality and hydrology? (WATeR – William R. Waldrop)

Response: The water quality analysis was done by a TVA technical specialist and registered professional engineer, with 12 years experience in water quality, water resources, and non-point source pollution work. The name was inadvertently left off the list of preparers in Chapter 5 in the DEIS. The final EIS will include the correct information.

7. We do not believe the (2000 Tellico Reservoir Land Management Plan) should be deviated from until or unless it is modified through the same NEPA process with public hearings and community input that brought it into being, including making the final decision regarding the potential sale. This process has not been followed. (Tod and Paula Kilroy, and Tellico Village Property Owners Association – Gary E. Grove)

Response: Changes to the Tellico Reservoir Land Use Plan by TVA, including the current one in question, are subject to review under NEPA. The NEPA process provides opportunities for community input, including public meetings. As described in Section 1.1, this EIS tiers from the June 2000, Tellico Reservoir Land Management Plan EIS. However, the actions addressed in this EIS are not a result of TVA land planning but a request from the developers to buy and use TVA land, and a request for approval of a marina.

8. Section 4.15 provides only mitigation measures as opposed to commitments. The FEIS and, ultimately, the Record of Decision should provide clear commitments. These commitments should also be more specific than the measures listed in Section 4.15. (Environmental Protection Agency – Heinz J. Mueller)

Response: TVA intends to identify those mitigation measures to which it commits in the Record of Decision.

#### Purpose and Need for the Proposed Actions

9. The Need for this action is not mentioned in the 'Purpose of and Need for Action' section. In section 3.9 the socioeconomics clearly shows that Loudon County is one of the fastest growing counties in Tennessee, the unemployment rate is below that of the state and nation, manufacturing employment is high, and the per capita personal income is above the state average and fast approaching the national average. Clearly the current plan for economic development is working and the community does not need for TVA to sell this land to help the community. What is the expressed Need for this Action? Other than the developers need, what Agency Need (under the definition of NEPA) does this proposed action fill? (Virginia Tolbert, WATeR – William R. Waldrop, and Robert D. Wilson)

Response: Economic development of the Tennessee Valley is a function of TVA as described in the 1933 TVA Act. Accordingly, as described in Section 1.2 of the EIS, economic development has long been one of TVA's objectives for its Tellico projects. As described in Section 1.1, TVA is responding to requests from Rarity Communities for Section 26a approval of a marina and other facilities.



Rarity Communities has requested the use of TVA property to enhance its development. These potential actions clearly pertain to long-standing TVA responsibilities; therefore TVA chose to further analyze the actions before making a decision.

10. Page 24, fourth paragraph – The only justification for this sale is that the socioeconomic benefits “would be slightly enhanced.” All other impacts are negative. How then does TVA justify proceeding with any option with so little favorable benefits and so many negative effects? (WATeR – William R. Waldrop)

Response: No decision on the proposed actions has been made.

11. TVA never defines a “need” (as defined under NEPA) for the proposed action. In fact it seems to confuse the applicants purpose and need (which has no standing under NEPA) with TVA’s (which is required by NEPA). Please explain why TVA needs to even consider this request. (Wayne Tolbert)

Response: See response to comment number D-9 on the NEPA Process.

#### Cumulative Impacts

12. No Cumulative impacts are addressed in the DEIS and it does not include the cumulative effects of development already planned along Tellico Lake including Tellico Village. It addresses only effects of the proposed development. (Hugh and Jody Brashear, Stephan and Carol Ellis, Caryl Gallagher, Howard and Susan Kastner, and an attendee at the public meeting)

Response: Impacts of the project, when considered together with other past, present, and reasonably foreseeable future actions, are discussed under each resource area in Chapter 4 of the EIS. For example, in Section 4.1, the potential cumulative loss of forested habitat in the Tellico Reservoir region is described.

13. It is impossible to properly value cumulative impacts in the manner selected in this DEIS. The definition of cumulative impacts (per CEQ Regulation - 40 CFR 1500-1508) are impacts of the proposed action when considered with other past, present and future actions. TVA clearly acknowledges that additional land sale requests are a reasonably foreseeable future action. Thus, TVA is obligated by law to address the potential cumulative impacts this precedent-setting action has in fostering such additional requests. The public is entitled to know the full scope of environmental impacts associated with the proposed action.

The CEQ Regulations specifically prohibit “piecemeal analysis” of related actions. Thus when actions are related to one another the agency is required to examine the full scope of all related actions even if some future actions are not fully known in detail. While TVA might not have a complete picture of the full universe of future developer land requests, it should provide a range of estimates of what might be forthcoming and the potential cumulative impacts of the actions it considers reasonably possible. That would provide a truer picture to the public of the real impacts of the proposed action.

Does TVA claim the agency is exempt from the “piecemeal” prohibition in CEQ Regulations for implementing NEPA actions?

What legal justification does TVA offer for doing NEPA analysis on a “case by case basis,” especially when the most significant environmental impacts would almost assuredly be the cumulative adverse impacts on an unplanned, patchwork development process that violates TVA’s own management plan for the Tellico Reservoir. (Wayne Tolbert)

Response: TVA considered all reasonably foreseeable cumulative impacts in this EIS. TVA assumed that all of the property along the reservoir managed by TRDA or TVA and designated for industrial, residential, or commercial recreation uses would be fully developed and based its analysis of potential impacts on this assumption. TVA does not assume that lands not designated for development uses would be re-designated and does not agree that such redesignations are “reasonably foreseeable.” TVA controls use designations of land under its control. In the event it receives future re-designation requests, the potential impacts of such requests, including cumulative impacts, would be evaluated at that time.

14. In Section 1.1 ‘Purpose’, page 1, in the second paragraph – TVA states that they evaluated the impacts associated with development of the non-TVA property that collectively makes up the Rarity Pointe project as currently contemplated by the developers. However, TVA did not include the current and future cumulatively impact of the other developments along this reservoir planned and sanctioned by TVA and implemented through TRDA. The incremental effect of this proposed development might become more critical when considering the rapid growth of other commercial, industrial, and residential developments now occurring in the lower half of the Tellico Reservoir.

It would be a violation of TVA’s NEPA implementing regulation and the CEQ Regulations (40 CFR 1500-1509) for actions of a related nature to be addressed “piecemeal.” A reasonably foreseeable future action would be for other developers to make additional land transfer requests. Even if TVA does not have specific detail for each potential request, an analysis could (and should) be done using bounding assumptions to help the agency and the public to see the true overall cumulative impact of this proposed action.

Since TVA has not chosen to include any potential development (and associated impacts) beyond those contemplated in the proposed action, then either (1) TVA will not consider further land transfer requests for private development on the Tellico Reservoir (thus a cumulative impacts analysis is not required) or (2) the agency is intentionally violating both the CEQ Regulations and its own procedures for implementing NEPA. Please clarify in the Final EIS which position is accurate. (Virginia Tolbert, and WATeR – William R. Waldrop)

Response: See response for comment number D-13 on the NEPA Process.

15. Under Alternative E, TVA argues that “none of the alternative TVA actions would generate additional cumulative impacts.” We believe this statement to be

erroneous based upon the scope defined in the paragraph containing this statement on page 98 of the draft EIS.

TVA's decision to sell public lands in this proposal must be considered for cumulative impacts analysis over the entire area under which TVA has authority and public lands holdings, the Tennessee valley. The cumulative nature of these impacts are not local to Tellico, but are reflected in the larger sense by the decisions TVA makes on land dispersal and disposition over the Tennessee valley area. At this scale, should TVA disburse these lands, there is an additional loss of public lands and habitat corresponding to yet another cumulative impact in the Tennessee valley. (Tennessee Conservation League – Mike Butler)

Response: Comment noted. See response to comment D-13 on the NEPA Process. TVA believes that cumulative impacts have been addressed appropriately in the EIS.

16. Taking into consideration that the Wildcat Rock area is already public lands, there appears to be a real cumulative impact (loss) of public land that follows previous losses of public lands during the past 40 years.

Lastly, using the logic provided within the draft EIS, only 50 acres of the Wildcat Rock area is suitable for industrial development. Thus, if the TRDA should develop the Wildcat Rock area at a later date, a substantial portion of the parcel should be able to remain in a natural state, as it is currently in public ownership, thus creating no real gain for the public in conservation acreage. (Tennessee Conservation League – Mike Butler)

Response: Please refer to the response to comment number B-30 on Alternatives.

**E. Precedent Setting Decision**

Comments related to the potential precedent-setting nature of the action alternatives where consideration of these actions could precipitate similar requests to sell TVA land on lower Tellico Reservoir.

1. Changing the 2000 Tellico Reservoir Land Management Plan to allow the sale of the 118 acres sets a precedent for changing the plan every time a developer has a new proposal. This will result in the development of the remaining TVA land on the lower part of the lake in exchange for land upstream. (Ray and Nancy Barrett, Stephan and Carol Ellis, Caryl Gallagher, Marvin and Iva Jinnettee, Lenny Juckett, Howard and Susan Kastner, Thomas Koch, Ken Leonhardt, William P. Long, Cris McBride, Valerie McDonald, Donald R. Miller, Earl C. Mizell, Tim P. Molgaard, Sally Oster, John and Darlene Smolik, Roger and Sandy Steward, Virginia Tolbert, Robert and Lois Tuttle, Gerald E. Veino, WATeR – William R. Waldrop, Shirley A. Wenzel, Roger and Margaret Wert, Harry and Sandra Westcott, J. Worth Wilkenson, Kay and Clyde Wilson, Robert D. Wilson, Kay Wright, Robert L. Wright, and 5 attendees at the public meeting)

Response: TVA does not view the proposed action as precedent-setting. Please see the response to comment number B-17 on Alternatives. Proposals are considered on their own merits and evaluated under a public NEPA process. Also, refer to the response to comment number D-13 on the NEPA Process.

2. Given the public concern voiced over the (precedent setting issue) why does this DEIS fail to address the most significant environmental issue raised by the Rarity Pointe request? (Wayne Tolbert)

Response: See the response to comment number E-1 on Precedent Setting.

3. If TVA chooses to disregard the previous plan and sell the 118 acres to Rarity Pointe there should be clear language preventing other future proposals from continuing to erode the original plan. (Larry Bollinger)

Response: Comment noted. Please refer to the responses to comment number D-13 on the NEPA Process and comment number B-17 on Alternatives.

## F. Public Land

Comments related to the ownership, use and disposition of public land in general or on Tellico Reservoir.

1. We do not want public land sold for private development, use, or profit; it should remain undeveloped and in public ownership. (Edward R. Atkins, Art Brandt, William Buelow, Karen Caperell, E. Fisher, Panella Fricke, Caryl Gallagher, James and Jaye Hallihan, John Hebron, Lenny Juckett, Leonard and Margaret Kulik, John and Darlene Smolik, David Twiggs, Gerald E. Veino, Ronald C. Williams, Robert D. Wilson, and 4 attendees at the public meeting)

Response: TVA has historically allowed a wide variety of uses for its reservoir lands, and its responsibilities include economic development as well as natural resource conservation. On Tellico Reservoir, TVA has sought to provide a balance of uses on the land acquired.

2. This is my land as a citizen of the USA, public land belongs to the people not the government, once it is gone it is gone forever and should be preserved in a natural state for future generations. (Panella Fricke, Lenny Juckett, Rich Karakis, Earl C. Mizell, Michael Poulson, Cecil Smith, Don Wendland, and an attendee at the public meeting)

Response: Comment noted. See the response for comment number F-1 on Public Land.

3. I think it is wrong to sell or trade public land to a private developer – particularly when it is public land that has been previously designated for recreation and natural resource conservation in several land use plans. (Larry Bollinger, E. Fisher, Lenny Juckett, John Liska, Donald R. Miller, and Cecil Smith)

Response: Comment noted. See the response for comment number F-1 on Public Land.

4. This land was taken from people and belongs to the people (public), not developers that cater to the wealthy. (Amy Hayes, William P. Long, and Cecil Smith)

Response: Comment noted. See the response for comment number F-1 on Public Land.

5. I am a long term resident of Loudon and strongly urge TVA or TRDA to sell all unneeded land for it's best use. (Hamill B. Carey)

Response: Comment noted.

6. This land was taken from the original owners at a price far below its real value, it is unethical and immoral to sell it. Not only were people cheated out of their land but now they will be cheated out of using the lake too. (Janice Smith, John and Darlene Smolik, and an attendee at the public meeting)

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*

Response: Comment noted. TVA acquires land at fair market price. Access to Tellico Reservoir will remain open to the public.

## **G. Trust in TVA**

Comments focused on how the public perceives TVA decisions, programs, plans, and personnel.

1. This proposal violates the 2000 Tellico Reservoir Land Management Plan and public trust by the promise denying a similar request just three years ago. TVA should not change the 2000 Tellico Land Use Plan developed with extensive public input or renege on its promise to local landowners not to allow development of the TVA property on the eastern shore of Tellico Reservoir. It was supposed to not be changed for 10 years. (Edward R. Atkins, Jerry Barr, Ray and Nancy Barrett, Hugh and Jody Brashear, Karen Caperell, Barry D. Corle, E. Fisher, Panella Fricke, Caryl Gallagher, James and Jaye Hallihan, Marvin and Iva Jinnette, Rich Karakis, Howard and Susan Kastner, Leonard and Margaret Kulik, Ken Leonhardt, William P. Long, Harry and Judith Rowan, Ron Stob, Tellico Village Property Owners Association – Gary E. Grove, Robert and Lois Tuttle, WATeR – William R. Waldrop, Shirley A. Wenzel, Robert D. Wilson, and 2 attendees at the public meeting)

Response: TVA uses its land use planning process to signal its intention on how it plans to manage TVA property. However, no land use planning process is static. TVA has decided to consider a request which has potential economic development and natural resource conservation benefits.

2. An established development plan for the land around Tellico Reservoir existed when we bought our residential property in Tellico Village. This was an important reason for people to locate here, people were promised that the east side of the lake would not be developed. (Michael J. Crosby, Tod and Paula Kilroy, Randolph Lash, Ken Leonhardt, William P. Long, John and Darlene Smolik, WATeR – William R. Waldrop, and Kay and Clyde Wilson)

Response: See the response for comment number G-1 on Trust in TVA.

## TVA and the Board of Directors

3. TVA should be accountable to the public and not influenced by land developers. TVA should honor their commitments and not change them with every new board of directors, so the public respects and trusts them. (Hugh and Jody Brashear, Barry D. Corle, Caryl Gallagher, Leonard and Margaret Kulik, Deborah and Roy Miller, Robert D. Wilson, and 3 attendees at the public meeting)

Response: Comment noted.

4. Maybe the TVA chairman and management should give back the bonuses until a more desirable solution could be found and you can live up to your commitments. (Michael J. Crosby, and an attendee at the public meeting)

Response: Comment noted. Members of the TVA Board of Directors do not receive bonuses. .

5. I hope that senior TVA management and board will seriously reflect on and consider my concerns. (E. Fisher, Donald R. Miller, Kay and Clyde Wilson)

Response: TVA considers comments from the public in its decision-making process.

6. I don't like TVA and the ignorant land destroying "stuffies." (Valerie)

Response: Comment noted.

7. TVA is a dictatorship, unresponsive to public opinion and we're tired of you. Our next big issue is how to decapitate you or make you more responsive to public input. Darn, I wish we had an election for your positions. (Ron Stob)

Response: Comment noted.

8. TVA should be an organization that continues to stand for integrity. (E. Fisher, and an attendee at the public meeting)

Response: Comment noted.

9. I wish our congress would redesign the whole TVA project to prevent further misuse of the public trust. (Caryl Gallagher)

Response: Comment noted.

10. This NEPA process is a meaningless exercise to justify a personal commitment by a TVA Director to a private developer? (WATeR – William R. Waldrop)

Response: Comment noted.

11. I no longer trust the TVA officials and will loath to speaking out against them and protest their appointments. (Shirley Marra)

Response: Comment noted.

12. What confidence does TVA expect the public to have in their promises when a new administration can simply ignore them? Does the agency care about public trust? (WATeR – William R. Waldrop)

Response: Comment noted.

13. Three years ago, the then TVA Chairman made a statement after the development project before them was turned down, that their land would remain for public use with no future consideration for development. Move forward three years, new Chairman, new board, new policy that TVA will entertain development proposals on an ongoing bases. (Barry D. Corle, Panella Fricke, and WATeR – William R. Waldrop)

Response: Comment noted. In 1999, the TVA Board decided to "cease efforts to develop" the Little Cedar mountain complex on Nickajack Reservoir and to "cease consideration of a proposal" for Tellico Landing on Tellico Reservoir. In a March 1999 press release, Chairman Craven Crowell stated that this action



“reflects a renewed commitment by the TVA Board to preserve public lands for the maximum benefit of the people who use them.” He also stated that “TVA will continue to evaluate requests for use of TVA lands, but proposals must be compatible with TVA’s objective of managing public lands to benefit future generations and the environment.”

14. Corporate policy ought to be more consistent than changing with each new board. (Barry D. Corle and Caryl Gallagher)

Response: Comment noted.

15. This action is a clear example of private influence circumventing the public interest through a federal agency with no checks and balances. If TVA sold this land for private development knowing the depth of public opposition, the public will lose trust in TVA and the NEPA process. (WATeR – William R. Waldrop)

Response: Comment noted.

16. I find it highly suspect that Mr. Ross and Mr. Boardman are personal friends and that Mr. Ross is getting everything he wants under alternative E plus he gets rid of a piece of property he doesn’t need or want and comes off as having made a concession. (Valerie McDonald)

Response: Mr. Boardman is not a personal friend of Mr. Ross. TVA assigned Mr. Boardman to his role as liaison to Mr. Ross for the Rarity Pointe proposal. It is becoming of Mr. Boardman’s energy and insistence on protecting TVA’s role in public property management, that TVA has been able to identify significant mitigation measures to offset the otherwise possible loss of public lands.

#### Money vs. Environment

17. The environment has suffered the last 100 years because we listen to the \$. When does it stop? When do reasonable people say no to the big buck? (an attendee at the public meeting)

Response: Comment noted.

18. We don’t need to increase population density and boat density just to line Mr. Ross’s Pockets. (Valerie McDonald)

Response: Comment noted.

19. Money talks and neighbors are of no value in the big picture. (public meeting attendee #13)

Response: Comment noted.

20. The only reasons I can see for a TVA sale of the 118 acres is to create wealth for Mr. Ross at the expense of the public who overwhelmingly oppose. (William Buelow)

Response: Comment noted.

21. TVA is untrustworthy as a keeper of public land and protector of the environment. TVA, is selling out to the developers with money. This is unethical and immoral. (Jerry Barr, Michael J. Crosby, Melvin R. Koenig, Amy Hayes, Joy and Bill Macklem, Shirley Marra, Roger and Sandy Steward, M. K. Waldrop, WATeR – William R. Waldrop, Kay and Clyde Wilson, and 6 attendees at the public meeting)

Response: Comment noted. TVA believes that the mitigation tract being obtained under Alternatives C or E would offer public benefits through the allocation of additional land for natural resource management and public recreation.

Decision is already Made

22. The DEIS made the sale sound like a done deal. The sale to this developer was strongly opposed during the NEPA scoping period summer of 2002. (Marvin and Iva Jinnette, Joy and Bill Macklem, and Harry and Sandra Westcott)

Response: Although TVA agreed to consider the Rarity Pointe request, the agency will not make a decision until at least 30 days after the Notice of Availability of the Final EIS is published.

23. If Mr. Ross gets what he wants I believe this entire environmental review process and environmental impact study has been a colossal waste of our tax dollars. You already made up your mind. (Valerie McDonald)

Response: Through a cost reimbursement agreement, TVA charged the applicant for the cost of the environmental review. TVA is not funded by tax revenues. TVA will not make a decision on the proposal until at least 30 days after the Final EIS is published and a Notice of Availability is published in the Federal Register.

24. The EIS's sell of the TVA Board's desire to make lands designated for Public Use available to a developer friend of TVA Board Member(s) is shameless and blatant. (Robert D. Wilson)

Response: Comment noted.

25. It is our view that the draft EIS is designed to support its recommended action. It understates the degrading of reservoir quality and the impact to boating safety while offering no redeeming contribution to the socioeconomic conditions of the area. (Tellico Village Property Owners Association – Gary E. Grove)

Response: See response to comment number G-22 on Trust in TVA.

26. This is a done deal and I strongly hate this development. Apparently if one has enough political clout and financial backing, TVA can be corrupted. (Shirley Marra)

Response: See response to comment number G-22 on Trust in TVA.

27. The EIS and this whole proceeding is a sham in my opinion. (an attendee at the public meeting)

Response: See response to comment number G-22 on Trust in TVA.

28. Entertaining the proposed sale of TVA property to Rarity Pointe is a violation of public trust. It doesn't matter what the public thinks, the decision has already been made. (John Hebreon, Joy Macklem, and an attendee at the public meeting)

Response: See response to comment number G-22 on Trust in TVA.

29. TVA obviously plans to continue with the sale of Parcels 8 and 9 to the developer, regardless of the 2000 Land Plan the per the DEIS (pg S-5) states, "Parcel 9 was allocated to protect the Tellico Village Viewshed and undisturbed woodland coves and was considered a suitable scenic corridor along the east side of the reservoir.... Parcel 8 would be managed for activities such as picnicking and hiking rather than commercial development...." That voiding of the 10 year 2000 Land Plan is a blatant misuse of the public trust. (Nils Johannesn)

Response: Comment noted.

30. The proposal and DEIS Alternative E with the sale of the land is a done deal, the meetings are just to placate the public. (Kevin Hill, Howard and Susan Kastner, Joy Macklem, Donald R. Miller, Sally Oster, Roger and Sandy Steward, Ron Stob, Roger and Margaret Wert, and 2 attendees at the public meeting)

Response: See response to comment number G-22 on Trust in TVA.

31. The prevalent feeling among most for the people with whom I have spoken with is that this NEPA process is a meaningless exercise to justify a personal commitment by a TVA Director to a private developer and that there is no point submitting comments – it is a done deal. (Virginia Tolbert)

Response: See response to comment number G-22 on Trust in TVA.

**H. Use of Private Land**

Comments about the existing development on private land.

1. I am not against the development of the land Mr. Ross already owns. (2 attendees at the public meeting)

Response: Comment noted.

2. I don't object to the Rarity Pointe Development itself (on private land) and I think it will be a valuable addition to the area and County. (Donald R. Miller)

Response: Comment noted.

## **Environmental Consequences**

Sections I through R contain the comments related directly to environmental issues and potential impacts to natural resources resulting from the proposed actions.

### **I. Terrestrial Ecology**

Comments about the potential effects of the proposed actions on terrestrial plants and animals.

1. Hopefully TVA will respect the wildlife and plants – Tellico Village puts enough strain on the environment. (an attendee at the public meeting)

Response: Existing terrestrial ecological resources, including wildlife and plants, are described in detail in Section 3.1. The anticipated environmental consequences of the proposed actions on these resources are described in Section 4.1. TVA's preferred alternative (Alternative E) provides for mitigation of anticipated impacts to terrestrial resources through the applicant's acquisition of 256 acres of property (Wildcat Rock-Wears Bend) to be placed in the public domain for long-term protection.

2. The migratory song bird habitat needs protection against fragmentation always. (an attendee at the public meeting)

Response: Interior forest and migratory songbird habitat and fragmentation issues are addressed in Sections 3.1 and 4.1 in the DEIS. Proposed mitigation under the Preferred Alternative E includes the acquisition of 256 acres of property (Wildcat Rock-Wears Bend) that includes approximately 18 acres of interior forest considered high quality habitat for numerous migratory songbird species.

3. In order to protect the natural resources on Tellico Lake TVA should enforce its previous plan and preserve all designated recreational property. (Larry Bollinger)

Response: Comment noted. As stated by EPA in it's comments, good land use plans must be flexible and capable of adapting to events and changed circumstances.

4. The buffer should be 100 to 200 feet from the shoreline not just 50 feet. (Leonard and Margaret Kulik)

Response: The proposed 50-foot buffer is considered adequate to protect water quality and also provides some shoreline habitat and movement corridors for a variety of non-area sensitive resident and migratory birds and mammals.

5. The proposed mitigation area would be potentially an island in an industrial development – an isolated property, so not a true mitigation for habitat protection. (an attendee at the public meeting)

Response: Although the proposed mitigation area may be surrounded eventually by industrial development, the size of the area is considered adequate to offset the loss of terrestrial resources on Parcels 8 and a portion of Parcel 9. The

topography of the proposed mitigation area is such that it allows for maximum buffering of future adjacent development actions. Also, industrial development generally allows enough site design flexibility to allow for additional buffer areas at specific sites.

6. I have been a Tellico resident for five years and I have seen in my neighborhood that as homes have been built, bird population have gone down. The habitat disappears and so do the birds. Animals suffer the same loss of habitat. We need to keep as much habitat as we can. Once natural areas are developed, it is gone for ever. (David C. Verhulst)

Response: Potential impacts to terrestrial animals are discussed in DEIS Section 4.1. In an effort to offset the impacts to terrestrial resources, Preferred Alternative E involves mitigation that includes the acquisition and protection of 256 acres of property (Wildcat Rock-Wears Bend) that includes approximately 18 acres of interior forest considered high quality habitat for numerous migratory songbird species.

7. The sandy point to the north that is considered for a golf course would take away habitat for shore birds and sea gulls. (David C. Verhulst)

Response: DEIS Section 4.15 Environmental Safeguard No. 7 addresses shoreline stabilization, wetland enhancement and shoreline buffer zone management in this area that would help protect existing habitat for shorebirds, gulls and other shoreline wildlife species.

8. What is meant by ‘...these effects (on vegetation and wildlife) would be localized to the project lands and the immediate vicinity and would be insignificant at the state and regional level’? (Randolph Lash)

Response: This statement is specific to the types of vegetation and wildlife identified onsite that would be affected by the proposed actions. The vegetation and wildlife identified during field studies is considered to be common and widespread from a regional and state level perspective.

9. Page 66, Alternative E – The document says that “Impacts related to soil and chemical runoff can be reduced to insignificant levels with implementation of Best Management Practices .....”, but it does not state that those practices will be used. Where is the commitment from the developer, and how will the use be monitored and enforced? Will TVA apply this offer to other property owners along the shoreline? If not, then why not? (Virginia Tolbert, and WATeR – William R. Waldrop)

Response: The proposed mitigation measure appears in section 4.15 as commitment number 8.

10. Development in this area will have a negative impact on wildlife, resources... Where will the deer herds go after the land is sold? They will be killed on the roads by the increased traffic. (Amy Hayes and Lenny Juckett)

Response: Existing terrestrial ecological resources, including wildlife and plants, are described in detail in Section 3.1, and the anticipated environmental consequences of the proposed actions on these resources are described in Section 4.1. TVA's preferred alternative (Alternative E) provides for mitigation of anticipated impacts to terrestrial resources through the applicant's acquisition of 256 acres of property (Wildcat Rock-Wears Bend) to be placed in the public domain for long-term protection.

11. With continued loss of habitat for wildlife and with loss of connected wild spaces, the proposed action as well as Alternative E do not provide for long-term environmental protection and habitat protection for those wildlife that are currently not designated as "of concern." Surely the cumulative impacts of this and future proposals for land sales on migratory birds in need of habitat protection should be considered seriously in this EIS. (Virginia Tolbert)

Response: Cumulative impacts to terrestrial ecology resources, including migratory birds, are discussed in DEIS Section 4.1 Terrestrial Ecology. TVA acknowledges that cumulative impacts to terrestrial ecology resources are ongoing and likely to continue due to the amount of land that is zoned for development along Tellico Reservoir, in particular downstream of U. S. Highway 411. However, TVA's contribution to cumulative impacts would be lessened considerably through proposed mitigation that would replace the habitat being lost. This would be done through a land exchange at Wildcat Rock (Wears Bend) that would provide 256 acres of high-quality habitat that would be protected long-term (see Section 4.15 in the EIS - Proposed Mitigation Measure number 3). The Wildcat Rock site contains approximately 18 acres of interior forest that provides essential habitat for numerous neo-tropical migratory and resident bird species.

**J. Aquatic Ecology**

Comments pertaining to the analysis of potential effect to aquatic habitats in the draft EIS.

1. The section on aquatic habitats under Alternative A suggests no impacts to aquatic habitat. But this section goes on to say that development on privately owned property at Rarity Pointe would continue, so impacts related to erosion runoff from the site and development of permitted waterfront facilities would still occur. Since this statement only appears in the alternative A but would apply to all alternatives, it would suggest to me that an irrelevant and inappropriate comment was made in an attempt to offset the “no aquatic impact” statement contained in Alternative A. (Randolph Lash)

Response: Alternative A would not result in impacts to aquatic habitats attributable to the sale and subsequent development of TVA land, the marina expansion, or the disturbance of approximately 5 acres of TVA land below the 820-foot contour. This statement only appears in Alternative A because only Alternative A does not involve the sale and subsequent development of TVA land. It is true that impacts related to development of private property (which is not controlled by TVA), and any waterfront facilities permitted in the future by TVA would occur.



## K. Threatened and Endangered Species

Comments about the analysis of potential impacts to federal- and state-protected species affected by the proposal.

1. Bald eagles have been observed several times on this land. As stated on page 36, “the forested setting of this project lands likely helps to maintain the integrity of bald eagle habitat on the reservoir.” On page 30, it states that “ Loudon County, where the project lands occur, is one of several counties within the Valley in which forests located within one-fourth mile of the reservoir make up at least 20 percent of total forested land in the county.” On page 31, it is conceded, “the majority of other lands surrounding the lower end of Tellico Reservoir (downstream of the U.S. Highway 411 Bridge) are owned by TRDA, and zoned for residential or industrial development.” Why is destroying this shoreline forest for conversion to residential housing not considered critical to the habit for the bald eagle? (Virginia Tolbert)

Response: In the DEIS Section 4.3, Threatened and Endangered Species, the potential impacts to bald eagles as a result of the proposed actions are described as being a slight reduction in reservoir shoreline conditions suitable for the species. Section 4.15, Proposed Mitigation Measures Number 1 describes the minimum 50-foot buffer zone that would be maintained along the shoreline periphery of Parcel 8 and a portion of Parcel 9. This buffer zone, along with the 35-foot setback for residential construction from this zone, will continue to provide some reservoir based migratory/winter roost habitat for bald eagles. In addition, Proposed Mitigation Measure number 3, which addresses the land exchange at the Wildcat Rock site, would also protect approximately 2.45 miles of high-quality riparian habitat and adjacent forest area that is suitable for current and future bald eagle use.

2. Why is destroying this shoreline forest (on Tellico Reservoir) for conversion to residential housing not considered critical to the habit for bald eagle? (WATeR – William R. Waldrop)

Response: See response to comment number K-1 on Threatened and Endangered Species.

## **L. Water Quality**

Comments related to water quality protection and the analysis of potential impacts discussed in the draft EIS.

1. The project needs to have strong requirements for water runoff, erosion, and shoreline stabilization. The 5 acres for the golf course needs to include the requirement to stabilize the shoreline. (Lenny Juckett and an attendee at the public meeting)

Response: Commitments for water quality are listed in Section 4.15 of the EIS.

2. Explain how Rarity Pointe sewage will be handled. (Lenny Juckett and an attendee at the public meeting)

Response: During early phases, onsite waste treatment approved by TDEC and county health officials will be used. After construction of a pipe line, all sewage from the development would be treated at the Niles Ferry Wastewater Treatment Plant. This is discussed in more detail in Section 4.4, Alternative A.

3. The development and marina will impact water quality and result in more pollution, erosion, trash, run off from pesticides and fertilizers, and shoreline degradation. (Ray and Nancy Barrett, Lenny Juckett, Harry Kolassa, Joy and Bill Macklem, Ron Stob, Tellico Village Property Owners Association – Gary E. Grove, Roger and Margaret Wert, and 3 attendees at the public meeting)

Response: Expected water quality and erosion impacts are discussed in Section 4.4 of the EIS. Because TVA has no control over development of private land and the amount of development would be similar under all alternatives, impacts from development would be essentially the same whether or not TVA sells land for development. In Alternative E, the impacts of the marina would be mitigated with boat pump outs and other management practices (see Section 4.15).

4. Tellico Harbor Marina is dumping untreated sewage from houseboats into the lake. (Ron Stob)

Response: TVA has investigated this alleged incident and found no violation.

5. The high percentage of rental boats in the proposed marina will have no sanitary facilities on board which will degrade water quality. (Howard and Susan Kastner)

Response: Only approximately 4 percent of the boat slips will be designated for rental boats. Any rental boats with sanitary facilities will have access to pump-out facilities. Although any raw sewage discharge is undesirable, the large dilution and assimilative capacity of Tellico Reservoir would likely be able to maintain health risks and nutrient loading at negligible levels. Recreational boaters using Tellico Reservoir are not allowed to release untreated sewage into the Reservoir.

6. The TASS wastewater treatment plant is currently treating about 200,000 GPD (Gallons per Day), but is planning to increase capacity to 1,000,000 GPD to accommodate this and other anticipated development. This indicates that TRDA

and TVA have serious, but yet undisclosed plans for development along the eastern shoreline of Tellico Reservoir. The outfall of this plant is near Vonore. Section 3.4 states that the “ecological health of Tellico Reservoir was rated poor in 2001,” and the “most notable trend for Tellico Reservoir is the increase in chlorophyll levels, which suggest increased nutrient loading to the reservoir.” How will this additional loading introduced about 16 miles upstream affect the ecological health and water quality of this reservoir? (WATeR – William R. Waldrop)

Response: TVA has no plans for development of the eastern shoreline of Tellico Reservoir outside of the existing published management plan. The planned sewage treatment plant expansion would accommodate further growth in Vonore and surrounding communities. It would also create an opportunity to improve wastewater treatment in local areas not currently served by sewers.

Expansion of the plant at its current treatment level would increase nutrient loading to the reservoir. The increase would be small compared to the total watershed contribution, but the location of the discharge and the chemical form of the nutrients in the discharge mean that this impact may be higher than indicated by the relative magnitude. Because of this, the state may consider requiring advanced treatment at this facility during the permitting process. Advanced treatment would maintain loading at its current level or even decrease loading from the expanded facility compared to current conditions.

Even at one million gallons per day (1 MGD), this plant is relatively small, and would process wastewater from about 8000 people (assuming 125 gallons of wastewater per person per day). As the area grows, it is likely that more capacity beyond this expansion will be required

The expansion of the plant will likely take place even without the Rarity Pointe development, and the Rarity Pointe development will likely occur with or without any action from TVA. Decisions made as a result of this EIS would not influence wastewater treatment plant expansion or permit requirements.

7. Water quality is poorest in the lower portion of the reservoir where this development is planned. Why will this not contribute to a deteriorating trend of degraded water quality and ecological health in an area already feeling the effects of development and zoned for considerably more? (WATeR – William R. Waldrop)

Response: This development will make a small, incremental contribution to the trend of degrading water quality. However, this is true for any TVA action (or inaction) on this proposal, because this development will take place whatever TVA's decision. TVA's analysis of water quality effects takes into account these trends.

8. Is TVA going to prohibit the use of fertilizers on this development below the 820 mark, and enforce it, to prevent pollution of our water? (Thomas Koch, and Robert D. Wilson)

Response: Mitigation measures are listed in Section 4.15. Because of the steep slope, the 50-foot buffer required on Parcels 8 and 9 for alternatives C and E would eliminate any fertilizer use below the 820-foot contour in this area. The entire par-3 golf course would be below the 820-foot contour, so some fertilizer use would occur there. This would be minimized by management practices (see Proposed Mitigation Measure number 2).

9. Allowing sewerage to be sent the entire distance of lower Tellico Lake (to Vonore) and collecting more along the way, just so it can then float back down the currently unspoiled Tellico Lake would be very costly in dollars and loss of one of our nations unspoiled recreation areas. (Caryl Gallagher)

Response: Comment noted. Extension of sewage lines and expansion of the treatment plant are likely to occur regardless of TVA's decision.

10. We look to TVA, as manager of the Tellico Reservoir, to apply best management practices to improve and maintain water quality within the reservoir system so that the carrying capacity for the reservoir system is not exceeded. (Environmental Protection Agency – Heinz J. Mueller)

Response: Comment noted. TVA's environmental analysis took these issues into account.

11. From an environmental perspective how would development along Tellico Reservoir be controlled so that the carrying capacity of the Reservoir would not be exceeded and water quality (especially near the forebay) not be further degraded. The FEIS should discuss what TVA's role is in this regard, as well as any local zoning or other relevant measures. (Environmental Protection Agency – Heinz J. Mueller)

Response: Comment noted. TVA strives to promote conservation and management practices that maintain water quality through the implementation of programs such as the Clean Marina Initiative and Shoreline Protection Plan. Approvals for the use of the TVA land and for the construction of water use facilities under Section 26a of the TVA Act are generally contingent upon the use of best management practices to minimize impacts to water quality. Moreover, the development of the Tellico Reservoir Land Use Plan that was completed in June 2000, took into account potential impacts to the Tellico watershed in making land allocations. Notwithstanding these efforts, TVA has no control over a majority of the private activities impacting the carrying capacity of the Tellico watershed with respect to water quality.

12. The TVA preferred alternative would provide considerable additional lands in the public domain that would be allocated for conservation/recreation rather than industrial/commercial use. However, EPA has some environmental concerns with the proposed development of natural lands, a marina, and a shoreline golf course. These actions would be proximate to the forebay of the Tellico Dam and could therefore exacerbate the forebay's existing water quality degradation. While the number of residential units at Rarity would remain the same with or without conveyance and annexation of the TVA lands, the maintenance of the TVA lands as natural areas at Rarity Pointe would provide a conservation buffer

next to the ongoing development. This would reduce the extent of the impervious surfaces and thereby benefit the overall health of the Tellico River. (Environmental Protection Agency – Heinz J. Mueller)

Response: Comment noted.

## **M. Wetlands and Floodplains**

Comments on the potential impacts of the proposed actions on wetlands and the floodplain below the 820-foot contour.

1. The par-3 golf course below the 820-foot contour will impact a wetland area and should be denied. (an attendee at the public meeting)

Response: Wetland impacts would be mitigated if TVA approves any of the action alternatives.

2. The proposal includes a par-3 golf course below 820 foot elevation, this is inconsistent with the stringent TVA restrictions avoiding the use of land below 820 foot elevation. (Edward R. Atkins, Hugh and Jody Brashear, Marvin and Iva Jinnette, Howard and Susan Kastner, Leonard and Margaret Kulik, Robert and Lois Tuttle, WATeR – William R. Waldrop, Shirley A. Wenzel, and Harry and Sandra Westcott)

Response: The property where the par-3 golf course is to be developed is designated for recreation. In addition, golf course development below elevation 820-feet is an acceptable use for TVA property when the adjoining property, (Lower Jackson Bend) is designated for commercial recreation. TVA has authorized the use of land below elevation 820-feet at existing golf courses on Tellico. A variety of other private, public and commercial recreational facilities are permitted below the 820-foot contour where necessary land rights exist.

3. How does TVA justify this violation of their policy (placing a golf course below the 820 foot elevation) without offering the same provisions to others? Where has the potential impact of this provision been addressed in this document? (Thomas Koch, Virginia Tolbert, WATeR – William R. Waldrop)

Response: Development of the par-3 golf course would not be inconsistent with TVA policy. See response to comment number M-2. Best management practices to protect water quality will be a commitment of approval if this proposal is accepted. The impacts of the par-3 golf course have been evaluated in the EIS.

4. Are all of TVA's rules and policies being relaxed just for Rarity Pointe, or can anyone else develop below the 820 elevation now? (Thomas Koch)

Response: The same policies and guidelines apply to everyone on Tellico Reservoir including Rarity Pointe. See response to comment number M-2.

5. Given the ongoing denuding of the land purchased by the developer from TRDA, how does TVA hope to have ANY assurances of land and water quality protection with construction within the 820 area? (Virginia Tolbert)

Response: If TVA chooses any of the action alternatives, TVA would require the Applicant to follow the wetlands mitigation plan found in Appendix C, this includes a buffer for wetlands and water quality protection. Also, there are additional mitigation measures for land and water quality protection found in Section 4.15.

## N. Recreation

Comments related to recreation use and needs on Tellico Reservoir, or the operation of the proposed resort as presented in the draft EIS.

1. Our country has been inundated with golf courses and developments. (Lenny Juckett, and an attendee at the public meeting)

Response: The National Golf Foundation reports that in recent years the supply of golf courses could exceed demand. However, given the correct market environment and physical setting, golf course development can be successful. The concept for Rarity Pointe places a high priority on golf being a significant element of the commercial recreation activities to serve property owners and members of the public. The developer has been successful with other residential/recreation lakefront developments.

2. Why weren't recreation facilities developed on the property (parcel 8 and 9) in dispute now? (Kay Wright)

Response: Lack of public access made it infeasible to develop recreation facilities on parcel 8. Parcel 9 is allocated for natural resource conservation, and recreation facilities were not considered.

3. Who would build future recreation facilities on the exchanged properties? (Kay Wright)

Response: The Wildcat Rock mitigation property would be owned by TVA. Potential development and management could involve TVA, public agencies, and/or non-profit partner organizations. TVA would likely develop, or cause to be developed, a parking area and trails for visitor use of the exchange property.

4. The analysis of planned and existing docks in the area serves as the basis for estimating the future boating density. However, this procedure likely significantly underestimates the number of future boaters. A recent survey of residents of Tellico Village revealed that the number one reason that people bought property and moved there was access to the lake. Tellico Village currently has a population of slightly more than 5,000, but is expected to grow to about 12,000 in the next 20 years. The number of people desiring to own boats and use the lake will quickly exceed the number of boat slips available; consequently, people will make provisions for storing their boat and trailering it to a ramp as many currently do. (WATeR – William R. Waldrop)

Response: Comment noted. Reservoir boating is driven in part by the public's ability to access the reservoir from private residential docks, public boat ramps and marinas. In the analysis, TVA did consider the impacts of individuals trailering their boats to boat ramps. Please refer to the response to comment number N-20 on Recreation for anticipated effects of boating saturation.

### Resort Operation

5. The DEIS says that the developer can change the land use as they see fit. There are no safeguards for the public. (an attendee at the public meeting)

Response: Any proposed land use or development of TVA land must be in accordance with the land use allocation specified for each tract in the Tellico Reservoir Land Use Plan. A proposed use that is inconsistent with the plan is subject to TVA Board approval of a land use allocation change. This action requires a comprehensive review of environmental impacts under NEPA. Land use allocation changes for TRDA land, and deed modifications for former TRDA land are also subject to TVA approval and NEPA review. Any development on private land is bound by the parameters of the transfer instrument (i.e. deed).

6. The developers contradict the former TRDA land being restricted to rental dwellings. (an attendee at the public meeting)

Response: The former TRDA land (Lower Jackson Bend) is restricted to commercial recreation development in accordance with Contract TV-60000A, and no primary permanent residences are authorized on this tract.

7. Some people were told they could build whatever they wanted at Rarity Pointe (an attendee at the public meeting)

Response: The "118-acre" tract of land the developer proposes to purchase from TVA may be used for permanent dwellings, golf course, clubhouses and other purposes. The deed to this property would contain covenants as needed to protect TVA and the public's interest. Development and use of the 219-acre former TRDA commercial recreation tract (Lower Jackson Bend) would be administered in accordance with Contract TV-60000A, Attachment B (Developmental Standards for Commercial Recreation). In addition, use and development of the property would be subject to local and state ordinances or regulations.

8. I would also like to know how TVA or TRDA will enforce the commercial recreation designation for the applicable land designation as such in this proposal. How will they ensure that permanent residents do not reside in this area? Who monitors the developer? (Barry D. Corle, Caryl Gallagher, and 2 attendees at the public meeting)

Response: The commercial recreation designation is enforceable through compliance with deed restrictions attached to the property.

9. DEIS page A-86 in the "Declaration of Covenants, Conditions and Restrictions for Rarity Pointe" states, "This recreational use restriction may be repealed upon the execution of a subsequent declaration by the Declarant and consented to by the Zoning Agency." That seems to solve the puzzle of how Mr. Ross has no mention of the restriction in the Covenants and Restrictions. All he has to do is go to the "Zoning Agency" and request that the "recreational use" restriction is either allowing or intentionally building that escape from the TVA restriction. (Nils Johannesen)

Response: TVA is the holder of the deed restriction on the former TRDA property. TVA has not been asked to remove this restriction.



10. The density and location of townhouses around the golf clubhouse is not desired and should not be permitted. (W. J. Drerup)

Response: Comment noted.

11. I came away from the (last public meeting) thinking that the 118 acres Mr. Ross is trying to obtain would be golf course. His proposal now shows condo units (240 units) with the golf course inland. This is unacceptable. (Art Brandt)

Response: Comment noted. The Applicant's proposal has not changed with regard to location of the condo units and the golf course.

12. The 2.8 units per acre appear to be misleading, how is it calculated? The real concentration will be more in residential area as some of the land will be used for the golf courses and infrastructure. (James and Jaye Hallihan, Randolph Lash)

Response: Using the total acres (657) and the proposed number of units (1,200) the units per acre were calculated in the following manner.

216 acres of TRDA land--523 units divided by 216 acres = 2.42 units/acre  
118 acres of TVA land--325 units divided by 118 acres = 2.75 units/acre  
323 acres of private land--352 units divided by 323 acres = 1.08 units/acre

The concentration of units per acre would increase based on the amount of land put to other uses (i.e., marina, golf courses, clubhouse, road and other infrastructure).

13. How can a gated community offer recreation and shopping benefits to area residents. (Marlene Lash)

Response: Access to and use of the amenities would be available to members of the public who are customers of the resort, also some retail shopping would have public access.

14. What is the process for reviewing floor plans, site plans, architectural guidelines, etc.... (Marlene Lash)

Response: The developer would be responsible for compliance with any local/state zoning regulations, building, and other permit requirements. TRDA would be responsible for assuring compliance with Contract TV-60000A, Attachment B, Development Standards for Commercial Recreation on its former property. TVA may review site plans to assure that the 35-foot setback requirement from the TVA sale boundary is being maintained.

15. Mr. Ross's venture wants the TVA 118 acres to enhance the value of his recreation facilities and amenities giving way to less crowding of amenity structures on his site thus increasing overall value for each unit or lot. (Leonard and Margaret Kulik)

Response: Comment noted.

16. Page 43, last paragraph – The document states “the number of big game (deer) hunters remained steady with a significant increase in the total amount spent by hunters.” “The increased use of this property for hunting reflects the growing popularity of deer and turkey hunting in conjunction with a shrinking land base to support such recreational pursuits....” This project will convert public land now used by hunters to private property with restricted access. What is this negative recreational and economic impact to Loudon County and the local area? (Virginia Tolbert, and WATeR – William R. Waldrop)

Response: Impacts to recreational hunting opportunities across the various alternatives are discussed in Section 4.6 Recreation. Reasonably estimating the economic impact on the loss of hunting opportunities on Parcel 8 and a portion of Parcel 9 is difficult because precise user data is not available for this area. However, under Alternative E, the applicant would be required to secure the Wildcat Rock site on Wears Bend for the long-term protection of natural resources and recreational use opportunities, including hunting (see Section 4.15 - Proposed Mitigation Measures, Number 3). Although this area is now available for hunting uses under a short-term agreement between TRDA and TWRA, the planned future development of the site would preclude these activities. While Alternative E would eliminate some recreational hunting opportunities in the short-term, it would replace the 118 acres lost with a 256 acre parcel to be protected for long-term resource protection and multiple recreation uses, including hunting.

17. Page 1 suggests that some of the residences at Rarity Pointe would be second homes. To the extent feasible, the FEIS should estimate the percent of the 1,200 units that might second homes since the residents in such seasonally inhabited residences could be expected to generate less pollution at Rarity Pointe due to their seasonal absences, and therefore would reduce cumulative impacts. (Environmental Protection Agency – Heinz J. Mueller)

Response: Approximately 45 percent of the 1200 units would not be primary permanent residences. This was considered in the analysis of the EIS.

18. The FEIS should discuss the number of units per acre. Page 71 suggests that under the No action Alternative, and assuming 165 acres for the golf course, there would be approximately 2.8 units/acre on some 374 acres (ie: 657 total acres -165 golf course acres -118 TVA acres). The expected number of people that would live at Rarity Pointe should also be estimated. The FEIS should estimate and discuss these figures so that a sense of development density and population can be predicted. (Environmental Protection Agency – Heinz J. Mueller)

Response: Comment noted. Population estimates including permanent residents appear in Section 4.9 of the EIS. Density figures were included in both the Recreation and Visual Impacts sections. The unit density used in the Recreation analysis does not take into account the unbuildable area of the proposed project, as its purpose was a relative comparison of unit changes (see response to comment number N-12). A more detailed calculation of housing unit density was used in the visual impact analysis (see section 4.8) since that analysis was dependent on site specific numbers.. This information is as follows:

<b>FACILITY ITEM</b>	<b>TVA PROPERTY</b>	<b>PRIVATE PROPERTY</b>
	(Facility footprint--Acres)	(Facility footprint--Acres)
Golf Course — Club house	38	122
Retail shopping and sales	0	6
Marina land development	3.6 (26-a) permit	5
Lodge, spa, rental cabins	0	10
Roads --- Utilities	16	52
Dwelling Units *	64	344

\* Dwellings can be defined as: Cabin rental units, condominium units, residential housing, seasonal (non-year around) residential dwellings, etc.

Dwelling Units per Acre Calculations:

Private Property --- 539 total acres less 195 for other development, leaves 344 acres for 875 dwelling units. Approximately 2.54 dwellings per acre.

TVA Property --- 118 total acres less 54 acres for other development, leaves 64 acres for 325 dwelling units. Approximately 5.07 dwellings per acre. Please note that the increase in density relates to multiple units or levels within a single condominium structure.

Total Project --- 657 total acres less 249 acres for other development, leaves 408 acres for 1200 dwelling units. Approximately 2.94 dwelling units per acre.

19. It is clear that the developer currently plans to construct 1,200 units with or without the conveyance of the TVA lands. It is less clear if the scope of the developer's proposal could change and if such a change would increase the density of the residential units at Rarity Pointe. (Environmental Protection Agency – Heinz J. Mueller)

Response: The Development Plan Summary states that if the No Action alternative was chosen “dwelling unit size and values would need to change to achieve the total number of units and unit values necessary to produce the projected gross revenues...” The developer would build high-rise condominium buildings to achieve a higher unit count vertically or reduce the size of one-story unit lots. See Section 4.6, Alternative A.

#### Marina and Boating

20. A 500 boat marina would have a negative impact on this part of the lake which already has a large marina. Can this part of the lake handle the additional traffic plus the boat generated pollution. The traffic is already so heavy in this area especially during peak holidays and weekends that residents avoid usage

because of safety. (Hugh and Jody Brashear, Karen Caperell, Carl W. Clarke, Stephan and Carol Ellis, Marvin and Iva Jinnette, Lenny Juckett, Howard and Susan Kastner, Harry Kolassa, Leonard and Margaret Kulik, Joy and Bill Macklem, Earl C. Mizell, John and Darlene Smolik, Robert and Lois Tuttle, Gerald E. Veino, Shirley A. Wenzel, Harry and Sandra Westcott, and an attendee at the public meeting)

Response: The marina is replacing the previously-approved International Harbor Marina. The effects of additional boat traffic have been estimated from the marina, as well as from the addition of private water use facilities within Tellico Village and other private property within the 22-mile boating use zone. The boating public has tolerated a fairly high boating density level on weekends and holidays based on available data and analysis assumptions. Weekdays continue to exhibit very modest use levels. When density levels reach the point of intolerability during any period of time, boating use patterns may change. This could result in weekday boating increases, a decrease in weekend boating activities, or the use of less-congested reservoirs. There are continuing annual increases in boat registrations in Tennessee and increasing boat sales nationwide, as well as the continued popularity of boating in the region. Boaters who do not adhere to environmental regulations for water pollution are subject to regulatory enforcement by TDEC. The new marina would have pump-out facilities to appropriately accommodate the handling of waste water.

21. What impact or limitations will 500 additional boat slips place on future lake front development elsewhere up or down river? (an attendee at the public meeting)

Response: The marina development is not anticipated to have a direct effect on the development of private water use facilities on other lakefront property. Anyone having the proper land rights may apply for a permit to construct water use facilities. Each would be reviewed based on its own merits and environmental effects, including cumulative effects.

22. The area surrounding the proposed marina is quite shallow. To accept boats of the proposed size will almost certainly require extensive dredging on a regular basis, and will also result in excess sediment being stirred up by prop wash. Neither will be good for the lake or the river environment. (Nils P. Johannesen)

Response: The preliminary marina plans for the dock layouts do not call for dredging to accommodate the proposed rental wet slips. However, approximately 10,000 Cubic Yards (90 feet by 650 feet) of dredging is anticipated between the docks and shoreline to improve boat maneuvering. Impacts of dredging are evaluated in the final EIS. TVA and the U. S. Army Corps of Engineers routinely consider dredges where necessary to accommodate water use facilities. If dredging is approved, appropriate Best Management Practices and commitments for water quality and aquatic ecology would be required.

23. The proposal will add more boat traffic on the lake which is already too much, it will be dangerous and unpleasant. (Stephan and Carol Ellis, Lenny Juckett, Harry Kolassa, Leonard and Margaret Kulik, and 2 attendees at the public meeting)

Response: Please see response to comment number N-20 on Recreation.

24. The marina is in a congested area and should be reduced in size. (Nils P. Johannesen, Earl C. Mizell, and an attendee at the public meeting)

Response: See response to comment number N-20 on Recreation and B-3 on Alternatives.

25. The proposed marina has provisions for 529 docks. This marina will be located about 3 miles from the Ft. Loudon Marina that currently has 585 docks and is known as the largest marina in Tennessee. The data presented shows a trend of an increasing accident rate with the number of boats in the area. By permitting two such large marinas in such proximity, why is TVA allowing a dangerous boating situation to develop in this area? (Virginia Tolbert, and WATeR – William R. Waldrop)

Response: The current marina plans call for 549 docks. TWRA has taken measures to help control boating speeds by placing “Congested Area” and “No Wake” buoys in heavy boating areas on Tellico Reservoir. Along with other law enforcement personnel, TWRA has increased their presence on the water during heavy boating periods. The DEIS states that “boating accidents in the State have steadily increased since 1983.” However, TWRA’s Boating Accident Reports for 1999, 2000 and 2001 indicate the following total number of boating accidents for the two reservoirs during this three year period: Fort Loudoun Reservoir - 15, 5, and 4; Tellico Reservoir – 3, 7, and 3. Boating accident data do not necessarily reflect an upward trend on Fort Loudoun and Tellico Reservoirs.

26. The DEIS supports the conclusion that there will be an excess of boats in the area. (Earl C. Mizell)

Response: The DEIS concluded that there would be an increase in the number of boats, the water surface acreage per boat could diminish, and boaters may have to change their boating habits. An ultimate determination of whether there are too many boats in any given area is a judgment call which would have to be made by boaters or the Tennessee Wildlife Resources Agency, which is responsible for managing the waters of the State of Tennessee.

27. EPA recommends that the measures established in the TVA Clean Marina program be implemented in construction and operation of the proposed full-scale marina if an action alternative is selected. These measures should also include avoiding the use of lumber preserved with arsenic-based chemicals to prevent the leaching of arsenic into the reservoir from marina decking and pilings. Measures should also address avoiding the use of Styrofoam materials since these often break apart and then become unsightly, difficult to recover, and slow to biodegrade. (Environmental Protection Agency – Heinz J. Mueller)

Response: The Tennessee Valley Clean Marina Initiative (TVCMi) is a voluntary program. However, approval of the marina would be conditioned to assure that important TVCMi criteria are met (see Section 4.15 Proposed Mitigation Measures). A Spill Prevention Countermeasures and Control plan would be required for fuel storage and handling facilities. The owner/operator would be

required to provide and maintain pump out facilities for marine waste. Likewise, BMPs would be required to control such things as erosion and protect surface water quality. In addition, the applicant for the marina has demonstrated strong support of the clean marina initiative at Fort Loudon Marina, which met the requirements for and recently received Clean Marina Certification. TVA's Section 26a approval will be conditioned upon the requirement that all styrofoam used as part of dock flotation will be encased.

28. The developer has stated that there will not be private docks permitted in this proposed development. Is TVA planning to hold the developer to this over the long term or is this an empty promise for shoreline protection? (Virginia Tolbert)

Response: This will be a condition of any TVA approval (see Section 4.15).

## **O. Cultural Resources**

Comments associated with the identification and protection of archaeological and historical resources as presented in the draft EIS.

1. We find that the project area for the proposed development contains no archaeological resources eligible for listing in the National Register of Historic Places. Our office concurs that any additional land areas acquired by TVA or impacted by the project (trail terminal) would be subject to our existing memorandum of agreement for Tellico Reservoir and must undergo a phased process of identification and evaluation of historic sites. We have no objection to the implementation of this project. (Tennessee Historical Commission – Herbert L. Harper)

Response: Comment noted.

2. The DEIS indicates that no cultural survey was done on the Wildcat Rock Site. Shouldn't this be done to be sure TVA could use the land as intended if they get it. Will the public be left with the cost of a future survey? (Randolph Lash)

Response: The Wildcat Rock Site (256 acres) has not been investigated for historic properties (cultural resources). Once acquired by TVA, the property would be subject to surveys, evaluations and if necessary, mitigation or treatment plans prior to ground disturbance, development, or transfer per the conditions of the existing Tellico Land Management Plan Memorandum of Agreement and applicable legal authorities.

## **P. Visual Impacts**

Specific comments on the analysis of the impacts to visual resources on Tellico Reservoir from the proposed actions.

1. TVA is advocating Alternative E which takes highly visible and critical viewshed land and transforms it from excellent to poor. This would substantially alter landscape and adversely change the viewshed of a minimum of 250 homes and is without mitigation. Why is there no mitigation for the visual impacts to Tellico Village? (James and Jaye Hallihan, Leonard and Margaret Kulik, Randolph Lash, and an attendee at the public meeting)

Response: Impacts to the Tellico Village viewshed are already occurring as development proceeds on the developer's private property. TVA has indicated that it currently prefers Alternative E. This alternative mitigates most of the environmental impacts such as loss of public land, recreation, and terrestrial habitat, but, would still add to the impact of the viewshed from Tellico Village. Alternatives A, C, and D would have less viewshed impact due to reduced development area, but they would have less mitigation benefit for other resources. TVA has concluded that there is no reasonable or practical means of mitigating viewshed impacts of the proposed development. The preferred alternative E would include several commitments including a 50 foot buffer, no residential lake access, and a 35 foot building setback that would help minimize disturbance at the shoreline, see Section 4.15.

2. The 118 acres are a major residential viewshed as described in the DEIS, but by the time Rarity Pointe is done with the land it will have a residential density of over 4 units per acre and be the eyesore of Tellico Reservoir. This is unreasonable, greedy, and totally unacceptable. (Leonard and Margaret Kulik, Art Brandt, Roger and Sandy Steward, and an attendee at the public meeting)

Response: See response to comment number P-1 of Visual Impacts. The residential density would be similar to other large residential developments on Tellico Reservoir which average about 2.5 units per acre and range from 1 to 4 units per acres.

3. I am truly distressed over the number of trees which already have been hacked down. Why do they have to take every tree down, it a real eyesore. (Lenny Juckett, and an attendee at the public meeting)

Response: Comment noted. The trees removed to date have been on the developer's private property.

4. The visual beauty and natural qualities of the eastern side are what makes the difference in the high quality of Tellico Lake. I believe the shoreline should be left undisturbed and for everyone's enjoyment. Preservation of undisturbed reservoir lands were among the most frequently expressed public concerns during the review for the Tellico Land Plan. Do not give it away. (Harry Kolassa, Leonard Kulik, Valerie McDonald, Roger and Sandy Steward, David C. Verhulst, Kay and Clyde Wilson, and an attendee at the public meeting)

Response: TVA recognizes that visual attributes and natural scenery are important to people using and living on Tellico Reservoir. The preferred



Alternative E would include several commitments including a 50-foot buffer, no residential lake access, and a 35-foot building setback that would help minimize disturbance at the shoreline (see Section 4.15).

5. At least have Mr. Ross revise his proposal to include a buffer to keep the shoreline pristine and the visual deterioration minimal. (Art Brandt, and an attendee at the public meeting)

Response: A 50-foot buffer is proposed in Alternative E for water quality protection and to provide some visual protection on the approximately 118 acres and surrounding the par-3 golf course. Surrounding the approximately 118 acres, the buffer zone would extend back 50 feet from the full pool elevation of 813., and the vegetation is intended to remain essentially undisturbed. The main purpose for this zone is to help protect water quality, but it would also help retain the natural scenic character near the water's edge. The buffer zone would likely screen some views from nearby boat traffic, but would not provide much screening for the residential viewshed due to the elevated areas of development.

6. Look at the poorly developed condo areas in Tellico Village, we don't need any more of this in this beautiful area. (Art Brandt)

Response: Comment noted.

**Q. Socioeconomics**

1. A review of this proposal has found no conflicts with our plans or programs.  
(East Tennessee Development District – Terrence J. Bobrowski)

Response: Comment noted.

2. What are the comparable appraised values of the 118 acres vs. 256 acres? Why was this information not available to the public? How will the public get at least equal value? What profit will TRDA realize from the sale? (Donald R. Miller, and 3 attendees at the public meeting)

Response: TVA appraises property which is to be sold to set the price which TVA will accept. The sales price will be made public once the appraisal process is completed. TRDA will not receive any money from the sale of the TVA land. If either Alternative C or E is selected, then, according to contract TV-60000A, TRDA would receive the appraised value of the 256 or 60 acres (Wildcat Rock tract). Also, under a contract provision that provides a mechanism for compensating TVA for the land it originally transferred to TRDA while taking into account certain TRDA activities to enhance the value of the land, up to 50 percent of the unimproved land value would go into one or more escrow funds for payment to TVA or for other reservoir uses approved by TVA.

3. The additional 62 acre sale (Alternative E vs. Alternative C) gives the developer 300 plus home sites for huge profits – will the tax payers receive the true value and where will it be applied? Will it help reduce TVA's debt or will the little people be charged higher rates in favor of businessmen? Where is the money going and how does sale of the land benefit the majority of the public? (2 attendees at the public meeting)

Response: Proceeds from the sale of all TVA land and property goes into the TVA general fund where it can benefit other Resource Stewardship activities.. The potential benefits of the land sale are discussed in Chapter 4 and summarized in Section 2.4.

4. The transfer of the 118 acres is not in the long-term best interest of the community and does not benefit the public. (Chris McBride, and Roger and Sandy Steward)

Response: Comment noted.

5. I support this development, a development of this kind is positive for this area.  
(Hamill P. Carey, and 3 attendees at the public meeting)

Response: Comment noted.

6. A lot of people are here (at the public meeting) from other developments and just afraid their property values will go down. They say they are environmentalist but they are not. (an attendee at the public meeting)

Response: Comment noted.

7. Who is making the most money on this deal? The resulting profit to the developer will be in the millions of dollars. (2 attendees at the public meeting)

Response: Comment noted.

8. In any sale to the developer we lose natural assets that can not be replaced. Losing a natural asset is more of an economic detriment than any gains that could be attained. Rarity Pointe would destroy the peaceful and attractive environment for many residents in Tellico Village. Property values and tax revenues would go down. (Michael J. Crosby, Randolph Lash, John and Darlene Smolik, and David C. Verhulst)

Response: It is difficult to support the contention that losing a natural asset categorically constitutes a greater economic loss than any economic gains that could be realized from alternative uses of that asset. The impact of the proposed development on the property values of those in Tellico Village is largely speculation. Increasing the supply of homes in any area could theoretically reduce the value of existing homes or limit appreciation. However, homeowners in any area cannot expect real estate development to be limited in order to maximize the value of their own property. Another concern involves the potentially negative impact of environmental changes (e.g., loss of a “peaceful and attractive” setting) on property values. To some extent, these changes must be considered part and parcel of real estate investment/ownership. Empirically, it is very difficult to say what the impact of the proposed development would be on existing home values. In response to similar concerns about development on lakes, the US Army Corps of Engineers have maintained that increased development does not seem to negatively affect property values (Public Comments, Greers Ferry Lake Shoreline Management Plan Final Environmental Impact Statement, April, 2002). It is not likely that the property values of existing home owners will suffer.

9. I think that the residents of Tellico Village are worried about competition with Rarity Pointe or Rarity Bay. (Sloan Wilson)

Response: Comment noted.

10. The socioeconomic data in the DEIS do not support the need for economic stimulation in Loudon County where the growth rate, income level, and unemployment rate is among the best in the state. (Hugh and Jody Brashear, Marvin and Iva Jinnette, Peg and Doug Kahr, Howard and Susan Kastner, Tellico Village Property Owners Association – Gary E. Grove, Robert and Lois Tuttle, M. K. Waldrop, and Harry and Sandra Westcott)

Response: Comment noted. Although Loudon County’s economic indicators are higher than those for many other counties, this development proposal is somewhat unique to Loudon County and is not an opportunity that can be transferred to another county.

11. The area needs higher paying jobs than the building trades and golf course maintenance jobs brought by Rarity Pointe. (M. K. Waldrop)

Response: Comment noted. It is true that many of the jobs associated with this project are not high-paying. However, higher paying jobs likely would be associated with industrial development that would be more intrusive and perhaps less welcome in a residential and recreational setting.

12. The project would result in increased road traffic, lack of infrastructure to handle the increased population, degrade the environment, and less desirable place to live. (Marvin and Iva Jinnette, Joy and Bill Macklem, Howard and Susan Kastner, Ron Stob, and Harry and Sandra Westcott)

Response: Comment noted. The impacts of the proposed development on traffic, infrastructure, and population are evaluated in Chapter 4, particularly in Section 4.9 of the EIS.

13. The development will bring in a transient population which is good for revenues but will these people respect the lake the way full time residents will. (an attendee at the public meeting)

Response: Comment noted.

14. Has this DEIS factored in the negative effect on property value for those whose viewshed is being degraded by this land sale? (WATeR – William R. Waldrop)

Response: See response to comment number Q-9 on Socioeconomics.

15. If the lake becomes unsafe and unpleasant for boating because of overcrowding, it will deter people from relocating in this area. This will result in a reduction of property value. This negative socioeconomic impact was not factored into the analysis. Please include this factor as a counterbalance to the perceived positive impact of increased tax revenues. (John and Darlene Smolik, and WATeR – William R. Waldrop)

Response: Establishing a connection between lake usage (or “over usage”) and property values would be very difficult. The impact of increased lake usage caused by the proposal on property values would be speculative. However, there is no reason to think that the proposed action would lead to “unsafe and unpleasant” boating because of overcrowding. The proposed marina would not exceed the existing harbor limits previously established by TVA for a former marina at the same site. And there were be no recreational boat user complaints in this regard during the operation of the former marina, which the proposed marina would replace. It is not likely that the property values of existing home owners will suffer.

16. The analysis includes positive aspects of the development but does not adequately address the negative aspects such as the increased demand of county services associated with low wage employees or the decrease in property values due to overpopulation and unsafe boating conditions. (Virginia Tolbert, and WATeR – William R. Waldrop)

Response: The number of low wage employees permanently relocating to Loudon County will be minimal. As to property values and other aspects of the development, see response to comment number Q-9, Q-18, and Section 4.9 on socioeconomic in the EIS.

17. (The analysis) also fails to include the need to relocate such low wage employees to a county that has had full employment for several years. (Virginia Tolbert, and WATeR – William R. Waldrop)

Response: As noted, many of the workers may commute from surrounding counties (within the Labor Market Area), particularly during construction. Permanent employment is small enough to have very little impact on Loudon County.

18. The revenue generated from property taxes on residents located on Parcels 8 and 9 will be assessed at residential rates. Therefore, this property will provide significantly less tax revenue than all property assessed at commercial rates on the former TRDA land zoned for commercial recreation. Thus, the incremental benefits from the sale of the TVA land will be less. (Virginia Tolbert, and WATeR – William R. Waldrop)

Response: Residential property assessment rates are lower than commercial rates. However, if these parcels are not developed as proposed, there is no reason to think that (higher tax generating) commercial development will occur.

19. The Loudon County Economic Development Agency targets industrial development with higher incomes and tax rates instead of residential housing as their goal. Consequently, this planned action is inconsistent with the economic goals of Loudon County. Why is TVA pursuing an economic development strategy in conflict with Loudon County? (Virginia Tolbert and WATeR – William R. Waldrop)

Response: The proposed actions by TVA are not in conflict with Loudon County's economic development strategy so much as a complement to it. Furthermore, if the proposed site is not deemed suitable by TVA for industrial development, then the proposed development may be a good alternative.

20. Sale of TVA public land is in direct conflict with the views of most Loudon County residents. (Donald R. Miller, and Kay and Clyde Wilson)

Response: Comment noted.

21. Sale of this land is inconsistent with the planned development of Tellico Village. (Stephan and Carol Ellis)

Response: Comment noted.

22. The EIS doesn't mention that further commitment to housing (especially gated communities) is not in keeping with Loudon County's Land Use Objectives. (Robert D. Wilson)

Response: See response to comment number Q-19 on Socioeconomics.

23. An overheated construction economy in Loudon County is generating excessive inflationary costs in the construction industry at the expense of the small contractor and the ultimate buyer. (Tellico Village Property Owners Association – Gary E. Grove, and Robert D. Wilson)

Response: It is conceivable that a temporary increase in home construction costs could result if the proposed project strains the existing supply of local construction workers. However, the large labor market around Loudon County would tend to minimize this effect. There is no reason to think that small contractors would be adversely affected by the increase in construction associated with the proposed development.

24. TVA must take into consideration more than just the developer's revenue stream and profit. Besides the environmental issues, the negative human impacts should take priority. (Melvin R. Koenig and Randolph Lash)

Response: Comment noted. TVA considers human impacts in its EIS and in its decision.

25. Although we are aware of the TVA mandate for economic development of the Tennessee Valley and assistance in this regard by TRDA, management of reservoir health should also be fully considered in selectively siting that economic development and minimizing developmental impacts. (Environmental Protection Agency – Heinz J. Mueller)

Response: As indicated by the analysis done for this EIS, TVA does take into account reservoir health and has identified a number of measures to avoid or reduce potential impacts (see Sections 4.4 and 4.15).

**R. Air Quality**

Comments about the analysis of the potential impacts to air quality and compliance with air quality regulations.

There were no substantive comments on air quality.



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## **Public Notice**

### **Tennessee Valley Authority**

March 25, 2003

#### **Proposed action**

Sale of TVA land for construction of Rarity Pointe Commercial Recreation and Residential Development

#### **Location**

Lower Jackson Bend area, Tellico Reservoir, Tennessee

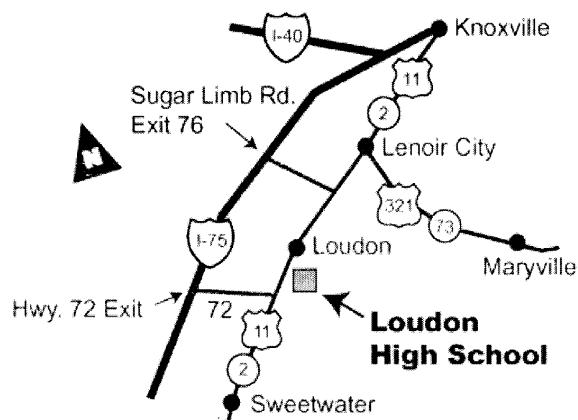
#### **Description**

The request includes the sale of 118 acres of TVA land and permits to use an additional nine acres for residential and commercial recreation purposes. The total development consists of approximately 621 acres and includes residential homes, a marina and lighthouse, a lodge and spa, rental cabins, par-3 and 18-hole championship golf courses, and retail shops.

A public informational meeting will be held from 5 p.m. to 9 p.m. on Thursday, April 10, at Loudon County High School, 1039 Mulberry St., Loudon, Tennessee 37774. Registration will begin at 5 p.m. and presentations will be made at 6:00 and 7:30 p.m. The purpose of the meeting is to obtain public input on the Rarity Pointe draft environmental impact statement (DEIS), which outlines the five alternatives considered by TVA for the property. View the [meeting agenda](#) (PDF file, 63 kb).

#### **Directions to TVA Public Informational Meeting**





TVA is interested in receiving comments on the DEIS and the proposed action and in identifying any other issues associated with this proposal. These comments will be used in reaching a decision concerning the proposal.

For more information, contact Spencer Boardman at 865-632-1550 or [sdboardman@tva.gov](mailto:sdboardman@tva.gov). If you would like to attend the meeting and have special needs, please contact him at least five days before the meeting.

View the complete Rarity Pointe [draft environmental impact statement](#).

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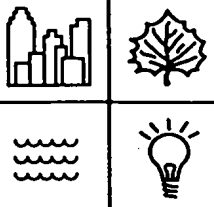
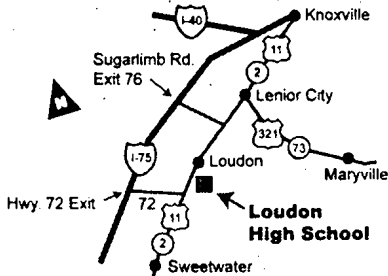

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CITY Lenoir City, TN  
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## **Rarity Pointe meeting set for April 10**

A public information meeting on the proposed Rarity Pointe commercial recreation and residential development is planned 5-9 p.m. Thursday, April 10, at Loudon High School.

The Tennessee Valley Authority (TVA) reported its draft environmental impact statement (DEIS) notice of availability for the project should be initiated around the end of March. Area residents would then be able to review the document on the TVA Web site at [www.tva.gov/environment/reports/tellico2/index.htm](http://www.tva.gov/environment/reports/tellico2/index.htm).

Comments about this project slated for the Tellico Reservoir area should be sent to: Richard L. Toennisson, Tennessee Valley Authority, WE 8C-K, 400 West Summit Hill Drive, Knoxville, Tenn. 37902-1499 or send e-mail to [rtoennisson@tva.gov](mailto:rtoennisson@tva.gov).

	<h1 style="font-family: cursive; font-size: 2em; margin: 0;">fyi from tva</h1>
<h2 style="margin: 0;">Rarity Pointe Community and TVA</h2> <h3 style="margin: 0;">Invite You to Attend an Informational Meeting</h3>	
<p>TVA will hold an informational meeting on April 10 from 5 to 9 p.m. at Loudon High School. Registration will begin at 5 p.m. and presentations will be made at 6:00 and 7:30 p.m. The purpose of this meeting is to obtain public input on the Rarity Pointe draft environmental impact statement (DEIS), which includes the following five alternatives.</p> <ul style="list-style-type: none"> <li>A. <b>No Action</b> — Everything would remain the same as it is now.</li> <li>B. <b>Applicant's Proposal</b> — TVA would modify the Tellico Land Plan and approve the applicant's proposal.</li> <li>C. <b>Partial Land Sale with Mitigation</b> — TVA would modify the Tellico Land Plan and consider a partial sale of TVA land including a 60-acre land exchange with vehicle access across private property to the remaining TVA shoreland.</li> <li>D. <b>Small Golf Course and Marina with No Land Sale</b> — TVA would permit the marina and allow construction of the par-3 golf course adjacent to Lower Jackson Bend, but would not sell TVA land for residential and championship golf course purposes.</li> <li>E. <b>Applicant's Proposal with Mitigation</b> — TVA would approve the applicant's request and allow the sale of TVA land as proposed in alternative (B). Required mitigation would include a 256-acre land exchange to TVA with public road access, an easement across private property for a greenway trail, and the construction of a trail head on TVA land which includes a toilet building, paved parking lot and picnic tables for public use.</li> </ul> <p>TVA is interested in receiving comments on the DEIS and the proposed action to affect the environment and to identify any other issues associated with this development proposal. These comments will be used in reaching a decision concerning the proposed action.</p> <p>For more information, contact Spencer Boardman at (865) 632-1550. If you have special needs, please contact Mr. Boardman at the number listed above at least five days prior to the meeting.</p> <p><b>Informational Meeting</b>  Thursday, April 10, 5 to 9 p.m.  Loudon High School  1039 Mulberry Street  Loudon, TN 37774</p>	
<p><b>Directions to TVA Public Informational Meeting</b></p> 	
	



## **APPENDIX C – WETLAND INFORMATION AND MITIGATION PLAN**



## **Rarity Pointe Mitigation Plan**

### **1. Introduction**

The mitigation plan is designed to replace and offset shoreline wetlands and wildlife habitat impacts, to stabilize the shoreline, to provide water quality protection, and, as additional benefits, to establish a diverse native plant community and provide aesthetic interest. The mitigation plan consists of shoreline stabilization and the establishment of a permanent vegetated shoreline buffer zone around the peninsula on Lower Jackson Bend that will contain the Rarity Pointe par-3 golf course. The west boundary of the mitigation area will be on a straight line extending out to the shoreline from the residential lot line between lots 47 and 48. The east boundary will be on a straight line extending out to the shoreline from the residential lot line between lots 40 and 41 (Attachment xx). A minimum 50-foot wide buffer measured from the normal summer pool elevation (813 feet above msl) will be established. In certain locations where changes in the par-3 golf course configuration are feasible, or native herbaceous vegetation can be incorporated into the fairway design, the buffer will be wider than 50 feet, up to a maximum of 150 feet. The buffer adjoining wetland W5 will begin at the wetland boundary instead of the top of the bank.

### **2. Shoreline Stabilization**

Shoreline stabilization will consist of hard-armoring and establishment of native shrub species to prevent further shoreline erosion. From the west buffer zone boundary north along the shoreline to a point to be established by survey, shoreline stabilization will consist of bank reshaping and contouring, and placement of filter fabric and rock rip-rap. This work will require the use of equipment to perform the bank shaping/contouring work and installation of rock rip-rap. From this point to the east buffer zone boundary, shoreline stabilization will consist of hand-placement of rock rip-rap. This work will require the use of a bobcat or similar small equipment to transport the stone. No bank shaping or recontouring will be done in this area. The shoreline stabilization work will be conducted during the Tellico Reservoir winter drawdown period so that all of the heavy equipment work can be done from the bottom of the bank in order to protect the desired existing vegetation in the buffer zone. A TVA representative with expertise in shoreline stabilization will be onsite to provide technical assistance during the shoreline stabilization work.

#### **Shoreline Stabilization Procedure**

##### **West Section:**

1. Perform bank contouring to produce a stable slope on which to place the rock. Regrade the bank to a uniform, stable slope with a maximum 1.5h : 1v slope, preferably 2h : 1v.

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*

2. Prepare the subgrade to the required lines and grades.
3. Compact any fill required in the subgrade to a density approximating that of the surrounding undisturbed material.
4. Spread any soil material removed to an upland location at least 150 feet from any surface water. Seed, fertilize, and straw-mulch the spread soil immediately.
5. Excavate a keyway at the toe of the regraded slope to form a stable base for the placement of rock riprap. The bottom of the keyway must be at the 811.5 to the 812 foot elevation.
6. Cover the newly regarded sloped with 10 ounce nonwoven filter fabric from the bottom of the keyway to the top of the bank. Overlap the edges by at least 12 inches, and space anchor pins/pegs every 3 feet along the overlap. Care must be taken not to damage the cloth when placing the riprap. If damage occurs, remove the stone and repair the sheet by adding another layer of filter material with a minimum overlap of 12 inches.
7. Rock class and gradation must be approved by TVA prior to commencement of work.
8. Machine place appropriately sized durable, rock riprap from the keyway to the top of the bank. Place rock riprap so that it forms a dense, well-graded mass of stone with a minimum of voids. Place rock riprap to its full thickness and height in one operation. Do not place stone by dumping through chutes or other methods which cause segregation of stone sizes. The exact distance along the shoreline to perform bank contouring and machine placement of riprap will be marked in the field by TVA, however, it is approximately 650 to 700 feet.
9. The finished slope will be a minimum of 1.5 h to 1 v, and will be free of pockets of small stone or clusters of large stones. Hand placing of rock may be necessary to achieve the proper distribution of stone sizes to produce a relatively smooth, uniform surface.
10. Native riparian woody species will be selectively established on the top of the riprap bank (see Buffer Zone Vegetation section).

East Section

1. Hand-cut and remove selected woody species from the bank and top of bank. Woody plants that are to remain undisturbed will be marked by TVA. Unmarked woody plants can be removed.
2. Excavate by hand or small machine a keyway at the toe of the bank to form a stable base for the placement of rock riprap. Bottom of the keyway should be at the 812 foot elevation.
3. Hand place appropriately sized durable, rock riprap from the keyway to the top of the bank. Place rock riprap so that it forms a dense, well-graded mass of stone with a minimum of voids. Carefully place rock riprap around the stems of the remaining woody vegetation, making sure that there are a minimum of voids. Place rock riprap to its full thickness and height in one operation.
4. Native, riparian woody species will be selectively established on the top of the riprap bank (see Buffer Zone Vegetation section).



### 3. Buffer Zone Vegetation Plan

Establishment of the 50-foot vegetated buffer will consist of retention of some of the existing woody species, hand-removal and mechanical removal of selected plants, application of selected EPA-approved herbicides to control invasive exotic plant species; and planting of native shrubs and herbaceous species. Methods for long-term maintenance of the vegetated buffer zone include annual or biannual mowing, selective pruning of shoreline shrubs, and selective use of herbicides to control invasive, exotic species and certain native species such as poison ivy. Any herbicides used must be EPA-approved for use in aquatic areas and be applied according to label directions. Herbicide applications will be conducted only by state-certified pesticide applicators.

Table 1 presents a list of native woody and herbaceous plant species that can be planted or seeded in the buffer zone, the planting location (shoreline, wetland, or upland buffer zone), and the form in which they can be purchased (e.g., container-grown, bare-root seedling, seed). This is not a complete list of species that would be suitable for this area and additions can be made. Any species additions made by the applicant, however, must not be planted in the buffer zone until they are approved by TVA. While not all of these species may be used due to availability and other species may be added, the goal will be to use at least 80% of the listed and approved species in order to provide diversity and increase the likelihood of success of the planting plan (e.g., The impact of the failure of two or three species is of less consequence to overall plan success as the number of species planted/seeded increases).

#### Shoreline zone:

1. Plant selected woody plant species (shrubs) at the top of the rock riprap and in a ten-foot wide area extending landward from the top of the riprap. The planting stock will be either bare-root or container-grown. The shrubs will be planted in the appropriate numbers and spacing for the species and the planting area.
2. No fertilizers will be used.
3. The shrubs will be planted immediately upon completion of the riprap placement.

#### Buffer zone:

1. TVA will mark the plants that are to remain undisturbed. Remove unmarked woody plants from the buffer zone through a combination of hand-clearing and mechanical clearing. These plants include the invasive, exotic species, privet (*Ligustrum sinense*), autumn olive (*Eleagnus umbellata*), and mimosa (*Albizia julibrissin*). To control regrowth and stump sprouting, appropriate herbicides may

be applied to the stumps using hand-held application equipment (backpack or hand-carried sprayers).

Do not disturb the aboveground or belowground parts of woody species that marked to remain.

2. Prepare the site for seeding in late summer with disk harrow or bog harrow, followed by disking and rolling to prepare seedbed. In some areas, it may not be possible to use mechanical means of clearing. In these areas, site preparation will consist of a combination of hand-clearing and herbicide applications.
3. Following mechanical site preparation, apply appropriate herbicides to the remaining herbaceous vegetation and vines in the buffer zone, being careful to avoid getting spray on the leaves of the existing shrubs and trees. A follow-up herbicide treatment in about two weeks may be necessary to control regrowth before seeding.
4. Plant the seed in late fall, after the first killing frost, and when the soil is not wet. Hydroseed or hand seed warm-season grasses and wildflowers. If hand-seeding, the seed should be mixed with a carrier of similar weight (i.e., sawdust, vermiculite). Following the hand-broadcast of seed the field should be lightly worked to cover the seed with 1/4" of soil and the soil packed with a roller harrow or yard roller.
5. Do not fertilize if hand-seeding. If hydroseeding, a low nitrogen content (0.10 – 0.25 lbs/acre) fertilizer may be applied as part of the hydroseed mixture. None of the hydroseeding mixture shall come in contact with surface waters.
6. The buffer zone may be watered during the establishment year. Following the establishment year, no watering is needed, and would tend to encourage undesired species, such as Japanese honeysuckle (*Lonicera japonica*).

### **3. Maintenance**

#### Shoreline Shrub Zone:

Maintenance should be required in the shoreline shrub zone only to remove tall growth and to remove certain invasive, exotic species.

- a. Some of the shrubs may eventually reach heights that restrict the view of Tellico Reservoir from the par-3 golf course. In this eventuality, these shrubs may be selectively pruned using hand equipment. At no time, however, will any of the shrubs be pruned to below the height of five feet
- b. Certain, invasive, exotic species are to be discouraged as they will outcompete the existing and planted species, and will further contribute to the spread of these species in the Tellico Reservoir area. These plant species are listed in Table 2. These species may be removed by hand-removal (digging out the plant by hand), by hand-cutting and stump application of an approved herbicide, or

by very careful foliage application of herbicides using hand-held equipment. Any herbicide applications in the buffer zone must be approved in writing by TVA and performed by certified applicators.

Warm Season Grass – Wildflower Zone:

During the first two years when the warm season grasses and wildflowers are becoming established, undesired species may grow in the buffer zone. Management of undesired species may require hand-pulling, mowing, and/or herbicide applications. If mowing is used, mow just above the tops of the desired plant, and no lower. Only herbicides appropriate for the area should be used to avoid killing the planted grasses and wildflowers. The person in charge of maintenance of this area must call a TVA Watershed Team biologist prior to mowing or applying herbicide in the first year to determine the appropriate height of the mowing blade to avoid cutting the desired plants and to select the appropriate herbicide.

After the first year, it is only necessary to mow once every other year to keep woody species in check. Mowing should only be done after a hard killing frost in the fall because early mowing will destroy flowering stalks or flower buds. Do not mow the area lower than 8 inches. Mowing too low will destroy the ability of the plant to store adequate nutrients for subsequent bloom.

<b>Table 1. Native species suitable for planting at the Rarity Pointe mitigation site</b>				
<b>Common name</b>	<b>Scientific name</b>	<b>Growth form</b>	<b>Planting zone</b>	<b>Planting form</b>
Buttonbush	<i>Cephalanthus occidentalis</i>	Shrub	Shoreline top of riprap; Wetland	Bare-root; container
Bushy St. John's wort	<i>Hypericum densiflorum</i>	Shrub	Shoreline top of riprap; Wetland	Container
Silky dogwood	<i>Cornus amomum</i>	Shrub	Shoreline top of riprap; Wetland	Bare-root; container
Rose mallow	<i>Hibiscus moscheutos</i>	Shrub	Shoreline top of riprap; Wetland	Container
Virginia willow	<i>Itea virginica</i>	Shrub	Shoreline top of riprap; Wetland	Container
American beauty berry	<i>Callicarpa americana</i>	Shrub	Shoreline – upland edge	Container
Carolina rose	<i>Rosa carolina</i>	Shrub	Shoreline – upland edge	Container
Fragrant sumac	<i>Rhus aromatica</i>	Shrub	Shoreline-upland edge	Container
Dwarf sumac	<i>Rhus copallina</i>	Shrub	Shoreline – upland edge	Container
Red buckeye	<i>Aesculus parva</i>	Shrub	Shoreline – upland edge	Container
Hydrangea	<i>Hydrangea arborescens</i>	Shrub	Shoreline – upland edge	Container

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Azalea sp.	Rhododendron sp.	Shrub	Shoreline – upland edge	Container
Eastern gamagrass	Tripsacum dactyloides	Grass	Upland buffer	Seed
Little bluestem	Schizachyrium scoparius	Grass	Upland buffer	Seed
False boneset	Brickellia eupatorioides	Herbaceous wildflower	Upland buffer	Seed
Butterfly weed	Asclepias tuberosa	Herbaceous wildflower	Upland buffer	Seed
Lance-leaved coreopsis	Coreopsis lanceolata	Herbaceous wildflower	Upland buffer	Seed
Black-eyed susan (perennial)	Rudbeckia hirta	Herbaceous wildflower	Upland buffer	Seed
Purple coneflower	Echinacea purpurea	Herbaceous wildflower	Upland buffer	Seed
Bergamot	Monarda didyma and/or Monarda fistulosa	Herbaceous wildflower	Upland buffer	Seed
Dense blazing-star	Liatris spicata	Herbaceous wildflower	Upland buffer	Seed
Smooth penstemon	Penstemon sp.	Herbaceous wildflower	Upland buffer	Seed
Beardtongue	Penstemon digitalis	Herbaceous wildflower	Upland buffer	Seed
Smooth aster	Aster laevis	Herbaceous wildflower	Upland buffer	Seed
Asters	Aster spp.	Herbaceous wildflower	Upland buffer	Seed
Showy goldenrod	Solidago speciosa	Herbaceous wildflower	Upland buffer	Seed
Cup plant	Silphium perfoliatum	Herbaceous wildflower	Upland buffer	Seed
Summer phlox	Phlox paniculata	Herbaceous wildflower	Upland buffer	Seed
Sunflowers	Helianthus spp.	Herbaceous wildflower	Upland buffer	Seed
Primrose	Oenothera sp.	Herbaceous wildflower	Upland buffer	Seed
Mistflower	Eupatorium coelestinum	Herbaceous wildflower	Buffer – wetland edge	Seed
Swamp milkweed	Asclepia incarnata	Herbaceous wildflower	Buffer – wetland edge	Seed

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site:           Rarity Pointe/Tellico Lake				Date:	8/22/02
Applicant/Owner:				County:	Loudon
Investigator:           B. Rosensteel, P.C. Durr				State:	Tennessee
Do normal circumstances exist on the site?	Yes	<u>  x  </u>	No	<u>      </u>	Community ID:   PSS1E
Is the site significantly disturbed (Atypical Situation)?	Yes	<u>      </u>	No	<u>  x  </u>	Transect ID:
Is the area a potential problem area? (If needed, explain on reverse)	Yes	<u>      </u>	No	<u>  x  </u>	Plot ID:           W1

## VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Cephalanthus occidentalis	Shrub	Obl	9. Impatiens capensis	Herb	Facw
2. Cornus amomum	Shrub	Facw+	10. Juncus effusus	Herb	Facw+
3. Acer negundo	Shrub	Facw	11.		
4. Campsis radicans	Vine	Fac	12.		
5. Rubus argutus	Herb	Facu+	13.		
6. Microstegium vimineum	Herb	Fac+	14.		
7. Boehmeria cylindrica	Herb	Facw+	15.		
8. Carex crinita	Herb	Facw+	16.		
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 9/10 = 90%					
Remarks:					

## HYDROLOGY

<div> <div>Recorded Data (Describe in Remarks):</div> <div> <div>Stream, Lake, or Tide Gauge</div> <div>Aerial Photographs</div> <div>Other</div> <div>No Recorded Data Available</div> </div> </div>	<div>Wetland Hydrology Indicators:</div> <div>Primary Indicators:</div> <div> <div>Inundated</div> <div>x Saturated in Upper 12 Inches</div> <div>Water Marks</div> <div>x Drift Lines</div> <div>Sediment Deposits</div> <div>Drainage Patterns in Wetlands</div> </div>
<div>Field Observations:</div> <div> <div>Depth of Surface Water: (in.)</div> <div>Depth to Free Water in Pit: 9 (in.)</div> <div>Depth to Saturated Soil: (in.)</div> </div>	<div>Secondary Indicators (2 or more required):</div> <div> <div>Oxidized Root Channels in Upper 12 Inches</div> <div>x Water-Stained Leaves</div> <div>Local Soil Survey Data</div> <div>FAC-Neutral Test</div> <div>Other (Explain in Remarks)</div> </div>
<div>Remarks: Since this wetland lies in very close proximity to Tellico Lake, hydrology is, at least in part, influenced by lake levels. Other hydrologic input is from a well-defined wet weather conveyance.</div>	

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*

**SOILS**

Map Unit Name (Series and Phase):	Emory Silt Loam (Em)	Drainage Class:	Well-Drained	
Taxonomy (Subgroup):		Field Observations Confirm Mapped Type?	Yes _____	No _____

Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8		10YR 5/2	10YR 5/3	25%	silt loam, concretions
			10YR 4/4	5%	
			10YR 3/3	5%	
8-12+		7.5YR 4/4	7.5YR 5/6	10%	silt loam, fine gravel
			10YR 5/2	20%	
			7.5YR 4/3	10%	

<p>Hydric Soil Indicators:</p> <p>_____ Histosol</p> <p>_____ Histic Epipedon</p> <p>_____ Sulfidic Odor</p> <p>_____ Aquic Moisture Regime</p> <p>_____ x Reducing Conditions</p> <p>_____ x Gleyed or Low-Chroma Colors</p>	<p>_____ x Concretions</p> <p>_____ High Organic Content in Surface Layer in Sandy Soils</p> <p>_____ Organic Streaking in Sandy Soils</p> <p>_____ Listed on Local Hydric Soils List</p> <p>_____ Listed on National Hydric Soils List</p> <p>_____ Other (Explain in Remarks)</p>
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Remarks:
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**WETLAND DETERMINATION**

Hydrophytic Vegetation Present?	Yes	x	No		Is this Sampling Point Within a Wetland?      Yes    x    No    _____
Wetland Hydrology Present?	Yes	x	No		
Hydric Soils Present?	Yes	x	No		

Remarks: Small palustrine scrub/shrub wetland (60 x 35 ft) hydrologically associated with Tellico Lake.
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**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site:	Rarity Pointe/Tellico Lake			Date:	8/22/02
Applicant/Owner:				County:	Loudon
Investigator:	B. Rosensteel, P.C. Durr			State:	Tennessee
Do normal circumstances exist on the site?	Yes	<u>  x  </u>	No	<u>      </u>	Community ID: PSS1E
Is the site significantly disturbed (Atypical Situation)?	Yes	<u>      </u>	No	<u>  x  </u>	Transect ID:
Is the area a potential problem area? (If needed, explain on reverse)	Yes		No	<u>  x  </u>	Plot ID: W2

## VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Cephalanthus occidentalis	Shrub	Obl	9. Microstegium vimineum	Herb	Fac+
2. Cornus amomum	Shrub	Facw+	10.		
3. Diospyros virginiana	Shrub	Fac	11.		
4. Carex crinita	Herb	Facw+	12.		
5. Carex tribuloides	Herb	Facw+	13.		
6. Polygonum punctatum	Herb	Facw+	14.		
7. Impatiens capensis	Herb	Facw	15.		
8. Boehmeria cylindrica	Herb	Facw+	16.		
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 9/9 = 100%					
Remarks:					

## HYDROLOGY

<div> <div>Recorded Data (Describe in Remarks):</div> <div> <div>Stream, Lake, or Tide Gauge</div> <div>Aerial Photographs</div> <div>Other</div> <div>No Recorded Data Available</div> </div> </div>	<div>Wetland Hydrology Indicators:</div> <div>Primary Indicators:</div> <div> <div>Inundated</div> <div>x Saturated in Upper 12 Inches</div> <div>Water Marks</div> <div>x Drift Lines</div> <div>Sediment Deposits</div> <div>Drainage Patterns in Wetlands</div> </div> <div>Secondary Indicators (2 or more required):</div> <div> <div>x Oxidized Root Channels in Upper 12 Inches</div> <div>x Water-Stained Leaves</div> <div>Local Soil Survey Data</div> <div>FAC-Neutral Test</div> <div>Other (Explain in Remarks)</div> </div>
<div>Field Observations:</div> <div> <div>Depth of Surface Water: (in.)</div> <div>Depth to Free Water in Pit: 5 (in.)</div> <div>Depth to Saturated Soil: (in.)</div> </div>	
<div>Remarks: Since this wetland lies in very close proximity to Tellico Lake, hydrology is, at least in part, influenced by lake levels. Other hydrologic input is from a well-defined wet weather conveyance.</div>	

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*

**SOILS**

Map Unit Name (Series and Phase):	Waynesboro Loam (WID2)	Drainage Class:	Well-Drained	
Taxonomy (Subgroup):		Field Observations Confirm Mapped Type?	Yes _____	No _____

Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2		10YR 4/2			silt, oxidized rhizospheres
2-12+		7.5YR 4/2	10YR 4/2	30%	silt loam, fine gravel, concretions
			10YR 3/2	10%	

<p>Hydric Soil Indicators:</p> <p>_____ Histosol</p> <p>_____ Histic Epipedon</p> <p>_____ Sulfidic Odor</p> <p>_____ Aquic Moisture Regime</p> <p>_____ x Reducing Conditions</p> <p>_____ x Gleyed or Low-Chroma Colors</p>	<p>_____ Concretions</p> <p>_____ High Organic Content in Surface Layer in Sandy Soils</p> <p>_____ Organic Streaking in Sandy Soils</p> <p>_____ Listed on Local Hydric Soils List</p> <p>_____ Listed on National Hydric Soils List</p> <p>_____ Other (Explain in Remarks)</p>
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Remarks:
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**WETLAND DETERMINATION**

Hydrophytic Vegetation Present?	Yes	x	No		Is this Sampling Point Within a Wetland?      Yes    x    No    _____
Wetland Hydrology Present?	Yes	x	No		
Hydric Soils Present?	Yes	x	No		

Remarks: Small palustrine scrub/shrub wetland (30 ft x 30 ft) hydrologically associated with Tellico Lake.
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**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site:	Rarity Pointe/Tellico Lake			Date:	8/22/02
Applicant/Owner:				County:	Loudon
Investigator:	B. Rosensteel, P.C. Durr			State:	Tennessee
Do normal circumstances exist on the site?	Yes	<u>  x  </u>	No	<u>      </u>	Community ID: PSS1E
Is the site significantly disturbed (Atypical Situation)?	Yes	<u>      </u>	No	<u>  x  </u>	Transect ID:
Is the area a potential problem area? (If needed, explain on reverse)	Yes		No	<u>  x  </u>	
					Plot ID: W3

## VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Cornus amomum	Shrub	Facw+	9.		
2. Cephalanthus occidentalis	Shrub	Obl	10.		
3. Scirpus cyperinus	Herb	Obl	11.		
4. Juncus effusus	Herb	Facw+	12.		
5. Boehmeria cylindrica	Herb	Facw+	13.		
6. Microstegium vimineum	Herb	Fac+	14.		
7. Carex crinita	Herb	Facw+	15.		
8.			16.		
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 7/7 = 100%					
Remarks:					

## HYDROLOGY

<p>Recorded Data (Describe in Remarks):</p> <p>_____ Stream, Lake, or Tide Gauge</p> <p>_____ Aerial Photographs</p> <p>_____ Other</p> <p>_____ No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>_____ Inundated</p> <p>_____ x Saturated in Upper 12 Inches</p> <p>_____ Water Marks</p> <p>_____ x Drift Lines</p> <p>_____ Sediment Deposits</p> <p>_____ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>_____ x Oxidized Root Channels in Upper 12 Inches</p> <p>_____ x Water-Stained Leaves</p> <p>_____ Local Soil Survey Data</p> <p>_____ FAC-Neutral Test</p> <p>_____ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Free Water in Pit: _____ 6 _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>	
<p>Remarks: Since this wetland lies in very close proximity to Tellico Lake, hydrology is, at least in part, influenced by lake levels. Other hydrologic input is from a well-defined wet weather conveyance.</p>	

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*

**SOILS**

Map Unit Name (Series and Phase):	Emory Silt Loam (Em)	Drainage Class: Well-Drained
Taxonomy (Subgroup):	Field Observations Confirm Mapped Type?	Yes _____ No _____

Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2		10YR 4/2			silt, oxidized rhizospheres
2-12+		7.5YR 4/2	10YR 4/2	30%	silt loam, fine gravel, concretions
			10YR 3/2	10%	

<p>Hydric Soil Indicators:</p> <p>_____ Histosol</p> <p>_____ Histic Epipedon</p> <p>_____ Sulfidic Odor</p> <p>_____ Aquic Moisture Regime</p> <p>_____ x Reducing Conditions</p> <p>_____ x Gleyed or Low-Chroma Colors</p>	<p>_____ x Concretions</p> <p>_____ High Organic Content in Surface Layer in Sandy Soils</p> <p>_____ Organic Streaking in Sandy Soils</p> <p>_____ Listed on Local Hydric Soils List</p> <p>_____ Listed on National Hydric Soils List</p> <p>_____ Other (Explain in Remarks)</p>
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Remarks:
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**WETLAND DETERMINATION**

Hydrophytic Vegetation Present?	Yes	x	No		Is this Sampling Point Within a Wetland?	Yes	x	No	
Wetland Hydrology Present?	Yes	x	No						
Hydric Soils Present?	Yes	x	No						

Remarks: This is largely a capillary fringe wetland associated with Tellico Lake. It includes an area of 75 ft x 15 ft.
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**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site:	Rarity Pointe / Tellico Lake				Date:	5 Sept 2002
Applicant/Owner:	TVA				County:	Loudon
Investigator:	B. Rosensteel, E. Keene				State:	TN
Do normal circumstances exist on the site?	Yes	<u>  x  </u>	No	<u>        </u>	Community ID:	PSS1C
Is the site significantly disturbed (Atypical Situation)?	Yes	<u>        </u>	No	<u>  x  </u>	Transect ID:	
Is the area a potential problem area? (If needed, explain on reverse)	Yes		No	<u>  x  </u>	Plot ID:	W4

## VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <i>Platanus occidentalis</i>	Canopy	Facw+	9. <i>Carex frankii</i>	herb	Facw+
2. <i>Alnus serrulata</i>	Shrub	Facw+	10. <i>Vernonia gigantea</i>	herb	Fac+
3. <i>Salix nigra</i>	Shrub	Obl	11. <i>Impatiens capensis</i>	herb	Facw+
4. <i>Hibiscus moscheutos</i>	Shrub	Obl	12. <i>Microstegium vimineum</i>	herb	Fac+
5. <i>Boehmeria cylindrica</i>	Herb	Facw+	13.		
6. <i>Apios americana</i>	Herb	Facw	14.		
7. <i>Carex lurida</i>	Herb	Obl	15.		
8. <i>Juncus effusus</i>	Herb	Facw+	16.		
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 12/12 = 100					
Remarks:					

## HYDROLOGY

<p>Recorded Data (Describe in Remarks):</p> <p>_____ Stream, Lake, or Tide Gauge</p> <p>_____ Aerial Photographs</p> <p>_____ Other</p> <p>_____ x No Recorded Data Available</p>		<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>_____ Inundated</p> <p>_____ x Saturated in Upper 12 Inches</p> <p>_____ Water Marks</p> <p>_____ Drift Lines</p> <p>_____ Sediment Deposits</p> <p>_____ x Drainage Patterns in Wetlands</p>	
<p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Free Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ 0 (in.)</p>		<p>Secondary Indicators (2 or more required):</p> <p>_____ Oxidized Root Channels in Upper 12 Inches</p> <p>_____ Water-Stained Leaves</p> <p>_____ Local Soil Survey Data</p> <p>_____ FAC-Neutral Test</p> <p>_____ Other (Explain in Remarks)</p>	
<p>Remarks: This is a capillary fringe wetland on the shoreline of Tellico Lake. Hydrology is influenced by lake levels and surface runoff.</p>			

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*

**SOILS**

Map Unit Name (Series and Phase):		Cumberland silty clay loam*		Drainage Class:	
Taxonomy (Subgroup):		Field Observations Confirm Mapped Type?		Yes	No
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast (%)	Texture, Concretions, Structure, etc.
0-2	O	10 YR3/2			sand
2-8	A	10 YR6/2	7.5 YR5/6	10%	sandy loam
8-12+	B	7.5 YR5/6	10 YR6/1 10 YR3/1	30% 15%	sandy clay loam

Hydric Soil Indicators:  <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <input type="checkbox"/> Histosol  <input type="checkbox"/> Histic Epipedon  <input type="checkbox"/> Sulfidic Odor  <input type="checkbox"/> Aquic Moisture Regime  <input type="checkbox"/> Reducing Conditions  <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors         </div> <div style="width: 48%;"> <input checked="" type="checkbox"/> Concretions  <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils  <input type="checkbox"/> Organic Streaking in Sandy Soils  <input type="checkbox"/> Listed on Local Hydric Soils List  <input type="checkbox"/> Listed on National Hydric Soils List  <input type="checkbox"/> Other (Explain in Remarks)         </div> </div>	
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Remarks: The Loudon County soil survey was published before construction of Tellico Dam. The location of the wetland could not be accurately determined.

**WETLAND DETERMINATION**

Hydrophytic Vegetation Present?	Yes	x	No		Is this Sampling Point Within a Wetland?         Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes	x	No		
Hydric Soils Present?	Yes	x	No		
Remarks: This is a capillary fringe wetland on the Tellico Lake shoreline. It is approximately 800 ft long and from 6 to 40 ft wide.					

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site:	Rarity Pointe / Tellico Lake			Date:	5 Sept 2002
Applicant/Owner:	TVA			County:	Loudon
Investigator:	B. Rosensteel,			State:	TN
Do normal circumstances exist on the site?	Yes	<u>  x  </u>	No	<u>      </u>	Community ID: PSS1E
Is the site significantly disturbed (Atypical Situation)?	Yes	<u>      </u>	No	<u>  x  </u>	Transect ID:
Is the area a potential problem area? (If needed, explain on reverse)	Yes		No	<u>  x  </u>	
					Plot ID: W5

## VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <i>Salix nigra</i>	shrub	Obl	9. <i>Carex frankii</i>	herb	Obl
2. <i>Cornus amomum</i>	shrub	Facw+	10. <i>Impatiens capensis</i>	herb	Facw+
3. <i>Alnus serrulata</i>	shrub	Facw+	11. <i>Juncus effusus</i>	herb	Facw+
4. <i>Cephalanthus occidentalis</i>	shrub	Obl	12. <i>Boehmeria cylindrica</i>	herb	Facw+
5. <i>Hibiscus moscheutos</i>	shrub	Obl	13. <i>Polygonum punctatum</i>	herb	Facw+
6. <i>Carex crinita</i>	herb	Facw+	14.		
7. <i>Carex tribuloides</i>	herb	Facw+	15.		
8. <i>Carex lurida</i>	herb	Obl	16.		
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 13 / 13 = 100%					
Remarks:					

## HYDROLOGY

<p>Recorded Data (Describe in Remarks):</p> <p>_____ Stream, Lake, or Tide Gauge</p> <p>_____ Aerial Photographs</p> <p>_____ Other</p> <p>_____ x No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>_____ Inundated</p> <p>_____ x Saturated in Upper 12 Inches</p> <p>_____ Water Marks</p> <p>_____ Drift Lines</p> <p>_____ x Sediment Deposits</p> <p>_____ X Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>_____ Oxidized Root Channels in Upper 12 Inches</p> <p>_____ x Water-Stained Leaves</p> <p>_____ Local Soil Survey Data</p> <p>_____ FAC-Neutral Test</p> <p>_____ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Free Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ 0 (in.)</p>	
<p>Remarks: This is a capillary fringe wetland on the Tellico Lake shoreline. Hydrology is primarily influenced by lake levels.</p>	

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*

## SOILS

Map Unit Name (Series and Phase):	See remarks	Drainage Class:			
Taxonomy (Subgroup):	Field Observations Confirm Mapped Type?	Yes	No		
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast (%)	Texture, Concretions, Structure, etc.
0-6	A	10 YR5/1	7.5 YR4/6	5%	silt loam
6-10	B	10 YR5/2	10 YR4/6	15%	clay loam
10-12		10 YR5/1	7.5 YR5/6	10%	clay
Hydric Soil Indicators:			<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <div style="margin-bottom: 5px;"> <input type="checkbox"/> Histosol         </div> <div style="margin-bottom: 5px;"> <input type="checkbox"/> Histic Epipedon         </div> <div style="margin-bottom: 5px;"> <input type="checkbox"/> Sulfidic Odor         </div> <div style="margin-bottom: 5px;"> <input type="checkbox"/> Aquic Moisture Regime         </div> <div style="margin-bottom: 5px;"> <input checked="" type="checkbox"/> Reducing Conditions         </div> <div style="margin-bottom: 5px;"> <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors         </div> </div> <div style="width: 45%;"> <div style="margin-bottom: 5px;"> <input checked="" type="checkbox"/> Concretions         </div> <div style="margin-bottom: 5px;"> <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils         </div> <div style="margin-bottom: 5px;"> <input type="checkbox"/> Organic Streaking in Sandy Soils         </div> <div style="margin-bottom: 5px;"> <input type="checkbox"/> Listed on Local Hydric Soils List         </div> <div style="margin-bottom: 5px;"> <input type="checkbox"/> Listed on National Hydric Soils List         </div> <div style="margin-bottom: 5px;"> <input type="checkbox"/> Other (Explain in Remarks)         </div> </div> </div>		
Remarks: The Loudon County soil survey was published before construction of Tellico Dam. The location of the wetland could not be accurately determined.					

## WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	<u>x</u>	No	<u>        </u>	Is this Sampling Point Within a Wetland?	Yes	<u>x</u>	No	<u>        </u>
Wetland Hydrology Present?	Yes	<u>x</u>	No	<u>        </u>					
Hydric Soils Present?	Yes	<u>x</u>	No	<u>        </u>					
Remarks: This is a capillary fringe wetland on the shoreline of Tellico Lake. It is approximately <u>  </u> ft long and from 8 ft to 25 ft wide.									

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site:      Rarity Pointe / Tellico Lake	Date:              5 Sept 2002
Applicant/Owner:      TVA	County:              Loudon
Investigator:          B. Rosensteel, E. Keene	State:                TN
Do normal circumstances exist on the site?      Yes <u>  x  </u> No <u>      </u>	Community ID:      PSS1E
Is the site significantly disturbed (Atypical Situation)?      Yes <u>      </u> No <u>  x  </u>	Transect ID:
Is the area a potential problem area? (If needed, explain on reverse)      Yes                      No <u>  x  </u>	Plot ID:              W6

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Cornus amomum	shrub	Facw+	9. Lycopodium virginicum	herb	Obl
2. Cephalanthus occidentalis	shrub	Obl	10. Carex sp.	herb	Facw to Obl depending on species
3. Cornus foemina	shrub	Facw-	11.		
4. Ligustrum sinense	shrub	Fac+	12.		
5. Campsis radicans	vine	Fac	13.		
6. Boehmeria cylindrica	herb	Facw+	14.		
7. Microstegium vimineum	herb	Fac+	15.		
8. Carex crinita	herb	Facw+	16.		
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 10/10 = 100%					
Remarks:					

**HYDROLOGY**

<p>Recorded Data (Describe in Remarks):</p> <p><u>      </u> Stream, Lake, or Tide Gauge</p> <p><u>      </u> Aerial Photographs</p> <p><u>      </u> Other</p> <p><u>  x  </u> No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><u>  x  </u> Inundated</p> <p><u>      </u> Saturated in Upper 12 Inches</p> <p><u>      </u> Water Marks</p> <p><u>  x  </u> Drift Lines</p> <p><u>  x  </u> Sediment Deposits</p> <p><u>      </u> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><u>      </u> Oxidized Root Channels in Upper 12 Inches</p> <p><u>  x  </u> Water-Stained Leaves</p> <p><u>      </u> Local Soil Survey Data</p> <p><u>      </u> FAC-Neutral Test</p> <p><u>      </u> Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water:                      <u>      </u> (in.)</p> <p>Depth to Free Water in Pit:                      <u>  9  </u> (in.)</p> <p>Depth to Saturated Soil:                      <u>  0  </u> (in.)</p>	
<p>Remarks: This is a capillary fringe wetland on the shoreline of Tellico Lake. The hydrology is primarily influenced by lake levels.</p>	

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*

**SOILS**

Map Unit Name (Series and Phase):	See remarks	Drainage Class:			
Taxonomy (Subgroup):	Field Observations Confirm Mapped Type?	Yes	No		
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast (%)	Texture, Concretions, Structure, etc.
0-2	O	10 YR4/2			silty sand; many fine roots
2-6	A	10 YR5/1			silty sand; many fine roots
6-12+	B	10 YR5/1	10 YR4/6 7.5 YR4/4	5% 5%	sandy silt loam

Hydric Soil Indicators:  <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> Histosol  <input type="checkbox"/> Histic Epipedon  <input type="checkbox"/> Sulfidic Odor  <input type="checkbox"/> Aquic Moisture Regime  <input checked="" type="checkbox"/> Reducing Conditions  <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors         </div> <div style="width: 45%;"> <input type="checkbox"/> Concretions  <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils  <input type="checkbox"/> Organic Streaking in Sandy Soils  <input type="checkbox"/> Listed on Local Hydric Soils List  <input type="checkbox"/> Listed on National Hydric Soils List  <input type="checkbox"/> Other (Explain in Remarks)         </div> </div>	
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Remarks: The Loudon County soil survey was published before construction of Tellico Dam. The location of the wetland could not be accurately determined.

**WETLAND DETERMINATION**

Hydrophytic Vegetation Present?	Yes	x	No		Is this Sampling Point Within a Wetland?      Yes    x    No
Wetland Hydrology Present?	Yes	x	No		
Hydric Soils Present?	Yes	x	No		
Remarks: This is a capillary fringe wetland in a shallow cove on the shoreline of Tellico Lake. It is approximately 0.04 acres in size.					



**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site:       Rarity Pointe / Tellico Lake	Date:               5 Sept 2002
Applicant/Owner:   TVA	County:            Loudon
Investigator:        B. Rosensteel, E. Keene	State:             TN
Do normal circumstances exist on the site?       Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Community ID:    PSS1C
Is the site significantly disturbed (Atypical Situation)?   Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Transect ID:
Is the area a potential problem area? (If needed, explain on reverse)   Yes        No <input checked="" type="checkbox"/>	Plot ID:           W7

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Salix nigra	canopy/shrub	Obl	9. Carex lupulina	herb	Obl
2. Cornus amomum	shrub	Facw+	10. Carex crinita	erb	Facw+
3. Cephalanthus occidentalis	shrub	Obl	11. Juncus effusus	herb	Facw+
4. Ligustrum sinense	shrub	Fac	12. Carex tribuloides	herb	Facw+
5. Impatiens capensis	herb	Facw	13.		
6. Boehmeria cylindrica	herb	Facw+	14.		
7. Microstegium vimineum	herb	Fac+	15.		
8. Vernonia gigantea	herb	Fac+	16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 12 / 12 = 100%

Remarks:

**HYDROLOGY**

<p>Recorded Data (Describe in Remarks):</p> <p>_____ Stream, Lake, or Tide Gauge</p> <p>_____ Aerial Photographs</p> <p>_____ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>_____ Inundated</p> <p><input checked="" type="checkbox"/> Saturated in Upper 12 Inches</p> <p>_____ Water Marks</p> <p>_____ Drift Lines</p> <p>_____ Sediment Deposits</p> <p>_____ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches</p> <p><input checked="" type="checkbox"/> Water-Stained Leaves</p> <p>_____ Local Soil Survey Data</p> <p>_____ FAC-Neutral Test</p> <p>_____ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Free Water in Pit:        10    (in.)</p> <p>Depth to Saturated Soil:            0    (in.)</p>	
<p>Remarks: The wetland is on the south end of a small island at the tip of Jackson Bend. Hydrology is primarily influenced by lake levels.</p>	

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*

**SOILS**

Map Unit Name (Series and Phase):	See remarks	Drainage Class:			
Taxonomy (Subgroup):	Field Observations Confirm Mapped Type?	Yes	No		
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast (%)	Texture, Concretions, Structure, etc.
0-7	A	10 YR5/2	7.5 YR4/6 7.5 YR4/4	20% 10%	silty clay loam
7-12	B	10 YR5/2	10 YR4/4 7.5 YR4/4	20% 20%	sandy clay loam
Hydric Soil Indicators:			<div style="display: flex; justify-content: space-between;"> <div> <div><input type="checkbox"/> Histosol</div> <div><input type="checkbox"/> Histic Epipedon</div> <div><input type="checkbox"/> Sulfidic Odor</div> <div><input type="checkbox"/> Aquic Moisture Regime</div> <div><input checked="" type="checkbox"/> Reducing Conditions</div> <div><input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors</div> </div> <div> <div><input checked="" type="checkbox"/> Concretions</div> <div><input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils</div> <div><input type="checkbox"/> Organic Streaking in Sandy Soils</div> <div><input type="checkbox"/> Listed on Local Hydric Soils List</div> <div><input type="checkbox"/> Listed on National Hydric Soils List</div> <div><input type="checkbox"/> Other (Explain in Remarks)</div> </div> </div>		
Remarks: The Loudon County soil survey was published before construction of Tellico Dam. The location of the wetland could not be accurately determined.					

**WETLAND DETERMINATION**

Hydrophytic Vegetation Present?	Yes	x	No		Is this Sampling Point Within a Wetland?	Yes	x	No	
Wetland Hydrology Present?	Yes	x	No						
Hydric Soils Present?	Yes	x	No						
Remarks: This wetland is on the southern end of a small island at the tip of Jackson Bend. It is approximately    acre.									

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site:      Rarity Pointe / Tellico Lake	Date:              5 Sept 2002
Applicant/Owner:      TVA	County:            Loudon
Investigator:          B. Rosensteel, E. Keene	State:              TN
Do normal circumstances exist on the site?      Yes <u>  x  </u> No <u>      </u>	Community ID:    PSS1E
Is the site significantly disturbed (Atypical Situation)?      Yes <u>      </u> No <u>  x  </u>	Transect ID:
Is the area a potential problem area? (If needed, explain on reverse)      Yes                      No <u>  x  </u>	Plot ID:            W8

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Fraxinus pennsylvanica	canopy	Facw+	9. Typha latifolia	herb	Obl
2. Gleditsia triacanthos	shrub		10. Boehmeria cylindrica	herb	Facw+
3. Acer negundo	shrub	Facw	11. Carex lupulina	herb	Obl
4. Cephalanthus occidentalis	shrub	Obl	12. Carex crinita	herb	Facw+
5. Cornus amomum	shrub	Facw+	13. Scirpus cyperinus	herb	Obl
6. Juncus effusus	herb	Facw+	14.		
7. Impatiens capensis	herb	Facw	15.		
8. Microstegium vimineum	herb	Fac+	16.		
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 13 / 13 = 100%					
Remarks:					

**HYDROLOGY**

<p>Recorded Data (Describe in Remarks):</p> <p><u>      </u> Stream, Lake, or Tide Gauge</p> <p><u>      </u> Aerial Photographs</p> <p><u>      </u> Other</p> <p><u>  x  </u> No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><u>      </u> Inundated</p> <p><u>  x  </u> Saturated in Upper 12 Inches</p> <p><u>      </u> Water Marks</p> <p><u>      </u> Drift Lines</p> <p><u>      </u> Sediment Deposits</p> <p><u>  x  </u> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><u>  x  </u> Oxidized Root Channels in Upper 12 Inches</p> <p><u>  x  </u> Water-Stained Leaves</p> <p><u>      </u> Local Soil Survey Data</p> <p><u>      </u> FAC-Neutral Test</p> <p><u>      </u> Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water:                      <u>      </u> (in.)</p> <p>Depth to Free Water in Pit:                      <u>      </u> (in.)</p> <p>Depth to Saturated Soil:                      <u>  0  </u> (in.)</p>	
<p>Remarks: This is a capillary fringe wetland in a small cove on the shoreline of Tellico Lake. Hydrology is primarily influenced by lake levels.</p>	

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*

**SOILS**

Map Unit Name (Series and Phase):	See remarks	Drainage Class:			
Taxonomy (Subgroup):	Field Observations Confirm Mapped Type?		Yes	No	

Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast (%)	Texture, Concretions, Structure, etc.
0-10	A	10 YR5/2	7.5 YR4/6	5%	fine gravelly silt loam

<p>Hydric Soil Indicators:</p> <p>_____ Histosol</p> <p>_____ Histic Epipedon</p> <p>_____ Sulfidic Odor</p> <p>_____ Aquic Moisture Regime</p> <p>_____ x Reducing Conditions</p> <p>_____ x Gleyed or Low-Chroma Colors</p>	<p>_____ x Concretions</p> <p>_____ High Organic Content in Surface Layer in Sandy Soils</p> <p>_____ Organic Streaking in Sandy Soils</p> <p>_____ Listed on Local Hydric Soils List</p> <p>_____ Listed on National Hydric Soils List</p> <p>_____ Other (Explain in Remarks)</p>
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Remarks: The Loudon County soil survey was published before construction of Tellico Dam. The location of the wetland could not be accurately determined.
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**WETLAND DETERMINATION**

Hydrophytic Vegetation Present?	Yes	x	No		Is this Sampling Point Within a Wetland?      Yes    x    No    _____
Wetland Hydrology Present?	Yes	x	No		
Hydric Soils Present?	Yes	x	No		

Remarks: This is a capillary fringe wetland on the shoreline of Tellico Lake. It is less than 0.05 acre in size.
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**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site:      Rarity Pointe / Tellico Lake	Date:                5 Sept 2002
Applicant/Owner:    TVA	County:            Loudon
Investigator:        B. Rosensteel, E. Keene	State:              TN
Do normal circumstances exist on the site?      Yes <u>  x  </u> No <u>      </u>	Community ID:    PEM1Hh
Is the site significantly disturbed (Atypical Situation)?      Yes <u>      </u> No <u>  x  </u>	Transect ID:
Is the area a potential problem area? (If needed, explain on reverse)      Yes                      No <u>  x  </u>	Plot ID:            W9

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Leersia oryzoides	Herb	Obl	9.		
2. Polygonum cespitosum	Herb	Facw-	10.		
3. Boehmeria cylindrica	Herb	Facw+	11.		
4. Microstegium vimineum	Herb	Fac+	12.		
5. Typha latifolia	Herb	Obl	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 5 / 5 = 100%

Remarks:

**HYDROLOGY**

<p>Recorded Data (Describe in Remarks):</p> <p><u>      </u> Stream, Lake, or Tide Gauge</p> <p><u>      </u> Aerial Photographs</p> <p><u>      </u> Other</p> <p><u>  x  </u> No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><u>  x  </u> Inundated</p> <p><u>  x  </u> Saturated in Upper 12 Inches</p> <p><u>      </u> Water Marks</p> <p><u>      </u> Drift Lines</p> <p><u>      </u> Sediment Deposits</p> <p><u>      </u> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><u>      </u> Oxidized Root Channels in Upper 12 Inches</p> <p><u>  x  </u> Water-Stained Leaves</p> <p><u>      </u> Local Soil Survey Data</p> <p><u>      </u> FAC-Neutral Test</p> <p><u>      </u> Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water:                      <u>  0-6  </u> (in.)</p> <p>Depth to Free Water in Pit:                      <u>  0.5  </u> (in.)</p> <p>Depth to Saturated Soil:                      <u>  0  </u> (in.)</p>	
<p>Remarks: This is a capillary fringe wetland ranging from 1' to 5' wide on the edge of a small (70'x30') manmade pond at the head of a wet-weather conveyance. Hydrologic sources are groundwater and surface runoff.</p>	

*Rarity Pointe Commercial Recreation and  
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**SOILS**

Map Unit Name (Series and Phase):	Fullerton silty clay loam, severely eroded steep phase	Drainage Class:	Well-drained
Taxonomy (Subgroup):	Field Observations      Yes      No      x Confirm Mapped Type?      _____      _____		

Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast (%)	Texture, Concretions, Structure, etc.
0 – 4		10 YR4/2	7.5 YR4;6	3%	Sandy silt loam, fine gravel
4					Resistance to auger; hard layer, possibly hard gravel

Hydric Soil Indicators:  <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <input type="checkbox"/> Histosol  <input type="checkbox"/> Histic Epipedon  <input type="checkbox"/> Sulfidic Odor  <input type="checkbox"/> Aquic Moisture Regime  <input checked="" type="checkbox"/> Reducing Conditions  <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors         </div> <div style="width: 48%;"> <input type="checkbox"/> Concretions  <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils  <input type="checkbox"/> Organic Streaking in Sandy Soils  <input type="checkbox"/> Listed on Local Hydric Soils List  <input type="checkbox"/> Listed on National Hydric Soils List  <input type="checkbox"/> Other (Explain in Remarks)         </div> </div>
Remarks:

**WETLAND DETERMINATION**

Hydrophytic Vegetation Present?	Yes	x	No	Is this Sampling Point Within a Wetland?	Yes	x	No
Wetland Hydrology Present?	Yes	x	No				
Hydric Soils Present?	Yes	x	No				

Remarks: This is a capillary fringe emergent wetland that has developed on the margins of a small (~70 x 30') man-made pond in an area that is currently forested. This wetland has a surface connection with a wet-weather conveyance probably only during periods of high precipitation when water overtops the berm. The wet-weather conveyance drains into an intermittent stream that drains to Tellico Lake.
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**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site:      Rarity Pointe / Tellico Lake	Date:              5 Sept 2002
Applicant/Owner:      TVA	County:            Loudon
Investigator:          B. Rosensteel, E. Keene	State:              TN
Do normal circumstances exist on the site?      Yes <u>  x  </u> No <u>      </u>	Community ID:      PSS1Hh
Is the site significantly disturbed (Atypical Situation)?      Yes <u>  x  </u> No <u>      </u>	Transect ID:
Is the area a potential problem area? (If needed, explain on reverse)      Yes                      No <u>  x  </u>	Plot ID:              W10

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Juncus effusus	Herb	Facw+	9.		
2. Typha latifolia	Herb	Obl	10		
3. Eupatorium serotinum	Herb	Fac	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 3 / 3 = 100%

Remarks:

**HYDROLOGY**

<p>Recorded Data (Describe in Remarks):</p> <p><u>      </u> Stream, Lake, or Tide Gauge</p> <p><u>      </u> Aerial Photographs</p> <p><u>      </u> Other</p> <p><u>  x  </u> No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><u>  x  </u> Inundated</p> <p><u>  x  </u> Saturated in Upper 12 Inches</p> <p><u>      </u> Water Marks</p> <p><u>      </u> Drift Lines</p> <p><u>      </u> Sediment Deposits</p> <p><u>      </u> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><u>      </u> Oxidized Root Channels in Upper 12 Inches</p> <p><u>      </u> Water-Stained Leaves</p> <p><u>      </u> Local Soil Survey Data</p> <p><u>      </u> FAC-Neutral Test</p> <p><u>      </u> Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water:                      <u>  1-12+  </u> (in.)</p> <p>Depth to Free Water in Pit:                      <u>      4      </u> (in.)</p> <p>Depth to Saturated Soil:                      <u>      0      </u> (in.)</p>	
<p>Remarks: This is a capillary fringe wetland on the edge of a manmade pond at the head of a wet-weather conveyance. Hydrologic sources are groundwater and surface runoff.</p>	

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*

**SOILS**

Map Unit Name (Series and Phase):		Drainage Class:			
Taxonomy (Subgroup):		Field Observations Confirm Mapped Type?		Yes _____	No _____

Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast (%)	Texture, Concretions, Structure, etc.
0 - 0.5		5YR 5/4			Silt loam
0.5 - 10+		2.5YR 4/8			Clay

Hydric Soil Indicators:  <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> Histosol  <input type="checkbox"/> Histic Epipedon  <input type="checkbox"/> Sulfidic Odor  <input type="checkbox"/> Aquic Moisture Regime  <input type="checkbox"/> Reducing Conditions  <input type="checkbox"/> Gleyed or Low-Chroma Colors         </div> <div style="width: 45%;"> <input type="checkbox"/> Concretions  <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils  <input type="checkbox"/> Organic Streaking in Sandy Soils  <input type="checkbox"/> Listed on Local Hydric Soils List  <input type="checkbox"/> Listed on National Hydric Soils List  <input type="checkbox"/> Other (Explain in Remarks)         </div> </div>	
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Remarks: The soil is red clay used in constructing the pond and berm. There has been insufficient time for development of hydric characteristics in this soil.
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**WETLAND DETERMINATION**

Hydrophytic Vegetation Present?      Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present?            Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soils Present?                    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is this Sampling Point Within a Wetland?      Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks: This is a capillary fringe emergent wetland on the edge of a small (~90' x 50') manmade pond. This is an atypical situation because there has not been sufficient time for the red clay soil used in the construction of the pond and berm to develop hydric characteristics. This wetland has a surface connection with a
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## **APPENDIX D – TERRESTRIAL ECOLOGY INFORMATION**



## APPENDIX D.

Vascular plant species observed on the proposed project lands during 2002 field surveys.

Common name	Scientific name
Adam's-needle	<i>Yucca filamentosa</i>
Alabama lip-fern	<i>Cheilanthes alabamensis</i>
Allegheny-chinkapin	<i>Castanea pumila</i>
American alumroot	<i>Heuchera americana</i>
American beech	<i>Fagus grandifolia</i>
American bittersweet	<i>Celastrus scandens</i>
American burnweed	<i>Erechtites hieraciifolia</i>
American elm	<i>Ulmus americana</i>
American hazelnut	<i>Corylus americana</i>
American hog-peanut	<i>Amphicarpaea bracteata</i>
American holly	<i>Ilex opaca</i>
American hornbeam	<i>Carpinus caroliniana</i>
American lopseed	<i>Phryma leptostachya</i>
American plum	<i>Prunus americana</i>
American pokeweed	<i>Phytolacca americana</i>
American squawroot	<i>Conopholis americana</i>
American strawberry-bush	<i>Euonymus americana</i>
Amur honeysuckle	<i>Lonicera maackii</i>
Angular-fruit milkvine	<i>Matelea gonocarpos</i>
Anise-scented goldenrod	<i>Solidago odora</i>
Annual ragweed	<i>Ambrosia artemisiifolia</i>
Arrow-leaf tearthumb	<i>Polygonum sagittatum</i>
Ashleaf maple (Boxelder)	<i>Acer negundo</i>
Asian bittersweet	<i>Celastrus orbiculatus</i>
Atlantic-pigeonwings	<i>Clitoria mariana</i>
Autumn goldenrod	<i>Solidago sphacelata</i>
Autumn olive	<i>Elaeagnus umbellata</i>
Barren strawberry	<i>Waldsteinia fragarioides</i>
Beaked panic grass	<i>Panicum anceps</i>
Bearded beggarticks	<i>Bidens polylepis</i>
Beardtongue	<i>Penstemon sp.</i>
Bear's-foot	<i>Smallanthus uvedalius</i>
Bitter dock	<i>Rumex obtusifolius</i>
Bitternut hickory	<i>Carya cordiformis</i>
Black cherry	<i>Prunus serotina</i>
Black locust	<i>Robinia pseudoacacia</i>
Black medick	<i>Medicago lupulina</i>
Black oak	<i>Quercus velutina</i>
Black raspberry	<i>Rubus occidentalis</i>
Black tupelo	<i>Nyssa sylvatica</i>
Black walnut	<i>Juglans nigra</i>
Black willow	<i>Salix nigra</i>
black-eyed-susan	<i>Rudbeckia hirta</i>
Black-seed plantain	<i>Plantago rugellii</i>
Black-stem spleenwort	<i>Asplenium resiliens</i>

<b>Common name</b>	<b>Scientific name</b>
Bloodroot	<i>Sanguinaria canadensis</i>
Blunt broom sedge	<i>Carex tribuloides</i>
Blunt spike-rush	<i>Eleocharis obtusa</i>
Blunt-leaf rabbit-tobacco	<i>Gnaphalium obtusum</i>
Bosc's rosette grass	<i>Dichanthelium boscii</i>
Bracken fern	<i>Pteridium aquilinum</i> var. <i>latiusculum</i>
Bristle grass	<i>Setaria parviflora</i>
Broad beech fern	<i>Phegopteris hexagonaptera</i>
Broad-leaf enchanter's-nightshade	<i>Circaea lutetiana</i> ssp. <i>canadensis</i>
Brookside alder	<i>Alnus serrulata</i>
Broom rosette grass	<i>Dichanthelium scoparium</i>
Broom-sedge	<i>Andropogon virginicus</i>
Bull thistle	<i>Cirsium vulgare</i>
Butterfly milkweed	<i>Asclepias tuberosa</i>
Buttonbush	<i>Cephalanthus occidentalis</i>
Canadian black-snakeroot	<i>Sanicula canadensis</i>
Canadian goldenrod	<i>Solidago canadensis</i>
Canadian white violet	<i>Viola canadensis</i>
Carolina coralbeed	<i>Cocculus carolinus</i>
Carolina elephant's-foot	<i>Elephantopus carolinianus</i>
Carolina false-buckthorn	<i>Frangula caroliniana</i>
Carolina holly	<i>Ilex ambigua</i> var. <i>ambigua</i>
Carolina horse-nettle	<i>Solanum carolinense</i>
Carolina silverbell	<i>Halesia carolina</i>
Carolina vetch	<i>Vicia caroliniana</i>
Carolina wild petunia	<i>Ruellia caroliniensis</i>
Chestnut oak	<i>Quercus prinus</i>
Chickasaw plum	<i>Prunus angustifolia</i>
Chinaroot	<i>Smilax tamnoides</i>
Chinese bush-clover	<i>Lespedeza cuneata</i>
Chinese privet	<i>Ligustrum sinense</i>
Chinkapin oak	<i>Quercus muehlenbergii</i>
Christmas fern	<i>Polystichum acrostichoides</i>
Christmas honeysuckle	<i>Lonicera fragrantissima</i>
Common duckweed	<i>Lemna minor</i>
Common fescue	<i>Festuca arundinacea</i>
Common morning-glory	<i>Ipomoea purpurea</i>
Common selfheal	<i>Prunella vulgaris</i>
Cottongrass bulrush	<i>Scirpus cyperinus</i>
Cranefly orchid	<i>Tipularia discolor</i>
Creeping bush-clover	<i>Lespedeza repens</i>
Crossvine	<i>Bignonia capreolata</i>
Crown grass	<i>Paspalum</i> sp.
Curly dock	<i>Rumex crispus</i>
Cut-leaf grape fern	<i>Botrychium dissectum</i>
Cypress rosette grass	<i>Dichanthelium dichotomum</i>

Common name	Scientific name
Dandelion	<i>Taraxacum officinale</i>
Deerberry	<i>Vaccinium stamineum</i>
Deer-tongue rosette grass	<i>Dichanthelium clandestinum</i>
Deptford pink	<i>Dianthus armeria</i>
Devil's-darning-needles	<i>Clematis virginiana</i>
Devil's-grandmother	<i>Elephantopus tomentosus</i>
Downy milk-pea	<i>Galactia volubulis</i>
Downy rattlesnake-plantain	<i>Goodyera pubescens</i>
Downy serviceberry	<i>Amelanchier arborea</i>
Downy yellow false-foxglove	<i>Aureolaria virginica</i>
Duck-potato (Arrowhead)	<i>Sagittaria latifolia</i>
Dwarf cinquefoil	<i>Potentilla canadensis</i>
Dwarf crested iris	<i>Iris cristata</i>
Early blue violet	<i>Viola palmata</i>
Early lowbush blueberry	<i>Vaccinium pallidum</i>
Eastern black nightshade	<i>Solanum ptychanthum</i>
Eastern daisy fleabane	<i>Erigeron annuus</i>
Eastern hemlock	<i>Tsuga canadensis</i>
Eastern hop-hornbeam	<i>Ostrya virginiana</i>
Eastern red-cedar	<i>Juniperus virginiana</i>
Eastern white pine	<i>Pinus strobus</i>
Ebony spleenwort	<i>Asplenium platyneuron</i>
Elm-leaf goldenrod	<i>Solidago ulmifolia</i>
English plantain	<i>Plantago lanceolata</i>
Eyebane	<i>Chamaesyce nutans</i>
Fall sneezeweed	<i>Helenium autumnale</i>
False aloe	<i>Manfreda virginica</i>
False nettle	<i>Boehmeria cylindrica</i>
False solomon's-seal	<i>Smilacina racemosa</i>
Fan ground-pine	<i>Lycopodium digitatum</i>
Farewell-summer	<i>Aster lateriflorus</i>
Fescue sedge	<i>Carex festucacea</i>
Field thistle	<i>Cirsium discolor</i>
Flowering dogwood	<i>Cornus florida</i>
Flowering spurge	<i>Euphorbia corollata</i>
Four-leaf yam	<i>Dioscorea quaternata</i>
Fragrant bedstraw	<i>Galium triflorum</i>
Fringed greenbrier	<i>Smilax bona-nox</i>
Fringed sedge	<i>Carex crinita</i>
Frost grape	<i>Vitis vulpina</i>
Giant ironweed	<i>Vernonia gigantea</i>
Giant ragweed	<i>Ambrosia trifida</i>
Goat's-rue	<i>Tephrosia virginiana</i>
Gray goldenrod	<i>Solidago nemoralis</i>
Gray-bark grape	<i>Vitis cinerea</i> var. <i>baileyana</i>
Great mullein	<i>Verbascum thapsus</i>
Greater tickseed	<i>Coreopsis major</i>

*Rarity Pointe Commercial Recreation and  
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<b>Common name</b>	<b>Scientific name</b>
Ground-cherry	<i>Physalis</i> sp.
Hairy alumroot	<i>Heuchera villosa</i>
Hairy bedstraw	<i>Galium pilosum</i>
Hairy bush-clover	<i>Lespedeza hirta</i>
Hairy goldenrod	<i>Solidago hispida</i>
Hairy skullcap	<i>Scutellaria elliptica</i> var. <i>hirsuta</i>
Hairy small-leaf tick-trefoil	<i>Desmodium ciliare</i>
Heart-leaf foamflower	<i>Tiarella cordifolia</i>
Hirsute sedge	<i>Carex complanata</i>
Hogwort	<i>Croton capitatus</i>
Honey-locust	<i>Gleditsea triacanthos</i>
Hooded blue violet	<i>Viola sororia</i>
Hooked buttercup	<i>Ranunculus recurvatus</i>
Horsebrier	<i>Smilax rotundifolia</i>
Huger's carrion-flower	<i>Smilax hugeri</i>
Hyssop-leaf thoroughwort	<i>Eupatorium hyssopifolium</i>
Indian-strawberry	<i>Duchesnea indica</i>
Indian-tobacco	<i>Lobelia inflata</i>
Japanese honeysuckle	<i>Lonicera japonica</i>
Japanese-clover	<i>Kummerowia striata</i>
Jimsonweed	<i>Datura stramonium</i>
Johnson grass	<i>Sorghum halapense</i>
Jumpseed	<i>Polygonum virginianum</i>
Korean-clover	<i>Kummerowia stipulacea</i>
Lamb's-quarters	<i>Chenopodium album</i>
Lamp rush	<i>Juncus effusus</i>
Large-bract plantain	<i>Plantago aristata</i>
Late goldenrod	<i>Solidago gigantea</i>
Late-flowering thoroughwort	<i>Eupatorium serotinum</i>
Licorice bedstraw	<i>Galium circaezans</i>
Limestone wild petunia	<i>Ruellia strepens</i>
Little bluestem	<i>Schizachyrium scoparium</i>
Little-brown-jug	<i>Hexastylis arifolia</i>
Little-sweet-betsy	<i>Trillium cuneatum</i>
Liverwort	<i>Hepatica acutiloba</i>
Liverwort	<i>Hepatica americana</i>
Loblolly pine	<i>Pinus taeda</i>
Long-leaf summer bluet	<i>Houstonia longifolia</i>
Loomis' mountain-mint	<i>Pycnanthemum loomisii</i>
Lyre-leaf sage	<i>Salvia lyrata</i>
Man-of-the-earth	<i>Ipomoea pandurata</i>
May-apple	<i>Podophyllum peltatum</i>
Meadow garlic	<i>Allium canadense</i>
Mercury spurge	<i>Euphorbia mercurialina</i>
Mockernut hickory	<i>Carya alba</i>
Moutain stewartia	<i>Stewartia ovata</i>
Multiflora rose	<i>Rosa multiflora</i>

Common name	Scientific name
Muscadine	<i>Vitis rotundifolia</i>
Naked-flower tick-trefoil	<i>Desmodium nudiflorum</i>
Narrow-leaf mountain-mint	<i>Pycnanthemum tenuifolium</i>
Narrow-leaf vervain	<i>Verbena simplex</i>
Narrow-leaf white-top-aster	<i>Sericocarpus linifolius</i>
Nepalese browntop	<i>Microstegium vimineus</i>
New Jersey-tea	<i>Ceanothus americanus</i>
Nightcaps	<i>Anemone quinquefolia</i>
Nodding plumeless-thistle	<i>Carduus nutans</i>
Nodding wild rye	<i>Elymus canadensis</i>
Northern dewberry	<i>Rubus flagellaris</i>
Northern hackberry	<i>Celtis occidentalis</i>
Northern red oak	<i>Quercus rubra</i>
Oat	<i>Avena sativa</i>
Orchard grass	<i>Dactylis glomerata</i>
Osage-orange	<i>Maclura pomifera</i>
Oswego-tea	<i>Monarda fistulosa</i>
Ox-eye daisy	<i>Leucanthemum vulgare</i>
Panicled-leaf tick-trefoil	<i>Desmodium paniculatum</i>
Partridge-pea	<i>Chamaecrista fasciculata</i>
Path rush	<i>Juncus tenuis</i>
Pawpaw	<i>Asimina triloba</i>
Pennsylvania sedge	<i>Carex pensylvanica</i>
Perennial rye grass	<i>Lolium multiflorum</i>
Perennial rye grass	<i>Lolium perenne</i>
Perfoliate bellwort	<i>Uvularia perfoliata</i>
Perplexed tick-trefoil	<i>Desmodium perplexum</i>
Persimmon	<i>Diospyros virginiana</i>
Pignut hickory	<i>Carya glabra</i>
Pink azalea	<i>Rhododendron periclymenoides</i>
Pink slender-thoroughwort	<i>Fleischmannia incarnata</i>
Plume grass	<i>Erianthus</i> sp.
Poison ivy	<i>Toxicodendron radicans</i>
Poorjoe	<i>Diodia teres</i>
Post oak	<i>Quercus stellata</i>
Poverty wild oat grass	<i>Danthonia spicata</i>
Prairie fleabane	<i>Erigeron strigosus</i>
Prickly fanpetals	<i>Sida spinosa</i>
Princesstree	<i>Paulownia tomentosa</i>
Prostrate tick-trefoil	<i>Desmodium rotundifolium</i>
Purple cliff-brake	<i>Pellaea atropurpurea</i>
Purple passion-flower	<i>Passiflora incarnata</i>
Queen Anne's-lace	<i>Daucus carota</i>
Queendevil	<i>Hieracium gronovii</i>
Rattlesnake fern	<i>Botrychium virginianum</i>
Red clover	<i>Trifolium pratense</i>
Red hickory	<i>Carya ovalis</i>

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<b>Common name</b>	<b>Scientific name</b>
Red maple	<i>Acer rubrum</i>
Red mulberry	<i>Morus rubra</i>
Redbud	<i>Cercis canadensis</i>
Resurrection fern	<i>Pleopeltis polypodioides</i>
Rice button american-aster	<i>Aster dumosus</i>
Richweed	<i>Collinsonia canadensis</i>
Rose	<i>Rosa</i> sp. (cultivated)
Round-leaf thoroughwort	<i>Eupatorium rotundifolium</i>
Round-seed rosette grass	<i>Dichanthelium sphaerocarpon</i>
Rusty blackhaw	<i>Viburnum rufidulum</i>
Sallow sedge	<i>Carex lurida</i>
Sassafras	<i>Sassafras albidum</i>
Sawbrier	<i>Smilax glauca</i>
Saw-tooth blackberry	<i>Rubus argutus</i>
Scarlet oak	<i>Quercus coccinea</i>
Sensitive brier	<i>Mimosa microphylla</i>
Shag-bark hickory	<i>Carya ovata</i>
Sharp dock	<i>Rumex conglomeratus</i>
Short-leaf pine	<i>Pinus echinata</i>
Showy goldenrod	<i>Solidago speciosa</i>
Shrubby bush-clover	<i>Lespedeza intermedia</i>
Sicklepod	<i>Senna obtusifolia</i>
Silktree	<i>Albizia julibrissin</i>
Silky dogwood	<i>Cornus amomum</i>
Slippery elm	<i>Ulmus rubra</i>
Small woodland sunflower	<i>Helianthus microcephalus</i>
Small's black-snakeroot	<i>Sanicula smallii</i>
Small's groundsel	<i>Senecio anonymous</i>
Smooth rockcress	<i>Arabis laevigata</i>
Smooth sumac	<i>Rhus glabra</i>
Soft grooveburr	<i>Agrimonia pubescens</i>
Solomon's-seal	<i>Polygonatum biflorum</i>
Sourwood	<i>Oxydendrum arboreum</i>
Southern adder's-tongue	<i>Ophioglossum vulgatum</i>
Southern crab grass	<i>Digitaria ciliaris</i>
Southern hackberry	<i>Celtis laevigata</i>
Southern red oak	<i>Quercus falcata</i>
Southern shag-bark hickory	<i>Carya carolinae-septentrionalis</i>
Southern woodland violet	<i>Viola hirsutula</i>
Spiny amaranth	<i>Amaranthus spinosa</i>
Spoon-leaf purple-everlasting	<i>Gnaphalium purpureum</i>
Spotted St. John's-wort	<i>Hypericum punctatum</i>
Spotted wintergreen	<i>Chimaphila maculata</i>
Spreading bent grass	<i>Agrostis stolonifera</i>
St. Andrew's-cross	<i>Hypericum hypericoides</i>
Starved rosette grass	<i>Dichanthelium depauperatum</i>
Stiff marsh bedstraw	<i>Galium tinctorium</i>



Common name	Scientific name
Straggling St. Andrew's-cross	<i>Hypericum stragalum</i>
Straw-color flat-sedge	<i>Cyperus strigosus</i>
Sugar maple	<i>Acer saccharum</i>
Sulphur cinquefoil	<i>Potentilla recta</i>
Tall rattlesnake-root	<i>Prenanthes altissima</i>
Tall redbtop	<i>Tridens flavus</i>
Tall thimbleweed	<i>Anemone virginiana</i>
Tapered rosette grass	<i>Dichanthelium acuminatum</i>
Three-part violet	<i>Viola tripartita</i> var. <i>glaberimma</i>
Timothy	<i>Phleum pratense</i>
Toothed spurge	<i>Euphorbia dentata</i>
Trailing arbutus	<i>Epigaea repens</i>
Trailing bush-clover	<i>Lespedeza procumbens</i>
Tree sparkle-berry	<i>Vaccinium arboreum</i>
Tree-of-heaven	<i>Ailanthus altissima</i>
Trumpet-creeper	<i>Campsis radicans</i>
Tuberous gromwell	<i>Lithospermum tuberosum</i>
Tuliptree	<i>Liriodendron tulipifera</i>
Umbrella magnolia	<i>Magnolia tripetala</i>
Upright yellow wood-sorrel	<i>Oxalis stricta</i>
Velvet-leaf tick-trefoil	<i>Desmodium viridiflorum</i>
Venus's-pride	<i>Houstonia purpurea</i>
Virginia pine	<i>Pinus virginiana</i>
Virginia strawberry	<i>Fragaria virginiana</i>
Virginia three-seed-mercury	<i>Acalypha virginica</i>
Virginia wild rye	<i>Elymus virginicus</i>
Virginia-creeper	<i>Parthenocissus quinquefolia</i>
Virginia-snakeroot	<i>Aristolochia serpentaria</i>
Waterthread	<i>Potamogeton diversifolius</i>
Wavy-leaf american-aster	<i>Aster undulatus</i>
Waxy-leaf meadow-rue	<i>Thalictrum revolutum</i>
White ash	<i>Fraxinus americana</i>
White avens	<i>Geum canadense</i>
White clover	<i>Trifolium repens</i>
White crownbeard	<i>Verbesina virginica</i>
White milkweed	<i>Asclepias variegata</i>
White oak	<i>Quercus alba</i>
White oldfield american-aster	<i>Aster pilosus</i>
White snakeroot	<i>Ageratina altissima</i>
White sweet-clover	<i>Melilotus alba</i>
White vervain	<i>Verbena urticifolia</i>
Wild comfrey	<i>Cynoglossum virginianum</i>
Wild geranium	<i>Geranium maculatum</i>
Wild hydrangea	<i>Hydrangea arborescens</i>
Wild lettuce	<i>Lactuca canadensis</i>
Winged elm	<i>Ulmus alata</i>
Winged sumac	<i>Rhus copallinum</i>

<b>Common name</b>	<b>Scientific name</b>
Witch-hazel	<i>Hamamelis virginiana</i>
Woodland lettuce	<i>Lactuca floridana</i>
Woodland pinkroot	<i>Spigelia marilandica</i>
Yarrow	<i>Achillea millefolium</i>
Yellow crownbeard	<i>Verbesina occidentalis</i>
Yellow passion-flower	<i>Passiflora lutea</i>
Yellowdicks	<i>Helenium amarum</i>
Yellow-fruit sedge	<i>Carex annectens</i>
Yellow-seed false-pimpernell	<i>Lindernia dubia</i>

### **Terrestrial Ecology Comparison of TVA Lands to Mitigation Lands**

Terrestrial Plants - Alternatives C and E include provisions to mitigate for the loss of public land through a land exchange in which additional properties would be purchased by the applicant and transferred to public ownership. Although these alternatives differ in the total acreage and quality of mitigation lands to be acquired, both propose to acquire a portion of an area known as the Wildcat Rock site. This site was surveyed for botanical resources in early January 2003 along with the Morganton Cemetery Site which is consider unsuitable for use as terrestrial plant mitigation.

The Wildcat Rock site is located on the eastern shoreline of Tellico Reservoir near the Loudoun-Monroe County line. The general area consists of a narrow embayment bordered on the north by a steep narrow-backed ridge and to the south by a comparably low ridgeline. The parcel consists of a mixture of pasture, old fields, shrub lands, and pine and hardwood forests. Low-lying areas at the head of the cove and along the lower slopes have been heavily impacted by cattle access. In contrast, the slopes and ridge tops support forests of higher habitat quality.

In terms of species diversity and age structure, the best-developed forests at the Wildcat Rock site are located along the upper slopes and ridgeline that forms the northern boundary of the proposed mitigation site. The slope forests consist of various species of oaks and hickories with a strong Virginia pine component. Other species of some importance include red maple, sourwood, and shortleaf pine. On lower slopes particularly along the cove, invasive exotic plant species such as Chinese privet, Japanese honeysuckle, and multiflora rose are present. Some stands of Virginia pine are also present, however some tree damage and mortality from the southern pine beetle is evident.

Karst features and rock outcrops were noted on the forested slopes, with woody vegetation consisting of species such as chinkapin oak, white oak, eastern red cedar, hop hornbeam, and buckthorn bumelia. Herbs such as purple phacelia and wild columbine are frequent on exposed rock faces, as are ferns such as black-stem spleenwort, resurrection fern, and purple cliff brake. Chinese privet is also associated with the thin soils over these rock outcrops.

The requested TVA parcels and these proposed mitigation lands are described in terms of five major vegetation categories in Table D-1 and compared in terms of several indicators of habitat quality in Table D-2. Descriptions of land cover for the proposed mitigation lands were obtained from field surveys and supplemented by examination of aerial photography.

<b>Table D-1. Land Cover Types Present on the TVA Lands and Mitigation Lands</b>			
<b>Land Cover</b>	<b>TVA lands (parcels 8 &amp; 9)</b>	<b>Mitigation Lands</b>	
		<b>Wildcat Rock 60 Acres (Alt. C)</b>	<b>Wildcat Rock 256 Acres (Alt. E)</b>
Pasture/grassland	0	15	7
Shrub land	5	20	5
Hardwood Forest <sup>1</sup>	45	40	71
Pine Forest <sup>1</sup>	30	25	15
Dead pine	20	0	2
<b>Total</b>	100	100	100

<sup>1</sup> Forests include pole-sized trees and larger. Mixed pine-hardwood is not broken out, but is included in the separated figures.

Hardwood forest is the most predominant land cover type on the requested TVA lands, as well as both of the tracts proposed as mitigation (Table D-1). While the 60-acre Wildcat Rock tract proposed as mitigation under Alternative C has a similar proportion of land in hardwood forests relative to the TVA lands requested by the applicant, the Wildcat Rock site proposed as mitigation under Alternative E actually has a greater proportion of this vegetation type than the TVA lands requested by the applicant.

However, these three sites are not comparable in terms of overall forest quality (Table D-2). The TVA lands that would be transferred under Alternatives C and E consist of a relatively large, nearly contiguous tract of forest land. In contrast, the 60-acre Wildcat Rock tract associated with Alternative C contains linear segments of shoreline forest situated on either side of an embayment. At the mouth and head of the cove, this shoreline forest is interrupted by pasture and old fields that are subject to grazing and disturbance by cattle. The larger Wildcat Rock tract associated with Alternative E contains this shoreline forest as well as forests located on the south and north facing slopes leading up to an adjacent narrow-backed ridge. Although the lower slopes of this ridge have been subject to some disturbance from cattle, the higher slopes and prominent ridgeline contain a diversity of plant species in the canopy and understory, as well as several karst features and rock outcrops (described above). In this regard, the habitat and species diversity encompassed by the larger Wildcat Rock site is greater than that observed on the requested TVA lands (Table D-2).

<b>Table D-2. Relative Quality of Terrestrial Ecology Resources Present on TVA Lands and Mitigation Lands</b>			
<b>Indicator</b>	<b>Relative Occurrence</b>		
	<b>Low</b>	<b>Intermediate</b>	<b>High</b>
<b>Invasive Terrestrial Plants</b>	Wildcat Rock (Alternative E)	Wildcat Rock (Alternative C)	TVA lands (parcels 8 and 9)
<b>Average Forest Stand Age</b>	Wildcat Rock (Alternative C)	Wildcat Rock (Alternative E)	TVA lands (parcels 8 and 9)
<b>Interior Forest</b>	Wildcat Rock (Alternative C); TVA lands (Parcels 8 and 9) <sup>1</sup>		Wildcat Rock (Alternative E)
<b>Understory Diversity</b>	Wildcat Rock (Alternative C)	TVA lands (parcels 8 and 9)	Wildcat Rock (Alternative E)

<sup>1</sup> See Terrestrial Animals section for a definition of interior forest, and a discussion of this indicator's relevance to wildlife.

**Terrestrial Animals** - TVA Parcels 8 and 9 and the Wildcat Rock site contain some similar habitat types (Table D-1). For the most part, the differences in the sites are related to the density of exotic and invasive plants, the amount of interior forest, forest age, understory diversity and structure (Table D-2), and the special habitat features of each site.

*Wildcat Rock* – The eastern and southern portion of this 256-acre site currently supports cattle grazing. The highest quality wildlife habitat on this site involves the hardwood forest on the ridge top, along the slopes, and along the shoreline. Special habitat features on this site include springs and associated wetland habitats, a small creek, interspersed pine forests, and limestone outcrops that contain fractures suitable as habitat for bats, salamanders, small mammals, and other species that prefer small openings. A few larger trees have been harvested from the site. Numerous tree cavities provide habitat for cavity nesting birds and mammals, and trees containing loose bark provide potential habitat for roosting bats. Overall, wildlife known or expected to inhabit this site is very similar to those listed for the project area. However, due to the special habitat features found on the site, wildlife diversity here may be slightly higher.

Table 4-2 compares relative indicators on this site with the TVA lands. This site contains a relatively low density of invasive plant species, some open-land habitat with grassland habitat development potential, approximately 18 acres of interior forest, and the best overall structure and diversity of understory habitat. Although the TVA tract has the oldest overall stand age, the Wildcat Rock site contains a variety of trees at various levels of maturity. The north slope of the property is comprised of mature deciduous woodlands and contains a small pond surrounded by woodlands. The ridge top and side slopes contain several species of hard mast producing trees including American beech, oaks, and hickories. Overall, the upland areas and the forested shoreline provide some of the best habitat

among properties considered for mitigation, especially for forest-dwelling birds not requiring extensive forest tracts.

*TVA (Parcels 8 and 9)* – A large portion of Parcel 9, under consideration, contains standing southern pine beetle killed pines. The remaining lands on Parcel 8 and 9 are middle-aged to mature deciduous woodlands and mixed pine-hardwood forests. The shoreline is forested and very limited open habitats exist on the Parcels. Table D-2 compares relative indicators of this site with the Wildcat Rock site. This site contains some exotic invasive plants that are expected to increase substantially within areas affected by pine beetles. There are no interior forests on the site, the site has the highest average stand age of the three properties, and it provides a fairly developed structure and diversity of habitat in the understory. Overall, this site provides continuity to the shoreline habitat along the reservoir, and is somewhat similar to the Wildcat Rock site.

The Morganton Cemetery site was assessed for its suitability as a mitigation site for terrestrial ecology. The Southern Pine Bark Beetle has killed several stands of pine woodlands on the northeast portion of this site. Invasive Chinese privet dominates the understory in these pine stands. These areas are interspersed by small stands of hardwood trees. The southwest end of the site contains mature hardwood and pine forests. Much of the shoreline is forested. Most of the high quality timber was removed from this area in recent years, although some mature trees remain on the steeper slopes. In comparison to the wildcat rock and the TVA lands, this site ranked high among invasive species, contained no interior forest, had the lowest average stand age, and had the lowest understory diversity. Overall, the site offers moderate wildlife habitat and would not be provide suitable mitigation for impacts to terrestrial ecology.

### Invasive Exotic Pest Plants of Tennessee

**Rank 1 — Severe Threat:** Exotic plant species that possess characteristics of invasive species and spread easily into native plant communities and displace native vegetation.

Scientific Nomenclature	Common Name
<i>Ailanthus altissima</i> (Mill.) Swingle	Tree of heaven
<i>Albizia julibrissin</i> Durz.	Mimosa
<i>Alliaria petiolata</i> (Bieb.) Cavara & Grande	Garlic-mustard
<i>Celastrus orbiculata</i> Thunb.	Asian bittersweet
<i>Dioscorea oppositifolia</i> L.	Air-potato
<i>Elaeagnus umbellata</i> Thunb.	Autumn olive
<i>Elaeagnus pungens</i> Thunb.	Thorny-olive
<i>Euonymus fortunei</i> (Turcz.) Hand.-Mazz.	Winter creeper
<i>Hedera helix</i> L.	English ivy
<i>Lespedeza cuneata</i> (Dum.-Cours.) G. Don	Sericea lespedeza
<i>Ligustrum sinense</i> Lour.	Chinese privet
<i>Ligustrum vulgare</i> L.	Common privet
<i>Lonicera fragrantissima</i> Lindl. & Paxton	January jasmine
<i>Lonicera japonica</i> Thunb.	Japanese honeysuckle
<i>Lonicera maackii</i> (Rupr.) Maxim.	Amur bush honeysuckle
<i>Lonicera morrowii</i> A. Gray	Morrow's bush honeysuckle
<i>Lonicera tatarica</i> L.	Tartarian honeysuckle, twinsisters
<i>Lonicera x bella</i> Zabel	Bush honeysuckle
<i>Lythrum salicaria</i> L. [all varieties and cultivars]	Purple loosestrife
<i>Microstegium vimineum</i> (Trin.) A.	Camus Nepalgrass, Japanese grass
<i>Myriophyllum spicatum</i> L.	Eurasian water milfoil
<i>Paulownia tomentosa</i> (Thunb.) Sieb. & Zucc. ex Steud	Princess tree
<i>Phragmites australis</i> (Cav.) Trin. ex Steud.	Common reed
<i>Polygonum cuspidatum</i> Seib. & Zucc	Japanese knotweed, Japanese bamboo
<i>Pueraria montana</i> (Lour.) Merr.	Kudzu
<i>Rosa multiflora</i> Thunb.	Multiflora rose
<i>Solanum viarum</i> Dunal	Tropical soda apple
<i>Sorghum halepense</i> (L.) Pers.	Johnson grass
<i>Spiraea japonica</i> L.f.	Japanese spiraea

**Rank 2 — Significant Threat:** Exotic plant species that possess characteristics of invasive species but are not presently considered to spread as easily into native plant communities as those species listed as **Rank 1— Severe Threat.**

Scientific Nomenclature	Common Name
<i>Alternanthera philoxeroides</i> (Mart.) Griseb.	Alligatorweed
<i>Artemisia vulgaris</i> L.	Mugwort, common wormwood
<i>Arthraxon hispidus</i> (Thunb.) Makino	Hairy jointgrass
<i>Berberis thunbergii</i> DC.	Japanese barberry
<i>Bromus commutatus</i> Schrad.	Meadow brome
<i>Bromus japonicus</i> Thunb. ex Murray	Japanese brome grass
<i>Bromus secalinus</i> L.	Rye brome
<i>Bromus tectorum</i> L.	Thatch brome grass, cheat grass
<i>Carduus nutans</i> L.	Musk thistle, nodding thistle
<i>Centaurea biebersteinii</i> DC.	Spotted knapweed
<i>Cirsium arvense</i> L. (Scop.)	Canada thistle
<i>Cirsium vulgare</i> (Savi) Ten.	Bull thistle
<i>Clematis ternifolia</i> DC.	Leatherleaf clematis
<i>Conium maculatum</i> L.	Poison hemlock
<i>Coronilla varia</i> L.	Crown vetch
<i>Daucus carota</i> L.	Wild carrot, Queen Anne's-lace
<i>Dipsacus fullonum</i> L.	Fuller's teasel
<i>Dipsacus laciniatus</i> L.	Cutleaf teasel
<i>Euonymus alata</i> (Thunb.) Sieb.	Burning bush
<i>Festuca arundinacea</i> Schreb.	Tall fescue
<i>Festuca pratensis</i> Huds.	Meadow fescue
<i>Hesperis matronalis</i> L.	Dame's rocket
<i>Hydrilla verticillata</i> (L.f.) Royle	Hydrilla, water thyme
<i>Lespedeza bicolor</i> Turcz.	Bicolor lespedeza, shrubby bushclover
<i>Ligustrum japonicum</i> Thunb.	Japanese privet
<i>Lysimachia nummularia</i> L.	Moneywort, creeping Jenny
<i>Mahonia bealei</i> (Fortune) Carriere	Oregon grape
<i>Melilotus alba</i> Medik.	White sweet clover
<i>Melilotus officinalis</i> (L.) Lam.	Yellow sweet clover
<i>Miscanthus sinensis</i> Andersson	Zebra grass, Chinese silver grass
<i>Murdannia keisak</i> (Hassk.) Hand.-Mazz.	Asian spiderwort
<i>Myriophyllum aquaticum</i> (Vell.) Verdc.	Parrot's feather, water milfoil
<i>Nandina domestica</i> Thunb.	Nandina, sacred-bamboo
<i>Rorippa nasturtium-aquaticum</i> (L.)	Hayek Watercress
<i>Polygonum caespitosum</i> Blume	Bunchy knotweed, oriental lady's-thumb
<i>Populus alba</i> L.	White poplar
<i>Potamogeton crispus</i> L.	Curly pondweed
<i>Setaria faberi</i> R.A.W. Herrm.	Nodding foxtail-grass, Japanese bristle-grass
<i>Setaria italica</i> (L.) P. Beauv.	Foxtail-millet
<i>Setaria pumila</i> (Poir.) Roem. & Schult.	Yellow foxtail, smooth millet
<i>Setaria viridis</i> (L.) P. Beauv.	Green millet
<i>Torilis arvensis</i> (Huds.) Link	Spreading hedge-parsley
<i>Tussilago farfara</i> L.	Coltsfoot
<i>Verbascum thapsus</i> L.	Common mullein
<i>Vicia sativa</i> L.	Garden vetch
<i>Vinca minor</i> L.	Common periwinkle
<i>Wisteria sinensis</i> (Sims) DC.	Chinese wisteria
<i>Wisteria floribunda</i> (Willd.) DC.	Wisteria
<i>Xanthium strumarium</i> L.	Common cocklebur, rough cocklebur

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*

**Rank 3 — Lesser Threat:** Exotic plant species that spread in or near disturbed areas and are not presently considered a threat to native plant communities.

Scientific Nomenclature	Common Name
<i>Allium vineale</i> L.	Field garlic
<i>Arundo donax</i> L.	Giant reed, elephant grass
<i>Bromus catharticus</i> Vahl	Brome grass, rescue grass
<i>Bromus inermis</i> Leyss.	Smooth brome grass
<i>Broussonetia papyrifera</i> (L.) L'Her. ex Vent.	Paper mulberry
<i>Lithospermum arvense</i> (L.) I. M. Johnston	Corn gromwell
<i>Cardiospermum halicacabum</i> L.	Balloonvine, love-in-a-puff
<i>Centaurea cyanus</i> L.	Bachelor's button, cornflower
<i>Chrysanthemum leucanthemum</i> L.	Ox-eye daisy
<i>Cichorium intybus</i> L.	Chicory
<i>Egeria densa</i> Planch.	Brazilian elodea, Brazilian water-weed
<i>Elaeagnus angustifolia</i> L.	Russian olive
<i>Eschscholzia californica</i> Cham.	California poppy
<i>Fatoua villosa</i> (Thunb.) Nakai	Hairy crabweed
<i>Glechoma hederacea</i> L.	Gill-over-the-ground, ground ivy
<i>Iris pseudacorus</i> L.	Pale-yellow iris
<i>Kummerowia stipulacea</i> (Maxim.) Makino	Korean clover
<i>Kummerowia striata</i> (Thunb.) Schindl.	Japanese clover
<i>Melia azedarach</i> L.	Chinaberry
<i>Ornithogalum umbellatum</i> L.	Star of Bethlehem
<i>Pastinaca sativa</i> L.	Wild parsnip
<i>Polygonum persicaria</i> L.	Lady's thumb
<i>Rubus phoenicolasius</i> Maxim.	Wineberry
<i>Senna obtusifolia</i> (L.) H. S. Irwin & Barneby	Sicklepod senna
<i>Tragopogon dubius</i> Scop.	Yellow goat's-beard
<i>Tribulus terrestris</i> L.	Puncturevine
<i>Urtica dioica</i> L.	Stinging nettle
<i>Xanthium spinosum</i> L.	Spiny cocklebur



**NON-NATIVE, NON-INVASIVE SPECIES SUITABLE FOR EROSION  
CONTROL/STABILIZATION ACTIVITIES**

**ANNUAL RYEGRASS**

**FOXTAIL, BROWNTOP AND JAPANESE MILLETS**

**WINTER WHEAT**

**OATS (spring variety)**

**ORCHARDGRASS**

**PERENNIAL RYEGRASS**

**REDTOP**

**RYE**

**TIMOTHY**

**WEeping LOVEGRASS**

**CRIMSON, RED AND LADINO CLOVERS**



## **APPENDIX E – CORRESPONDENCE**





## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

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**Environmental Policy and Planning**

May 12, 2003

MAY 14 2003

Mr. Richard L. Toennisson  
Tennessee Valley Authority  
400 West Summit Hill Drive (WT 8C)  
Knoxville, TN 37902

Doc Type: \_\_\_\_\_  
Index Field: \_\_\_\_\_  
Project Name: \_\_\_\_\_  
Project No.: \_\_\_\_\_

**SUBJ: EPA Review of TVA DEIS for "Rarity Pointe Commercial Recreation  
and Residential Development on Tellico Reservoir"; Loudon County, TN;  
CEQ No. 030125**

Dear Mr. Toennisson:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced Tennessee Valley Authority (TVA) Draft Environmental Impact Statement (DEIS) in accordance with the responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. This DEIS considers the conveyance of TVA public lands to a requesting applicant for residential development in exchange for similar applicant private lands along the Tellico Reservoir system.

Under the TVA preferred alternative (Alternative E), TVA would accept the proposal of the applicant (developer; Rarity Communities) with mitigation, and convey some 118 acres of TVA lands on the Tellico Reservoir for applicant private ownership and residential development at Rarity Pointe. The developer's planned residential complex would combine the TVA lands with its adjacent private lands that together would total some 657 acres. In exchange, TVA would receive some 256 acres of private lands at Wildcat Rock upstream of Rarity Pointe for public conservation (conveyance of the mitigation lands would be transferred by the Tellico Reservoir Development Agency (TRDA), an agency established by the State of Tennessee). The Rarity Pointe development would involve 1,200 residential units (low-rise and mid-rise condominiums, cottage-style cabins, duplexes, attached and detached villas, single-family estate homes, custom home sites, and overnight suites), a regulation-sized 18-hole golf course, a small Par-3 golf course and a full-scale marina (329 wet slips and 200 dry stack storage spaces). The planned 1,200 residential units would be developed *with or without* the TVA land sale or exchange, although the unit density would be greater without the TVA land conveyance.

In addition to our enclosed *Additional Comments* on the DEIS, we offer the following summary comments on the five presented action and no action alternatives for TVA's consideration in their development of the Final EIS (FEIS):

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► **Alternatives**

\* Alternative A (No Action) - Since TVA lands would not be sold or exchanged under this alternative, Alternative A would have the environmental advantage of maintaining these lands in the public domain for conservation and recreation. Although the developer's private lands at Rarity Pointe would still be developed under the No Action Alternative, maintenance of the adjacent TVA lands would provide a stabilizing conservation buffer next to that development and limit the areal extent of the impervious surfaces associated with development. On the other hand, the 1,200-unit development would be concentrated on less land than if the TVA lands were annexed as part of the complex (i.e., 374 acres versus 492 acres, assuming 165 acres of the 657 total acres will be left available for the regulation-sized golf course). In either case, however, development at Rarity Pointe would concentrate additional development on Tellico Reservoir near the Tellico Dam forebay, which is already experiencing water quality degradation involving low dissolved oxygen, elevated chlorophyll, stressed benthic assemblages and PCB bioaccumulation.

From a TVA and the TRDA perspective, the No Action Alternative could be perceived as not promoting economic development of Tellico Reservoir. However, it should be emphasized that the developer would develop the private lands at Rarity Pointe with 1,200 residential units (land clearing has already begun) with or without the TVA land sale, so that only the areal extent of the residential development would be reduced as opposed to development being prevented.

\* Alternative B (Applicant's Proposal) - The developer's proposal to purchase and develop the adjacent TVA lands together with the ongoing development of Rarity Pointe private lands would provide more land for the development of the 1,200 residential units than if the TVA lands were not acquired (i.e., lower unit density per acre). This would provide a lower residential unit density per acre, but would result in a greater extent of impervious surfaces and also remove the adjacent conservation buffer of the undeveloped TVA lands. This alternative would also result in secondary impacts associated with public infrastructure systems for sewage, drinking water, natural gas hook-ups and access (possibly related highway widening in the area has already begun) for the expected population infill. Alternative B also does not offer mitigation (no land exchange), and a proposed greenway trail on the TVA lands would no longer be established (pg. S-6) if TVA lands are sold.

\* Alternative C (Partial Land Sale With Mitigation) - Alternative C proposes conveyance of a portion of the 118 acres of TVA lands, i.e., 49 acres of primarily back-lying lands with little shoreline (0.2 miles of the 1.7-mile shoreline: Fig. 2-4). As mitigation, a small land exchange (60 ac) is offered at Wildcat Rock that would provide shoreline strip acreage for TVA management. An advantage of this small exchange is that more acreage – and specifically ecologically valuable-shoreland acreage – would be added in the public domain (60 ac vs. 49 ac) which otherwise could be used for industrial or commercial development. On the other hand, such a conveyance would increase the acreage of development at Rarity Pointe and therefore increase the extent of impervious surfaces and possibly result in the loss of the greenway trail

(the FEIS should clarify page 18 of DEIS). The exchange of some of the TVA lands under Alternative C could be perceived as somewhat of a balance between the economic development and conservation of Tellico Reservoir, although realistically the development at Rarity Pointe is already occurring on the developer's private lands with or without a partial or full TVA land conveyance.

\* Alternative D (Small Golf Course and Marina with No Land Sale) - As in the case of Alternative A, Alternative D would avoid developmental impacts on the TVA lands since they would not be sold or exchanged. However, the proposed development of the small Par-3 golf course and full-scale marina would still proceed under this alternative. Such development in addition to the developer's ongoing development of private lands at Rarity Pointe could further exacerbate water quality degradation near the forebay since these facilities would be proximately located on the north end of the Rarity Pointe complex. Development of the marina would require the sale of 5 acres of TVA submerged lands (in addition to the 118 acres for the other TVA land sale or exchange alternatives) and development of both the marina and Par-3 golf course would require TVA 26(a) permitting.

Some water quality impacts can be expected in the development and operation of the full-scale marina and small Par-3 golf course. The marina would be equipped with 329 wet slips and 200 dry stack storage spaces and would also offer repair services. As such, the potential exists for fuel spills, bacterial contamination, nutrient loading, fish toxicity and runoff from the repair facility (e.g., hull sanding). Similarly, although the DEIS (pg. 72) does not characterize it as significant, runoff from the golf course could result in reservoir inflows of pesticides and fertilizers since such chemicals are used extensively on golf course greens and the golf course will apparently (pg. 66) not have a vegetated buffer strip along its shoreline.

In regard to the sites selected for the marina and small golf course on the northern end of the Rarity Pointe complex (Fig.2-5), we note that a smaller marina had previously been constructed and operational at the proposed site until it was recently closed due to low demand. Although the marina site is somewhat protected from wave action, it is not hydrologically isolated in a cove or embayment such that good reservoir circulation is possible (the FEIS should discuss circulation patterns relative to good marina flushing). However, both the marina and golf course are located on the northern end of the development complex near the Tellico Dam forebay and could therefore exacerbate water quality degradation. On the other hand, we note that both facilities are located along shorelines of poor quality (Shoreline Aquatic Habitat Index (SAHI) rating of *poor*), so that the good quality shorelines (SAHI rating of *good*) along the western shoreline of the private and TVA lands would not be disturbed.

\* Alternative E (Applicant's Proposal with Mitigation: TVA's Preferred Alternative) - As discussed above, Alternative E would annex and develop the adjacent TVA lands together with the ongoing development of private lands at Rarity Pointe. This alternative is essentially the applicant's proposal (Alternative B) with mitigation. Mitigation involves a substantial land exchange of 256 acres of similar lands at Wildcat Rock for the 118 acres of TVA lands, and

includes establishment of a greenway trail on the TVA lands.

This alternative would have the advantages of 1) acquisition in the public domain of additional shoreland acreage under TVA management since the acreage ratio of the exchange is much greater than 1:1 (256 ac vs. 118 ac); 2) favorably changing the allocation of the mitigation lands from industrial/commercial development to conservation/recreation; 3) the mitigation lands consist of a valuable vegetated shoreline and an interior forested area similar to the TVA lands; 4) inclusion of the originally planned establishment of a greenway trail; 5) TVA would not permit or consider private water access along the shoreline of the TVA lands (pg. 102); and 6) the mitigation lands contain less exotics and dead pines (pine bark beetle) than the TVA lands. A disadvantage would be that the forests of the TVA lands are more mature than those of the mitigation lands, although the forests of the mitigation lands have more even-aged trees.

► **Summary** - The TVA preferred alternative would provide considerable additional lands in the public domain that would be allocated for conservation/recreation rather than industrial/commercial use. However, EPA has some environmental concerns with the proposed development of natural lands, a marina, and a shoreline golf course. These actions would be proximate to the forebay of the Tellico Dam and could therefore exacerbate the forebay's existing water quality degradation. While the number of residential units at Rarity Pointe would remain the same with or without the conveyance and annexation of the TVA lands, the maintenance of the TVA lands as natural areas at Rarity Pointe would provide a conservation buffer next to the ongoing development. This would reduce the extent of the impervious surfaces and thereby benefit the overall health of the Tellico Reservoir. Although we are aware of the TVA mandate for economic development of the Tennessee Valley and assistance in this regard by TRDA, management of reservoir health should also be fully considered in selectively siting that economic development and minimizing developmental impacts.

Because the developer intends to develop Rarity Pointe with or without annexation of TVA lands, some development would occur whichever action or no action alternative is selected, so that some developmental impacts can be expected. We look to TVA, as the manager of the Tellico Reservoir, to apply best management practices to improve and maintain water quality within the reservoir system so that the carrying capacity for reservoir development is not exceeded. Water quality management measures include maintaining sufficient natural shoreline and back-lying areas by limiting development and infrastructure along shorelands, requiring shoreline buffer zones, maintaining aquatic littoral zone habitat, controlling water access, maintaining areas of habitat continuity such as greenways and wildlife corridors, continuing water quality monitoring (particularly in the impacted forebay), and other guidance measures outlined in the recent TVA Shoreline Management Initiative (SMI) EIS.

► **DEIS Rating** - EPA rates this DEIS an "EC-2" (i.e., Environmental Concerns with additional information requested) due to our overall water quality concerns for the Tellico Reservoir.



Thank you for the opportunity to provide comments on the DEIS. Should you have questions regarding our comments, the staff contact for this project is Chris Hoberg who can be reached directly at 404/562-9619.

Sincerely,

A handwritten signature in black ink, appearing to read "Heinz Mueller", with a stylized flourish at the end.

Heinz J. Mueller, Chief  
Office of Environmental Assessment  
Environmental Accountability Division

Enclosure - *Additional Comments*

## ADDITIONAL COMMENTS

► Mitigation Commitments - References to mitigation *commitments* are made in the DEIS, such as on page 73. However, Section 4.15 (pg. 100) provides only mitigation *measures* as opposed to *commitments*. The FEIS and ultimately the Record of Decision, should provide clear commitments. These commitments should also be more specific than the measures listed in Section 4.15. For example, page 74 indicates that TVA's SMI EIS criteria for shoreline management would be applied to the project, although such a commitment is not provided in Section 4.15 (although we do note that measure #14 indicates that TVA will not consider any residential access to Tellico Reservoir in the deed for transferring the TVA lands; however, while water access is addressed in SMI, it is only one aspect of shoreline management addressed).

It also appears that the number listed (#13) for the commitment referenced at the top of page 73 regarding erosion control BMPs is incorrect since the measure listed for #13 on page 102 pertains to another topic. The FEIS should correct the commitment number.

► Marina Development - EPA recommends that the measures established in the TVA Clean Marina program be implemented in the construction and operation of the proposed full-scale marina if an action alternative is selected. These measures should also include avoiding the use of lumber preserved with arsenic-based chemicals to prevent the leaching of arsenic into the reservoir from marina decking and pilings. Measures should also address avoiding the use of styrofoam materials since these often break apart and then become unsightly, difficult to recover, and slow to biodegrade.

► NEPA

\* *Preferred Alternative* - We appreciate that TVA has identified a preferred alternative at the DEIS stage as opposed to waiting until the FEIS. The public and agency reviewers are thereby in better position to evaluate the direction that the federal lead agency prefers at this time. We also appreciate that the current TVA EIS was generated and tiers from the Tellico Reservoir EIS, since the TVA preferred alternative would change the land allocations for certain parcels addressed in that Tellico Reservoir EIS.

\* *Alternative B* - Although informative relative to the applicant's proposal, Alternative B is not reasonable in the sense that no mitigation for potential impacts was offered. As a rule, all action alternatives involve environmental impacts such that the NEPA document should consider mitigation of those impacts to the extent feasible. Although Alternative E, which is the applicant's proposal *with* mitigation, is also presented in the DEIS, Alternative B by itself is insufficient for potential implementation. Alternative B should not be implemented without mitigation.

► Second Homes - Page 1 suggests that some of the residences at Rarity Pointe would be second homes. To the extent feasible, the FEIS should estimate the percent of the 1,200 units that might

be second homes since residents in such seasonally inhabited residences could be expected to generate less pollution at Rarity Pointe due to their seasonal absences, and therefore would reduce cumulative impacts.

► Units/Acre - The FEIS should discuss the number of units planned per acre. Page 71 suggests that under the No Action (without TVA lands), and assuming 165 acres for the golf course, there would be approximately 2.8 units/acre on some 374 acres (i.e., 657 total acres minus 165 golf course acres minus 118 TVA acres). The expected number of people that would live at Rarity Pointe should also be estimated. The FEIS should estimate and discuss these figures so that a sense of development density and population can be predicted.

It is clear that the developer currently plans to construct 1,200 residential units with or without the conveyance of the TVA lands. It is less clear if the scope of developer's proposal could change and if such a change would increase the density of the residential units at Rarity Pointe. From an environmental perspective, how would development along Tellico Reservoir be controlled so that the carrying capacity of the Reservoir would not be exceeded and water quality (especially near the forebay) not be further degraded. The FEIS should discuss what TVA's role is in this regard, as well as any local zoning or other relevant measures.

► Land Allocations - The land exchanges offered in Alternatives C and E would require modifications in the land allocations for the Tellico Reservoir prescribed in the recent (2000) 10-year Tellico Reservoir Land Management Plan (Land Plan) as well as the recent (2000) TVA Tellico Reservoir Land Management Plan EIS (Tellico EIS). We note that the current EIS tiers from that Tellico Reservoir EIS to update the allocations pertaining to land parcels 8 and 9 at Rarity Pointe currently designated for *Natural Resource Conservation* (Zone 4) or *Recreation* (Zone 6). For both Alternatives C and E, the re-allocations due to the exchange would be environmentally favorable since the mitigation lands would be changed from industrial/commercial development to conservation/recreation. For Alternative B, however, where no land exchange is offered, the sale of the TVA lands would result in the loss of 118 acres of lands currently allocated for conservation/recreation.

The potential amendment of the 2000 Tellico Land Plan is less clear. Will this Land Plan also be modified consistent with the Tellico EIS? Parenthetically, we believe that changing a 10-year plan after only three years seems unusual and undermines its development process somewhat. How often can TVA be expected to hear additional applicant requests to modify the Tellico Land Plan and EIS? On the other hand, we understand that flexibility and adaptive management for cause is essential to such plans.

► Adjacent Land Use - It would be helpful if the land use and allocation of parcels neighboring the TVA lands and the developer's private lands at Rarity Pointe were discussed (e.g., what are the designations for the areas in white in Figure 1-1?). This would provide a sense of perspective, i.e., are the TVA lands allocated for conservation and recreation rare in the area or are they only one of many parcels so-designated by the Tellico Land Plan?

► Public Opposition - We note that based on the DEIS (pg. S-1 & 7), the majority of the 500 public responses opposed the project as proposed in the TVA Notice of Intent. Page S-1 states that “[t]he comments focused on opposition to using public lands for private residential and commercial development and the associated environmental impacts such as the loss of visual and recreational opportunities and terrestrial habitat that could occur.” Comments were also made regarding a lack of public infrastructure, perceived lack of economic need for the proposal, that the proposal should not modify the Tellico Land Plan which allocated the TVA land parcels as conservation and recreation, that public opinion was being disregarded, and that a precedent was being set by TVA for future land management decisions. Those commenters that favored the proposal felt that the area would benefit economically in terms of local taxes, land value and jobs.



# United States Department of the Interior

## OFFICE OF THE SECRETARY

### OFFICE OF ENVIRONMENTAL POLICY AND COMPLIANCE

Richard B. Russell Federal Building

75 Spring Street, S.W.

Atlanta, Georgia 30303

ER 03/300

May 9, 2003

Richard L. Toennisson  
Tennessee Valley Authority  
400 West Summit Hill Drive (WT 8C)  
Knoxville, TN 37902

RE: Draft Environmental Impact Statement Rarity Pointe Commercial Recreation and Residential Development on Tellico Reservoir

Dear Mr. Toennisson:

The Department of the Interior received the referenced document and have no comments to provide for your consideration. If you should have any questions concerning this project I can be reached at 404-331-4524.

Sincerely,

Gregory Hogue  
Regional Environmental Officer

cc:  
FWS, Region 4  
OEPC, WASO

**RECEIVED**  
**Environmental Policy and Planning**

MAY 14 2003

Doc Type: \_\_\_\_\_  
Index Field: \_\_\_\_\_  
Project Name: \_\_\_\_\_  
Project No.: \_\_\_\_\_

*Rarity Pointe Commercial Recreation and  
Residential Development on Tellico Reservoir*



Type: \_\_\_\_\_  
Field: \_\_\_\_\_  
Name: \_\_\_\_\_

April 3, 2003

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

Dear Mr. Loney:

SUBJECT: Result of Regional Review  
Tennessee Valley Authority - Draft Environmental Impact Statement for the Rarity Pointe  
Commercial Recreation and Residential Development on Tellico Reservoir  
in Loudon County

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,

A handwritten signature in black ink, appearing to read 'Terrence J. Bobrowski', is written over the typed name and title.

Terrence J. Bobrowski  
Executive Director

TJB/tc

5616 Kingston Pike P.O. Box 19806 Knoxville, TN 37939-2806  
PHONE: (865)584-8553 FAX: (865)584-5159  
E-MAIL: easttndevd@aol.com



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

Type: \_\_\_\_\_  
Field: \_\_\_\_\_

March 28, 2003

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

RE: TVA, ARCHAEOLOGICAL ASSESSMENT, RARITY POINTE DEV'T/TELLICO RES.,  
UNINCORPORATED, LOUDON COUNTY, TN

Dear Mr. Loney:

At your request, our office has reviewed the above-referenced archaeological survey report in accordance with regulations codified at 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739). Based on the information provided, and in accordance with our previous correspondence, we find that the project area for the proposed development contains no archaeological resources eligible for listing in the National Register of Historic Places.

Alternatives C and E include areas in addition to the proposed development area. Our office concurs with the recommendation that any additional areas to be acquired by TVA and the Trail Terminal must undergo a phased process of identification and evaluation of historic sites, in accordance with the extant memorandum of agreement.

This office has no objection to the implementation of this project. If project plans are changed or archaeological remains are discovered during construction, please contact this office to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act.

Your cooperation is appreciated.

Sincerely,

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

HLH/jmb

cc: J. Bennett Graham, TVA Cultural Resources





## **APPENDIX F – WATER QUALITY INFORMATION**



#### 4.5.1 Discharges (Houseboat, Watercraft, and Floating Structures)

##### 1. Marine Sanitation Device

No person operating a commercial boat dock on or over real property of the United States in the custody and control of TVA, or on or over real property subject to provisions for the control of water pollution in a deed, grant of easement, lease, license, permit, or other instrument from or to the United States or TVA shall permit the mooring on or over such real property of any watercraft or floating structure equipped with a marine sanitation device (MSD) unless such MSD is in compliance with all applicable statutes and regulations, including the FWPCA and regulations issued there under, and, where applicable, statutes and regulations governing "no discharge" zones.

##### 2. No Discharge Zones

The Environmental Protection Agency has designated certain TVA reservoirs as "no discharge" lakes. Whenever a vessel equipped with a Type I or Type II MSD (these types discharge treated sewage) is operating in an area of water that has been declared a No Discharge Zone, the MSD cannot be used and must be secured to prevent discharge. No Discharge Zones are areas of water that require greater environmental protection and where even the discharge of treated sewage could be harmful. When operating in a No Discharge Zone, a Type I or Type II MSD must be secured in some to prevent discharge. Closing the seacock and padlocking, using a non-releasable, wire- tie, or removing the seacock handle would be sufficient. Generally, all freshwater lakes (and similar freshwater impoundments or reservoirs that have no navigable connections with other bodies of water), and rivers not capable of interstate vessel traffic, are by definition considered No Discharge Zones.

TVA No Discharge Lakes Include:		
Beech River Project		Tims Ford
Boone		Watauga
Cherokee		Wilbur
Douglas		Appalachia
Ft. Patrick Henry		Hiwassee
Nolichucky		Nottely
Normandy		Blue Ridge
Norris		Bear Creek Projects
Ocoee 1, 2, 3		Fontana

#### 4.5.3 Marina Sewage Pump-Out Stations and Holding Tanks

All pump-out facilities constructed after the effective date of these regulations shall meet the following minimum design and operating requirements:

1. Spill-proof connection with shipboard holding tanks.

2. Suction controls or vacuum breaker capable of limiting suction to such levels as will avoid collapse of rigid holding tanks.
3. Available fresh water facilities for tank flushing.
4. Check valve and positive cut-off or other device to preclude spillage when breaking connection with vessel being severed.
5. Adequate interim storage where storage is necessary before transfer to approved treatment facilities.
6. No overflow outlet capable of discharging effluent into the reservoir.
7. Alarm system adequate to notify the operator when the holding tank is full.
8. Convenient access to holding tanks and piping system for purposes of inspection.
9. Spill-proof features adequate for transfer of sewage from all movable floating pump-out facilities to shore-based treatment plants or intermediate transfer facilities.
10. A reliable disposal method consisting of:
  - a. An approved upland septic system that meets TVA, state, and local requirements; or
  - b. Proof of a contract with a sewage disposal contractor.
11. A written statement to TVA certifying that the system shall be operated and maintained in such a way as to prevent any discharge or seepage of wastewater or sewage into the lake.

#### **4.5.5 Storage Tanks (USTS and ASTS)**

1. A underground storage tank (UST) is any one or combination of tanks used to contain a regulated substance (such as a petroleum product), which has 10 percent or more of its total volume beneath the surface of the ground. The total volume includes any piping used in the system. A UST may be a buried tank, or an aboveground tank with buried piping if the piping holds 10 percent or more of the total system volume including the tank.

TVA's review for application to install a UST below the 500-year flood elevation on a TVA reservoir, or regulated tailwater will require:

- a. A copy of the state approval for the UST along with a copy of the application sent to the state and any plans or drawings that were submitted for the state's review.
- b. Secondary containment for all piping or other systems associated with the UST.
- c. Secondary containment to contain leaks from gas pumps(s).
- d. Calculations showing how the tank will be anchored so that it does not float during flooding should be provided by a professional engineer.
- e. If the UST system includes surface storage capacity greater than 1,320 gallons or any one surface container exceeding 660 gallons, a Spill Prevention, Control and Countermeasure (SPCC) plan must be prepared by the facility in accordance with applicable regulations. Facilities with a buried storage capacity greater than 42,000

gallons may also require SPCC plans. The SPCC plan must be prepared under the supervision of a professional engineer, maintained at the facility, and available for inspection and use by facility employees in the event of a spill.

- f. That a facility's current employees are up-to-date in SPCC training.
- g. That the applicant must accept TVA approval language stating that the permittee, licensee, or grantee is at all times the owner of the UST system, that TVA will have the right to prevent or remedy pollution or violation of law including removal of the UST system, with costs charged to the applicant, and that TVA will require the applicant to be in compliance with applicable federal and state regulations at all times.
- h. TVA will require that the facility maintain eligibility in the appropriate state trust fund and remain in compliance with applicable state and local UST regulations.

## 2. Aboveground Storage Tanks (ASTs)

For TVA's purposes, an AST is any storage tank whose total volume (piping and tank) is less than 10 percent underground.

TVA's review for application to install an AST located below the 500-year elevation on a TVA reservoir or a regulated tailwater will require all of the information requested in 1304.7(a), except: state approval of the AST (not available). The applicant must notify the state fire marshal and obtain any necessary documents or permission from his or her office prior to installation of the AST. The applicant must also follow the NFPA codes 30 and 30a for installation of combustible liquids storage tanks at service stations.



**APPENDIX G – RECREATION INFORMATION AND GENERAL AND  
STANDARD AND CONDITIONS**





Figure G-1 Wildcat Rock Proposed Land Use Allocations

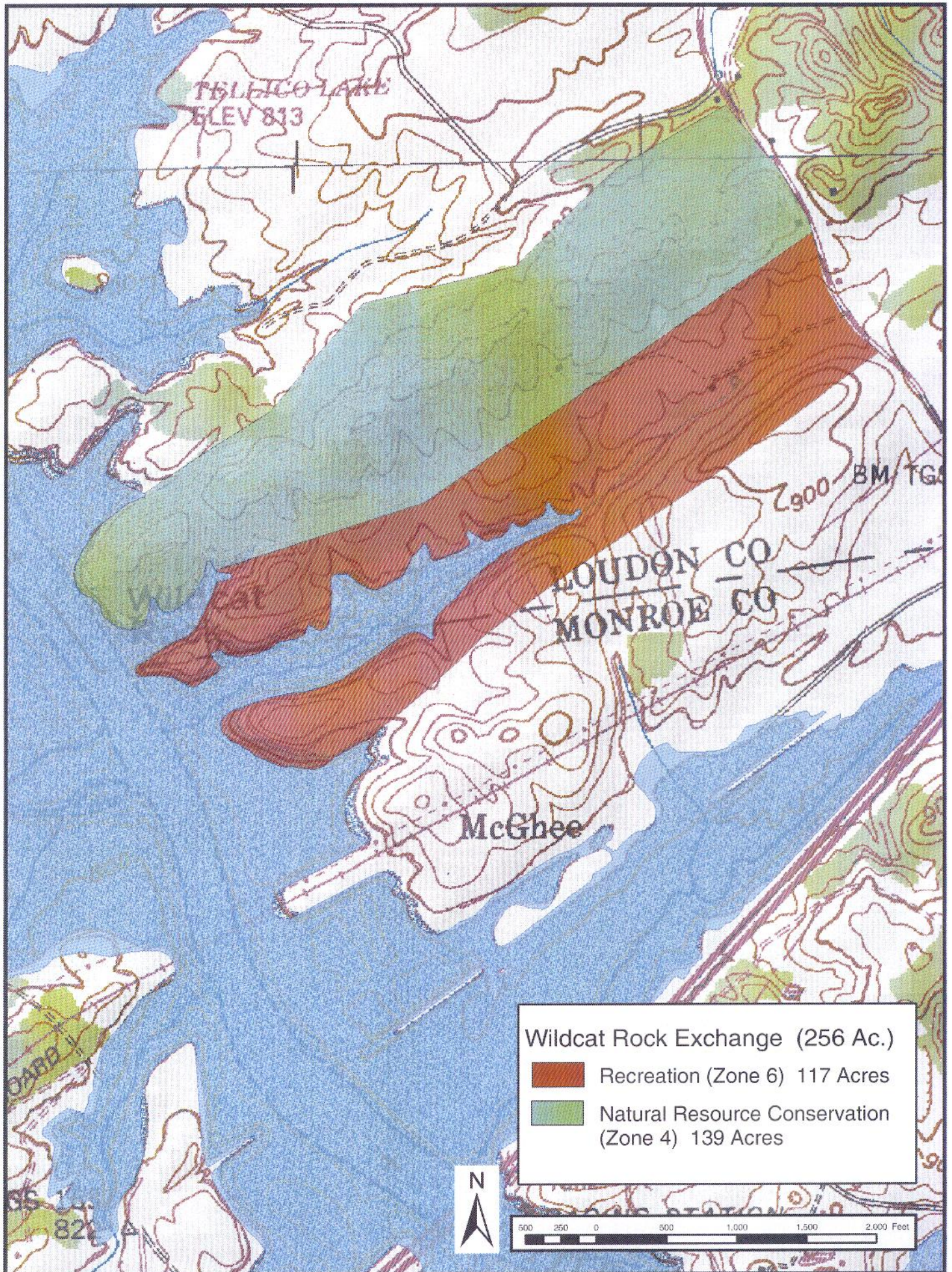
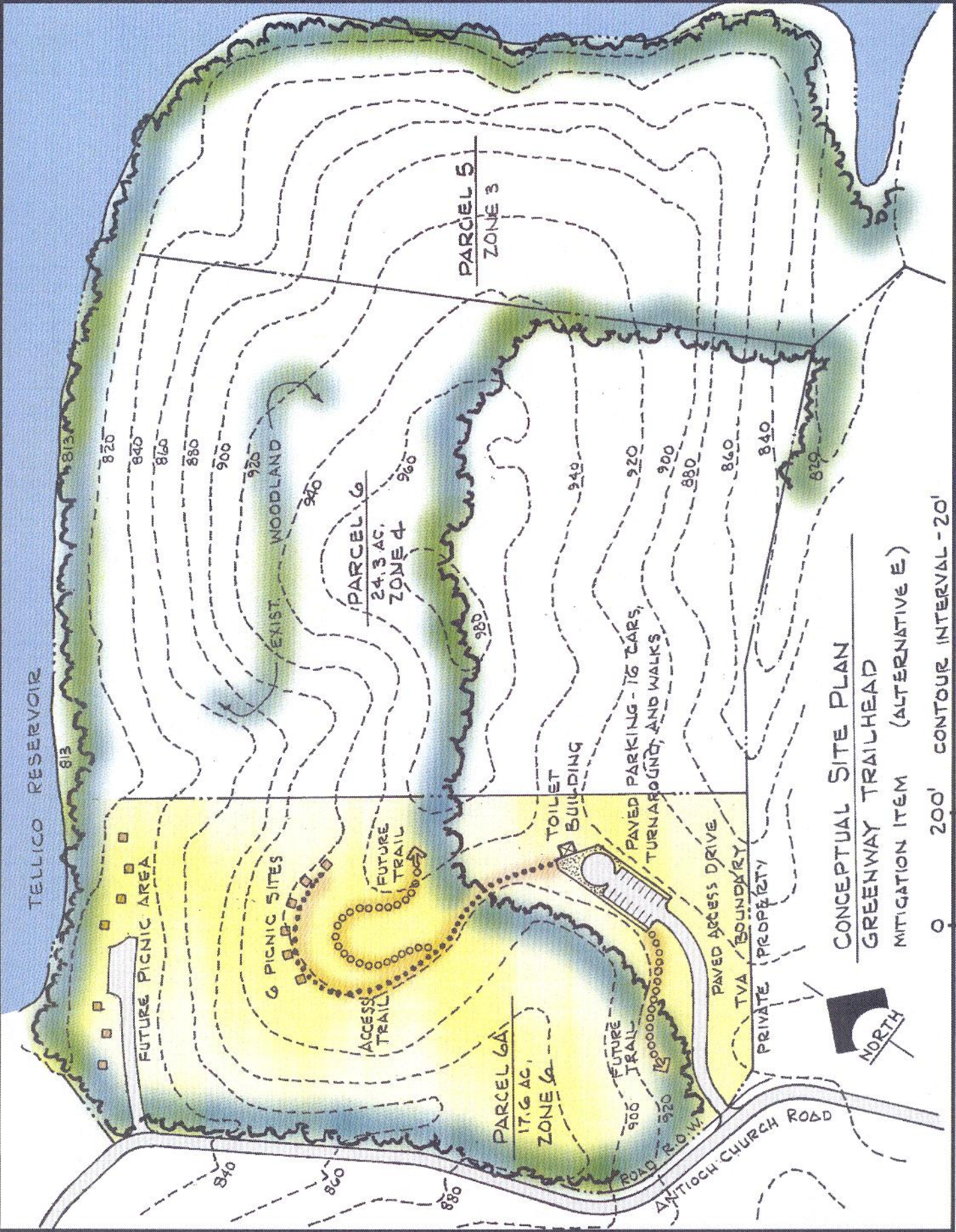




Figure G-2 Conceptual Site Plan for Greenway Trailhead





## **GENERAL AND STANDARD CONDITIONS**

### **Section 26a and Land Use**

#### **General Conditions**

1. You agree to make every reasonable effort to construct and operate the facility authorized herein in a manner so as to minimize any adverse impact on water quality, aquatic life, wildlife, vegetation, and natural environmental values.
2. This permit may be revoked by TVA by written notice if:
  - a) the structure is not completed in accordance with approved plans;
  - b) if in TVA's judgment the structure is not maintained as provided herein;
  - c) the structure is abandoned;
  - d) the structure or work must be altered to meet the requirements of future reservoir management operations of the United States or TVA, or;
  - e) TVA finds that the structure has an adverse effect upon navigation, flood control, or public lands or reservations.
3. If this permit for this structure is revoked, you agree to remove the structure, at your expense, upon written notice from TVA. In the event you do not remove the structure within 30 days of written notice to do so, TVA shall have the right to remove or cause to have removed, the structure or any part thereof. You agree to reimburse TVA for all costs incurred in connection with removal.
4. In issuing this Approval of Plans, TVA makes no representations that the structures or work authorized or property used temporarily or permanently in connection therewith will not be subject to damage due to future operations undertaken by the United States and/or TVA for the conservation or improvement of navigation, for the control of floods, or for other purposes, or due to fluctuations in elevations of the water surface of the river or reservoir, and no claim or right to compensation shall accrue from any such damage. By the acceptance of this approval, applicant covenants and agrees to make no claim against TVA or the United States by reason of any such damage, and to indemnify and save harmless TVA and the United States from any and all claims by other persons arising out of any such damage.
5. In issuing this Approval of Plans, TVA assumes no liability and undertakes no obligation or duty (in tort, contract, strict liability or otherwise) to the applicant or to any third party for any damages to property (real or personal) or personal injuries (including death) arising out of or in any way connected with applicant's construction, operation, or maintenance of the facility which is the subject of this Approval of Plans.
6. This approval shall not be construed to be a substitute for the requirements of any federal, state, or local statute, regulation, ordinance, or code, including, but not limited to, applicable electrical building codes, now in effect or hereafter enacted.
7. The facility will not be altered, or modified, unless TVA's written approval has been obtained prior to commencing work.
8. You agree to notify TVA of any transfer of ownership of the approved structure to a third party. Third party is required to make application to TVA for permitting of the structure in their name.
9. You agree to stabilize all disturbed areas within 30 days of completion of the work authorized. All land-disturbing activities shall be conducted in accordance with Best Management Practices as defined by Section 208 of the Clean Water Act to control erosion and sedimentation to prevent adverse water quality and related aquatic impacts. Such practices shall be consistent with sound engineering and construction principles; applicable federal, state, and local statutes, regulations, or ordinances; and proven techniques for controlling erosion and sedimentation, including any *required* conditions.
10. You agree not to use or permit the use of the premises, facilities, or structures for any purposes that will result in draining or dumping into the reservoir of any refuse, sewage, or other material in violation of applicable standards or requirements relating to pollution control of any kind now in effect or hereinafter established.
11. The facility will be maintained in a good state of repair and in good, safe, and substantial condition. If the facility is damaged, destroyed, or removed from the reservoir or stream for any reason, or deteriorates

beyond safe and serviceable use, it cannot be repaired or replaced without the prior written approval of TVA.

12. You agree that if any historical or prehistoric archaeological material (such as arrowheads, broken pottery, bone or similar items) is encountered during construction of this facility you will immediately contact this office and temporarily suspend work at that location until authorized by this office to proceed.
13. The Native American Graves Protection and Repatriation Act and the Archaeological Resources Protection Act apply to archaeological resources located on the premises. If LESSEE {or licensee or grantee (for easement) or applicant (for 26a permit on federal land)} discovers human remains, funerary objects, sacred objects, objects of cultural patrimony, or any other archaeological resources on or under the premises, LESSEE {or licensee, grantee, or applicant} shall immediately stop activity in the area of the discovery, make a reasonable effort to protect the items, and notify TVA by telephone (phone \_\_\_\_). Work may not be resumed in the area of the discovery until approved by TVA.

14. On TVA land, unless otherwise stated on this permit, vegetation removal is prohibited.
15. You agree to securely anchor all floating facilities to prevent them from floating free during major floods.
16. You are responsible for accurately locating your facility, and this authorization is valid and effective only if your facility is located on or fronting property *owned or leased* as shown on your application.
17. It is understood that you own adequate property rights at this location. If at any time it is determined that you do not own sufficient property rights, or that you have only partial ownership rights in the land at this location, this permit may be revoked if TVA receives an objection to your water use facility from any owner or partial owner of the property rights at this location.

**Standard Conditions:** (Items that pertain to your request have been checked.)

**1. Structures and Facilities**

- a) ☐ TVA number \_\_\_\_\_ has been assigned to your facility. When construction is complete, this number shall be placed on a readily visible part of the outside of the facility in the numbers not less than three inches high.
- b) ☐ The 100-year flood elevation at this site is estimated to be \_\_\_\_\_-feet mean sea level. As a minimum, your fixed facility should be designed to prevent damage to stored boats by forcing them against roof during a 100-year flood event.
- c) ☐ You agree that the float will be temporarily connected (i.e., by slip pin/ropes) and not permanently attached to nonnavigable houseboat.
- d) ☐ You agree that this \_\_\_\_\_ shall have no side enclosures except wire mesh or similar screening.
- e) ☐ Buildings or other enclosed structures containing sleeping or living accommodations, including toilets and related facilities, or that have enclosed floor area in excess of 32 square feet, are prohibited.
- f) ☐ Ski jumps will not be left unattended for extended periods of time. All facilities will be tied to the shoreline or to a boathouse or pier fronting your property at the completion of each day's activities.
- g) ☐ For all electrical services permitted, a disconnect must be located at or above the \_\_\_\_\_-foot contour that is accessible during flooding.
- h) ☐ You should contact your local government official(s) to ensure that this facility complies with all applicable local floodplain regulations.
- i) ☐ The entire closed-loop coil heating and air conditioning system and its support apparatus must be either placed below elevation \_\_\_\_\_ (to provide a five-foot clearance for water craft at minimum pool elevations of \_\_\_\_\_) or located underneath a TVA approved water-use facility or other TVA approved structure. The supply and return lines must be buried as they cross the reservoir drawdown zone in areas of water depth less than five feet (minimum pool). The liquid contents of the closed-loop heating and air conditioning system must be propylene glycol or water, and the applicant or authorized agent must provide TVA with written verification of this fact.
- j) ☒ You agree that only those facilities which have been approved by TVA prior to construction will be placed within the harbor limits and that permanent mooring buoys, boat slips, or other harbor facilities will not be placed outside the harbor limits.
- k) ☒ You agree that all storage, piping, and dispensing of liquid fuel shall comply with applicable requirements of the "Flammable and Combustible Liquids" section of the National Fire Codes and any additional requirements of federal, state, and local laws and regulations.
- l) ☒ You agree that the marina facility hereby approved will be used for commercial recreation purposes and for no other purpose unless approved in writing from TVA.

m) ☐ You agree that the construction project covered by this permit will be completed by the following date: \_\_\_\_\_.

**2. Ownership Rights**

- a) ☐ No fill will be placed higher than elevation \_\_\_\_\_ maximum shoreline contour (msc), and every precaution will be taken not to disturb or alter the existing location of the \_\_\_\_\_-foot contour elevation through either excavation or placement of fill.
- b) ☒ You are advised that TVA retains the right to flood this area and that TVA will not be liable for damages resulting from flooding.
- c) ☒ You shall notify TVA of any sale or transfer of land, which would affect the landward limits of harbor area, as far in advance of such sale or transfer as possible.
- d) ☒ This approval of plans is only a determination that these harbor limits will not have any unacceptable effect on TVA programs or other interests for which TVA has responsibility. Such approval does not profess or intend to give the applicant exclusive control over the use of navigable waters involved.
- e) ☒ You recognize and understand that this authorization conveys no property rights, grants no exclusive license, and in no way restricts the general public's privilege of using shoreland owned by or subject to public access rights owned by TVA. It is also subject to any existing rights of third parties. Nothing contained in this approval shall be construed to detract or deviate from the rights of the United States and TVA held over this land under the Grant of Flowage Easement. This Approval of Plans does not give any property rights in real estate or material and does not authorize any injury to private property or invasion of private or public rights. It merely constitutes a finding that the facility, if constructed at the location specified in the plans submitted and in accordance with said plans, would not at this time constitute an obstruction unduly affecting navigation, flood control, or public lands or reservations.

**3. Shoreline Modification and Stabilization**

- a) ☒ For purposes of shoreline bank stabilization, all portions will be constructed or placed, on average, no more than two feet from the existing shoreline at normal summer pool elevation.
- b) ☒ You agree that spoil material will be disposed of and contained on land lying and being above the 820-foot contour. Every precaution will be made to prevent the reentry of the spoil material into the reservoir.
- c) ☒ Bank, shoreline, and floodplain stabilization will be permanently maintained in order to prevent erosion, protect water quality, and preserve aquatic habitat.
- d) ☐ You agree to reimburse TVA \$\_\_\_\_\_, which is the current value of the \_\_\_\_\_ acre feet of power storage volume displaced by fill into the reservoir.

**4. Water Intake**

- a) ☐ If the reservoir falls below the elevation of the intake, the applicant will be responsible for finding another source of raw water.
- b) ☐ You must install and maintain a standard regulatory hazard buoy at the end of the intake to warn boaters of the underwater obstruction. The word "intake" should be added to the buoy and be attached using a five-foot cable.
- c) ☐ The screen openings on the intake strainer must be 1/8-inch (maximum), to minimize the entrapment of small fish.
- d) ☐ This approval does not constitute approval of the adequacy or safety of applicant's water system. TVA does not warrant that the water withdrawn and used by applicant is safe for drinking or any other purpose, and applicant is solely responsible for ensuring that all water is properly treated before using.

**5. Bridges and Culverts**

- a) ☐ You agree to design/construct any instream piers in such a manner as to discourage river scouring or sediment deposition.

- b) ☐ Applicant agrees to construct culvert in phases, employing adequate streambank protection measures, such that the diverted streamflow is handled without creating streambank or streambed erosion/sedimentation and without preventing fish passage.
- c) ☐ Concrete box culverts and pipe culverts (and their extensions) must create/maintain velocities and flow patterns which offer refuge for fish and other aquatic life, and allow passage of indigenous fish species, under all flow conditions. Culvert floor slabs and pipe bottoms must be buried below streambed elevation, and filled with naturally occurring streambed materials. If geologic conditions do not allow burying the floor, it must be otherwise designed to allow passage of indigenous fish species under all flow conditions.



- d) ☐ All natural stream values (including equivalent energy dissipation, elevations, and velocities; riparian vegetation; riffle/pool sequencing; habitat suitable for fish and other aquatic life) must be provided at all stream modification sites. This must be accomplished using a combination of rock and bioengineering, and is not accomplished using solid, homogeneous riprap from bank to bank.
- e) ☐ You agree to remove demolition and construction by-products from the site--for recycling if practicable, or proper disposal--outside of the 100-year floodplain. Appropriate BMPs will be used during the removal of any abandoned roadway or structures.

## 6. Best Management Practices

- a) ☒ You agree that removal of vegetation will be minimized, particularly any woody vegetation providing shoreline/streambank stabilization.
- b) ☐ You agree to installation of cofferdams and/or silt control structures between construction areas and surface waters prior to any soil-disturbing construction activity, and clarification of all water that accumulates behind these devices to meet *state water quality criteria at the stream mile where activity occurs* before it is returned to the *unaffected portion of the stream*. Cofferdams must be used wherever construction activity is at or below water elevation.
- c) ☒ A floating silt screen extending from the surface to the bottom is to be in place during excavation or dredging to prevent sedimentation in surrounding areas. It is to be left in place until disturbed sediments are visibly settled.
- d) ☒ You agree to keep equipment out of the reservoir or stream and off reservoir or stream banks, to the extent practicable (i.e., performing work "in the dry").
- e) ☐ You agree to avoid contact of wet concrete with the stream or reservoir, and avoid disposing of concrete washings, or other substances or materials, in those waters.
- f) ☐ You agree to use erosion control structures around any material stockpile areas.
- g) ☐ You agree to apply clean/shaken riprap or shot rock (where needed at water/bank interface) over a water permeable/soil impermeable fabric or geotextile and in such a manner as to avoid stream sedimentation or disturbance, or that any rock used for cover and stabilization shall be large enough to prevent washout and provide good aquatic habitat.
- h) ☐ You agree to remove, redistribute, and stabilize (with vegetation) all sediment which accumulates behind cofferdams or silt control structures.
- i) ☒ You agree to use vegetation (versus riprap) wherever practicable and sustainable to stabilize streambanks, shorelines, and adjacent areas. These areas will be stabilized as soon as practicable, using either an appropriate seed mixture that includes an annual (quick cover) as well as one or two perennial legumes and one or two perennial grasses, or sod. In winter or summer, this will require initial planting of a quick cover annual only, to be followed by subsequent establishment of the perennials. Seed and soil will be protected as appropriate with erosion control netting and/or mulch and provided adequate moisture. Streambank and shoreline areas will also be permanently stabilized with native woody plants, to include trees wherever practicable and sustainable (this vegetative prescription may be altered if dictated by geologic conditions or landowner requirements). You also agree to install or perform additional erosion control structures/techniques deemed necessary by TVA.

## Additional Conditions

1. The marina property and water use facilities shall not be used for full-time residential purposes. This restriction runs with the back-lying land and could only be rendered inapplicable upon written agreement by TVA and the Tellico Reservoir Development Agency to change the contract land use designation for the property to a designation that would allow marina facilities to be occupied as full-time residences.

