TENNESSEE VALLEY AUTHORITY

CHEROKEE RESERVOIR

FINAL RESERVOIR LAND MANAGEMENT PLAN

Appendix A-1

FINAL ENVIRONMENTAL ASSESSMENT

JULY 2001

TVA

This page intentionally left blank

APPENDIX A-1

CHEROKEE RESERVOIR LAND MANAGEMENT PLAN

RESOURCE STEWARDSHIP
Lower Holston River Watershed

Prepared by

Tennessee Valley Authority
Cherokee-Douglas Watershed Team

River System Operations and Environment - Resource Stewardship

July, 2001

CONTENTS

Finding of No Significant Impact (FONSI) 117

Introduction 121
- Background 121
- Purpose 122
- Process 123

Cherokee Reservoir Regional Overview 125
- The Past 125
- The Project 128
- The Present Shoreland 130
- The Future 130

Planning Goal and Objectives 134
- Planning Goal 134
- Cherokee Reservoir Planning Objectives 134

Parcel Allocations 143
- Allocation Team Participants 143
- Allocation Process 144

Sources of Information 158

INTRODUCTION

The Cherokee Reservoir Land Management Plan (Plan) is the result of a study of the Tennessee Valley Authority (TVA) public land surrounding the reservoir. This *Introduction* provides background information about TVA land management throughout its 65-year history, explains the purpose of the plan, and describes the process used to develop the plan. The *Reservoir Overview* describes the natural history and social development of the reservoir and surrounding area. *Reservoir Planning Objectives* lists the objectives around which the plan was developed. *Parcel Allocations* includes a summary of the allocation process and zone definitions documenting land use allocations, as well as a table showing the outcome of the allocation compared to the previous use forecast. Allocation maps (Exhibit 1) are stored in pockets at the back of the document.

Background

The massive dam and reservoir construction program that was undertaken by TVA, following its creation in 1933, required the purchase of over 1 million acres of land for the creation of 34 reservoirs in five of the seven states in the Tennessee Valley region. Approximately 600,000 acres of that land lie above the summer pool elevation of the TVA reservoir system.

Arthur Morgan, Chairman of the TVA Board in the 1930s, viewed public land ownership as a tool to promote social objectives. Throughout its history, TVA has managed the reservoir lands under its stewardship to meet a wide range of regional and local resource development needs and to improve the quality of life, both within specific reservoir areas and throughout the Tennessee Valley. Reservoir properties, together with adjoining private lands, have been used for public parks, industrial development, commercial recreation, residential development, tourism development, forest and wildlife management areas, and to meet a variety of other needs associated with local communities and government agencies.

Today, TVA's land base Valley-wide is approximately 265,000 acres. An increasing demand for and use of reservoir land sometimes results in conflicting and uneconomical land use patterns and friction between public and private uses. In addition to managing its own land, TVA shares responsibility with other state and federal entities for managing the watersheds within which TVA reservoir land exists. These competing interests and development pressures, coupled with today's environmental awareness, underscore the necessity for a planned approach to the management of TVA's reservoir land, water quality, and related resources.

TVA initiated a comprehensive reservoir land management planning process in 1979. Since that time, land management plans have been completed and approved by the TVA Board of Directors for seven mainstream reservoirs (Pickwick, approved in 1981; Guntersville, approved in 1983; Kentucky, approved in 1985; Watts Bar, approved in 1988; Chickamauga, approved in 1989; Nickajack, approved in 1990; and Wheeler,

approved in 1995) and four tributary reservoirs (Boone and Melton Hill, both approved in 1999, and Tellico and Tims Ford Reservoirs, both approved in 2000, and the Bear Creek Projects, approved in 2001).

Planning for the 17 multipurpose tributary reservoirs began in 1997. This plan is the sixth tributary reservoir plan to be completed. It was preceded by completion of plans for Boone, Melton Hill, Tellico, and Tims Ford Reservoirs and the Bear Creek Projects.

Purpose

The purpose of this plan is to help TVA makes decisions relating to future use of its land around Cherokee Reservoir. By providing a clear statement of how TVA will manage its land and by identifying land for specific uses, the Plan helps minimize conflicting land uses and improve TVA's responsiveness to the public concerning land use requests.

The mission of TVA's land management program is to provide for its stakeholders through cost-effective stewardship of TVA land and natural resources in order to:

1) fulfill TVA's integrated resource management mission,
2) manage the Tennessee River watershed and protect the integrity of the reservoir system, and
3) foster environmentally-sustainable development in the Tennessee Valley region.

The Plan uses an integrated resource management approach that focuses on balancing flood control, navigation, power generation, water quality, recreation, and land use needs to obtain the optimum benefit for the whole system. Land planning supports TVA's corporate strategic goals to support a thriving river system and stimulate economic growth by providing a framework for deciding the best use of TVA land toward continued implementation of the TVA mission.

This Plan will be used to guide TVA resource management and property administration decisions on 8,187 acres of land around Cherokee Reservoir that are under TVA custody and control. It identifies the most suitable uses for 149 parcels of land, providing areas for Project Operations, Sensitive Resource Management, Natural Resource Conservation, Recreation, and Residential Access (no land was allocated for Industrial/Commercial Development). The planned acreage is TVA-retained (public) land, which accounts for 297 miles or 75 percent of the total 396 miles of reservoir mainland and island shoreline. Residential Access shoreline area is segmented into two categories, in accordance with the Shoreline Management Policy (SMP) which was approved by the TVA Board in April, 1999. These include Residential Mitigation and Managed Residential categories; no shoreline on Cherokee Reservoir presently meets agency criteria for the Shoreline Protection category.

Process

Land planning is a systematic method of identifying and evaluating suitable uses of TVA's land. It uses resource data, computer analysis, and input from the public, other agencies, and TVA staff to allocate land to six zones (see Part 3, Land Use Allocations, for zone definitions) listed below. Zone 1 contains land which TVA never owned or sold and is designated Non-TVA shoreland.

- Non-TVA Shoreland (i.e., flowage easement land included because it is subject to Section 26a jurisdiction)
- Project Operations
- Sensitive Resource Management
- Natural Resource Conservation
- Industrial/Commercial Development
- Recreation
- Residential Access

TVA land management plans are expected to have a 10-year planning horizon. This Plan was developed by a team of land managers and technical experts, knowledgeable about the reservoir and its resources. A list of the allocation team members is provided in the Parcel Allocation Section. The team made land allocation decisions by integrating agency and public needs, environmental/watershed conditions, socioeconomic considerations, as well as applicable state and federal policies. The process includes:

- Identification of existing landrights. All "committed lands" (parcels with existing commitments through transfers, leases, licenses, contracts, and TVA projects) are automatically allocated to designated uses. No new field data are collected on such parcels.
- Compilation of existing resource data for all reservoir land.
- Field collection of new resource data for sensitive resources such as wetlands, threatened and endangered species, and archaeological/historical, on "uncommitted" land – e.g., land with no prior commitments, as defined above.
- Allocation of all land with identified sensitive resources (from existing or new data) to the Sensitive Resource Management Zone.
- Identification of issues and concerns about TVA reservoir land from stakeholders including public and other local, state, and federal entities.
- Development of planning objectives based on stakeholder input.
- Analysis of land capability and suitability by TVA resource managers based on subsequent rating/ranking of parcels for specific land uses.
- Initial allocation of uncommitted parcels by the Land Planning Team (Appendix B-1) based on public input and land needs justification (capability rating/ranking analysis).
- Development of a draft EA and Plan based on proposed allocation.
- Categorization of the residential access shoreline.
- External review of draft EA and Plan.

- EA and Plan revisions based on external reviews.
- Approval of final EA/Plan by TVA Board of Directors.

Over the years, TVA has refined its land planning process to improve the efficiency of planning and the flexibility of the product. The land planning process is conducted under TVA procedures for implementing National Environmental Policy Act (NEPA) which calls for an environmental impact analysis of federal plans having the potential to impact the quality of the human environment.

Reservoir land planning uses TVA's Geographic Information System (GIS) automated land rights database to identify ownership patterns for TVA land to be planned. All new data collected during the planning process are stored in the GIS system. Stored data are retrieved and analyzed by the system. Plan maps and other reports are generated by GIS.

CHEROKEE RESERVOIR REGIONAL OVERVIEW

Cherokee Reservoir, with its 396 miles of mainland and island shoreline, extends into four east Tennessee counties: Grainger, Hamblen, Hawkins, and Jefferson. The reservoir is located within the portion of the Tennessee River Valley known as the Holston River Basin. This basin is rather elongated in shape and broadens considerably at the eastern end into a fan-shaped area extending along the north fork above Kingsport, Tennessee. Cherokee Reservoir lies in the rolling country between the Clinch Mountains to the northwest and the Great Smoky Mountains to the southeast. This area falls entirely within the southern Appalachian Region which includes the Blue Ridge Mountains Section and the eastern Ridge and Valley Section. The southern Appalachia region is characterized by rugged topography, abundant rainfall and a multitude of native plants and animals. There is more national forest and park land in southern Appalachia than anywhere east of the Mississippi River. Almost three-fourths of the land is forested.

The Past

It is believed that humans occupied this land at least some 12,000 years ago. They lived in small groups and were believed to be highly nomadic, following herds of large game animals or utilizing seasonal plant and animal resources. The abundant natural resources of the region provided a diverse source of food which included white-tailed deer, a variety of small animals, fish and shellfish, as well as fruits and nuts. Between 8000 B.C. and about 500 B.C., there are signs of increased population, settlement, and trade among regions. By 500 A.D., settled village life had developed as evidenced by cultivated plants, houses, pottery, and burial mounds. By 1500 A.D., a complex social structure had developed. This is characterized by large habitation areas with town centers, flat-topped mounds with domicilary structures, fortified villages, evidence of a ranked, elite ruling class, and craft-specialization. Smaller farmsteads were scattered around the larger habitation areas to support the growing populations.

Southern Appalachia was occupied by the Cherokee nation. Cherokee territory extended throughout southern Appalachia and included parts of Virginia, North Carolina, Kentucky, Tennessee, Georgia, and South Carolina. Recent archaeological surveys of the Cherokee Reservoir indicate a substantial Native American population. In fact, Cherokee Dam bears the name of this Indian tribe.

This region was settled principally by Scotch-Irish pioneers from Virginia and North Carolina soon after the establishment of the Wilderness Road as a pioneer route. Many settlers came to claim their revolutionary war land grants. As the colonists headed westward, some settled in the Holston River Valley and farmed the fertile lands along the Holston and French Broad Rivers. This area was covered in the Dumplin Treaty of 1785, signed by the Indians and the (then) state of Franklin, ensuring some degree of safety from Indian attacks. Early settlers included Robert McFarland, Alexander Outlaw, and Thomas Jarnigan. Other pioneers were to follow, and soon, settlements were seen throughout this river valley—Blaine's Crossroads, Mossy Creek, Bean Station, New

Market, Strawberry Plains, Bulls Gap, Russellville, Whitesburg, Springvale, and Panther Springs, to name a few. In fact, settlements led to the creation of counties: Hawkins, 1787; Jefferson, 1792; Grainger, 1796; and Hamblen, 1870, with each county being carved from parts of others.

Rogersville, the county seat of Hawkins County, was founded in 1789 when a petition to the North Carolina General Assembly was granted. This petition allowed county commissioners to lay out the town. Rogersville's main street was defined by the route of the Great Wilderness Road, which attracted a steady stream of settlers through the town on their way to Bean Station, Cumberland Gap, and Knoxville. Dandridge, an early trade center, became the county seat of Jefferson County in 1793 with Rutledge becoming the county seat of Grainger County in 1801. Hamblen County named Morristown its county seat in 1870.

The early 1800s saw the extension of commerce, growing settlements, and the development of transportation. Raising corn, wheat, tobacco, and cattle were the primary economic activities of most in the region, but a number of businesses supplemented subsistence farming. From its initial settlement in 1788, Mossy Creek, later renamed Jefferson City, was a favorable location for several mills, an iron works, and many other water-dependent industries. Carson-Newman College was established in Jefferson City in 1851. By the 1830s the town of Dandridge included blacksmiths, a saddler, a tailor, two tanners, cabinet-makers, a tavern-keeper, a physician, and two attorneys. On the eve of the Civil War, the town had grown to include several more merchants, a druggist, and a bank—the Bank of Dandridge.

The first industry in Hamblen County was Shields' Paper Mill, located at Marshalls Ferry on the Holston River. The mill began operation in 1825 and produced a fine paper from rags, lint, and wheat straw. Other early businesses included the Morristown Manufacturing Company and the J. F. Goodson (JFG) Coffee Company. By the late 1850s, the town of Russellville in Hamblen County had a drugstore, railroad station, theater, and an academy. From the 1840s through the 1870s, the marble industry developed in Hawkins County. The area became famous for its pink and red variegated marble. Marble from Hawkins County was used in the Washington Monument, the balustrades and stairways of the Capitol, and the South Carolina State Capitol.

The region's roads and rivers were the primary means of transportation until the mid-1850s. Railroad service in Tennessee began in 1851, but it was a few years later before the Holston River Valley had rail service. The East Tennessee and Virginia Railroad used slave labor to lay the first tracks through the area. Completed in 1858, this railroad ran from Knoxville, Tennessee, to Bristol, Virginia. It was later incorporated into the East Tennessee and Georgia Railroad and later the Southern Railway. John Roper Branner, who became first president of the railroad, gave land for the right-of-way through Mossy Creek with the stipulation that every passenger train stop at the Mossy Creek Station. The railroad opened up many opportunities for the region before the Civil War, but as secession occurred, the location of the railroad contributed to battles over its control.

Tennessee seceded from the Union in 1861, although some counties, Jefferson, for example, voted against secession. Divided in its loyalty, members of a given family often fought on opposing sides. There were slave owners in the region, but much of upper east Tennessee opposed slavery. In fact, the Tennessee Manumission Society was organized in Jefferson County in 1815. However, because of the strategic location of the East Tennessee and Virginia Railroad, some towns in the region, such as Bulls Gap, saw frequent episodes of fighting between Union and Confederate forces, though the railroad remained under federal control throughout the war. A major skirmish occurred near Blaine around Christmas of 1862. A year later, the Battle of Bean's Station pitted the forces of Confederate General James Longstreet against the Union army forces under General J. M. Shackleford in a planned surprise attack that failed through the blunders of Longstreet's staff. Both Union and Confederate troops foraged the area in search of food. By winter's end the land was devastated; even the fence rails had been burned for fuel.

The close of the Civil War found the nation faced with new social, economic, and political problems. The returning southern soldier faced the necessity of a reorientation of previous political and economic policies since the familiar systems had been uprooted and destroyed by the war. Rework of the agricultural economy, which had furnished principal means of livelihoods, to a system of free labor was also necessary. Other pursuits that had gradually developed before the war as complements to agriculture and some of the war industries had to be reestablished under a changed economic and social order. Transportation facilities, too, had largely broken down and had to be rebuilt, expanded, and enlarged. Soon after peace was restored, the enormous task of rebuilding industry, agriculture, and essentially lives, began anew.

After the Civil War, the region remained primarily agrarian, but new industries did develop. The tourism industry is one example. By the late 1800s, tourism had developed around the mineral springs flowing from Clinch Mountain. The most famous, Tate's Springs, flourished until the Great Depression. It included mineral baths and waters, an enormous hotel, cabins, and a golf course. The canning industry in Jefferson County can be traced back to 1897 when Andrew Jackson Bush opened a store and allowed customers to barter merchandise for farm products. In 1904, Bush constructed a plant as a part of an agreement with the Stokely family of Newport, Tennessee. Stokely provided equipment and machinery, and Bush launched a tomato canning processing plant. Additionally, rich mineral resources, especially zinc, were discovered in the area and mined quite successfully.

The 1920s began as a prosperous decade. Farm prices remained high after World War I. The introduction of the automobile, along with improved roads, allowed more markets to be reached. Land prices in east Tennessee were at an all-time high. Advantages such as free mail delivery, telephone service, and electricity were brought to parts of the region in the early twentieth century. However, this prosperity was short-lived as banks began to fail and the stock market crashed. The decade closed with the beginning of the Great Depression.

Throughout the country, land and real estate values declined, banks failed, farm wages seldom exceeded fifty cents per day, and many established businesses closed due to bankruptcy. This was the case in the Cherokee Reservoir area. For example, the per capita annual income for Hamblen County in 1929 was $329. Between 1929 and 1940, this figure declined further to a mere $280. Furthermore, the region was almost completely dependent upon agriculture. Again, to use Hamblen County as an example, 47 percent of the county's income came from the cash crops of corn, wheat, and tobacco. Erosion and soil depletion were evident everywhere and timber cutting had reduced the woodlands. Something was needed to boost the once productive area.

The Depression gloom was lightened somewhat with the creation of the TVA in May 1933. TVA, created to provide flood control, navigation, and low-cost electricity, provided thousands of jobs for many in the region. Located in Knoxville, TVA launched its first major construction project with the building of Norris Dam. Some of the families affected by this construction were relocated to neighboring counties such as Jefferson and Grainger.

World War II brought further changes to this valley. By 1940, the United States was making national defense plans, and it became clear that war production would require tremendous increases in power production. TVA submitted a plan for meeting power demands to the Defense Advisory Commission. Cherokee Dam on the Holston was the first item in this plan. Work began on August 1, 1940 and the dam was closed December 5, 1941—two days prior to Pearl Harbor. As with all TVA projects, the construction of Cherokee Dam provided employment for many, but it did cause disruption to those families who had to be relocated.

The creation of the Cherokee Reservoir was primarily in support of the war effort and increased demands for power and flood control. However, with the end of World War II and a booming post-war economy, this area provided an enticement for industry and their employees. Today agriculture continues to be an important factor in the region's economy, but economically available electricity continues to attract industries to the region. Numerous water-oriented outdoor recreational activities on reservoirs in the region , such as Cherokee, add to the region's attractiveness.

The Project

Cherokee Dam became one element of a much more extensive effort that had been recommended to Congress by TVA in 1936 involving the unified development of the Tennessee River system. This bold concept included plans to develop a 9-foot navigable channel extending from the mouth of the river near Paducah, Kentucky, to Knoxville, Tennessee, a distance of 650 miles. The proposed system would include nine main-river, multi-purpose dams and three or more tributary storage dams. The system would contribute substantially to the control of floods on the Tennessee, lower Ohio, and lower Mississippi Rivers and provide many related benefits, including a large supply of electric power.

Although the Cherokee Dam Project was not included in the original TVA plan outlined in 1936, its construction was recommended by TVA and authorized by Congress in 1940 in response to national emergency and need for greater production of power. The Cherokee project also was intended to help meet demands of normal peacetime growth and to become part of TVA's overall navigation, flood control and power program. Work on Cherokee Dam started August 1, 1940, on a fast schedule. Filling of the reservoir began with closure of the dam December 5, 1941, and the first unit was placed in operation April 16, 1942, well ahead of schedule.

Cherokee Reservoir was filled to elevation 1,073 msl by April 16, 1942. At maximum pool, elevation 1,075-foot msl, the reservoir extends 54 river miles upstream to John Sevier Detention Dam and covers 31,240 acres. At the top of the gates (maximum pool), the shoreline, including islands, is 396 miles long. The reservoir's normal summer water level ranges from elevation 1,060 to 1,072 msl and its winter water level (minimum pool) is elevation 1,020 msl. At its normal minimum elevation, the reservoir covers 12, 360 acres.

The Cherokee Project involved more than construction of the dam. It originally involved the acquisition of 45,158 acres of land in Grainger, Hamblen, Hawkins, and Jefferson Counties. To make way for the reservoir, other project activities included: surveying, mapping, and clearing the reservoir area; relocating buildings, roads, cemeteries, power and telephone lines; municipal waterworks and sewerage facilities. A total of 100 miles of highway was rebuilt, 14 new highway bridges were constructed and 875 families were moved.

The post-war economy of the Cherokee Reservoir area rapidly changed from one predominantly rural in character to one more equally divided between agriculture and industry. This provided larger incomes for families of the area, as well as made additional demands for trained personnel for business, industry, and agriculture. The wartime baby boom created need for more schools in the 1950s and 1960s. In the late 1970s, completion of interstate highways through the area linking the east coast with points west not only improved accessibility for travelers, business persons, and local residents, but made communities like Morristown more attractive for business and industrial development. Homes "out in the county," neighborhood shopping centers, fast food outlets, shopping plazas, office parks, and scattered residential subdivisions became more prevalent and accessible and demanded even better roads.

During the post-war period, Cherokee Reservoir added to the attractiveness of the area by providing a new source of recreation. The reservoir is easily accessible to residents of Morristown, Jefferson City, Rogersville, and the smaller communities and farms within the area. The management of water levels by the TVA provided a reliable and predictable water level for seasonal recreation. Being within convenient driving distance of larger urban areas like the Tri-cities (Bristol, Johnson City, Kingsport) and Knoxville, Cherokee Reservoir became a site for second home development and lake cottages.

The Present Shoreland

Today, there are approximately 8,187 acres of Cherokee Reservoir shoreland on which TVA can plan future uses. This land includes about 297 miles of TVA public shoreline of the total of 396 miles of shoreline, including islands. Of the 336 miles of total mainland shoreline, 25 percent is privately-owned flowage easement land, 48 percent is public land managed by TVA, 12 percent is jointly managed TVA public land, such as county and state parks, and 15 percent is TVA residential access shoreland.

The shoreline area along the south side of the reservoir within Hamblen County and within the general vicinity of Morristown and Jefferson City includes a high concentration of urban residential development. Lower density and scattered residential development occurs on the northern side of the reservoir both upstream and downstream from Grainger County Park. New residential subdivision developments are located on the north shore of the reservoir in Hawkins County. The upper (northeastern) portion of the reservoir shoreline is predominantly rural in character with farmland interspersed with woodlands and scenic bluffs. The shorelands of Cherokee Reservoir contain ten commercial marinas and/or campgrounds, one state park, two county parks and several TVA public uses areas including the dam reservation. Most of the land retained by TVA is located at scattered sites around the reservoir. There is a total of 25 boat ramps around the reservoir.

Of the 8,187 acres of TVA land surrounding Cherokee Reservoir, approximately 5,478 acres (68 percent) are inventoried forest stands; 42 percent of these stands is hardwood and 26 percent is pine. The remaining 2,560 acres of TVA land include unmanaged forest areas, open lands, reverting old fields, and riparian/wetland areas along streams and the lake shore. The open lands are composed of agricultural fields, 217 acres of which are licensed for pasture or hay production. The forested uplands, open lands and riparian/wetland areas surrounding Cherokee provide a broad range of habitats for a diversity of terrestrial wildlife. These lands are managed to protect sensitive natural and cultural resources and improve habitat diversity and water quality.

Since 1990, residential patterns on Cherokee Reservoir shoreland have begun to shift from second-home and vacation and weekend lake cottages to permanent family residences. New middle and upper income residential subdivisions are replacing farmland acreage and altering scenic vistas. Modest lakefront cottages are being converted and remodeled into more substantial larger structures.

The Future

Recent trends within the southern Appalachia region provide a glimpse of the kind of pressures that will bear on Cherokee Reservoir in the future. Long-term shifts in the regional economy, social trends, along with broad shifts in recreational behavior, and current and anticipated environmental issues combine to frame a picture of the challenges ahead and what it will take to protect places like Cherokee Reservoir.

The population of the four counties in the Cherokee Reservoir area grew from 145,000 in 1990 to an estimated 170,000 in 1999. With increases in population, there has been expansion of urban and suburban areas into what were formerly rural and natural areas and an increase in the demand for recreational activities. Population for this four-county area is projected to grow to about 183,000 by the year 2010 and 196,000 by the year 2020.

Continued growth and development pressures will place increased demands on the reservoir. Extension of water service and sewer to areas within all four Cherokee Reservoir counties will accelerate growth and development in the coming years, as will the planned upgrading of highways. A combination of planning efforts currently underway will most likely stimulate additional development within the next 20 years which will result in conversion of land uses from rural to urban in areas both north and south of the reservoir.

An aggressive development program in the Morristown area is expected to continue and is reflected in expanded infrastructure, new schools, industrial park investments, and highway improvements. The city of Morristown is proposing to substantially increase the size of its water treatment plant which draws water from Cherokee Reservoir. Expansion of the Morristown Water System will indirectly impact areas outside of the city and on both sides of the reservoir since Morristown sells water to neighboring water utilities which include Alpha-Talbot, Russellville-Whitesburg, Witt, and Bean Station. Taken together, these utilities serve a substantial portion of the area that surrounds Cherokee Reservoir.

North of the reservoir, Bean Station sells water to the Town of Rutledge and the Mooresburg Utility District. Bean Station has proposed a new water line that would eventually extend public water service to areas within Grainger County on the north side of the reservoir. Although there are no known new plans for major near-term highway additions, widening and relocation of State Route 31 over Flat Gap is currently under study by Tennessee Department of Transportation. If pursued, the project would affect TVA land along Poor Valley Creek and require approval under Section 26a for crossings of Poor Valley and McAllister Creeks and other tributaries. In addition, discussions have begun concerning major improvements to U.S. Highway 11W between U.S. Highway 25E and the town of Rutledge, also in Grainger County. A portion of this highway segment skirts the shoreline of the Ray/German Creek embayment on the north side of the reservoir. Continued development spurred by these two projects would occur in an area where there are no zoning controls in effect and where on-site wastewater systems (e.g., septic systems) would have to be relied upon for sewage handling and disposal.

Trends affecting the Cherokee Reservoir area mirror those of the larger region of which it is a part. The current population of the southern Appalachian region is better-educated, older and has a higher net income than 20 years ago. More people throughout the region are moving out of urban areas and commuting to work. There is increased demand for real estate that includes attributes associated with a leisurely, rural life-style but affords

access to the benefits of a metropolitan area. Thus, development pressures on reservoir-front properties a short distance from urban centers can be expected to remain very high.

Ninety-two percent of respondents to a 1999 survey of stakeholders reported that they used TVA public land around Cherokee Reservoir, some as many as 40 times annually. Water-oriented recreational activities, including boating, jet skiing, swimming, and fishing, were preferred uses by more than 70 percent of respondents. About 30 percent of respondents hunted, while better than 70 percent enjoyed viewing wildlife. More than 50 percent indicated that more land was needed for natural resource management, while only 4 percent felt more land was needed for industry. Most respondents also want high priority given to resource conservation and environmental stewardship, including protection of endangered species, wetlands, cultural resources, natural areas, shoreline erosion control, and clean water. About 55 percent of those polled felt about the right amount of land was already being used for residential and commercial purposes (Appendix A-2-Scoping Results).

The most significant trend in recreation is an increase in both numbers of participants and the diversity of activities. The percentage of the population that participates in recreational activities like fishing, camping, and hiking has grown or remained stable. Future population changes are expected to result in major growth in less physically demanding activities, such as pleasure driving, sightseeing, nature and cultural resource study, and developed camping. Increased pressure on nature-based recreation settings and facilities is also expected in the future. Urban, suburban, and transitional settings where development is emerging are expected to increase at the expense of existing rural or natural-appearing settings. Public land will have to supply a larger portion of nature-based outdoor recreation opportunities as settings and opportunities on private land decline. Without better cooperation between public and private sectors, key natural and cultural settings on public land may be negatively affected by increasing density of development.

Environmental quality issues will become increasingly important as population and demands on the environment increase. The southern Appalachian region has more species of native plants, animals, and insects than any other region with a similar climate in North America. The high mountains and abundant streams and rivers create a variety of habitat types that support thousands of species, many of which occur only in this region. Land that borders the streams, rivers, and waterbodies in the valleys is a significant contributor to this regional diversity. Riparian zone—strips of land bordering waterbodies—are characterized by many different native species often occurring as dense populations. Poor land use practices near the water and reductions in wetland areas can threaten both this diversity of species and water quality. In southern Appalachia, generally, land conversion, chipping large areas of forest into smaller patches (known as forest fragmentation), invasions of non-native pest species, air and water pollution, and other human-caused stresses are affecting these native sources.

Non-native insects, disease, and plant and animal species—such as the gypsy moth, dogwood anthracnose, the zebra mussel, hydrilla—are impacting the region. Some of the

most pressing air quality issues include ground-level ozone, visibility, and acid rain. Land management or human activities adjacent to streams, rivers, and lakes can increase erosion into the aquatic system and lead to sedimentation, alter the natural shape of stream channels, change water chemistry, and impact aquatic organisms.

Two-thirds of reported water quality impairments within the southern Appalachian region are from nonpoint sources such as septic tanks, agricultural runoff, storm water discharges, and landfill and mining leachate. Agricultural impacts due to runoff containing commercial fertilizer, animal manure, and pesticides are greatest where slopes are greater than 3 percent and where agricultural operations are immediately adjacent to waterbodies. Highways, especially those close to or crossing waterways, impact water quality in a number of ways such as erosion and sedimentation, oil and grease, and potential chemical spills. Capital investments in municipal and industrial wastewater treatment processes since the adoption of the Clean Water Act in 1972 have resulted in significant improvements in the quality of point-source discharges into waterways and, in turn, have reduced water pollution. As growth continues, further improvements in wastewater management will be necessary. Increases in the amounts of water that are withdrawn from surface waterbodies for use can have downstream impacts on the quality of water. Currently, over 1 billion gallons are drawn daily from surface waters in the Holston Basin.

Cherokee Reservoir is a unique resource that can be enjoyed by many future generations. For it to be enjoyed in the future, it must be able to accommodate increased demands that are placed upon it, or some of those demands must be curtailed. How Cherokee Reservoir can best accommodate these increased demands will depend on the actions of government, business, and civic leaders within the region, those who come to enjoy Cherokee Reservoir for whatever purpose, and those who own the land on or near its shoreline.

Cherokee Reservoir's future will be affected by trends and issues that extend far beyond its shoreline. Population growth within the upper east Tennessee region, land development and community planning practices, growing tourism and recreation economy, a growing diversity of recreational pursuits, as well as developments in upstream portions of the lower Holston watershed all will affect the quality of experience Cherokee Reservoir provides. Close attention must be given to reserving shorelands with unique or special qualities, properly managing and conserving the natural resources of the shoreline, and protecting different uses so they can be enjoyed by the public.

PLANNING GOALS AND OBJECTIVES

From its conception, the Cherokee Dam and Reservoir were planned as a multipurpose project for flood control, navigation, water supply, economic development, recreation, and electric power generation. This plan reevaluates alternative uses of Cherokee Reservoir properties still under TVA custody and control.

TVA's vision is **Generating Prosperity in the Valley**. TVA strives to achieve this vision by pursuing the following goals:

- **Supplying low-cost, reliable power.**
- **Supporting a thriving river system.**
- **Stimulating economic growth.**

Reservoir land plans support TVA's vision by supporting integrated resource management associated with a thriving river system and stimulating sustainable economic growth.

Planning Goal

In support of TVA's vision, the Cherokee Reservoir Land Plan seeks to provide appropriate lands for public and economic development uses while maintaining and improving the environmental integrity of the Cherokee Reservoir area.

Cherokee Reservoir Planning Objectives

Land planning objectives for Cherokee Reservoir were developed by the Cherokee-Douglas Watershed Team using stakeholder and TVA staff inputs received during the scoping or issues-gathering phase of the environmental review process. The range of issues, within the scope of this plan, raised by the public included: maintenance of natural scenery; improvement of water quality; concerns about the affects of and a preference for little development; availability and accessibility to public recreation land and quality facilities; preservation of wildlife; concerns about affects of soil erosion and litter, and perceived lack of regulation. Considering this range of issues and TVA's needs, the following objectives were used to allocate land uses on Cherokee Reservoir:

Resource Management Goal

- ***Protect sensitive resources on TVA land.*** During public scoping, most respondents indicated that TVA should place a high priority on resource conservation and environmental stewardship. Such resources include threatened and endangered species, unique habitats, natural areas, and historic resources, including archaeological sites, wetlands, and scenic resources. Only one federally-listed animal, bald eagle, but no plants are known to occur on TVA Cherokee Reservoir

land, while four state-listed animals and six plants were found during field surveys. Evidence of use by another federally-listed animal, gray bats, was observed in one cave in the vicinity of Whites Cliff. Indiana bats are known from the surrounding counties but, none have been observed on the TVA land.

The plan identifies 18 parcels containing lands with wetlands, protected species, or archaeological, visual or other important resources present. To protect these sensitive resources, 1,020 acres of TVA land is allocated to Zone 3, Sensitive Resource Management. Of this area, staff has recommended TVA Natural Areas designation for portions of three parcels totaling about 451 acres. Berry Island ESA (Parcel 57) will keep its designation (and be managed as a research natural area) for the life for this plan. TVA will also expand the Berry Island ESA to include an additional 10.7-acre stand of old-growth hardwoods. Portions of Parcels 36, 43, 59, 73, and 90 and all of Parcels 46 will be designated in the plan as Habitat Protection Areas (HPA) due to the presence of state-listed plant species, caves or other sensitive resources. The remainder of Parcel 90 surrounding the interior HPA will be further studied for potential designation as a TVA Small Wild Area during the resource management unit planning process.

Although protection of sensitive resources is the primary strategy used to guide TVA's management, this land may be used for other compatible purposes such as natural resource conservation and informal recreation.

- ***Curb erosion around Cherokee Reservoir.*** Stakeholders also expressed concerns about shoreline erosion on Cherokee Reservoir. Most respondents to public scoping questionnaires indicated that erosion control should be given a high priority by TVA.

  Lands allocated to Zones 3 and 4, Sensitive Resource Management and Natural Resource Conservation, respectively, comprise 81 percent of the 8,187 acres of Cherokee Reservoir land and 69 percent of the TVA public shoreline. An important component to controlling erosion is maintaining a woody vegetation zone near the water's edge. These allocated uses, which tend to support low impact uses, would help maintain woody vegetation along much of the TVA shoreline.

  TVA has identified highly-eroded shoreline sites throughout the reservoir system and has conducted shoreline stabilization demonstration projects on three Cherokee Reservoir sites. Approximately 3,000 linear feet of bioengineering or other appropriate stabilization has been completed on Cherokee Dam Reservation (Parcel 1), Fall Creek Dock and Campground (Parcel 54), and along TVA land fronting Spradlin Estates (Parcel 129). In addition, to encourage private initiatives to curb erosion, TVA generally waives processing fees for shoreline stabilization permits and assists landowners in application preparation and project design.

- ***Preserve undeveloped TVA lands on Cherokee Reservoir and manage resources to provide natural areas and habitat for fish and wildlife.*** TVA places a high priority on managing for wildlife on its land. Fifty-six percent and 55 percent of survey respondents indicated that there was the "right amount" of residential and commercial areas, respectively, on Cherokee Reservoir. Fifty percent of survey respondents indicated that more land should be devoted to natural resource management areas, while only 6 percent felt too much land was already being used for that purpose. Most felt that preservation of natural areas should be a high priority. Survey results also revealed that turkey, deer, waterfowl, squirrel, dove, rabbit, and quail (in that order) are the preferred species for hunting, while songbirds, waterfowl, and deer are among the most popular species for viewing. The plan allocates 61 parcels, totaling 5,590 acres to Natural Resource Conservation, in an effort to meet this planning objective. This land will largely be managed to provide for wildlife habitat and informal recreational use opportunities.

Given the amount of privately-owned Cherokee Reservoir shoreland that is already or subject to future residential development, this plan also attempts to provide balance relative to the amount and affects of shoreline development that occurs in the future. Consistent with SMP, landowners can apply for approval of residential water-use facilities development along 144 miles of Cherokee Reservoir shoreline (43 percent). This includes 45 miles of TVA public shoreline allocated to Zone 7, Residential Access, and 99 miles of privately-owned shoreline.

The plan allocates 18 parcels, containing 1,020 acres along 18 shoreline miles, to Zone 3, Sensitive Resource Management; 61 parcels, containing 5,590 acres along 187 shoreline miles, to Zone 4, Natural Resource Conservation. These zones comprise 81 percent of the 8,187 acres of Cherokee Reservoir land and nearly 72 percent of the TVA public shoreland. In addition, much of the TVA land and shoreline allocated to Recreation and some Residential Access lands are generally undeveloped, such as portions of Cherokee Dam Reservation.

Parcel 118, surrounding the lower reach of Shields Creek at its confluence with Ray Creek, has been allocated for Natural Resource Conservation and, following further studies, could be used for a crappie rearing impoundment. Preliminary assessments suggest that the watershed conditions are favorable and that crappie could be reared here to assist stocking efforts in Cherokee Reservoir. Detailed plans are being developed for this proposal. This allocation, in the near-term, will also help protect existing habitat for wildlife.

- ***Agricultural use of TVA land.*** Of the 15,950 acres of land TVA purchased above elevation 1,075 msl, fee title was acquired to 4,785 acres with the grantor retaining the right of agricultural use. Third-party agricultural-use rights remain today over a substantial part of the land where such rights were originally left outstanding. Such rights are being exercised on some reservoir properties for pasture and hay production.

In addition to the tracts with agricultural use rights, TVA uses agricultural licenses on selected properties as a management tool while allowing food, forage, and fiber production. These licenses are not considered long-term commitments, but an interim use of the land. There are currently 13 tracts on Cherokee Reservoir licensed to local farmers; these tracts contain a total of 217 acres. Some of these undeveloped lands have been in agricultural use for many years and are important to the local agribusiness community. Because agricultural BMPs are required and shoreline buffers are established, these areas also generally provide for improved wildlife habitat.

Economic Development Goal

- ***Provide land for TVA and other public works projects such as the dam reservation, navigation aides, power transmission lines, roads, and other utility corridors and infrastructure developments.*** When considering current land use and future agency and stakeholder needs around Cherokee Reservoir, an important component is providing adequate opportunity to accommodate and maintain infrastructure and other capital improvements. The 540-acre Cherokee Dam Reservation comprises the bulk of this land and supports projects beneficial to TVA and the public. Such infrastructure includes TVA facilities like the dam and power generation and distribution lines as well as other public works projects developed on reservoir property. Such uses of TVA land are supported in this plan and future needs will be considered.

- ***Future expansion of the highway infrastructure on TVA lands.*** Highway infrastructure is a key to continued economic growth in east Tennessee. Although there are no known new plans for major near-term additions, widening and relocation of State Route 31 over Flat Gap is currently under study by Tennessee Department of Transportation. If pursued, the project would affect TVA land along Poor Valley Creek and require approval under Section 26a for crossings of Poor Valley and McAllister Creeks and other tributaries. Discussions have also begun concerning major improvements to U.S. Highway 11W between U.S. Highway 25E and the town of Rutledge. In recent years, TVA has provided easements to Tennessee Department of Transportation that have affected lands on Cherokee Reservoir. These include permanent easements for present improvements to Highway 11W along the northern edge of German and Ray Creek and Highway 25E from Morristown to Bean Station.

- ***Expansion of utilities and other public works projects (pipelines, electric transmission lines, phone, cable, and others services) on TVA land.*** Utilities, like roads, are the lifeblood of economic development. It is expected that proposals for utilities (or utility use) on TVA land will continue to be received. For example, Bean Station sells water to the town of Rutledge and the Mooresburg Utility District. Bean Station is constructing a new water line that would eventually extend public water service to areas within Grainger County on the north side of the reservoir where TVA has granted necessary easements. Similarly, TVA has recently granted needed landrights and other appropriate authorizations to the cities of Jefferson City and

Morristown for Mossy and Turkey Creeks (respectively) Wastewater Treatment Plant modifications. TVA would continue to review such requests for beneficial use of its lands and would encourage, where practicable, use of existing corridors for new projects.

TVA has preliminary plans to construct a new delivery point for Appalachian Electric near Cherokee Dam. Upgrading power supply to the Newport, Tennessee area is also being considered, as well as supplying additional power to the Morristown area. A new 500-kv transmission line is also being considered that might run from the Knoxville or Alcoa area to the vicinity of Surgoinsville (former Phipps Bend power plant site). These project could all be routed across TVA Cherokee Reservoir land.

There are 542 acres of land allocated to Zone 2, Project Operations, largely to accommodate existing infrastructure, including utility corridors. TVA recognizes that roads and utility corridors are necessary and are of substantial public benefit; as new proposals are developed, it would be reasonable to consider use of other reservoir land to accommodate such use.

Recreational Development Goal

- ***Provide recreation opportunities on Cherokee Reservoir.*** Greater than 90 percent of survey respondents indicated that their preferred uses of Cherokee Reservoir were water related, i.e., boating, fishing, skiing, and swimming, while land-based activities included picnicking, camping and hiking. In the Cherokee Plan, 6,610 acres or 81 percent of the land is allocated to Zone 3, Sensitive Resource Management, or Zone 4, Natural Resource Conservation. These lands are basically undeveloped, with the exception of signs and parking areas accommodating many informal uses such as camping, hiking, nature observation, hunting, and fishing.

  TVA land comprises the vast majority of the undeveloped public land in the surrounding counties available for informal use. Ninety-nine miles (25 percent) of the Cherokee Reservoir shoreline are privately-owned, affording the general public very little land-based recreational opportunities on this portion of the shoreline. Other public land around Cherokee Reservoir where developed recreational opportunities are provided include Panther Creek State Park, Fall Creek Dock and Campground, Grainger County Park, and Hamblen County (Cherokee) Park. TVA expects that proposals may be received for expansion of recreational use opportunities on existing public use areas, rather than any new commercial recreational developments on its land in the near future.

- ***Provide for developed reservoir access areas.*** Reservoir access provides use and enjoyment of the reservoir for the general public. TVA has partnered with TWRA and local municipalities to develop ramps, parking, and other facilities. TVA also maintains access sites to the reservoir. As mentioned, greater than 90 percent of survey participants indicated that they used Cherokee Reservoir for some type of recreation, 75 percent of which is water-based. Most of those responding indicated

that year-round reservoir access (via low water ramps with space for parking) should be a high priority for TVA.

The plan allocates 31 previously committed parcels, containing 760 acres to Zone 6, Recreation. Nine sites are currently managed by TWRA with developed boat ramps for reservoir access. Ten sites (three of which include some private land) also provide boat ramps and are managed by commercial operators. Two sites with public ramps, at the Dam Reservation and John Sevier Fossil Plant, are owned by TVA. The County Line Access Area, Parcel 41, which has a low water boat ramp specifically for use during the winter draw-down, is managed by TWRA. Other low-water access sites managed by a private operator, TWRA, or Grainger County include Fall Creek Dock and Campground, Grainger County Park, and Kidwell's Ridge ramps, respectively. Parcel 54 is leased to a private operator for a commercial marina (Fall Creek Dock and Campground). This marina uses both TVA land and adjoining private land. TVA Cherokee Dam Reservation (Parcel 1), is managed by TVA and provides a developed boat launching ramp for the public.

Developed access for the general public is provided by commercial and public facilities on approximately 1,057 acres of the 8,187 acres of land addressed in this plan. There are ten commercial marinas and/or campgrounds. In addition, there are two county parks, one state park, and the Cherokee Dam Reservation which provide land-based facilities and access. There is a total of 25 boat ramps around the reservoir. Ten ramps are provided by commercial operators and 15 ramps are provided by public agencies.

Watershed Management Goal

- ***Provide Opportunities to Maintain or Improve Watershed Water Quality***. Reservoir water quality was the third-highest-ranking concern expressed during public scoping. Most respondents indicated that water quality should be a high priority. They felt that the hydrologic units that adjoin and surround the reservoir should also be high priority.

  Water quality information and analyses suggest that conditions are better in the upper portions of tributary streams (i.e., headwaters) of the lower Holston River watershed and degrade closer to Cherokee Reservoir, particularly in urbanizing areas. Besides urbanization, other contributors to water quality degradation include runoff from agriculture, erosion and sedimentation, sewage and septic systems, and an increase in contaminants through point source effluents released into the reservoir (also see Resource Management Goal below).

  Cherokee Reservoir is designated a "no discharge" reservoir by the Environmental Protection Agency. This means that releases of houseboat and boathouse sewage are prohibited. To encourage compliance, Fall Creek Campground and Dock and Hamblen County Dock are both equipped with sewer pump-out facilities. Fall Creek also has a spill protection plan for gas tanks located on TVA property. Cherokee-

Douglas Watershed Team is actively participating in the Clean Boating Campaign, implementing shoreline stabilization, and promoting vegetation maintenance and restoration. It is also working with the Natural Resources Conservation Service in watershed partnerships, which along with other agencies, concerned citizens, and organizations, attempt to identify water quality problems within the watershed and to provide effective solutions to correct potential problems.

The land allocation process considered watershed water quality. General aquatic ecological health conditions in the watersheds (hydrologic units) adjoining Cherokee Reservoir were also considered. Land was allocated to uses that would generally maintain or improve existing conditions. Where appropriate, uses were allocated that would minimize vegetative clearing or land disturbance from future uses because of the water quality benefits that result. No additional land on Cherokee Reservoir was allocated to industrial or commercial development. Seven hundred sixty (760) acres of land were allocated to recreation; it is expected that expansion of recreation opportunities would be accommodated on existing developed or commercial recreation areas, rather than on new commercial recreation land.

Residential Access Goal

- ***Ensure Consistency with Shoreline Management Initiative (SMI).*** TVA has categorized all shoreline where Section 26a applications or other approvals for residential use alterations are considered. Requests for alterations are considered: (a) along the TVA public Residential Access shoreline, where appropriate rights of ingress and egress for the purpose of constructing water-use facilities exist, (b) on privately-owned flowage easement, and (c) where such pre-existing use is grandfathered. The proposed use can not conflict with the interests of the general public. This categorization is based on resource data collected from field surveys and staff knowledge and experience. Based on the known occurrence of certain sensitive resources, the shoreline was dedicated into three categories: Shoreline Protection, Residential Mitigation, or Managed Residential (see DEA Chapter 2, Table 2.2.2-1 Land Use Zone Definitions-Residential Access). Cherokee Reservoir's residential access shoreline covers portions of 144 miles or 43 percent of the mainland shoreline.

  Approximately 120 miles of residential access shoreline is known to have sensitive species or habitats, designated natural areas, uncommon natural communities, or other sensitive ecological areas, archaeological resource concerns, or wetland vegetation. Approximately 34 miles (24 percent) of the residential shoreline has historic resources or the potential for their occurrence; 40 miles (28 percent) has sensitive plant and/or animal species or suitable habitat present; and 46 miles (32 percent) has wetland vegetation. No residential access shoreline is known to contain especially vulnerable sensitive natural or cultural resources of national significance; therefore, none is categorized as Shoreline Protection. Eighty-one miles of shoreline known to contain one or more sensitive resources of less significance or where the presence of such resources is unknown (i.e., not surveyed), are categorized as Residential Mitigation.

Sixty-three miles of surveyed shoreline, where such resources are known not to be present, are categorized as Managed Residential.

Consistent with the TVA's SMI Environmental Impact Statement (May 24, 1999 Record of Decision) and its resultant SMP, effective November 1, 1999, this plan does not allocate any new shoreland to Zone 7, Residential Access. Thirty-six parcels containing 275 acres or 38 shoreline miles (13 percent of the TVA public shoreline) are allocated to Zone 7. TVA land here is encumbered with pre-existing deeded access rights. About 106 miles of residential access shoreline is privately-owned flowage easement land. TVA limits consideration of requests for access across lands where such rights do not exist to (a) projects proposed by others to "give up" access rights at one location to "get" these rights at another location when the action would result in a no net loss, or preferably, a net gain of undeveloped public land and (b) TVA projects that support the agency's integrated resource management mission. This new "maintain and gain" policy would maintain and could increase the amount of public shoreline property by limiting the maximum amount of shoreline developed for residential access to that portion where residential access rights exist (also see Resource Management Goal). TVA would allow docks and other alterations along shoreline where access rights exist and where sensitive resources, navigation, flood control, and power generation concerns do not exist. Voluntary donations of conservation easements over flowage easement or other shoreland to protect scenic landscapes would be encouraged.

Requests for shoreline alterations along Residential Mitigation shoreline would be subject to site specific review and would require special analysis and perhaps specific mitigation measures, or additional data. Requests along shoreline categorized as Managed Residential are subject to review, but such areas do not presently have known sensitive resources (see Table 2.2-1).

Project Operations Goal

- ***Provide for navigation aids on Cherokee Reservoir.*** Navigation aids provide for a safer and more enjoyable boating experience. Some 75 percent of survey respondents indicated they use Cherokee Reservoir for water-based recreational activities.

  Cherokee Reservoir has 29 navigation aids (or dayboard markers) to assist boaters in finding their way around the lake. Four are located on the flowage easement areas where TVA does not own the land but has the right to erect such structures. Twenty-five markers are located on TVA land. In addition, TVA maintains several marker buoys in the reservoir to warn boaters of underwater rocks and other shallow-water areas that are particularly hazardous during the fall and winter.

Other Objectives

- ***Honor existing land use commitments on TVA land.*** A basic premise of the Land Planning process is to honor existing commitments on TVA land. In this planning process, each of these commitments has been reviewed in light of continuing to provide public benefits or uphold sound management practices which meet TVA's expectations. TVA is always prepared to evaluate unacceptable conditions and render necessary solutions when TVA land is involved.

- ***Identify lands that could be candidates for "maintain and gain" or acquire around Cherokee Reservoir.*** During the land planning process, the allocation team discussed parcels that may be candidates for "maintain and gain" or lands TVA could potentially acquire (see Residential Access Goal). Several parcels were identified as potential maintain and gain candidates such as Parcels 17, 38, and 132. These parcels front private residential properties at Wilderness Shores, Hallpon Village, and opposite Gilmore Dock in Honey Creek embayment, respectively. Back-lying property owners here do not have ingress and egress rights for the purpose of requesting water-use facilities development approval.

  Due to the lack of public land around Cherokee Reservoir, potential for purchasing conservation easements to increase the undeveloped shoreline is a possibility. Candidates for future easements may have excellent visual ratings, significant archaeological areas, wetlands, threatened and endangered species, or unique natural areas. In addition, easements would be considered for road access to parcels without such access. This is consistent with the findings during public scoping where respondents indicated that natural resource preservation and management should receive a high priority. Also, fifty percent of those surveyed indicated that more land was needed in natural resource areas.

PARCEL ALLOCATIONS

Allocation Team Participants

The Cherokee Reservoir land allocation meeting took place on November 4-5, 1999 at the Cherokee-Douglas Watershed Team office in Morristown. Participants included:

Judith P. Bartlow, Senior Natural Areas Specialist, Watershed Technical Services, TVA Regional Natural Heritage Project, Norris, Tennessee (Retired)

J. Leo Collins, Senior Botanist, Watershed Technical Services, TVA Regional Natural Heritage Project, Norris, Tennessee

Stephen D. Cottrell, Wildlife Biologist, Northeast Region, Clinch-Powell Watershed Team, Norris, Tennessee

Dennis T. Curtin, Program Administrator, Watershed Technical Services, TVA Regional Natural Heritage Project, Norris, Tennessee

Stanford E. Davis, Environmental Scientist, Northeast Region, Cherokee-Douglas Watershed Team, Morristown, Tennessee

Harold M. Draper, NEPA Specialist, NEPA Administration, Environmental Policy and Planning, Knoxville, Tennessee

Frank B. Edmonson, Senior Land Use Specialist, Upper Holston Watershed Team, Kingsport, Tennessee

Joe C. Feeman, Forester, Northeast Region, Clinch-Powell Watershed Team, Norris, Tennessee

George M. Humphrey, Land Use Specialist/Recreation Planner, Northeast Region, Clinch-Powell Watershed Team, Norris, Tennessee

Danny E. Olinger, Archaeologist, Watershed Technical Services, TVA Cultural Resources, Norris, Tennessee

Betty C. Peak, Engineering Aide, Cherokee-Douglas Watershed Team, Morristown, Tennessee

Laurie S. Pearl, Land Use Specialist, Cherokee-Douglas Watershed Team, Morristown, Tennessee

Samuel C. Perry, Project Leader, Watershed Technical Services, Site Planning and Design, Norris, Tennessee (Retired)

Benjamin H. Peters, Land Use Specialist, Cherokee-Douglas Watershed Team, Morristown, Tennessee

Barbara Rosensteel, Wetlands Biologist (Contractor), Watershed Technical Services, TVA Regional Natural Heritage Project, Norris, Tennessee

Karen C. Stewart, Land Use Specialist, Cherokee-Douglas Watershed Team, Morristown, Tennessee

David A. Tomljanovich, Watershed Specialist, Northeast Region, Upper Holston Watershed Team, Norris, Tennessee

Allocation Process

During the allocation meeting, the location, existing conditions, and qualities of each parcel were discussed. As explained in the Introduction to this Plan, the allocation team honored all existing commitments—that is, existing leases, licenses, easements, and uses by TVA programs. Land with identified sensitive resources was placed in the Sensitive Resource Management Zone. Allocation to the Residential Access Zone was based on SMI data. The remaining parcels were allocated based on reservoir planning objectives and TVA programs' requested land uses, which were developed with public input. Decisions were made by consensus. Unresolved issues were tabled for further research and discussion. Final allocation decisions were made by the team leader.

During the allocation meeting, the team allocated the TVA land by parcels to six of the seven zones defined in Table A-1.1. Non-TVA Shoreland was designated Zone 1. Table A-1.2 lists all the parcels and includes their allocations, prior use forecast, acreage, and reason for the allocation.

Table A-1.1 Planned Land Use Zone Definitions

Zone		Definition
1	**Non-TVA Shoreland**	Shoreland located above summer pool elevation that TVA does not own in fee or land never purchased by TVA. TVA is not allocating private or other non-TVA public land. This category is provided to assist in comprehensive evaluation of potential environmental impacts of TVA's allocation decision. Non-TVA shoreline includes: • ***Flowage easement land***—Privately or publicly owned land where TVA has purchased the right to flood, limit structures, and/or other minor rights. Flowage easement rights are generally purchased to a contour elevation. All structures on TVA flowage easement land should have Section 26a permits. SMP guidelines addressing vegetation management do not apply. • ***Privately owned reservoir land***—This is land never purchased by TVA and may include, but is not limited to, residential, industrial, commercial, or agricultural land. This land, lying below the 500-year flood elevation, is subject to TVA's 26a approvals for structures.
2	**Project Operations**	All TVA reservoir land currently used for TVA operations and public works projects includes: • ***Land adjacent to established navigation operations***—Locks, lock operations and maintenance facilities, and the navigation work boat dock and bases. • ***Land used for TVA power projects operations***—Generation facilities, switchyards, and transmission facilities and rights-of-way. • ***Dam reservation land***—Areas used for developed and dispersed recreation, maintenance facilities, Watershed Team offices, research areas, and visitor centers. • ***Navigation safety harbors/landings***—Areas used for tying off commercial barge tows and recreational boats during adverse weather conditions or equipment malfunctions. • ***Navigation day-boards and beacons***—Areas with structures placed on the shoreline to facilitate navigation. • ***Public works projects***—Includes fire halls, public water intakes, public treatment plants, etc. (These projects are placed in this category as a matter of convenience and may not relate specifically to TVA projects.) • ***Land planned for any of the above uses in the future.***
3	**Sensitive Resource Management**	Land managed for protection and enhancement of sensitive resources. Sensitive resources, as defined by TVA, include resources protected by state or federal law or Executive Order and other land features/natural resources TVA considers important to the area view-shed or natural environment. Recreational activities such as hunting, wildlife observation, and camping on undeveloped sites may occur in this zone, but the overriding focus is protecting and enhancing the sensitive resource the site supports. Areas included are: • TVA-designated sites with potentially ***significant archeological resources.*** • TVA lands with ***sites/structures listed on or eligible for listing on the National Register of Historic Places.*** • ***Wetlands***—Aquatic bed, emergent, forested, and scrub-shrub wetlands as defined by TVA.

Table A-1.1 Planned Land Use Zone Definitions

Zone		Definition
		• ***TVA land under easement, lease, or license to other agencies/individuals for resource protection purposes.*** • ***TVA land fronting land owned by other agencies/individuals*** for resource protection purposes. • ***Habitat Protection Areas***—These are areas managed by TVA to protect populations of species identified as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS), state-listed species, and any unusual or exemplary biological communities/geological features. • ***Ecological Study Areas***—These are designated areas that are suitable for ecological research and environmental education by a recognized authority or agency. They typically contain plant or animal populations of scientific interest or are of interest to an educational institution that would utilize the area. • ***Small Wild Areas***—These are areas managed by TVA or in cooperation with other public agencies or private conservation organizations to protect exceptional natural, scenic, or aesthetic qualities that can also support dispersed, low-impact types of outdoor recreation. • ***River corridor with sensitive resources***—A river corridor is a linear green space along both stream banks of selected tributaries entering a reservoir managed for light boat access at specific sites, riverside trails, and interpretive activities. These areas will be included in Zone 3 when identified sensitive resources are present. • ***Significant scenic areas***—These are areas designated for visual protection because of their unique vistas or particularly scenic qualities. • ***Champion tree site***— Areas designated by TVA as sites that contain the largest known individual tree of its species in that state. The state forestry agency "Champion Tree Program" designates the tree, while TVA designates the area of the sites for those located on TVA land. • ***Other sensitive ecological areas***—Examples of these areas include heron rookeries, nest colonies, and unique cave or karst formations. • ***Land planned for any of the above uses in the future.***
4	**Natural Resource Conservation**	Land managed for the enhancement of natural resources for human use and appreciation. Management of resources is the primary focus of this zone. Appropriate activities in this zone include hunting, forest management, wildlife observation, and camping on undeveloped sites. Areas included are: • ***TVA land under easement, lease, or license*** to other agencies for wildlife or forest management purposes. • ***TVA land fronting land owned by other agencies*** for wildlife or forest management purposes. • ***TVA land*** managed for wildlife or forest management projects. • ***Informal recreation areas*** maintained for passive, dispersed recreation activities such as hunting, hiking, bird watching, photography, primitive camping, bank fishing, and picnicking.

Table A-1.1 Planned Land Use Zone Definitions

Zone		Definition
		• ***Shoreline Conservation Areas***—Narrow riparian strips of vegetation between the water's edge and TVA's back-lying property that are managed for wildlife, water quality, or visual enhancement purposes. • ***Wildlife Observation Areas***—Areas with unique concentrations of easily observable wildlife that are managed as designated public Wildlife Observation Areas. • ***River corridor without sensitive resources present***—A river corridor is a linear green space along both stream banks of selected tributaries entering a reservoir managed for light boat access at specific sites, riverside trails, and interpretive activities. River corridors will be included in Zone 4 unless sensitive resources are present (see Zone 3). • ***Islands of 10 acres or less.*** • ***Land planned for any of the above uses in the future.***
5	**Industrial/ Commercial* Development**	Land managed for economic development purposes. Areas included are: • ***TVA land under easement, lease, or license to other agencies/individuals*** for industrial or commercial purposes. • ***TVA land fronting land owned by other agencies/individuals*** for industrial or commercial purposes. • ***Sites planned for future industrial use.*** Types of development that can occur on this land are: • ***Business parks***—TVA waterfront land which supports industrial or commercial development. • ***Industrial access***—Access to the waterfront by back-lying property owners across TVA property for water intakes, wastewater discharge, or conveyance of commodities (i.e., pipelines, rail, or road). Barge terminals are associated with industrial access corridors. • ***Barge terminal sites***—Public or private facilities used for the transfer, loading, and unloading of commodities between barges and trucks, trains, storage areas, or industrial plants. • ***Fleeting areas***—Sites used by the towing industry to switch barges between tows or barge terminals which have both off-shore and on-shore facilities. • ***Minor commercial landing***—A temporary or intermittent activity that takes place without permanent improvements to the property. These sites can be used for transferring pulpwood, sand, gravel, and other natural resource commodities between barges and trucks.
6	**Recreation***	All reservoir land managed for concentrated, active recreation activities that require capital improvement and maintenance, including: • ***TVA land under easement, lease, or license to other agencies/individuals*** for recreational purposes. • ***TVA land fronting land owned by other agencies/individuals*** for recreational purposes.

Table A-1.1 Planned Land Use Zone Definitions

Zone		Definition
		• ***TVA land developed for recreational purposes*** such as campgrounds, day use areas, etc. • ***Land planned for any of the above uses in the future.*** Types of development that can occur on this land are: • ***Commercial recreation***, e.g., marinas, boat docks, resorts, campgrounds, and golf courses. • ***Public recreation***, e.g., local, state and federal parks, and recreation areas. • ***Greenways,*** e.g., linear parks located along natural features such as lakes or ridges, or along man-made features including abandoned railways or utility rights-of-way, which link people and resources together. • ***Water access sites***, e.g., boat ramps, courtesy piers, canoe access, fishing piers, vehicle parking areas, picnic areas, trails, toilet facilities, and information kiosks.
7	**Residential Access****	TVA public lands where Section 26a applications and other land use approvals for residential shoreline alterations are considered. Requests for residential shoreline alterations are considered on parcels identified in this zone where such use was previously considered and where the proposed use would not conflict with the interests of the general public. As provided for in the SMP, residential access would be divided into three categories based on the presence of sensitive ecological resources. The categories are: (1) Shoreline Protection, for shoreline segments that support sensitive ecological resources, such as federally-listed threatened or endangered species, high priority state-listed species, wetlands with high function and value, archaeological or historical sites of national significance, or which contain navigation restrictions; (2) Residential Mitigation, for shoreline segments where resource conditions or navigation conditions would require special analysis and perhaps specific mitigation measures, or where additional data are needed; and (3) Managed Residential, where no sensitive resources are known to exist. Types of development/management that can occur on this land are: • ***Residential water-use facilities***, e.g., docks, piers, launching ramps/driveways, marine railways, boathouses, enclosed storage space, and nonpotable water intakes. • ***Residential access corridors***, e.g., pathways, wooden steps, walkways, or mulched paths which can include portable picnic tables and utility lines. • ***Shoreline stabilization***, e.g., bioengineering, riprap and gabions, and retaining walls. • ***Shoreline vegetation management*** on TVA public residential access shoreland. • ***Conservation easements*** for protection of the shoreline. • ***Other activities***, e.g., fill, excavation, grading, etc.

* **Commercial recreation uses**, such as marinas and campgrounds, are included in Zone 6.

** **Docks and other shoreline development are not permitted on land categorized as Shoreline Protection.**

Table A-1.2 Land Use Allocation, Prior Use Forecast, and Reason for Allocation for the Cherokee Reservoir Land Management Plan

(The shaded parcels were committed early in the land planning process due to existing commitments or sensitive resources.)

Parcel	Proposed Land Use Allocation	Prior Use Forecast	Acres	Reason for Allocation
1	Zone 2 - Project Operations	Project Operations	540.6	TVA dam reservation land
2	Zone 4 - Natural Resource Conservation	Reservoir Operations	14.7	Shoreline resources conservation
3	Zone 7 - Residential Access	No Forecast and Reservoir Operations	24.3	TVA public shoreline with residential access rights
4	Zone 4 - Natural Resource Conservation	Reservoir Operations	0.2	Informal recreation and shoreline resources conservation
5	Zone 6 - Recreation	No Forecast and Public Recreation	3.4	TVA land which fronts land transferred for recreation and wildlife observation
6	Zone 4 - Natural Resource Conservation	Reservoir Operations	4.8	Informal recreation and wildlife observation
7	Zone 6 - Recreation	Industrial	0.8	TVA land licensed and fronts land transferred for recreation
8	Zone 4 - Natural Resource Conservation	Industrial	11.6	Informal recreation and shoreline resources conservation
9	Zone 4 - Natural Resource Conservation	No Forecast	2.0	Informal recreation and shoreline resources conservation
10	Zone 3 - Sensitive Resource Management	Public Recreation	2.9	Historic resources
11	Zone 4 - Natural Resource Conservation	Public Recreation	25.9	Informal recreation and shoreline resources conservation
12	Zone 7 - Residential Access	No Forecast	0.2	TVA public shoreline with residential access rights
13	Zone 6 - Recreation	Public Recreation	0.6	Commercial recreational use
14	Zone 4 - Natural Resource Conservation	No Forecast	0.2	Informal recreation and shoreline resources conservation
15	Zone 7 - Residential Access	No Forecast	1.5	TVA public shoreline with residential access rights
16	Zone 6 - Recreation	No Forecast	0.1	TVA land licensed and fronts land transferred for recreation

Table A-1.2 Land Use Allocation, Prior Use Forecast, and Reason for Allocation for the Cherokee Reservoir Land Management Plan

(The shaded parcels were committed early in the land planning process due to existing commitments or sensitive resources.)

Parcel	Proposed Land Use Allocation	Prior Use Forecast	Acres	Reason for Allocation
17	Zone 4 - Natural Resource Conservation	No Forecast	2.8	Shoreline resources conservation
18	Zone 4 - Natural Resource Conservation	Commercial and Public Recreation; Reservoir Operations; and Industrial	79.1	Informal recreation and shoreline resources conservation
19	Zone 7 - Residential Access	No Forecast and Residential	6.4	TVA public shoreline with residential access rights
20	Zone 6 - Recreation	No Forecast	0.1	TVA land licensed and fronts land transferred for recreation
21	Zone 4 - Natural Resource Conservation	Reservoir Operations	25.9	Shoreline resources conservation
22	Zone 6 - Recreation	Public Recreation	226.6	TVA land licensed and fronts land transferred for recreation
23	Zone 4 - Natural Resource Conservation	Reservoir Operations	12.5	Shoreline resources conservation
24	Zone 4 - Natural Resource Conservation	Reservoir Operations	98.6	Shoreline resources conservation
25	Zone 4 - Natural Resource Conservation	No Forecast	1.5	Shoreline resources conservation
26	Zone 7 - Residential Access	No Forecast	6.7	TVA public shoreline with residential access rights
27	Zone 6 - Recreation	No Forecast	7.3	TVA land licensed and fronts land transferred for recreation
28	Zone 4 - Natural Resource Conservation	Public Recreation	243.6	Informal recreation and shoreline resources conservation
29	Zone 4 - Natural Resource Conservation	Reservoir Operations	353.6	Shoreline and sensitive resources conservation
30	Zone 4 - Natural Resource Conservation	Public Recreation	144.3	Shoreline resources conservation
31	Zone 4 - Natural Resource Conservation	Public Recreation and Reservoir Operations	30.0	Informal recreation and shoreline resources conservation
32	Zone 3 - Sensitive Resource Management	Reservoir Operations	3.4	Shoreline and sensitive resources conservation
33	Zone 7 - Residential Access	No Forecast	10.0	TVA public shoreline with residential access rights

Table A-1.2 Land Use Allocation, Prior Use Forecast, and Reason for Allocation for the Cherokee Reservoir Land Management Plan

(The shaded parcels were committed early in the land planning process due to existing commitments or sensitive resources.)

Parcel	Proposed Land Use Allocation	Prior Use Forecast	Acres	Reason for Allocation
34	Zone 4 - Natural Resource Conservation	Reservoir Operations	1.2	Shoreline resources conservation
35	Zone 7 - Residential Access	No Forecast	0.8	TVA public shoreline with residential access rights
36	Zone 3 - Sensitive Resource Management	Reservoir Operations and Industrial	157.9	Shoreline and sensitive resources conservation
37	Zone 6 - Recreation	No Forecast	0.6	TVA land licensed and fronts land transferred for recreation
38	Zone 4 - Natural Resource Conservation	Public Recreation	8.2	Informal recreation and shoreline resources conservation
39	Zone 7 - Residential Access	No Forecast	2.0	TVA public shoreline with residential access rights
40	Zone 6 - Recreation	No Forecast	21.6	TVA land licensed and fronts land transferred for recreation
41	Zone 6 - Recreation	No Forecast	2.6	TVA land licensed and fronts land transferred for recreation
42	Zone 7 - Residential Access	No Forecast	12.8	TVA public shoreline with residential access rights
43	Zone 3 - Sensitive Resource Management	Reservoir Operations	30.6	Shoreline and sensitive resources conservation
44	Zone 4 - Natural Resource Conservation	Reservoir Operations	7.1	Shoreline resources conservation
45	Zone 4 - Natural Resource Conservation	Reservoir Operations; Public Recreation; and Industrial	59.0	Shoreline resources conservation
46	Zone 3 - Sensitive Resource Management	Public Recreation	100.3	Shoreline and sensitive resources conservation
47	Zone 4 - Natural Resource Conservation	Public Recreation	18.1	Informal recreation and shoreline resources conservation
48	Zone 3 - Sensitive Resource Management	Public Recreation	3.4	Shoreline and sensitive resources conservation
49	Zone 4 - Natural Resource Conservation	Public Recreation and Reservoir Operations	456.5	Shoreline resources conservation
50	Zone 7 - Residential Access	No Forecast	1.0	TVA public shoreline with residential access rights

Table A-1.2 Land Use Allocation, Prior Use Forecast, and Reason for Allocation for the Cherokee Reservoir Land Management Plan

(The shaded parcels were committed early in the land planning process due to existing commitments or sensitive resources.)

Parcel	Proposed Land Use Allocation	Prior Use Forecast	Acres	Reason for Allocation
51	Zone 7 - Residential Access	Reservoir Operations	27.9	TVA public shoreline with approved structures "grandfathered" under SMP
52	Zone 4 - Natural Resource Conservation	Industrial and Public Recreation	39.5	Shoreline resources conservation
53	Zone 6 - Recreation	No Forecast	0.4	TVA land licensed and fronts land transferred for recreation
54	Zone 6 - Recreation	Public Recreation; No Forecast; and Industrial	140.1	TVA land leased for commercial recreation
55	Zone 4 - Natural Resource Conservation	Public Recreation and Industrial	66.2	Shoreline resources conservation
56	Zone 4 - Natural Resource Conservation	Reservoir Operations and No Forecast	81.6	Shoreline resources conservation
57	Zone 3 - Sensitive Resource Management	Reservoir Operations and Small Wild Area	75.8	Shoreline and sensitive resources conservation
58	Zone 4 - Natural Resource Conservation	Reservoir Operations and No Forecast	172.0	Shoreline resources conservation
59	Zone 3 - Sensitive Resource Management	Reservoir Operations; Industrial; and Public Recreation	194.4	Shoreline and sensitive resources conservation
60	Zone 7 - Residential Access	No Forecast	4.0	TVA public shoreline with residential access rights
61	Zone 4 - Natural Resource Conservation	No Forecast	0.2	Shoreline resources conservation
62	Zone 7 - Residential Access	Reservoir Operations and No Forecast	26.4	TVA public shoreline with residential access rights and approved structures "grandfathered" under SMP
63	Zone 6 - Recreation	Power Transmission and Reservoir Operations	76.8	TVA land licensed for recreation
64	Zone 6 - Recreation	Public Recreation	6.5	TVA land licensed for recreation
65	Zone 2 - Project Operations	Reservoir Operations	0.1	TVA land under permanent easement for utilities
66	Zone 3 - Sensitive Resource Management	Reservoir Operations	38.4	Shoreline and sensitive resources conservation

Table A-1.2 Land Use Allocation, Prior Use Forecast, and Reason for Allocation for the Cherokee Reservoir Land Management Plan

(The shaded parcels were committed early in the land planning process due to existing commitments or sensitive resources.)

Parcel	Proposed Land Use Allocation	Prior Use Forecast	Acres	Reason for Allocation
67	Zone 7 - Residential Access	Reservoir Operations and No Forecast	1.6	TVA public shoreline with residential access rights and approved structures "grandfathered" under SMP
68	Zone 4 - Natural Resource Conservation	Reservoir Operations and Public Recreation	297.0	Informal recreation and shoreline resources conservation
69	Zone 7 - Residential Access	Reservoir Operations and No Forecast	27.4	TVA public shoreline with approved structures "grandfathered" under SMP
70	Zone 6 - Recreation	No Forecast	1.2	TVA land licensed and fronts land transferred for recreation
71	Zone 3 - Sensitive Resource Management	Reservoir Operations	14.9	Shoreline and sensitive resources conservation
72	Zone 4 - Natural Resource Conservation	Public Recreation and Reservoir Operations	119.0	Informal recreation and shoreline resources conservation
73	Zone 3 - Sensitive Resource Management	Public Recreation	129.1	Shoreline and sensitive resources conservation
74	Zone 4 - Natural Resource Conservation	Public Recreation	258.1	Informal recreation and shoreline resources conservation
75	Zone 7 - Residential Access	No Forecast	3.7	TVA public shoreline with residential access rights
76	Zone 4 - Natural Resource Conservation	Reservoir Operations and Public Recreation	58.2	Informal recreation and shoreline resources conservation
77	Zone 6 - Recreation	No Forecast	2.5	TVA land licensed and fronts land transferred for recreation
78	Zone 7 - Residential Access	No Forecast	21.1	TVA public shoreline with residential access rights
79	Zone 3 - Sensitive Resource Management	Power Transmission	20.2	Shoreline and sensitive resources conservation
80	Zone 4 - Natural Resource Conservation	Power Transmission and Public Recreation	934.3	Informal recreation and shoreline resources conservation
81	Zone 7 - Residential Access	Power Transmission and Public Recreation	0.4	TVA public shoreline with approved structures "grandfathered" under SMP

Table A-1.2 Land Use Allocation, Prior Use Forecast, and Reason for Allocation for the Cherokee Reservoir Land Management Plan

(The shaded parcels were committed early in the land planning process due to existing commitments or sensitive resources.)

Parcel	Proposed Land Use Allocation	Prior Use Forecast	Acres	Reason for Allocation
82	Zone 6 - Recreation	Public Recreation	21.6	TVA land around substation licensed for recreation
83	Zone 2 - Project Operations	Power Transmission	1.1	TVA land under permanent easement for utility substation
84	Zone 4 - Natural Resource Conservation	Public Recreation	189.9	Informal recreation and shoreline resources conservation
85	Zone 3 - Sensitive Resource Management	Public Recreation	157.3	Shoreline and sensitive resources conservation
86	Zone 4 - Natural Resource Conservation	Reservoir Operations	40.6	Informal recreation and shoreline resources conservation
87	Zone 4 - Natural Resource Conservation	Reservoir Operations and Public Recreation	20.7	Shoreline resources conservation
88	Zone 7 - Residential Access	Public Recreation	4.7	TVA public shoreline with residential access rights
89	Zone 4 - Natural Resource Conservation	Reservoir Operations and Public Recreation	48.4	Informal recreation and shoreline resources conservation
90	Zone 3 - Sensitive Resource Management	Reservoir Operations and Public Recreation	85.6	Shoreline and sensitive resources conservation
91	Zone 4 - Natural Resource Conservation	Public Recreation and Reservoir Operations	113.4	Shoreline resources conservation
92	Zone 6 - Recreation	No Forecast	0.8	TVA land licensed and fronts land transferred for recreation
93	Zone 7 - Residential Access	No Forecast	3.3	TVA public shoreline with residential access rights
94	Zone 6 - Recreation	No Forecast	5.6	TVA land licensed and fronts land transferred for recreation
95	Zone 4 - Natural Resource Conservation	No Forecast	5.2	Shoreline resources conservation
96	Zone 4 - Natural Resource Conservation	Reservoir Operations and Public Recreation	484.3	Informal recreation and shoreline resources conservation
97	Zone 4 - Natural Resource Conservation	Reservoir Operations	23.6	Shoreline resources conservation
98	Zone 7 - Residential Access	No Forecast	2.0	TVA public shoreline with residential access rights
99	Zone 4 - Natural Resource Conservation	Reservoir Operations and Public Recreation	14.2	Shoreline resources conservation

Table A-1.2 Land Use Allocation, Prior Use Forecast, and Reason for Allocation for the Cherokee Reservoir Land Management Plan

(The shaded parcels were committed early in the land planning process due to existing commitments or sensitive resources.)

Parcel	Proposed Land Use Allocation	Prior Use Forecast	Acres	Reason for Allocation
100	Zone 6 - Recreation	No Forecast	0.6	TVA land licensed and fronts land transferred for recreation
101	Zone 7 - Residential Access	No Forecast	1.5	TVA public shoreline with residential access rights
102	Zone 7 - Residential Access	No Forecast	5.1	TVA public shoreline with residential access rights
103	Zone 3 - Sensitive Resource Management	Reservoir Operations	0.6	Shoreline and sensitive resources conservation
104	Zone 4 - Natural Resource Conservation	Public Recreation; Power Transmission; and Reservoir Operations	180.0	Informal recreation and shoreline resources conservation
105	Zone 4 - Natural Resource Conservation	Public Recreation, Reservoir Operations; and Industrial	107.1	Informal recreation and shoreline resources conservation
106	Zone 4 - Natural Resource Conservation	Public Recreation	3.9	Informal recreation and shoreline resources conservation
107	Zone 6 - Recreation	Public Recreation	10.1	TVA land under easement for recreation
108	Zone 6 - Recreation	No Forecast	2.4	TVA land licensed and fronts land transferred for recreation
109	Zone 7 - Residential Access	No Forecast	1.5	TVA public shoreline with residential access rights
110	Zone 4 - Natural Resource Conservation	Reservoir Operations; Public Recreation; and No Forecast	14.6	Shoreline resources conservation
111	Zone 7 - Residential Access	No Forecast	2.0	TVA public shoreline with residential access rights
112	Zone 6 - Recreation	No Forecast	0.7	TVA land licensed and fronts land transferred for recreation
113	Zone 3 - Sensitive Resource Management	Public Recreation	0.2	Shoreline and sensitive resources conservation
114	Zone 6 - Recreation	Public Recreation	3.2	TVA land licensed for recreation
115	Zone 7 - Residential Access	Reservoir Operations	0.2	TVA public shoreline with residential access rights
116	Zone 4 - Natural Resource Conservation	Reservoir Operations	84.4	Shoreline resources conservation

Table A-1.2 Land Use Allocation, Prior Use Forecast, and Reason for Allocation for the Cherokee Reservoir Land Management Plan

(The shaded parcels were committed early in the land planning process due to existing commitments or sensitive resources.)

Parcel	Proposed Land Use Allocation	Prior Use Forecast	Acres	Reason for Allocation
117	Zone 7 - Residential Access	Reservoir Operations	3.6	TVA public shoreline with approved structures "grandfathered" under SMP
118	Zone 4 - Natural Resource Conservation	Reservoir Operations	151.0	Shoreline resources conservation
119	Zone 3 - Sensitive Resource Management	Reservoir Operations	4.9	Shoreline and sensitive resources conservation
120	Zone 7 - Residential Access	No Forecast	10.1	TVA public shoreline with residential access rights
121	Zone 7 - Residential Access	Reservoir Operations	1.7	TVA public shoreline with residential access rights
122	Zone 4 - Natural Resource Conservation	Power Transmission	186.9	Informal recreation and shoreline resources conservation
123	Zone 6 - Recreation	No Forecast	1.3	TVA land licensed and fronts land transferred for recreation
124	Zone 7 - Residential Access	No Forecast	5.0	TVA public shoreline with residential access rights
125	Zone 4 - Natural Resource Conservation	Reservoir Operations	0.5	Shoreline resources conservation
126	Zone 4 - Natural Resource Conservation	Public Recreation	5.9	Informal recreation and shoreline resources conservation
127	Zone 7 - Residential Access	No Forecast	7.7	TVA public shoreline with residential access rights
128	Zone 4 - Natural Resource Conservation	No Forecast	1.4	Informal recreation and shoreline resources conservation
129	Zone 4 - Natural Resource Conservation	Public Recreation and Reservoir Operations	66.7	Informal recreation and shoreline resources conservation
130	Zone 6 - Recreation	No Forecast	1.0	TVA land licensed and fronts land transferred for recreation
131	Zone 7 - Residential Access	No Forecast	14.1	TVA public shoreline with residential access rights
132	Zone 4 - Natural Resource Conservation	No Forecast	1.0	Shoreline resources conservation
133	Zone 4 - Natural Resource Conservation	No Forecast	0.3	Shoreline resources conservation

Table A-1.2 Land Use Allocation, Prior Use Forecast, and Reason for Allocation for the Cherokee Reservoir Land Management Plan

(The shaded parcels were committed early in the land planning process due to existing commitments or sensitive resources.)

Parcel	Proposed Land Use Allocation	Prior Use Forecast	Acres	Reason for Allocation
134	Zone 4 - Natural Resource Conservation	Commercial Recreation	77.2	Shoreline resources conservation
135	Zone 3 - Sensitive Resource Management	Commercial Recreation	0.5	Shoreline and sensitive resources conservation
136	Zone 4 - Natural Resource Conservation	No Forecast	1.5	Shoreline and sensitive resources conservation
137	Zone 6 - Recreation	No Forecast	1.1	TVA land licensed and fronts land transferred for recreation
138	Zone 4 - Natural Resource Conservation	Public Recreation and No Forecast	66.4	Shoreline resources conservation
139	Zone 7 - Residential Access	No Forecast	4.5	TVA public shoreline with residential access rights
140	Zone 6 - Recreation	No Forecast	1.8	TVA land licensed and fronts land transferred for recreation
141	Zone 4 - Natural Resource Conservation	Public Recreation and Reservoir Operations	17.2	Shoreline resources conservation
142	Zone 6 - Recreation	Public Recreation	7.1	TVA land leased for commercial recreation
143	Zone 7 - Residential Access	Reservoir Operations	16.1	TVA public shoreline with approved structures "grandfathered" under SMP
144	Zone 4 - Natural Resource Conservation	No Forecast	3.2	Shoreline resources conservation
145	Zone 6 - Recreation	Public Recreation	211.3	TVA land leased for commercial recreation and a portion in under contract to county for recreation
146	Zone 7 - Residential Access	No Forecast	7.1	TVA public shoreline with residential access rights
147	Zone 4 - Natural Resource Conservation	Public Recreation; Reservoir Operations; and No Forecast	52.4	Informal recreation and shoreline resources conservation
148	Zone 7 - Residential Access	No Forecast	6.5	TVA public shoreline with residential access rights
149	Zone 6 - Recreation	Public Recreation	0.4	TVA land licensed and fronts land transferred for recreation
		Total Acres	**8,186.9**	

Sources of Information

Grainger County Heritage Book Committee. 1998. *Grainger County, Tennessee, and its People, 1796-1998*. Waynesville, North Carolina: Don Mills, Inc.

Hamblen County, Tennessee, Historic Program Committee. 1970. *Historic Hamblen, 1870-1970*. Morristown, Tennessee: Morristown Printing Company.

Jefferson County Genealogical Society. 1996. *Jefferson County, Tennessee, Families and History, 1792-1996*. Waynesville, North Carolina: Don Mills, Inc.

Jefferson County, Tennessee, Bicentennial Committee. 1976. *Heritage—Jefferson County*. Dandridge, Tennessee: Bicentennial Committee of Jefferson County, Tennessee.

Muncy, Estle P. 1994. *People and Places of Jefferson County*. Rogersville, Tennessee: East Tennessee Printing Company.

Appendix A-2 – Scoping Results

Cherokee Reservoir
Scoping Report

Prepared by

The Tennessee Valley Authority

October 1999

Background and Purpose

TVA develops reservoir land management plans to help manage the 265,000 acres of public lands around its lakes. Plans are developed in accordance with TVA policy and performance standards with active participation by public agencies and officials, private organizations, and individuals. By providing a clear statement of how TVA will manage public land and by identifying land for specific uses, a reservoir land plan can minimize conflicting land uses and make it easier to handle requests for use of public land. In addition, the plans focus on a watershed approach that access the needs of the watershed adjacent to the reservoir.

The Cherokee/Douglas Watershed Team is developing a plan focusing on TVA managed lands and watershed hydrological units or areas around Cherokee Lake. Specific uses for the land will be identified, including Resource Protection, Natural Resource Conservation, Industrial/Commercial Development, Recreation, Residential Access, and TVA Operations. The plan will be designed to minimize future conflicting land uses and make it easier to manage requests for the use of these lands. It will also integrate knowledge of important watershed conditions into the land allocation decision process. The plan will apply the policies adopted in the Shoreline Management Initiative (SMI) Environmental Impact Statement, approved earlier this year by the TVA Board; SMI is designed to better manage and protect land and aquatic resources.

Public Participation

During August 1999, TVA sought comments from citizens and recreational users of Cherokee Reservoir. Individuals were invited to complete a questionnaire about Cherokee Reservoir (see Appendix I). Questionnaires were mailed to individuals whose names were compiled from TVA mailing lists and were distributed to recreational users at Cherokee Reservoir as well as during a public meeting. Individuals could also submit comments by electronic mail (e-mail). The solicitation of public comments was sought through news releases to local newspapers (i.e., Hawkins, Grainger, Jefferson, and Hamblen Counties) announcing public participation opportunities.

In addition to the questionnaire, citizens were invited to attend a public information session in Morristown, Tennessee (August 26, 1999) to discuss the land planning efforts on the Cherokee Reservoir. The public meeting was attended by 21 individuals.

Questionnaire Respondents

Approximately 700 questionnaires were mailed. Of these, 187 questionnaires were completed, for a return rate of 27 percent.

Lake Visitation

Ninety-two percent of respondents reported that they have used TVA public lands around Cherokee Reservoir within the past year. Respondents reported visiting Cherokee Reservoir an average of 40 times a year (range 1-300); ten respondents reported that they live on the Cherokee Reservoir.

Activity Preferences

Respondents were asked to refer to a list of outdoor recreational activities and indicate their preference for using Cherokee Reservoir (see Figure 1).

Most respondents (50 percent or more) indicated they ***prefer to use*** Cherokee Reservoir for:

- ù Boat launching, marina boating, & pleasure boating
- ù Bank & boat fishing
- ù Swimming in informal areas
- ù Picnicking

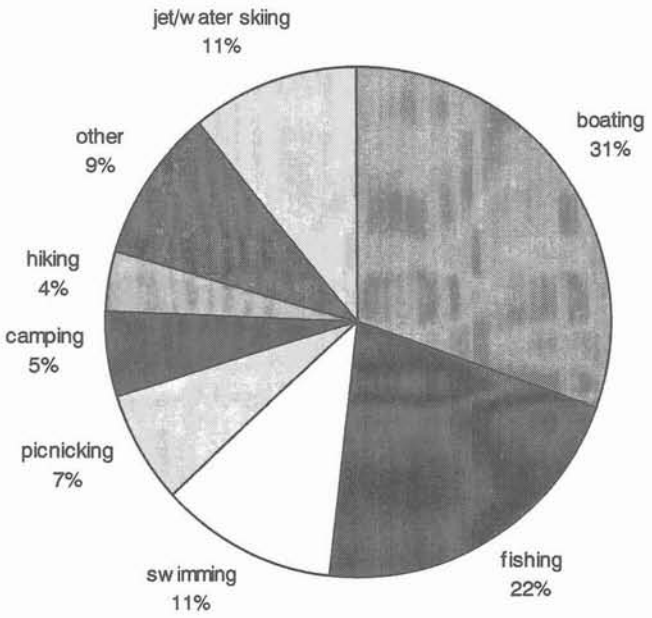
Approximately one-third of respondents indicated they ***prefer to use*** Cherokee Reservoir for:

- ù Water skiing & jet skiing

Approximately 15 percent of respondents indicated they ***would use Cherokee Reservoir if the proper facilities were provided*** for:

- ù Swimming in designated areas
- ù Golfing
- ù Bike riding

Figure 1. Activity Preferences for Cherokee Reservoir.



Wildlife

Figure 2 below displays respondents' hunting and viewing preferences of species TVA should consider when managing habitats.

Regarding **viewing**, the majority of respondents indicated the following species to consider for habitat management:

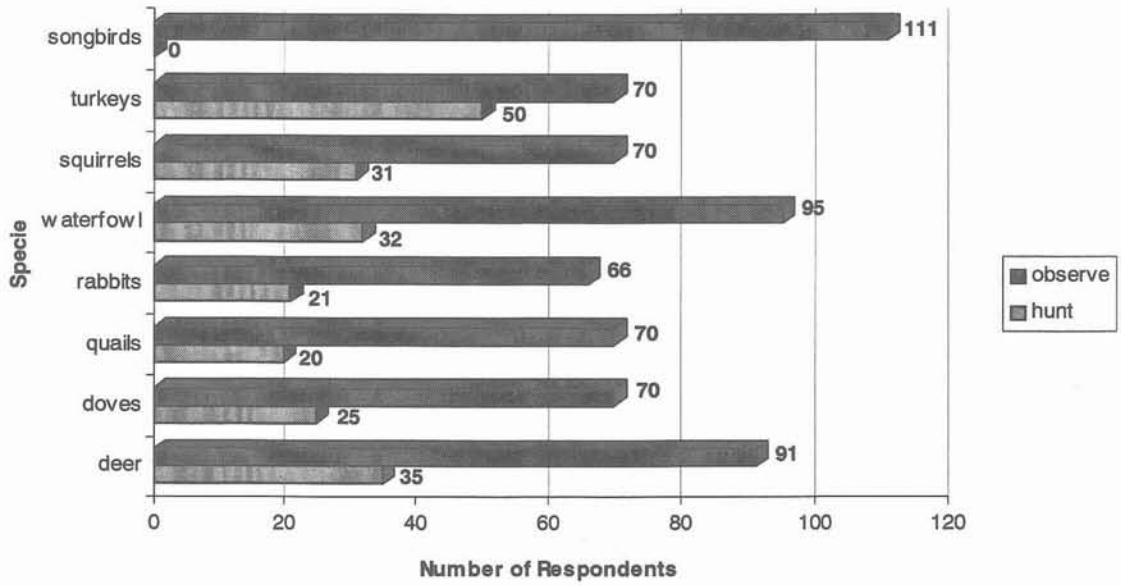
ù Deer
ù Waterfowl
ù Songbirds

Regarding **viewing**, many respondents also identified turkeys, squirrels, rabbits, quails, and doves as species to consider for habitat management.

Regarding **hunting**, many respondents indicated the following species to consider for habitat management:

ù Turkeys
ù Deer
ù Waterfowl
ù Squirrels

Figure 2. Wildlife for TVA to Consider When Managing Habitat at Cherokee Reservoir.



Land Allocation Preferences

Respondents were asked to rate their preferences concerning the allocation of TVA land around the Cherokee Reservoir (see Figure 3).

Most respondents indicated that ***too much*** land has been allocated for:

ù Industrial areas

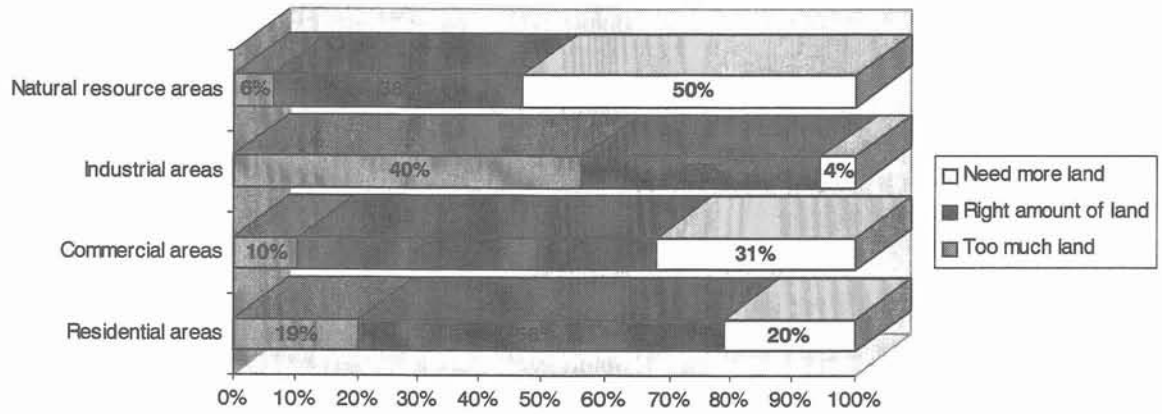
Most respondents indicated that ***about the right amount*** of land has been allocated for:

ù Residential areas
ù Commercial recreation areas

Most respondents indicated that ***more land is needed*** for:

ù Natural resource areas

Figure 3. Land Use Allocation Preferences for Cherokee Reservoir.



Level of Priority

Respondents were asked to indicate the level of priority TVA should place on various facilities, areas, and/or services.

Most respondents indicated that a ***high priority*** should be placed on:

ù Wildlife habitat management & protection of endangered species
ù Preservation of natural/open spaces, public land with unique features, wetlands
ù Protection of historic sites & cultural artifacts
ù Ecological study areas for local schools or universities
ù Shoreline erosion control
ù Protection of water quality
ù Year-round boat ramps with parking
ù Public fishing piers

Most respondents indicated that a ***medium priority*** should be placed on:

ù Brochures and signs directing the public to natural areas
ù Primitive campgrounds (no hook-ups)
ù Hiking trails (dirt paths)
ù Informal recreation (hiking, biking, horse trails, etc.)
ù Interpretative centers/museums
ù Picnic pavilions/picnic areas
ù Public recreation areas (campgrounds, parks, etc.)
ù Swimming beaches

Most respondents indicated that a ***low priority*** should be placed on:

ù Full-service campgrounds (electric, water, sewer, etc.)
ù Paved hiking trails, signs, and observation towers

Most respondents indicated that TVA should have **no involvement** in:

ù Commercial boat stack storage
ù Overnight lodging (cabins, cottages, resort lodges, etc.)
ù Theme parks (Dollywood or Disney types)
ù Timber production
ù Upscale amphitheaters
ù Industrial and economic development

Hydrologic Units

Respondents were asked to indicate the level of priority TVA should place on various hydrologic units. A map was included with the questionnaire dividing the land surrounding Cherokee Reservoir and the adjacent watershed into five areas called hydrologic units (see Appendix II).

Most respondents indicated that Unit 1 and Unit 5 should be a ***high priority***.

ù Many respondents indicated that Unit 1 should be a high priority due to its heavy use by a large number of people. Other respondents mentioned that it should be a high priority due to its location, water quality, and water level.

ù Many respondents indicated that Unit 5 should be a high priority due to its water quality, water level, and its location adjacent to Unit 1.

Many respondents indicated that Unit 2 should be a ***high priority***; however, a comparable number of respondents indicated that it should be a ***medium priority***.

ù Many respondents indicated that Unit 2 should be a high priority due to its water quality, and its location adjacent to Unit 1.

Many respondents indicated that Unit 2 should be a ***medium priority*** due to its small population and volume of users. In addition, some respondents indicated that they believed TVA should not be involved.

Most respondents indicated that Unit 3 should be a ***medium to high priority***.

ù Many respondents indicated that Unit 3 should be a medium to high priority due to its natural resources (pollution, water quality, etc.), and volume of users. In addition, some respondents indicated that they believed TVA should not be involved.

Many respondents indicated that Unit 4 should be a ***high priority***; however, a comparable number of respondents indicated that it should be a ***low priority***.

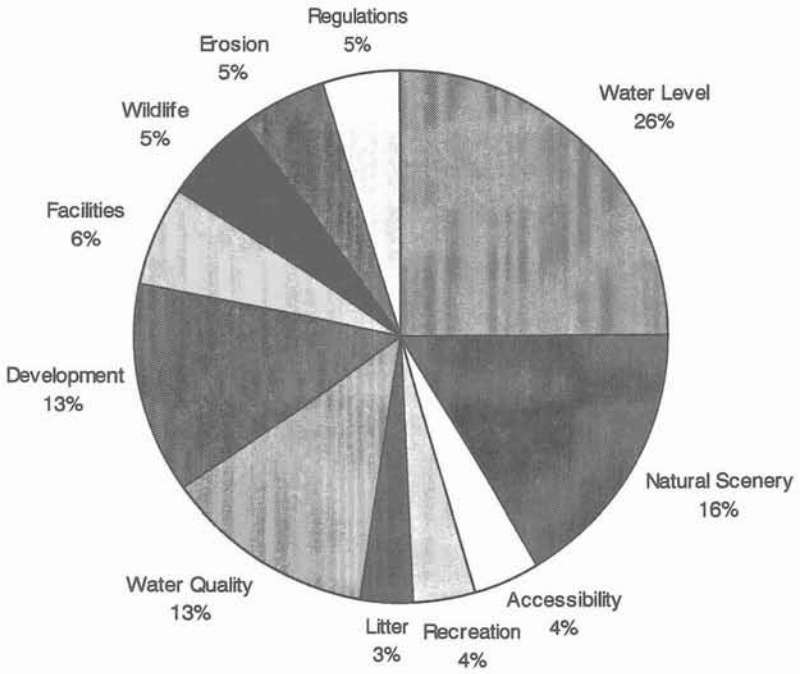
ù Many respondents indicated that Unit 4 should be a high priority due to its water quality and pollution. Many respondents indicated that it should be a low priority due to the amount of land and people affected. In addition, some respondents indicated that they believed TVA should not be involved.

In addition, many respondents indicated that all hydrological units should be treated equally.

Issues Identified by Public

Respondents were given the opportunity to write-in comments regarding their opinion on issues important to Cherokee Reservoir. Figure 4 below displays the issues that respondents identified.

Figure 4. Issues Identified by Public



What is Valued Most

Respondents were asked what they value most about TVA land around Cherokee Reservoir. Many respondents expressed that they valued:

ù The beautiful and natural scenery
" I value the beauty of the natural setting."

ù Its undeveloped state
"I value the areas of no development."

ù Public access
"I value that it is open to public use and easy to access."

ù Recreation
"I appreciate the fishing, boating, and other recreational uses."

ù Wildlife
"I value the variety of wildlife."

ù Water level
"We value the water remaining high through spring, summer, and fall."

Significant Watershed Issues

Respondents were asked their opinion regarding significant watershed issues that need to be addressed. Many respondents expressed the following issues:

ù Water level
"Water levels fluctuate too much—the water levels are not utilized to the best degree in relation to recreation, economy, tourism, lakeside homes, water quality."

ù Pollution and water quality
"Pollution (industrial and agricultural pollutants, fertilizer, garbage, sewage) is an issue."

ù Erosion
"Need more erosion control."

ù Litter
"Need organized trash clean-up—there is trash washed up on shoreline."

Issues Over the Next 10 Years

Respondents were asked their opinion regarding the major problems or issues that must be dealt with regarding TVA's management of Cherokee Reservoir and the adjacent watershed over the next 10 years. Many respondents expressed the following issues:

ù Water level
"Increasing lake levels with an extended full pool season."

ù Pollution and water quality
"Pollution of water and land will lead to loss of plant, animal, and marine life."

ù Over development
"Residential and commercial growth--industrial, shoreline, and recreational development need to be limited to the extent they adversely affect the natural resources of the area."

ù Erosion
"Do something to reduce bank erosion—erosion has removed necessary shoreline structure."

ù Regulation
"Do not disregard shoreline management—resist efforts to sell off land established for public use."

Preferred Features

Respondents were asked what features (man-made or natural) they want to see when looking at the land around this reservoir and watershed. Many respondents expressed that they wanted to see:

ù Natural scenery
"Leave in natural setting—clean water, wildlife, flowers, trees, unspoiled areas."

ù Facilities
"Need better quality public areas and private facilities (e.g., marinas, roads, fishing piers, campgrounds, picnic areas, restaurants, hotels, hiking/biking trails)."

ù Water level
"Need more stable water levels year-round to enhance the beauty of the lake and to decrease erosion."

ù Lack of development
"I prefer to see no man-made features—leave natural areas undeveloped."

Appendix I:
Cherokee Reservoir Questionnaire

WHAT DO YOU THINK ABOUT CHEROKEE RESERVOIR AND THE ADJACENT WATERSHED?

1. Have you used TVA public areas around Cherokee Reservoir within the past year?
   Yes_____ No_____
   If Yes, how many times in a year do you use or visit those public lands? _____

2a. Which of the following outdoor recreational activities do you participate in most?

2b. For any activities in which you participate, please check one of the following:

(Please check all that apply)	Prefer to use Cherokee Reservoir for this activity	Would use Cherokee Reservoir if proper facilities and opportunities were provided	Not interested in using Cherokee Reservoir for this activity
_____ Bike riding	☐	☐	☐
_____ Boat launching	☐	☐	☐
_____ Camping-not in a formal campground	☐	☐	☐
_____ Camping in a developed campground	☐	☐	☐
_____ Fishing—bank	☐	☐	☐
_____ Fishing—boat	☐	☐	☐
_____ Golfing	☐	☐	☐
_____ Hiking	☐	☐	☐
_____ Horseback riding	☐	☐	☐
_____ Jet skiing	☐	☐	☐
_____ Marina/boating	☐	☐	☐
_____ Off-road vehicles (ATV, Jeep, etc.)	☐	☐	☐
_____ Nature photography	☐	☐	☐
_____ Picnicking	☐	☐	☐
_____ Pleasure boating	☐	☐	☐
_____ Sailing	☐	☐	☐
_____ Skiing	☐	☐	☐
_____ Special event/festival/homecoming, etc.	☐	☐	☐
_____ Swimming - designated (beach park, etc.)	☐	☐	☐
_____ Swimming - informal areas	☐	☐	☐
_____ Other (please specify)	☐	☐	☐
_____	☐	☐	☐

3. If you observe or hunt wildlife on public land around Cherokee Reservoir, please check the wildlife species that you think TVA should consider when managing habitat. (Please check all that apply)

SPECIES	Hunt	Observe	SPECIES	Hunt	Observe
Deer	☐	☐	Squirrel	☐	☐
Dove	☐	☐	Turkey	☐	☐
Quail	☐	☐	Songbirds	☐	☐
Rabbit	☐	☐	Other non-game Species_____	☐	☐
Waterfowl	☐	☐	Other _____	☐	☐

4. TVA is interested in your preferences concerning the allocation of public land for specific uses. How do you feel about the amount of land already devoted to these specific uses?

Land Uses	Too much land	About right amount	Need more land	No Opinion
Residential areas (subdivisions, docks, other shoreline structures, etc.)	☐	☐	☐	☐
Commercial recreation areas (commercially operated marinas, resorts, campgrounds, etc.)	☐	☐	☐	☐
Industrial areas (barge terminals, ports, industrial parks, etc.)	☐	☐	☐	☐
Natural resource areas (forests, wildlife areas, etc.)	☐	☐	☐	☐
Other purposes (please specify)	☐	☐	☐	☐
_____	☐	☐	☐	☐
_____	☐	☐	☐	☐
_____	☐	☐	☐	☐
_____	☐	☐	☐	☐

5. Does Cherokee Reservoir need any (or more) of the facilities, areas, and/or services listed below? If so, what level of priority should TVA place on it? (Please respond to all categories.)

Facilities, Areas, Services	High Priority	Medium Priority	Low Priority	No TVA Involve-ment	No Opinion
Brochures and signs directing the public to natural areas	☐	☐	☐	☐	☐
Campgrounds full-service (electric, water, sewer, etc.)	☐	☐	☐	☐	☐
Camping primitive (no hookups)	☐	☐	☐	☐	☐
Commercial boat stack storage	☐	☐	☐	☐	☐
Hiking trails (dirt path)	☐	☐	☐	☐	☐
Industrial and economic development	☐	☐	☐	☐	☐
Informal recreation (hiking, biking, horse trails, etc.)	☐	☐	☐	☐	☐
Interpretive centers/museums	☐	☐	☐	☐	☐
Manage wildlife habitat (both for hunting and wildlife observation)	☐	☐	☐	☐	☐
Overnight lodging—cabins, cottages, resort lodge, etc.	☐	☐	☐	☐	☐
Paved hiking trails, signs, and observation towers	☐	☐	☐	☐	☐
Picnic pavilions/picnic areas	☐	☐	☐	☐	☐
Preserve natural areas/open space	☐	☐	☐	☐	☐
Protect cultural artifacts	☐	☐	☐	☐	☐
Protect endangered species	☐	☐	☐	☐	☐
Protect public land that has unique natural features	☐	☐	☐	☐	☐
Protecting historic sites	☐	☐	☐	☐	☐
Protecting wetlands	☐	☐	☐	☐	☐
Public fishing piers	☐	☐	☐	☐	☐
Public recreation areas (campground, parks, etc.)?	☐	☐	☐	☐	☐
Set aside ecological study areas for local schools or universities	☐	☐	☐	☐	☐
Shoreline erosion control	☐	☐	☐	☐	☐
Swimming beaches	☐	☐	☐	☐	☐
Theme parks (Dollywood or Disney type)	☐	☐	☐	☐	☐
Timber production	☐	☐	☐	☐	☐
Upscale amphitheater	☐	☐	☐	☐	☐
Water quality protection	☐	☐	☐	☐	☐
Year-round boat ramps with parking	☐	☐	☐	☐	☐

6. The map included with this questionnaire shows the land surrounding Cherokee Reservoir and the adjacent watershed. The watershed is divided into five areas called hydrologic units. TVA is actively working to enhance the water quality, wildlife habitat, citizen awareness and participation, and other water-related activities in each of these hydrologic units. For each unit, please check the box indicating the priority level each unit should receive.

Hydrologic Unit	High Priority	Medium Priority	Low Priority	No TVA Involve-ment	No Opinion
Unit 1	☐	☐	☐	☐	☐
Unit 2	☐	☐	☐	☐	☐
Unit 3	☐	☐	☐	☐	☐
Unit 4	☐	☐	☐	☐	☐
Unit 5	☐	☐	☐	☐	☐

7. For each Hydrologic unit, please explain why the priority level you indicated above is appropriate.

Unit 1_____

Unit 2_____

Unit 3_____

Unit 4_____

Unit 5_____

8. What do you value most about TVA land around Cherokee Reservoir?

_____

_____

_____

_____

_____

_____

_____

9. What in your opinion are significant watershed issues that need to be addressed?

_____

_____

_____

_____

10. Over the next 10 years what will be the major problems or issues that must be dealt with regarding TVA's management of Cherokee Reservoir and the adjacent watershed?

_____

_____

_____

_____

_____

_____

_____

11. What features (man-made or natural) do you want to see when looking at the land around this reservoir and watershed?

_____

_____

_____

_____

_____

_____

_____

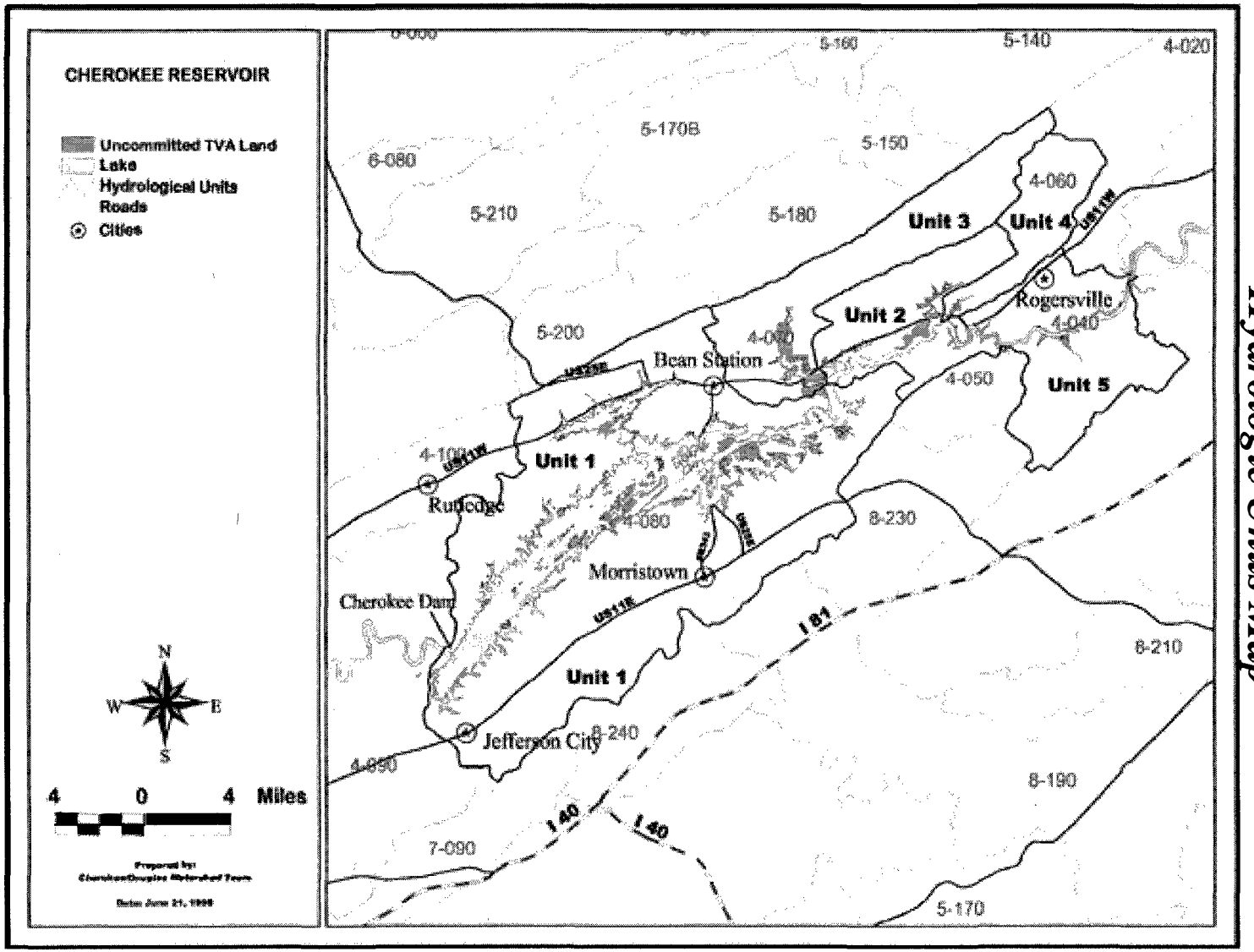
If you would like to be added to TVA's mailing list to receive more information about the Cherokee Reservoir Land Management Plan, the results of the survey and other related TVA watershed issues, please write in your name and complete mailing address.

NAME:_____

ADDRESS:_____

CITY:_____ STATE:_____ ZIP:_____

Appendix II:
Hydrologic Units Map



APPENDIX B-1 PLANNING TEAM MEMBERS

Spencer D. Boardman, Reservoir Lands Planning Specialist, Watershed Technical Services, Reservoir Lands Planning, Norris, Tennessee.

Stephen D. Cottrell, Regional Wildlife Biologist, Northeast Region, Norris, Tennessee.

Dennis T. Curtin, Program Administrator, Watershed Technical Services, TVA Regional Natural Heritage Project, Norris, Tennessee.

Stanford E. Davis, Regional Environmental Scientist, Northeast Region, Cherokee Reservoir Land Plan/EA Project Leader, Morristown, Tennessee.

Harold M. Draper, NEPA Specialist, NEPA Administration, Environmental Policy and Planning, Knoxville, Tennessee.

Frank B. Edmonson, Senior Land Use Specialist, Upper Holston Watershed Team, Kingsport, Tennessee.

Patricia Bernard Ezzell, Historian, Watershed Technical Services, TVA Cultural Resources, Norris, Tennessee.

Joe C. Feeman, Regional Forester, Northeast Region, Norris, Tennessee.

Susan B. Fuhr, Manager, Cherokee-Douglas Watershed Team, Morristown, Tennessee.

Ruth M. Horton, Planning Specialist, Watershed Technical Services, Reservoir Lands Planning, Norris, Tennessee.

George M. Humphrey, Land Use Specialist/Recreation Planner, Northeast Region, Norris, Tennessee.

Danny E. Olinger, Archaeologist, Watershed Technical Services, TVA Cultural Resources, Norris, Tennessee.

Laurie S. Pearl, Land Use Specialist, Cherokee-Douglas Watershed Team, Morristown, Tennessee.

George E. Peck, Aquatic Biologist, Watershed Technical Services, Norris, Tennessee.

Samuel C. Perry, Project Leader, Watershed Technical Services, Site Planning and Design, Norris, Tennessee (Retired).

Benjamin H. Peters, Land Use Specialist, Cherokee-Douglas Watershed Team, Morristown, Tennessee.

Barbara Stephenson, Land Use Specialist, Cherokee-Douglas Watershed Team, Morristown, Tennessee.

Karen C. Stewart, Land Use Specialist, Cherokee-Douglas Watershed Team, Morristown, Tennessee.

Charles R. Tichy, Historical Architect, Watershed Technical Services, TVA Cultural Resources, Norris, Tennessee.

Kenneth J. Wilson, Senior Computer Technician, Geographic Information and Engineering, Geographic Information Systems, Norris, Tennessee.

APPENDIX B-2 Proposed Allocation of Committed Lands on Cherokee Reservoir			
Parcel Number	**Allocation**	**Committed Uses on Parcel**	**Acres**
1	Zone 2 - Project Operations	Dam reservation, road, substation, telephone and transmission line rights-of-way easements	540.6
3	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	24.3
5	Zone 6 - Recreation	*Waterfowl refuge, easement/transferred lands to city of Jefferson City	3.4
6	Zone 4 - Natural Resource Conservation	Utility rights-of-way, adjoins lands transferred for waterfowl refuge	4.8
7	Zone 6 - Recreation	Licensed/transferred to TWRA for public recreation	0.8
12	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	0.2
13	Zone 6 - Recreation	Fronts Black Oak Boat Dock and supports existing heavy commercial recreation usage	0.6
15	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	1.5
16	Zone 6 - Recreation	Licensed/transferred to TWRA for public recreation	0.1
19	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	6.4
20	Zone 6 - Recreation	Licensed/transferred to TWRA for public recreation	0.1
22	Zone 6 - Recreation	Transferred for State Panther Creek State Park	226.6
26	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	6.7
27	Zone 6 - Recreation	Licensed/transferred to TWRA for public recreation	7.3
Part of the parcel 28	Zone 4 - Natural Resource Conservation	Licensed to Quail Unlimited (QU)	33.9
33	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	10.0
35	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	0.8
37	Zone 6 - Recreation	Licensed/transferred to TWRA for public recreation	0.6
39	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	2.0
40	Zone 6 - Recreation	Transferred to Hamblen County for Cherokee Park	21.6

APPENDIX B-2 Proposed Allocation of Committed Lands on Cherokee Reservoir			
Parcel Number	**Allocation**	**Committed Uses on Parcel**	**Acres**
41	Zone 6 - Recreation	Licensed/transferred to TWRA for public recreation	2.6
42	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	12.8
50	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	1.0
51	Zone 7 - Residential Access	Drainage and driveways and "grandfathered" docks and mowing	27.9
53	Zone 6 - Recreation	Licensed/transferred to TWRA for public recreation	0.4
54	Zone 6 - Recreation	Leased for Fall Creek Campground and Marina	140.1
Part of the parcel 57	Zone 3 - Sensitive Resource Management	Berry Island Ecological Study Area	13.5
60	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	4.0
62	Zone 7 - Residential Access	Ingress/egress rights and "grandfathered" docks	26.4
63	Zone 6 - Recreation	Licensed to Sequoyah Boy Scout Council	76.8
64	Zone 6 - Recreation	Road easement (bridge)	6.5
65	Zone 2 - Project Operations	Pump station	0.1
67	Zone 7 - Residential Access	Ingress/egress rights and "grandfathered" docks	1.6
Part of the parcel 68	Zone 4 - Natural Resource Conservation	Road, sewer, and distribution line rights-of-way easements	2.8
69	Zone 7 - Residential Access	Distribution line easement, Ingress/egress rights and "grandfathered" docks	27.4
70	Zone 6 - Recreation	Licensed/transferred to TWRA for public recreation	1.2
Part of the parcel 71	Zone 3 - Sensitive Resource Management	Distribution line rights-of-way easement	0.3
Part of the parcel 74	Zone 4 - Natural Resource Conservation	Driveway	0.1
75	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	3.7
77	Zone 6 - Recreation	Licensed/transferred to TWRA for public recreation	2.5
78	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	21.1

APPENDIX B-2 Proposed Allocation of Committed Lands on Cherokee Reservoir			
Parcel Number	**Allocation**	**Committed Uses on Parcel**	**Acres**
Part of the parcel 80	Zone 4 - Natural Resource Conservation	Road easement (fill)	1.2
81	Zone 7 - Residential Access	"Grandfathered" shoreline structures	0.4
82	Zone 6 - Recreation	Recreation, potable waterline, and substation easements	21.6
83	Zone 2- Project Operation	Transferred to Hawkins County	1.1
Part of the parcel 86	Zone 3 - Sensitive Resource Management	Distribution line rights-of-way easement	> 0.1
88	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	4.7
Part of the parcel 91	Zone 4 - Natural Resource Conservation	Road rights-of-way easement	> 0.1
92	Zone 6 - Recreation	Licensed/transferred to TWRA for public recreation	0.8
93	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	3.3
94	Zone 6 - Recreation	Licensed/transferred to TWRA for public recreation	5.6
Part of the parcel 96	Zone 4 - Natural Resource Conservation	Licensed to Quail Unlimited (QU)	11.3
98	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	2.0
100	Zone 6 - Recreation	Licensed/transferred to TWRA for public recreation	0.6
101	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	1.5
102	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	5.1
Part of the parcel 104	Zone 4 - Natural Resource Conservation	Distribution line rights-of-way easement	1.1
Part of the parcel 105	Zone 4 - Natural Resource Conservation	Road and waterline rights-of-way easements	34.7
Part of the parcel 106	Zone 4 - Natural Resource Conservation	**License of Grainger County ball field parking lot	1.6
107	Zone 6 - Recreation	Recreation easement for parking lot	10.1
108	Zone 6 - Recreation	Licensed/transferred to TWRA for public recreation	2.4
109	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	1.5
Part of the parcel 110	Zone 4 - Natural Resource Conservation	Rights-of-way easement for outfall	0.8

APPENDIX B-2 Proposed Allocation of Committed Lands on Cherokee Reservoir			
Parcel Number	**Allocation**	**Committed Uses on Parcel**	**Acres**
111	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	2.0
112	Zone 6 - Recreation	Licensed/transferred to TWRA for public recreation	0.7
114	Zone 6 - Recreation	Recreation easement for ball field and playground	3.2
115	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	0.2
117	Zone 7 - Residential Access	"Grandfathered" shoreline structures	3.6
Part of the parcel 118	Zone 4 - Natural Resource Conservation	License agreement - to TWRA for fish study	73.0
120	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	10.1
121	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	1.7
123	Zone 6 - Recreation	Licensed/transferred to TWRA for public recreation	1.3
124	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	5.0
127	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	7.7
130	Zone 6 - Recreation	Licensed/leased to TWRA for recreation - Twin Church Access Area	1.0
131	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	14.1
137	Zone 6 - Recreation	Licensed/transferred to TWRA for public recreation	1.1
139	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	4.5
140	Zone 6 - Recreation	Licensed/transferred to TWRA for public recreation	1.8
142	Zone 6 - Recreation	Recreation easement (campground)	7.1
143	Zone 7 - Residential Access	"Grandfathered" shoreline structures	16.1
145	Zone 6 - Recreation	Distribution line on public recreation easement	211.3
146	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	7.1
148	Zone 7 - Residential Access	Ingress/egress rights to back-lying landowners	6.5
149	Zone 6 - Recreation	Transferred to TWRA for public recreation	0.4
		Total Committed Acres	**1,756.2**

* Wildlife refuge extends onto Parcel 6 and totals 7.01 acres.

** Parking lot extends onto Parcel 107 and totals 6.80 acres.

GLOSSARY OF TERMS

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

agricultural licensing - Some parcels or portions of parcels designated for other purposes or uses may also be suitable for interim agricultural licensing. These parcels have been identified, using the criteria contained in TVA's agriculture instruction. Normal tenure for a TVA agricultural license is 5 years. Land with extreme erosion potential may not be licensed for agricultural use unless erosion and sediment controls, including the use of Best Management Practices, can be successfully implemented. Further investigation and/or mitigation of adverse impacts to natural or cultural resources may be required prior to approval of license agreements.

attainment areas - those areas of the United States that meet National Ambient Air Quality Standards as determined by measurements of air pollutant levels.

archaeological resource - an area with any grouping of five or more non-modern historic or prehistoric artifacts.

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

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 recreation opportunities, such as public boat access, bank fishing, camping, picnicking, etc.

deciduous trees - trees which shed their leaves at the end of the growing season.

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

dissolved oxygen - the oxygen dissolved in water, necessary to sustain aquatic life. It is usually measure in milligrams per liter or parts per million.

draw-down - area of reservoirs exposed between full summer pool and minimum winter pool levels during annual draw-down of the water level for flood control.

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

embayment - a bay or arm of the reservoir.

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

endangered species - any species in danger of extinction throughout all or a significant portion of its range or territory.

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 - non-TVA lakeshore properties where TVA has (1) the right to flood the land as part of its reservoir operations, (2) no rights for vegetation management, and (3) the authority to review plans for the construction of structures under Section 26a of the TVA Act.

Forecast System - process used for planning the use of TVA reservoir lands. TVA staff would provide a record of actual and prospective uses indicated for particular properties. A forecast record book was prepared for each TVA reservoir to serve as a general guide for use or development to benefit TVA staff interests and the local or regional economy. Decisions on the best use of the property were made, using internal agency expertise. The new land use planning process will eventually replace the Forecast system as the mechanism for identifying acceptable uses of TVA reservoir land. A major difference between the two methods is the involvement of the public in the planning process.

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

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 - an elevation typically 5 feet above the top of the gates of a TVA dam. It is often the property boundary between TVA marginal strip property and adjoining private property.

National Ambient Air Quality Standards - uniform, national air quality standards established by the Environmental Protection Agency that restrict ambient levels of certain pollutants to protect public health (primary standards) or public welfare (secondary standards). Standards have been set for ozone, carbon monoxide, particulates, sulfur dioxide, nitrogen, nitrogen dioxide, and lead.

National Environmental Policy Act (NEPA) - legislation signed into law in 1970 which, among other provisions, requires U.S. government agencies to prepare environmental reviews on proposed policies, procedures, plans, approvals, and other proposed federal actions. Approval of a private water-use facility or sale of an easement to use federal land are examples of federal actions subject to NEPA.

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.

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.

reservoir operations tracts - Prior to the reservoir lands planning process (1979), TVA made land-use decisions based on a Forecast System approach. The term *Reservoir Operations* was used to identify specific TVA land where the field district manager had been given the authority by the TVA Board of Directors to approve or deny minor shoreline alterations requested by adjacent private landowners. In cases where property owners had no rights of ingress or egress across TVA property but owned land adjacent to a Reservoir Operations tract, the agency could provide a letter permit, allowing the property owner the right to construct pre-approved private shoreline improvements. In most cases, TVA retained the right to request the removal of the improvements upon 30 days' written notice. If the property owner did not comply within the designated grace period, TVA could remove them at the owner's expense.

During TVA's formative years (1930s and 1940s) when public land was more abundant, the agency wanted to assist in providing recreation access to the reservoir wherever feasible. Reservoir Operation tracts provide this opportunity and are disbursed throughout the entire TVA Valleywide reservoir system. Some reservoirs had few, while others had large numbers of these tracts. Under the Forecast System, Reservoir Operation tracts and other land uses were selected by TVA staff with no formal public participation or external involvement.

Over the years, TVA has sold, transferred, or otherwise committed both large and small blocks of public land. Today TVA is at a point where the agency has only scattered remnants of land remaining for public use and other benefits. TVA's initial reservoir land base of 600,000 acres above normal pool elevation has been reduced Valleywide to less than 80,000 acres of uncommitted public land. Because of increased public pressure placed on TVA's shrinking land resources, the agency no longer recognizes Reservoir Operation tracts as a viable land use. In 1993, a policy decision was made that any undeveloped areas designated as Reservoir Operations would remain undeveloped.

All uncommitted TVA land, including Reservoir Operation tracts, are included as planned land under TVA's current reservoir land management planning process. There were 69 tracts around Cherokee formerly identified for Reservoir Operations. Collectively these tracts account for 1,461 acres of TVA public land on Cherokee Reservoir.

residential access - Prior to development of the Cherokee Reservoir plan, TVA permitted owners of private land which adjoined certain parcels of TVA land to construct and maintain facilities for private use. These facilities, some of which are boat docks, boat houses, picnic shelters, decks, walkways, sea walls, and landscaping, were only permitted under certain conditions and at certain locations. Consistent with this plan's objectives to determine the most suitable use for remaining public reservoir land, TVA will continue to consider such requests for private use only on selected parcels or portions of parcels where

such use was previously considered and where the proposed use will not conflict with the interests of the general public. The Alternative B map and parcel descriptions identify where TVA will consider requests for such improvements. On some parcels where such improvements have been permitted in the past, no new requests will be considered. Existing improvements which have not been formally approved by TVA will either be officially permitted (where the parcel descriptions indicate that additional requests will be considered) or will be dealt with as violations, as the parcels indicate. Consideration of future requests on tracts so identified in the plan will be handled on a case-by-case basis and will be reviewed by appropriate TVA staffs, specifically including—but not limited to—cultural resources, heritage, and navigation operations. Further investigation or mitigation of adverse impacts to natural or cultural resources may be required before approval of individual requests for private shoreline improvements.

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.

Section 26a review process - Section 26a of the TVA Act requires TVA review and approval of plans for obstructions such as docks, fills, bridges, outfalls, water intakes, and riprap before they are constructed across, in or along the Tennessee River and its tributaries. Applications for this approval are coordinated appropriately within TVA and USACE. USACE issues a joint public notice for those applications that are not covered by a USACE nationwide, general, or regional permit. The appropriate state water pollution control agency must also certify that the effluent from outfalls meets the applicable water quality standards.

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 normal summer pool elevation.

SMZ (Shoreline Management Zone) - a barrier of permanent vegetation established or left undisturbed around a reservoir in order to buffer the adverse impacts resulting from development and increased human activity.

significant cultural resources - Some of the tract descriptions state that "the tract contains significant cultural resources" or that "cultural resource considerations may affect development of the tract." However, many of the parcel descriptions contain no reference to archaeological or other cultural resources. The lack of such references within a tract description does not necessarily indicate that significant cultural resources do not exist. The use of any tract for developmental purposes may require additional archaeological testing or mitigation of adverse impact to archaeological sites. The costs of required testing or mitigation would be the responsibility of the developer.

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

substrates - the base or material to which a plant is attached and from which it receives nutrients.

summer pool elevation - the normal upper level to which the reservoirs may be filled. Where storage space is available above this level, additional filling may be made as needed for flood control.

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."