# Bear Creek Reservoirs Land Management Plan





## BEAR CREEK RESERVOIRS LAND MANAGEMENT PLAN

## RESOURCE STEWARDSHIP Bear Creek Watershed

Prepared by

**Tennessee Valley Authority Pickwick Watershed Team** 

**River System Operations and Environment - Resource Stewardship** 

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#### INTRODUCTION

The Bear Creek Reservoirs Land Management Plan (Plan) is the result of a study of the TVA-owned land surrounding the reservoirs. This *Introduction* provides background information about TVA land management throughout its 67-year history, explains the purpose of the Plan, and describes the process used to develop the Plan. The *Bear Creek Project Regional Overview* describes the natural and social development of the lakes and surrounding area. *Bear Creek Reservoirs Land Planning Goals and Objectives* list the objectives around which the Plan was developed. *Parcel Allocations* include a summary of the allocation process, zone definitions, and parcel descriptions documenting land management allocations. Allocation maps are stored in pockets inside the back cover 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.

Throughout its history, TVA has managed the public 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.

Today, TVA's land base Valleywide has been reduced to approximately 300,000 acres due to past conveyances of land. An increasing demand for and use of reservoir land sometimes results in conflicting and uneconomical land use patterns and friction between public and private use. 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 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). In addition, two special studies have been completed for Fort Loudoun Reservoir and the Muscle Shoals/Wilson Dam Reservations.

Planning for the 17 multipurpose tributary reservoirs began in 1997 using a streamlined planning process. Plans have been completed for Boone, Tims Ford, and Melton Hill Reservoirs.

#### **Purpose**

The purpose of this Plan is to help TVA managers make decisions relating to future use of land around the Bear Creek Reservoirs. 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.

TVA's Vision is **Generating Prosperity in the Valley**. This vision will be accomplished by TVA setting the standard for:

- Supplying low-cost reliable power Meet the changing needs of power distributors and directly served customers for energy products and services in changing markets.
- **Supporting a thriving river system** Minimize flood damage, maintain navigation, support power production, improve water quality, protect public health and the environment, and support recreational uses.
- Stimulating economic growth Provide services based on core expertise to solve regional problems, protect natural resources, create jobs, and build partnerships for public benefit.

TVA's integrated resource management approach focuses on balancing flood control, navigation, power generation, water quality, recreation, and land use needs to obtain the optimum benefits for the people of the region. Land planning supports TVA's corporate strategic goals by providing a framework for deciding the best use of TVA land toward continued implementation of the TVA mission.

This Plan will guide TVA resource management and property administration decisions on 9,178 acres of land around the Bear Creek Reservoirs that are under TVA stewardship and control. It identifies the most suitable uses for 171 parcels of TVA land, by providing areas for TVA project operations, sensitive resource management, natural resource conservation, industrial/commercial development, recreation, and residential access. The planned acreage is TVA fee-owned land and accounts for 284 miles of reservoir shoreline.

#### **Process**

Land planning is a systematic method of identifying and evaluating the most suitable use of the land. It uses resource data, computer analyses, and input from the public, other agencies, and TVA staff to allocate land to clearly defined zones (see Environmental Assessment for Bear Creek Reservoirs Land Management Plan,

Chapter 2, Table 2.2.2-1, Land Use Zone Definitions):

- Non-TVA Shoreland
- TVA Project Operations
- Sensitive Resource Management
- Natural Resource Conservation
- Industrial/Commercial Development
- Recreation
- Residential Access

TVA land management plans have a 10-year planning horizon. The Plan was developed by a team of land managers and technical experts who were knowledgeable about the reservoirs and their resources. A list of the planning team members is provided under the Parcel Allocations Section. The planning team made land use decisions by integrating facts about agency and public needs, environmental conditions, and economic benefits. The process includes:

- Identification of existing land rights. All "committed lands" (parcels with existing commitments through transfers, leases, licenses, contracts, and TVA projects) are automatically allocated to the designated use. 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 federal-mandated categories (i.e., sensitive resources such as wetlands, threatened and endangered species, and archeological/historical) on "uncommitted" land—e.g., land with no prior commitments, as defined above.
- Allocation of all land with identified sensitive resources (from existing and new data) to the Sensitive Resource Management Zone.
- Identification of issues and concerns about TVA reservoir land from the public and other local, state, and federal entities.
- Analyses of land capability and suitability by TVA resource managers based on rating/ranking of parcels for specific land uses.
- Initial allocation of uncommitted parcels by the TVA Land Planning Team based on public input and TVA land needs justification (capability rating/ranking analysis).
- Development of a draft Environmental Assessment (EA) and Plan based on proposed allocations.
- Internal and external review of the draft EA and Plan.
- EA/Plan revisions.
- Approval of draft Plan by TVA Board of Directors.

#### BEAR CREEK PROJECT REGIONAL OVERVIEW

Most of the Bear Creek Watershed lies within the Fall Line Hills district of the eastern Gulf Coastal Plain section of the Coastal Plains Province. However, the part of Little Cedar Creek which was inundated falls within the Little Mountain district of the Cumberland Plateau section of the Appalachian Plateaus Province. The terrain of the Bear Creek region is hilly, it has a temperate climate with hot summers and mild winters, and an abundance of flora and fauna.

#### The Past

It is believed that humans first occupied this land some 12,000 years ago. They lived in small, nomadic groups and subsisted upon the region's indigenous flora and fauna. Between 8000 B.C. and about 500 B.C., there are signs of increased population, more efficient use of natural resources, and trade with neighboring regions. By A.D. 500, settled village life had developed as evidenced by cultivated plants, houses, clay vessels, and burial mounds. By the time of Columbus, the Native Americans, through the horticulture of corn, beans, squash, and other cultigens had developed a social structure with town centers, domiciliary mounds, some fortified villages, an elite class, as well as smaller and scattered farmsteads.

The Bear Creek area and all of northwestern Alabama were claimed by Cherokee and Chickasaw Indians until 1816 when they ceded most of this area to the U.S. The greater part of Cedar Creek remained Chickasaw territory until 1836. Most of the area that is Franklin and Colbert Counties was organized by the Alabama Territorial Government as Franklin County in February 1818. At the same time, the land in the area went up for sale at the U.S. Land Office in Huntsville, Alabama. Initial land purchases and concomitant settlement were in the eastern and northern parts of the county.

By 1830, settlers clamored for more land and President Andrew Jackson and Congress responded by passing the Indian Removal Act. Although removal was not carried out until 1837, white settlers moved onto Chickasaw land, and in 1832, the Alabama Legislature extended the borders of Franklin County west to the Mississippi state line and north to the Tennessee River, at the same time extending Alabama authority to the Indian lands.

The exact origins of the settlers of the Bear Creek area are sketchy. However, Johnson, in his *A History of the Cedar Creek Area*, suggests that the residents of this area would have been similar to those of the Nauvoo postal district. Of 121 heads of households in Nauvoo, 39 percent were born in Alabama, 27 percent in one of the surrounding states, 31 percent in other southern states, and 3 percent elsewhere.

As the population grew in Franklin County, the number of settlements and towns increased as did the number of roads connecting the population centers. Tuscumbia was first settled by whites in 1815 at the site of a Cherokee Indian village destroyed by General James Robertson in 1787. The General Assembly of Alabama incorporated the town as Ococoposa in 1820. Eventually the town changed its name to Tuscumbia after Chief Taski Ambi who sold the land at the time of settlement. Tuscumbia had the first railroad west of the Allegheny Mountains, chartered in 1830 and built in 1831 to run 2 miles to the Tennessee River. Due to its size, wealth, and river and railroad access, Tuscumbia became the most prominent town in the county.

While Tuscumbia's economy diversified in the 1830s and 1840s, subsistence farming remained the primary economic activity for most of the Bear Creek region. Local industry did develop to serve the limited local market. For example, horse-powered saw and grist mills, blacksmiths, and an iron furnace, the earliest in Alabama, located in the Bear Creek area, and merchants brought manufactured goods with them as they settled in the region.

Other changes were occurring between the northern part and southern part of the county. Beginning in the 1850s, small farms in the northern part of the county were displaced by large plantations that used slave labor. This trend did not follow in the southern portion of Franklin County.

Franklin County did not favor outright secession at the Alabama Secession Convention in 1861, but when events at Fort Sumter brought war, the county offered up at least 17 companies of Union and Confederate infantry and cavalry. The issues leading to war had demonstrated that a division in sentiment existed between the small, rural landowners producing their own subsistence in the hilly southern part of Franklin County and the large plantation owners and educated, urban dwellers of the northern part of Franklin. Slave holders gave greater importance to the economic issue of slavery relative to the patriotic issue of preservation of the Union, while the latter was of greater importance to the people in the hills. The situation was similar across Alabama.

Divisions in Franklin County were exacerbated by the Confederate draft which was seen by many in the hill country as a violation of their personal liberties. As the war continued and increasing numbers of unwilling soldiers were drafted into the Confederate Army, the desertion rate rose. The hill country soon became a haven for Confederate deserters, and these "Tories," along with Union sympathizers, soon developed a strong presence in the hill country of northwest Alabama. In fact, the violence and destruction experienced in the Bear Creek area during the Civil War resulted from the beliefs and actions of the inhabitants of the region rather than the clash of military forces. In fact, there was no pitched battle in the Bear Creek area, but part of Franklin County was occupied by Union troops from April 1862 until April 1865.

Reconstruction for Cedar Creek, as in the rest of the South, was more than simply rebuilding life as it had been before the war. After the Civil War, the schism between the northern and southern parts of Franklin County became critical, largely because of the war. In January 1870 in a county referendum, the voters approved a legislative act making the northern part of the county into Colbert County with Tuscumbia as its seat. This left Franklin County poorer in population and resources. It was cut off from rail and river transportation and the potential for growth, arising from these facilities. Belgreen was incorporated in 1879 and served as the county seat until the courthouse burned in 1890. In 1891 Russellville became the county seat. It was also during this period that Franklin County became a center of populism and agrarian radicalism, possibly a backlash against the politics of neighboring Colbert County.

The industrial development that occurred in Franklin County during this period was more regional in orientation than prior to the Civil War. Textile, yarn, and rope manufacturing mills operated at various times in both the nineteenth and twentieth centuries, but not continuously and usually not for long. Lumbering and wood products were a fairly steady and important source of revenue in the county. Brick, tile, and pottery were produced on a small scale around the county, making use of local clay deposits. Limestone quarrying and finishing went on between 1880 and 1940. Mining for iron ore on a large scale began in 1887 with furnaces in Sheffield utilizing resources sent there by rail from Russellville. In the twentieth century, these raw materials became the base of Birmingham's massive steel mills.

Transportation, mining, and manufacturing in the Bear Creek region provided some nonagricultural employment for the rural population, but it was not reliable. Most ventures were short lived. Basically, agriculture remained the dominant way of life in the Bear Creek area with most of the farms being family owned and operated.

Two trends in Franklin County, the decline of agriculture and the decrease in isolation, combined with the impact of rural electrification to finally effect the modernization of the Bear Creek area. Johnson assembled Franklin County statistics, which indicated there were 1,648 tenant farmers in 1940, but he states that "by 1960 tenant farming had practically disappeared." The rural population declined between 1940 and 1970 as did the number of workers employed in agriculture. The reason for this decline was that farming in the Bear Creek area as a means of producing income was not as lucrative as other employment available in urban parts of Franklin or surrounding counties. Also, improved roads made it possible for residents to work in regional cities.

The traditional isolation of the Bear Creek area fell away with the arrival of several technological advancements such as the automobile, the radio, and rural electrification. The greater contact with the outside world and the greater dependence on cash income from nonagricultural employment de-emphasized self-sufficiency and the homecentered way of life. Nonetheless, some of the early heritage still remained. Nineteenth-century buildings and other constructions such as split-rail fences still enhanced the cultural landscape. The natural environment was appreciated, and the

woods and open spaces separated dwellings. Hunting and fishing were highly regarded recreational activities. Most of all, a strong sense of independence and individualism remained, complemented by a strong sense of identity with the local community.

#### The Project

The system of dams and reservoirs on the Tennessee River were part of a bold plan for the unified development of the Tennessee River system recommended to Congress by TVA in 1936. The proposed system would include nine main-river, multipurpose dams and three or more tributary, storage dams. In the late 1950s and early 1960s, TVA began an initiative to duplicate benefits that had occurred on the mainstream Tennessee River to its tributaries. This initiative developed from a broad base of support within TVA. Many TVA programs began working with groups of citizens in the tributary areas to help plan and implement projects in fields such as education, agriculture, forestry, and community and economic development. In 1961, it established the Office of Tributary Area Development to coordinate the activities of TVA program divisions in cooperating with other public agencies and with representative citizen groups active in furthering resource development in tributary areas. Many brainstorming and planning sessions with large groups of citizens were held to determine the best resource development activities possible. The most evident results of these planning sessions are the existing tributary dams and reservoirs. These were planned for flood control, water supply, recreation, and economic development.

The Bear Creek Project consists of four dams and reservoirs (Bear, Upper Bear, Little Bear, and Cedar), a 9-mile floodway along an 18-mile stretch below Bear Creek Dam, and a 26-mile recreational floatway below Upper Bear Dam. The reservoirs have a combined surface area of 8,300 acres and a shoreline length of approximately 284 miles. Flood control features of the project substantially reduce flooding on about 15,000 acres of farmland. The project provides other benefits by adding controlled flood storage to the Tennessee, lower Ohio, and lower Mississippi Rivers.

Generally, land was acquired above the maximum pool elevations to prevent severance damage, to avoid leaving in private ownership land which would be without access, and to assure effective development and use of the shoreline.

#### Bear Creek Dam and Reservoir

Construction began in 1967, and it was placed in operation in 1969. The dam is located at Bear Creek Mile (BCM) 74.6 in Franklin County, Alabama, 30 miles southwest of Sheffield and 10 miles southeast of Red Bay. It is earthfill construction with County Road B-25 across the top. The reservoir lies partly within Franklin and Marion Counties. Length of the reservoir is 12 miles with a shoreline length of 52 miles. The spillway crest is at elevation 602; top of dam 616; normal summer pool 576; and minimum pool 565. The reservoir covers 670 acres at elevation 576 with a volume of 9,600 acre-feet. At elevation 602, it covers 1,870 acres with volume of

41,300 acre-feet. The projected benefits of the reservoir were flood control, water supply, recreation, and environmental education.

#### Cedar Creek Dam and Reservoir

The dam is located at Cedar Creek Mile (CCM) 23.1 in Franklin County, Alabama, 22 miles southwest of Sheffield and 14 miles west of Russellville. It is earthfill capped with crushed limestone to serve as a service roadway across the top. The spillway crest is elevation 584; top of dam elevation 596; normal summer level 580; and minimum pool at elevation 566. Projected benefits of this reservoir included flood control, recreation, and shoreline development. The reservoir lies entirely within Franklin County. It is approximately 9 miles long at the normal summer pool. It covers 4,200 acres and has a volume of 93,940 acre-feet at summer pool. Total shoreline length is approximately 83 miles.

#### Upper Bear Creek Dam and Reservoir

The dam is located on BCM 114.7 in Marion County, Alabama, approximately 5 miles northwest of Haleyville and 16 miles southwest of Russellville. Counties affected by the reservoir are Franklin, Marion, and Winston. The spillway crest elevation is 799; top of dam 809; normal summer level 797; and minimum pool is elevation 787. The reservoir length at elevation 797 is 14 miles (two arms each of 7 miles). The length of the shoreline is approximately 105 miles. The reservoir covers 1,850 acres at elevation 797, with a volume of 37,400 acre-feet. Estimated benefits of Upper Bear included flood control, water supply, recreation, and shoreline development.

#### Little Bear Creek Dam and Reservoir

Little Bear Dam is located on Little Bear Creek at BCM 11.6 in Franklin County, Alabama. It is approximately 27 miles southwest of Sheffield and 15 miles west of Russellville. The reservoir lies entirely within Franklin County. It is approximately 6 miles long at summer pool. The length of the shoreline is approximately 45 miles. The spillway crest is at elevation 623; top of dam is 637; normal summer level 620; and minimum pool 608. This is an earthfill dam with County Road 88 across the top. Estimated benefits of Little Bear included flood control, water supply, recreation, and shoreline development.

Late in 1961, the residents of one Mississippi and four Alabama counties formed the Bear Creek Watershed Association (BCWA) for the purpose of fostering the development of the water resources of the area. Flood control, abundant and dependable water supply, and recreation were the benefits foreseen. This agency contacted TVA and initiated a cooperative development project. The Alabama Legislature and the state's voters created an agency, the Bear Creek Development Authority (BCDA), to work with TVA. TVA was to build, operate, and maintain the Bear Creek water control system, which consisted of four dams on the primary streams in the watershed. BCDA was to own, manage, and regulate all development of the lakefront lands resulting from the four dams TVA would build. Two dams were built on the upper part of Bear Creek, and a third was built on Little Bear Creek during the

1970s. The last and largest dam TVA built in the Bear Creek watershed was on Cedar Creek. It was begun in April 1976, and the gates were closed in February 1979.

#### **The Present Shoreland**

Today, there are approximately 9,178 acres of Bear Creek Lakes shoreland on which TVA can plan future uses. This includes about 284 miles of shoreline.

The lands surrounding the lakes are mostly rural and undeveloped. The predominant developed features along the lakes are the developed recreation areas. The four lakes include 16 developed public recreation areas. These areas include facilities for boat launching, camping, picnicking, swimming, concession sales, and playground areas. In addition to the lake recreation areas, there are five floatway access areas located between Upper Bear Dam and the upper reaches of Big Bear Reservoir. The Bear Creek Environmental Education Center (BCEEC) is located on Bear Creek Reservoir. These areas are generally a blend of TVA shoreline land and BCDA back-lying land. Tourism, generated by recreation visits to the Bear Creek Lakes, is a significant contributor to the area's economy.

The lakes have been a major contributor to the area's demand for water supply through the Upper Bear water treatment facility. This facility provides water to parts of Franklin, Marion, and Winston Counties. Late in 1999, the city of Russellville extended a pipeline from Lake Elliott, the city's major water supply reservoir, to Cedar Creek Reservoir. This facility will be used to pump water to Lake Elliott to supplement that reservoir. This connection was intended as a temporary solution to prolonged drought conditions in the area, while a permanent location on Cedar Creek Reservoir is approved. The Franklin County Water Service Authority is currently planning to develop water treatment facilities on a site adjacent to Little Bear Dam while Bear Creek Reservoir is under consideration as an alternative source. There are no other commercial or industrial facilities located on the Bear Creek Lakes.

Currently located on TVA fee-owned land are 20 licenses for agricultural use. The licenses represent approximately 315 acres. The current agricultural uses include pasture and hay crop uses. TVA is working with the individual license-holders to implement buffer zones and best management practices around the reservoirs.

A growing portion of the land around the lakes is residential land. Under BCDA's shoreline management program, approximately 185 private water-use facility permits were issued for private docks. In the transition period, between BCDA's management and the development of this land plan, TVA has honored the BCDA permits. Two types of residential access currently exist on the Bear Creek Lakes: 1) deeded residential access across TVA lands that occur in BCDA-developed subdivisions and 2) access rights that are licensed to property owners with existing BCDA-permitted water-use facilities in non-BCDA subdivisions.

#### The Future

Current issues help provide insight into the pressures that will bear on the Bear Creek Project in the future. Long-term shifts in the regional economy, social trends, and broad shifts in recreational behavior, along with current and anticipated environmental issues, combine to frame a picture of the challenges ahead and what it will take to protect places like the Bear Creek Reservoirs.

The population of Franklin County has increased 16 percent since 1970. Marion and Winston Counties have similarly increased in population. Franklin's population is projected to increase by at least 9 percent over the next 10 years, according to low-growth projections. Other estimates place the growth at over 30 percent. Much of the growth will occur in the population centers of Russellville, Phil Campbell, Red Bay, and Haleyville; however, the rural areas are also expected to increase in population. Primary growth corridors will occur along Highway 24 between Russellville and Red Bay and Highway 43/13 between Russellville and Haleyville. This increased population will exert increased pressure for lakefront lots.

The Bear Creek Lakes are a significant public recreation and tourism resource for the three counties. They support a great variety of activities, including fishing, boating, hiking, camping, hunting, and wildlife viewing. BCDA has developed a loyal following to its developed campgrounds and day use areas. Visitors from several states, as well as the north Alabama region, return each year. Respondents to the 1999 survey and public meeting regarding this plan indicated that the primary uses of the lakes were fishing, boating, swimming, and picnicking. Many others enjoyed the natural beauty of the lakes. With increased population pressures, the quality of these types of experiences will be impacted. Only with cooperation between public and private sectors will the quality of nature-based outdoor recreation opportunities be sustained.

A key issue affecting the Bear Creek watershed will be the future availability of a reliable supply of clean water in the provision of water service to residents and industry. Possible contamination of groundwater supplies and the need for fire protection are the primary reasons that public water service is desirable in all locations. As the drought periods in 1999 and 2000 have shown, Lake Elliott cannot accommodate the future water needs of Franklin County. The recently installed pumping facility at Cedar Creek is expected to be only a temporary solution to the long term problem. The city of Russellville has applied for a permanent intake structure on Cedar. The Franklin County Water Service Authority is preparing plans for development of a new water treatment facility on Little Bear Reservoir with Bear Creek Reservoir an alternate location. Protection of the water quality in the Bear Creek Reservoirs will become increasingly important.

Environmental quality issues will become increasingly important as population and demands on the environment increase. The Bear Creek watershed supports a wide

variety of native plants, animals, birds, and insects. The unique streams, bluffs, rock shelters and wetlands create a variety of habitat types that support many species. Riparian zones—strips of land bordering water bodies—are characterized by many different native species often occurring in dense populations. Poor land use practices near the water and reductions in wetland areas can threaten both this diversity of species and water quality. Land management or human activities adjacent to streams 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.

The Bear Creek Reservoirs are a unique resource that can be enjoyed by many future generations. However, for them to be enjoyed in the future, they must be able to accommodate increased demands that are placed upon them, or some of the demands must be curtailed. How the Bear Creek Reservoirs can best accommodate these increased demands will depend upon the actions of government, business and civic leaders within the region, those who come to enjoy the Bear Creek Lakes for whatever purpose, and those who own the land on or near their shoreline.

# BEAR CREEK RESERVOIRS LAND PLANNING GOALS AND OBJECTIVES

As previously stated, TVA's vision is **Generating Prosperity in the Valley**. This vision will be accomplished by TVA setting the standard for:

- Supplying low-cost reliable power: Meet the changing needs of power distributors and directly served customers for energy products and services in changing markets.
- **Supporting a thriving river system:** Minimize flood damage, maintain navigation, support power production, improve water quality, protect public health and the environment, and support recreational uses.
- **Stimulating economic growth:** Provide services based on core expertise to solve regional problems, protect natural resources, create jobs, and build partnerships for public benefit.

Land plans support TVA's mission to manage a thriving river system and stimulate economic growth. The plans seek to integrate resource management goals, provide for optimum public benefit, and balance competing resource uses.

The goals for each type of land use are as follows:

- **TVA Projects Goal:** Maintain TVA facilities for flood control, navigation, power production/transmission, recreation, and water quality.
- Watershed Management Goal: Manage TVA public lands to support TVA's efforts to maintain and improve water quality conditions and create sustainable watersheds.
- Resource Management Goal: Manage TVA public land for the enhancement of
  natural resources for wildlife habitat, for human appreciation and use, and to
  protect sensitive resources, such as significant archaeological sites, endangered
  species, and wetlands.
- **Economic Development Goal:** Complement the region's economic development activities and promote sustainable communities/watersheds.
- **Recreational Goal:** Meet public needs for recreation activities.
- Residential Access Goal: Promote small corridor access, well-vegetated shorelines, and other attributes consistent with the TVA Shoreline Management Policy which protects shoreline and aquatic resources, while providing reasonable access to water.

Land planning objectives for the Bear Creek Reservoirs were developed by the Pickwick Watershed Team, using lake user and TVA staff input received during the scoping process. *Scoping* is the issue-gathering phase of the environmental review process. The following objectives were used to allocate TVA land on the Bear Creek

Reservoirs. They reflect the public's interest in the Bear Creek Reservoirs and TVA's desire to manage TVA land on the Bear Creek Reservoirs in the public's best interest. These objectives are consistent with TVA's mission and its land planning goals.

# 1. Consider impacts on water quality as a result of the Bear Creek land allocations.

Water quality was the highest-ranking concern of respondents during the public meeting held during the public scoping process. Additionally, boating, fishing, swimming, and water sports were the highest-ranked uses of the four lakes. Maintenance and growth of these uses are heavily dependent upon good water quality in the lakes. While the land allocations did not specifically allocate lands for water quality concerns, water quality would benefit from the Bear Creek Reservoirs Land Management Plan allocations. The Plan allocates 130 of the 171 parcels, containing 7,456 acres, to both Sensitive Resource Management and Natural Resource Conservation Zones. This represents 81 percent of the land on the Bear Creek Reservoirs.

In some cases, these lands are large parcels, and in others, they are only narrow strips between back-lying residential or agricultural uses. These strips provide a buffer for the reservoir from runoff and pollution associated with activities on back-lying land. The Pickwick Watershed Team is actively working with other agencies and concerned citizens and organizations to identify water quality problems within the watershed and to develop effective solutions.

# 2. Recommend allocations that are compatible with obligations under the TVA Act and other federal laws and presidential orders (i.e., protecting sensitive resources on TVA land).

In making allocations, TVA paid particular attention to threatened and endangered species, cultural resources, wetlands, unique habitats, natural areas and distinctive visual resources. During the public scoping process, respondents indicated they value the natural beauty of the lakes. The Plan identifies 101 parcels containing 6,929 acres of land with cultural, wetlands, significant natural areas, resources, habitat protection areas, and distinctive visual resources. To protect the sensitive resources, all of these parcels of land are allocated to the Sensitive Resource Management Zone. These parcels may be used for other purposes such as informal recreation opportunities and natural resource conservation activities; however, protection of the sensitive resource would be the primary management criteria when considering other compatible land uses for the parcel.

Each parcel has been reviewed to ensure the recommended allocations are consistent with TVA's obligations under the National Historic Preservation Act (NHPA), Archaeological Resources Protection Act (ARPA), Wetlands Protection and Floodplain Management Executive Orders and the Endangered Species List. There

were some new sensitive resources identified on areas with existing residential wateruse facilities. In these cases, future requests for water-use facilities or other landdisturbing activities must first be carefully evaluated to avoid adverse impacts.

# 3. Continue the successful partnership with the BCDA in achieving the original legislative goals of integrated resource management.

We will continue to work together and partner with BCDA to achieve the original benefits of the Bear Creek Project as envisioned prior to acquisition and construction. The developed recreation areas represent a blend of both TVA and BCDA land. We will continue to work with BCDA to prioritize types, location, and quantity of developed recreation facilities that will be provided on the lakes. The BCDA headquarters and maintenance base are located on the Little Bear Dam Reservation. We will continue to work with BCDA to achieve the original goal of economic benefits to the watershed through their Area Development Program. This includes assisting the development of water supply and distribution systems in the watershed. New initiatives that include BCDA are watershed improvements on the reservoir such as the shoreline protection activities on all four reservoirs and a fisheries improvement program beginning on Little Bear.

#### 4. Ensure public access for recreational activities.

During the scoping process, respondents concerning all four reservoirs felt more land was needed for informal recreation areas than any other preference. This category includes hiking trails, bike trails, and primitive camping. The Plan allocates 527 acres or 6 percent of the project land to the Natural Resource Conservation Zone, which includes informal recreation as a component and compatible use. The Plan allocates 6,929 acres or almost 76 percent of the land to Sensitive Resource Management Zone which includes activities such as hunting and camping although the overriding focus is protecting and enhancing the sensitive resources the site supports.

An average of over 30 percent of the respondents on all four lakes indicated that more land was needed for developed recreation areas. This includes marinas, resorts, and campgrounds. The Plan recognizes the existing BCDA-operated recreation areas. Each of the developed areas contains additional land for future expansion. It is expected that the expansion of these areas can accommodate future growth. One new parcel was zoned Recreation on each of Cedar and Little Bear Lakes to accommodate community docks or marina facilities.

Many comments received during the public scoping period concerned stable lake levels. TVA will continue to make special releases during the summer for canoeing on the Bear Creek Floatway. Changes were implemented during 1999 and 2000 to have less total water released from Upper Bear while maintaining the normal canoeing schedule.

# 5. Maintain residential development in areas that are currently available for access.

There are two types of residential development on the Bear Creek Reservoirs (there is no residential development on Big Bear Reservoir): 1) two BCDA-developed subdivisions with existing land rights allowing water-use facilities; 2) residential developments that adjoin project lands that do not have deeded land rights. In these areas, BCDA previously permitted water-use facilities. Most of these areas are scattered along the shoreline and are not concentrated in subdivisions.

The draft Plan allocated six undeveloped parcels fronting BCDA land retained for future residential development. The BCDA Board of Directors requested that the draft Plan be changed to show these areas in Zone 4, Natural Resource Conservation, with the option to change the allocation should the BCDA board decide in the future to develop additional residential property. In order to meet this request, the team decided to change three parcels to Zone 4, while keeping three remaining parcels in Zone 7 to preserve their options for future development, subject to applicable reviews and approval. It is the intent that all parcels in Zone 4 that front BCDA can be considered for reallocation to Zone 7, Residential Access, subject to applicable reviews and approvals.

The Plan allocates 11 additional parcels for residential access that are not fronting BCDA. These 11 parcels contain clusters of water-use facilities that have BCDA-permitted facilities but no deeded land rights. The total land allocated to Zone 7, Residential Access, is 241.3 acres and 13.2 shoreline miles. This contains 5 percent of the total shoreline miles and 3 percent of the total acres. The totals for Little Bear are 2.5 shoreline miles and 48 acres; Cedar Creek, 7.0 shoreline miles and 144 acres; and Upper Bear, 3.7 shoreline miles and 49 acres.

Water-use facilities previously approved by BCDA in zones other than Zone 7, Residential Access, have been grandfathered upon acquisition of proper land rights from TVA through land use licenses.

#### PARCEL ALLOCATIONS

#### **Allocation Team Participants**

The Bear Creek Reservoirs Land Allocation Meeting was held at the BCEEC on October 25-26, 1999. Participants included:

Don Allsbrooks - Resource Stewardship, Natural Resources
Judith Bartlow - Resource Stewardship, Biologist
Spencer Boardman - Resource Stewardship, Planning
Harold M. Draper - Environmental Policy and Planning, NEPA Administration
Nancy Greer - Project Leader, Guntersville Watershed Plan
T. Hill Henry - Resource Stewardship, Heritage
Eric Howard - Resource Stewardship, Cultural
Carolyn J. Hunt - Resource Stewardship, Pickwick Watershed Team
Danny Johnson - Resource Stewardship, Pickwick Watershed Team
Larry W. McDonald - Resource Stewardship, Pickwick Watershed Team
George Peck - Resource Stewardship, Watershed Technical Services
Sam Perry - Resource Stewardship, Visual
Richard Pflueger - Project Leader, Bear Creek Project Watershed Plan
Jim Shedd - Resource Stewardship, Pickwick Watershed Team

#### **Allocation Process**

During the allocation meeting, the characteristics of each parcel (i.e., location and existing conditions) were discussed. As explained in the introduction to this Plan, the allocation team honored all existing commitments—that is existing leases, licenses, and easements. Land with identified sensitive resources was placed in the Sensitive Resource Management Zone. The remaining parcels were allocated based on reservoir planning objectives and TVA-requested land uses, which were developed with public input. Decisions were made by consensus.

During the allocation meeting, the planning team allocated the TVA land to one of seven planning zones defined in Table 1. Land use allocations for the Bear Creek Reservoirs Land Management Plan are shown in Table 2.

Та	Table 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 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—e.g., privately or publicly owned land where TVA has purchased the right to flood and/or limit structures. Flowage easement land is generally purchased to a contour elevation. Since this land is subject to TVA's Section 26a permitting requirements, the Shoreline Management Policy (SMP) guidelines discussed in the definition of Zone 7 would apply to flowage easement fronting private residential development.		
		<ul> <li>Privately owned reservoir land—Including, but not limited to, residential, industrial/commercial, or agricultural.</li> </ul>		
2	TVA Project Operations	All TVA reservoir land currently used for TVA operations and public works projects includes:		
		<ul> <li>Land adjacent to established navigation operations—Locks, lock operations and maintenance facilities, and the navigation work boat dock and bases.</li> </ul>		
		<ul> <li>Land used for TVA power projects operations—Generation facilities, switchyards, and transmission facilities and rights-of-way.</li> </ul>		
		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 dayboards 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 (EO) and other land features/natural resources TVA considers important to the area viewscape or natural environment. Natural resource activities such as hunting, wildlife observation, and camping on undeveloped sites may occur in this zone, but the overriding focuses are protecting and enhancing the sensitive resource the site supports. Areas included are:		
		TVA-designated sites with potentially significant archeological		

Та	Table 1. Planned Land Use Zone Definitions			
	Zone	Definition		
		resources.		
		TVA lands with sites/structures listed on or eligible for listing on the National Register of Historic Places (NRHP).		
		Wetlands—Aquatic bed, emergent (EM), forested (FO), and scrub-shrub (SS) wetlands as defined by TVA.		
		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.		
		TVA Natural Area-Habitat Protection Areas—These Natural Areas are managed 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.		
	TVA Natural Area-Ecological Study Areas—These Natural Area designated as suitable for ecological research and environmeducation by a recognized authority or agency. They typically coplant or animal populations of scientific interest or are of interest educational institution that would utilize the area.			
		TVA Natural Area-Small Wild Areas—These Natural Areas are 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 streambanks 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, uncommon plant and animal communities, 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, resource management, wildlife observation, and camping on undeveloped sites.		

	Table 1. Planned Land Use Zone Definitions				
Zone	Definition				
	Areas included are:				
	<ul> <li>TVA land under easement, lease, or license to other agencies for wildlife or forest management purposes.</li> </ul>				
	<ul> <li>TVA land fronting land owned by other agencies for wildlife or resource management purposes.</li> </ul>				
	TVA land managed for wildlife or forest management projects.				
	<ul> <li>Informal recreation areas maintained for passive, dispersed recreation activities such as hunting, hiking, bird watching, photography, primitive camping, bank fishing, and picnicking.</li> </ul>				
	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 qualities.				
	TVA Natural Area-Wildlife Observation Areas—TVA Natural Areas with unique concentrations of easily observed wildlife that are managed as public wildlife observation areas.				
	<ul> <li>River Corridor without sensitive resources present—A River Corridor is a linear green space along both streambanks 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).</li> </ul>				
	Islands of 10 acres or less.				
	Land planned for any of the above uses in the future.				
5 Industria	Land managed for economic development purposes. Areas included are:				
Commerc Developm	▲   IVA land linder easement lease or license to other				
	<ul> <li>TVA land fronting land owned by other agencies/individuals for industrial or commercial purposes.</li> </ul>				
	Sites planned for future industrial use.				
	Types of development that can occur on this land are:				
	<ul> <li>Business parks—TVA waterfront land which supports industrial or commercial development.</li> </ul>				
	<ul> <li>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.</li> </ul>				
	<ul> <li>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.</li> </ul>				
	Fleeting areas—Sites used by the towing industry to switch barges between tows or barge terminals which have both off-shore and				

Ta	Table 1. Planned Land Use Zone Definitions			
	Zone	Definition		
		<ul> <li>on-shore facilities.</li> <li>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.</li> <li>(Commercial recreation uses, such as marinas and campgrounds, are included in Zone 6.)</li> </ul>		
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.		
		<ul> <li>TVA land fronting land owned by other agencies/individuals for recreational purposes.</li> <li>TVA land developed for recreational purposes such as campgrounds, day use areas, etc.</li> <li>Land planned for any of the above uses in the future.</li> <li>Types of development that can occur on this land are:</li> <li>Commercial recreation, e.g., marinas, boat docks, resorts, campgrounds, and golf courses.</li> <li>Public recreation, e.g., local, state and federal parks, and recreation areas.</li> <li>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.</li> <li>Water access sites, e.g., boat ramps, courtesy piers, canoe access, fishing piers, vehicle parking areas, picnic areas, trails, toilet facilities, and information kiosks.</li> </ul>		
7	Residential Access	TVA-owned 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 federal-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 is needed; and		

Table 1. Planned Land Use Zone Definitions			
Zone	Definition		
	(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-owned residential access shoreland.		
	Conservation easements for protection of the shoreline.		
	<ul> <li>Other activities, e.g., fill, excavation, grading, etc.</li> <li>Docks and other shoreline developments are not permitted on land categorized as Shoreline Protection.</li> </ul>		

# Table 2. Land Use Allocations for the Bear Creek Reservoirs Land Management Plan

## BEAR CREEK

Parcel	Land Use Zone	Acres
1	Zone 2, Project Operations	170.4
2	Zone 6, Recreation	67.2
3	Zone 3, Sensitive Resource Management	225.0
4	Zone 6, Recreation	100.2
5	Zone 3, Sensitive Resource Management	1,177.0
6	Zone 6, Recreation	68.8
7	Zone 3, Sensitive Resource Management	486.9

### CEDAR CREEK

Parcel	Land Use Zone	Acres
1	Zone 2, Project Operations	277.6
2	Zone 3, Sensitive Resource Management	83.4
3	Zone 3, Sensitive Resource Management	121.9
4	Zone 4, Natural Resource Conservation	54.2
5	Zone 3, Sensitive Resource Management	48.9
6	Zone 3, Sensitive Resource Management	48.1
7	Zone 3, Sensitive Resource Management	10.2
8	Zone 7, Residential Access	6.0
9	Zone 3, Sensitive Resource Management	46.4
10	Zone 7, Residential Access	7.5
11	Zone 6, Recreation	8.7
12	Zone 3, Sensitive Resource Management	52.1
13	Zone 4, Natural Resource Conservation	22.9
14	Zone 3, Sensitive Resource Management	34.8
15	Zone 3, Sensitive Resource Management	3.8
16	Zone 3, Sensitive Resource Management	8.1
17	Zone 7, Residential Access	32.0
18	Zone 3, Sensitive Resource Management	35.1
19	Zone 4, Natural Resource Conservation	18.4

20	Zone 3, Sensitive Resource Management	65.3
21	Zone 3, Sensitive Resource Management	48.4
22	Zone 6, Recreation	80.3
23	Zone 6, Recreation	73.3
24	Zone 4, Natural Resource Conservation	40.6
25	Zone 7, Residential Access	26.4
26	Zone 6, Recreation	0.9
27	Zone 4, Natural Resource Conservation	8.4
28	Zone 3, Sensitive Resource Management	83.2
29	Zone 4, Natural Resource Conservation	41.4
30	Zone 4, Natural Resource Conservation	1.7
31	Zone 3, Sensitive Resource Management	371.3
32	Zone 7, Residential Access	17.0
33	Zone 3, Sensitive Resource Management	128.8
34	Zone 4, Natural Resource Conservation	47.1
35	Zone 3, Sensitive Resource Management	73.6
36	Zone 6, Recreation	31.6
37	Zone 3, Sensitive Resource Management	13.9
38	Zone 3, Sensitive Resource Management	7.6
39	Zone 3, Sensitive Resource Management	41.9
40	Zone 6, Recreation	9.7
41	Zone 4, Natural Resource Conservation	25.3
42	Zone 6, Recreation	5.3
43	Zone 4, Natural Resource Conservation	10.1
44	Zone 3, Sensitive Resource Management	204.0
45	Zone 4, Natural Resource Conservation	0.6
46	Zone 7, Residential Access	40.8
47	Zone 3, Sensitive Resource Management	39.7
48	Zone 3, Sensitive Resource Management	41.7
49	Zone 3, Sensitive Resource Management	17.3
50	Zone 3, Sensitive Resource Management	22.1
51	Zone 3, Sensitive Resource Management	11.6
52	Zone 7, Residential Access	11.5
53	Zone 3, Sensitive Resource Management	26.1
54	Zone 7, Residential Access	3.3
55	Zone 3, Sensitive Resource Management	47.2
56	Zone 3, Sensitive Resource Management	89.9
57	Zone 6, Recreation	17.6

A D			
AK			
Land Use Zone	Acres		
Zone 2, Project Operations	211.4		
Zone 6, Recreation	51.6		
Zone 3, Sensitive Resource Management	10.5		
Zone 7, Residential Access	17.5		
Zone 6, Recreation	5.0		
Zone 7, Residential Access	26.0		
Zone 3, Sensitive Resource Management	11.3		
	14.3		
·	16.9		
_	18.5		
	15.6		
-	7.9		
	271.1		
Zone 6, Recreation	11.3		
Zone 3, Sensitive Resource Management	10.6		
Zone 7, Residential Access	4.0		
Zone 3, Sensitive Resource Management	1.3		
	2.3		
_	25.5		
-	14.6		
	11.4		
	5.2		
	6.4		
	2.0		
·	2.5		
·	3.8		
	8.5		
	8.1		
-	186.8		
	24.7		
	4.1		
	19.3		
	9.4		
	66.9		
	Zone 2, Project Operations  Zone 6, Recreation  Zone 3, Sensitive Resource Management  Zone 7, Residential Access  Zone 6, Recreation  Zone 7, Residential Access  Zone 3, Sensitive Resource Management  Zone 3, Sensitive Resource Management		

35	Zone 3, Sensitive Resource Management	10.0
36	Zone 3, Sensitive Resource Management	5.5
37	Zone 3, Sensitive Resource Management	45.0
38	Zone 5, Industrial/Commercial Development	13.7

## **UPPER BEAR**

Parcel	Land Use Zone	Acres	
1	Zone 2, Project Operations	192.0	
2	Zone 4, Natural Resource Conservation	53.7	
3	Zone 3, Sensitive Resource Management	18.9	
4	Zone 4, Natural Resource Conservation	22.1	
5	Zone 3, Sensitive Resource Management	10.9	
6	Zone 3, Sensitive Resource Management	101.9	
7	Zone 3, Sensitive Resource Management	161.8	
8	Zone 3, Sensitive Resource Management	70.0	
9	Zone 4, Natural Resource Conservation	15.3	
10	Zone 3, Sensitive Resource Management	73.8	
11	Zone 3, Sensitive Resource Management	43.0	
12	Zone 4, Natural Resource Conservation	10.4	
13	Zone 4, Natural Resource Conservation	25.1	
14	Zone 3, Sensitive Resource Management	163.3	
15	Zone 3, Sensitive Resource Management	49.2	
16	Zone 4, Natural Resource Conservation	9.1	
17	Zone 3, Sensitive Resource Management	513.0	
18	Zone 3, Sensitive Resource Management	42.1	
19	Zone 6, Recreation	14.8	
20	Zone 3, Sensitive Resource Management	6.1	
21	Zone 3, Sensitive Resource Management	13.3	
22	Zone 3, Sensitive Resource Management	23.9	
23	Zone 3, Sensitive Resource Management	79.8	
24	Zone 3, Sensitive Resource Management	40.5	
25	Zone 3, Sensitive Resource Management	25.3	
26	Zone 7, Residential Access	7.6	
27	Zone 7, Residential Access	1.3	
28	Zone 4, Natural Resource Conservation	0.8	
29	Zone 3, Sensitive Resource Management	53.5	
30	Zone 3, Sensitive Resource Management	60.6	
31	Zone 6, Recreation	17.1	

32	Zone 3, Sensitive Resource Management	25.4
33	Zone 4, Natural Resource Conservation	5.9
34	Zone 4, Natural Resource Conservation	5.4
35	Zone 4, Natural Resource Conservation	3.8
36	Zone 4, Natural Resource Conservation	17.8
37	Zone 7, Residential Access	9.3
38	Zone 4, Natural Resource Conservation	12.4
39	Zone 3, Sensitive Resource Management	10.1
40	Zone 3, Sensitive Resource Management	51.3
41	Zone 3, Sensitive Resource Management	31.8
42	Zone 3, Sensitive Resource Management	41.0
43	Zone 3, Sensitive Resource Management	111.7
44	Zone 3, Sensitive Resource Management	58.5
45	Zone 3, Sensitive Resource Management	153.9
46	Zone 3, Sensitive Resource Management	32.3
47	Zone 3, Sensitive Resource Management	4.2
48	Zone 3, Sensitive Resource Management	38.0
49	Zone 6, Recreation	6.2
50	Zone 3, Sensitive Resource Management	101.2
51	Zone 3, Sensitive Resource Management	1.1
52	Zone 4, Natural Resource Conservation	10.1
53	Zone 3, Sensitive Resource Management	11.3
54	Zone 6, Recreation	41.4
55	Zone 7, Residential Access	8.5
56	Zone 3, Sensitive Resource Management	31.1
57	Zone 3, Sensitive Resource Management	8.6
58	Zone 7, Residential Access	22.6
59	Zone 4, Natural Resource Conservation	5.5
60	Zone 3, Sensitive Resource Management	27.4
61	Zone 4, Natural Resource Conservation	2.8
62	Zone 4, Natural Resource Conservation	22.6
63	Zone 4, Natural Resource Conservation	8.5
64	Zone 3, Sensitive Resource Management	27.7
65	Zone 3, Sensitive Resource Management	15.7
66	Zone 3, Sensitive Resource Management	7.0
67	Zone 3, Sensitive Resource Management	26.6
68	Zone 6, Recreation	2.2
69	Zone 3, Sensitive Resource Management	34.3
		<del>-</del>

#### PARCEL DESCRIPTIONS

#### **Bear Creek Parcel Descriptions**

#### **Parcel 1 (170.4 acres)**

Zone 2, TVA Project Operations

This parcel includes the Bear Creek Dam Reservation and is located at BCM 74.7. This parcel was committed for existing use. The parcel begins on the south end just west of the boat ramp and picnic area and includes a swimming beach maintained by TVA. County Road B-25 crosses the dam structure. A parking lot and overlook are located on the north side of the dam. Some of this parcel is forested. Common species include pine, oak, and hickory in sawtimber-size classes. Downstream of the dam structure is a paved parking lot and informal fishing area. There are no water-use facilities on this parcel, and none will be considered.

#### **Parcel 2 (67.2 acres)**

Zone 6, Recreation

Parcel 2 is located on the left bank at BCM 75 and includes the Piney Point Public Use Area operated by BCDA. This parcel was committed for existing use. Developed facilities include a boat ramp and parking lot, campground, swimming beach, and resident manager's residence. Upland hardwoods cover much of this parcel. Dominant species include sawtimber-size ash, hickory, and oak. Steep slopes and rocky shoreline are present along this parcel fronting the main reservoir. The shoreline is eroded where campsites are close to the water. The slope at the campground is more moderate and forested with loblolly pine, sweet gum, and hickory. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. This parcel was placed in Zone 6 to reflect current use.

#### **Parcel 3 (225.0 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual

Parcel 3 begins at the head of the slough adjacent to Piney Point Recreation Area and is located on the left bank of Bear Creek between BCM 75.4 and 78.5 at the mouth of and including Hudson Branch. This parcel was committed for existing use. The western portion has gentle to moderate slopes with clay bank shoreline and severe erosion in places. In this area the parcel is forested with pine, sweet gum, water oak, and elm. Slope is moderate to steep across from the Horseshoe Bend boat ramp and forested with ash, cedar, and elm. Heads of sloughs have emergent and fringe wetlands. Hudson Branch has moderate slopes with rock outcrops, with some beaver

damage noted. It is forested with cedar, ash, elm, oak, hickory, sweet gum, and beech. The shoreline from Hudson Branch to the beginning of Parcel 4 has steep banks and is thickly forested with hardwoods. The shoreline has intermittent rocky and eroded clay banks. Variations in shoreline vegetation and rock outcrops are a valuable scenic resource in this lower portion of the reservoir to both lake users and recreationists in the Piney Point and Horseshoe Bend Recreation Areas. This parcel will be managed to protect cultural, heritage, and visual resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. There are no water-use facilities on this parcel, and none will be considered.

#### **Parcel 4 (100.2 acres)**

Zone 6, Recreation

Located on the left bank from BCM 78.5 to 81.1 at the head of Island Branch slough, this parcel includes the BCEEC. This parcel was committed for existing use. Developed facilities at BCEEC include a boat dock for use by BCEEC, dormitories, dining hall, paved parking area, administrative staff residences, and restored historic farm buildings. Most of the developed facilities are located on BCDA land. Two power lines cross the reservoir from BCEEC to Horseshoe Bend Public Recreation Area. Slopes are moderate and forested with sweet gum, ash, hickory, white oak, red oak, and pine. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. This parcel was placed in Zone 6 to reflect current use.

#### Parcel 5 (1,177.0 acres)

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual

Parcel 5 extends from the eastern boundary of the BCEEC on the left bank (BCM 81.1), along both sides of Bear Creek to the Eastern boundary of Horseshoe Bend Recreation Area on the right bank (BCM 79.8), including all the upper reaches of Big Bear Reservoir. This parcel was committed for existing use. The parcel includes the Bear Creek Floatway access sites at Military Bridge (improved) and Scott Bridge (unimproved). There is one agriculture license on this parcel representing 16 acres. This is a highly diverse area which includes steep slopes, rocky outcrops, wetland islands, isolated coves, riverine conditions, forested bottomlands, and rocky bluffs. In addition to the canoe access sites there is one boat ramp operated by BCDA at Scott Ford. There are no private or commercial water-use facilities on this parcel. There are emergent and scrub-shrub wetlands in the backs of sloughs. The forest cover includes chestnut oak, hickory, beech, sweet gum, ash, river birch, willow, sycamore, elm, box elder, red oak, and white oak. Preservation of scenic resources throughout this parcel is most important as the majority of viewers hold visual/aesthetic values to be of foremost importance. This parcel will be managed to protect cultural, heritage, and

visual resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. There are no water-use facilities on this parcel, and none will be considered.

#### **Parcel 6 (68.8 acres)**

Zone 6, Recreation

Located on the right bank of Bear Creek between BCM 76.6 and 79.8, this parcel contains Horseshoe Bend Recreation Area operated by BCDA. This parcel was committed for existing use. Developed facilities include a boat ramp and paved parking lot, swimming beach, campsites, pavilion, and resident manager's site. Many of the facilities are located on BCDA property. The campground is forested with loblolly pine and sweet gum. Shoreline erosion is common along exposed clay banks. Rocky outcrops occur along the shoreline with hardwoods including ash, hickory, white oak, box elder, and elm dominating the shoreline forest. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. This parcel was placed in Zone 6 to reflect current use.

#### **Parcel 7 (486.9 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual

This parcel is located from the dam reservation at BCM 74.8 along the north shore of Bear Creek to the eastern boundary with Parcel 6 at Horseshoe Bend Public Recreation Area, BCM 76.6. This parcel was committed for existing use. It features steep rock bluffs, shoreline areas of exposed rock and eroded clay, unique rock formations, some gently sloping areas, and emerging and scrub-shrub wetlands in the backs of coves. The Colbert-Smithville 161-kV power line crosses the upper end of Rollins Mill Branch, north of the dam reservation. The scenic resources of this tract are of visual significance to both recreationists in the Piney Point Recreation Area and to visitors to the dam reservation. This parcel will be managed to protect cultural, heritage, and visual resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. There are no wateruse facilities on this parcel, and none will be considered.

# **Cedar Creek Parcel Descriptions**

### **Parcel 1 (277.6 acres)**

Zone 2, Project Operations

Parcel 1 includes the Cedar Creek Dam Reservation located at approximate Cedar Creek Mile (CCM) 23. This parcel was committed for the existing use. It includes a boat launching ramp and parking area on the left bank. Upland hardwoods are present on the higher portions of the parcel. Shoreline areas appear to be old reverting fields or borrow areas with scattered loblolly pine, red maple, and sycamore dominating the forest community. Slopes are gentle. Emergent and scrub-shrub wetlands are present along a small portion of shoreline in a small cove adjoining Parcel 2. Wetland vegetation includes black willow, various rushes, scattered buttonbush and occasional sycamore. Requests for water-use facilities will not be considered.

#### Parcel 2 (83.4 acres)

Zone 3, Sensitive Resource Management

Heritage

Located on the left bank just upstream of the Cedar Creek Dam, this is a relatively large forested parcel with mature, upland hardwoods dominated by red oak, white oak, and hickory. A narrow strip of young sapling-size sweet gum, water oak, red maple, and sycamore occurs near the shoreline. The slope is gentle. Scattered along this shoreline area are areas of buttonbush and lespedeza near the wood's edge. Shoreline fringe wetlands occur on the shoreline in shallow shoreline depressional areas. Adjoining lands are forested with predominantly mature, upland hardwoods with scattered loblolly pines. This parcel ends where standing timber was left within Granny Branch for aquatic habitat enhancement. This parcel should remain undeveloped to act as a buffer for the extensive standing timber habitat throughout the Granny Branch inlet. The remaining snags in the inlet present suitable habitat for fish, nest establishment and foraging activities by birds of prey and a foraging zone for both waterfowl and wading birds. This parcel will be managed to protect heritage resources. Requests for water-use facilities will not be considered.

### **Parcel 3 (121.9 acres)**

Zone 3, Sensitive Resource Management

Heritage

This parcel is located on both sides of Granny Branch embayment and includes the upper reaches. This parcel was committed for its existing use. Standing timber or high-cut stumps were left within this embayment and provide for aquatic habitat enhancement. These areas provide shade, cover, and a food source for fish. The stumps create safety concerns for recreational use of water-use facilities. Portions of the shoreline contain exposed bedrock, while other areas are represented by chert

banks. Upland forests dominate the adjoining lands and contain a mix of red and white oaks, hickory, and some loblolly pine. The right bank appears to be in pine monoculture. Emergent and scrub-shrub wetlands consisting of water willow and buttonbush are common around much of the shoreline. The terrain is gently to moderately sloped. Larger, high quality upland hardwood forests exist on the right bank near Parcel 4. This parcel will be managed to protect heritage resources. Requests for water-use facilities will not be considered.

# **Parcel 4 (54.2 acres)**

Zone 4, Natural Resource Conservation

This parcel is located on the left bank of Cedar Creek. A high pressure underground gas line right-of-way traverses this parcel. The parcel features a small jutting peninsula which extends lakeward. Two small islands are included with this parcel which appear to be old fields or borrow areas. The parcel is relatively open with many bare areas present. Scattered volunteer hardwoods, including sycamore, persimmon, scattered pine, and cedar trees occur on the parcel. Some gully erosion exists. It would be desirable to establish additional trees or shrubs on these islands to stop erosion. The eastern portion of the parcel is dominated by a large loblolly pine stand which appears to have been thinned sometime in the past. The slope is gentle. Back-lying land is privately owned. The easternmost part of the parcel has an area that has been cleared in the past and is in the process of reverting. The back of a small cove has a small, emergent scrub-shrub area. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. TVA acknowledges a BCDA commitment for up to two community water-use facilities on this parcel. Requests for private individual water-use facilities will not be considered.

### Parcel 5 (48.9 acres)

Zone 3, Sensitive Resource Management

- Cultural
- Visual

Parcel 5 is located on the left bank of Cedar Creek. It is a long peninsula with Bond Cemetery located near the point. This is a private inholding. A request is pending by the cemetery foundation for expansion of the cemetery by approximately 1 acre. The parcel has gentle slopes and is dominated by large, mature, upland forests, interspersed with loblolly pine. The shoreline area consists of red clay and chert with some minor erosion. Shoreline vegetation is predominately young volunteer hardwood species. Several old paved roadbeds cross this parcel. Large, mature trees occur on the parcel including shagbark hickory, ash, hickory, white oak, and red oak. The visual dominance of this peninsula with its large, mature timber and lake prominence are a valued scenic resource to the lake user and an aesthetic buffer to Bond Cemetery. This parcel will be managed to protect significant visual and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural

resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# **Parcel 6 (48.1 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Visual

Parcel 6 is located on the left bank of Cedar Creek and includes both sides of an unnamed embayment. The slope is gentle to moderate. Two private water-use facilities on the parcel exist on either side of the embayment in front of a standing timber area. Standing timber or high-cut stumps were left within this embayment for aquatic habitat. These areas provide shade, cover, and a food source for fish; suitable habitat for nest establishment and foraging activities by birds of prey; and a foraging zone for both waterfowl and wading birds. The stumps create safety concerns for recreational use of water-use facilities. The standing timber creates a visual focal point for this cove and is a somewhat unique scenic resource to the reservoir. Fringe wetlands occur on portions of the shoreline with water willow, sycamore, and buttonbush the dominant species. Mature, upland hardwoods occur on gentle to moderate slopes and include red oak, white oak, hickory, and ash. This parcel will be managed to protect significant visual and heritage resources. Back-lying landowners will be encouraged to protect similar resources. Requests for water-use facilities will not be considered.

# **Parcel 7 (10.2 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Visual

Located on the left bank of Cedar Creek, this parcel proceeds around a narrow peninsula with exposed bedrock. The parcel is dominated by mature, upland hardwood including ash, hickory, white oak, and scattered, large, eastern red cedar. The stands of mature, upland hardwood add to the scenic resource of this prominent point. The mature trees of this parcel provide habitat suitable for resident birds, neotropical migrants, deer, wild turkey, small mammals, reptiles and woodland amphibians. Several large snag trees occur along the shoreline. Minimal shoreline erosion was identified. The parcel terminates on the left bank of Hellum Mill Branch. This parcel will be managed to protect significant visual and heritage resources. Back-lying landowners will be encouraged to protect similar resources. Requests for water-use facilities will not be considered.

#### Parcel 8 (6.0 acres)

Zone 7, Residential Access

This parcel is located on the left bank of Hellum Mill Branch. It contains 12 water-use facilities permitted by BCDA. The parcel ends on the left bank of the branch at the beginning of standing timber left in the embayment for aquatic habitat. Requests for water-use facilities will be considered.

# **Parcel 9 (46.4 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Visual
- Wetland

This parcel extends to the back of Hellum Mill Branch and includes portions of both sides of the embayment. This parcel does not include any water-use facilities. Standing timber or high-cut stumps were left along this embayment and provides significant aquatic habitat. These areas provide shade, cover, and a food source for fish. The stumps create safety concerns for recreational use of water-use facilities. The standing timber is a focal point for this cove and a somewhat unique resource for the reservoir. The shoreline has areas of emergent scrub-shrub wetlands with a significant area of wetlands located in the back of the embayment. Adjoining forest lands are dominated by upland hardwoods which include white oak, red oak, and hickory. There are scattered sycamores, buttonbush, and black willow along the shoreline. Water-use facilities should not be considered on this parcel because of standing timber and wetland resources. This parcel will be managed to protect significant visual and heritage and wetland resources. Back-lying landowners will be encouraged to protect similar resources. Requests for water-use facilities will not be considered.

#### **Parcel 10 (7.5 acres)**

Zone 7, Residential Access

Parcel 10 is located on the right bank of Hellum Mill Branch. The parcel contains ten private water-use facilities. The shoreline vegetation has been significantly altered by adjoining landowners. It appears that standing timber in the water fronting the parcel has been removed. Requests for water-use facilities will be considered.

### Parcel 11 (8.7 acres)

Zone 6, Recreation

Parcel 11 includes Hellum Mill boat ramp, courtesy dock, and parking lot operated by BCDA. This parcel was committed for its existing use. It contains two private water-use facilities apparently built by back-lying property owners and permitted by BCDA.

The forest cover consists of miscellaneous hardwood and loblolly pine. This parcel was placed in Zone 6 to reflect current use.

### **Parcel 12 (52.1 acres)**

Zone 3, Sensitive Resource Management

Cultural

The parcel begins at the head of an unnamed cove adjacent to Hellum Mill Boat Ramp on the right bank of Hellum Mill Branch and terminates at the head of Massey Branch. It begins as a narrow, shoreline parcel and includes a large portion of a long peninsula. BCDA is the back-lying property owner. The slope is gentle along the shoreline and is moderate on upper areas. The parcel is forested with upland hardwood species including red oak, white oak, and hickory with scattered sweet gum and sycamore saplings. The head of the embayment has fringe wetlands dominated by water willow and buttonbush. The water depth is shallow. The back of the embayment has a gentle to flat slope and it is likely that wetland areas may extend beyond the shoreline fringe. This parcel will be managed to protect significant cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# **Parcel 13 (22.9 acres)**

Zone 4, Natural Resource Conservation

This parcel begins at an old abandoned roadbed at the head of Massey Branch and continues on the right bank of Massey to near the mouth of the embayment. The backlying lands are private. The parcel is flat. A large portion of the parcel beyond the road appears low lying with black willow and sycamore present. The remainder of the parcel is forested with mature, mixed pine and hardwoods. Scrub-shrub and emergent wetlands occur along the shoreline with water willow, cattail, black willow, sycamore, and buttonbush representing the dominant species. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Requests for water-use facilities will not be considered.

# **Parcel 14 (34.8 acres)**

Zone 3, Sensitive Resource Management

Cultural

Parcel 14 is on the left bank of Cedar Creek at CCM 27. It fronts BCDA property. It also includes a large peninsula with several islands at full pool. One private water-use facility permitted by BCDA exists on the parcel, and the understory vegetation has been cleared around that facility. The peninsula has a gentle to moderate slope. It is dominated by pine, with some hardwood including sycamore and persimmon. The narrow shoreline along the right bank is dominated by upland hardwood. Dominant species include red oak, white oak, and hickory. Shoreline depression areas contain

emergent and scrub-shrub wetlands with water willow, rushes, cattails, and buttonbush. This parcel will be managed to protect significant cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### Parcel 15 (3.8 acres)

Zone 3, Sensitive Resource Management

Cultural

Parcel 15 begins on the left bank at the mouth of Blue Lick Branch. The parcel fronts flooded standing timber that provides shade, cover, and a food source for fish. This narrow shoreline strip fronts BCDA property. Bedrock is exposed along much of its length. It is steep and dominated by mature, upland hardwood including ash, red oak, white oak, and hickory. An important function of the hardwoods is to buffer the standing timber habitat occurring just offshore. There is no erosion due to the rocky shoreline. Some of shoreline depressions contain fringe emergent and scrub-shrub wetlands with water willow, buttonbush and sycamore. Scattered loblolly pine occur on the parcel. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# **Parcel 16 (8.1 acres)**

Zone 3, Sensitive Resource Management

Cultural

Parcel 16 begins where the flooded standing timber stops. It extends upstream in Blue Lick Branch along the left bank. BCDA is the back-lying property owner. A road access is adjacent to the parcel. Exposed bedrock is common. Some portions of the parcel have been cleared by a nearby private-property owner. There is one partially completed dock (piers are present). The shoreline is forested with upland hardwoods and pine. Some minor emergent and scrub-shrub wetlands exist with water willow, buttonbush, and sycamore. A paved road bisects the parcel and ends at the water. The slope is gentle to moderate. The upstream end of Parcel 16 has had major understory clearing, grubbing, and planting of exotic flowering species. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### **Parcel 17 (32.0 acres)**

Zone 7, Residential Access

Parcel 17 extends along the left bank of Blue Lick Creek at approximate CCM 28. Fifteen water-use facilities have been permitted by BCDA on this parcel. Vegetation clearing by adjoining landowners has significantly impacted this parcel. Lawns have been maintained down to the water's edge. Slopes are gentle with bedrock outcrops

common along the shoreline. Areas that have not been maintained as lawns are dominated by upland hardwoods including ash, poplar, and scattered loblolly pine. Requests for water-use facilities will be considered.

### **Parcel 18 (35.1 acres)**

Zone 3, Sensitive Resource Management

- Cultural
- Visual

Parcel 18 extends around the left and right bank of the head of Blue Lick Branch embayment. One agriculture license exists on part of the parcel. The TVA, Browns Ferry/Union 500-kV power line crosses the parcel in the upper reaches. A significant area of emergent and scrub-shrub wetlands exists at the head of the cove. A portion of the parcel on the right bank appears to have areas of shallow bedrock with significant amounts of eastern red cedar present. The remainder of the area consists of mature, mixed/pine hardwood forest. The back of the embayment should be retained in the current undisturbed condition. A small portion of Parcel 18 fronts BCDA near the right descending bank. The cove between Parcels 18 and 19 is shallow and not suitable for water-use facilities. Significant wetlands occur at the back of the cove. This parcel will be managed to protect significant visual and cultural resources. Backlying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### **Parcel 19 (18.4 acres)**

Zone 4, Natural Resource Conservation

Parcel 19 is a narrow shoreline strip along the right bank of Blue Lick Branch which fronts BCDA. The long, narrow shoreline has areas of exposed bedrock and shoreline depressional areas with emergent scrub-shrub wetlands consisting of water willow, scattered buttonbush and sycamore. Upland hardwoods are represented by small and large sawtimber-size class red oak, white oak, persimmon, and ash found on gentle to moderate slopes, with scattered red cedar occurring in areas where bedrock is present. Exposed bedrock ceases to exist near the mouth of Blue Lick Branch fronting the reservoir. Should BCDA develop the back-lying area for residential, TVA would consider changing the allocation to Zone 7 subject to applicable review and approval. However, it would be desirable for TVA to acquire a wider shoreline buffering this area as well as to locate community dock facilities in cove areas and not consider individual dock requests along the entire length of shoreline.

### Parcel 20 (65.3 acres)

Zone 3, Sensitive Resource Management

- Cultural
- Visual
- Heritage

Parcel 20 is located at the right bank mouth of Blue Lick Branch and along the left bank of Cedar Creek at approximate CCM 29. Portions of this parcel were committed for its existing use. Two scenic coves are formed by this tract which provide a natural setting for the boater out of view of private docking facilities. The slope is gentle to moderate. The substrate is gravelly, and shoreline erosion is minimal. The forest cover is mixed eastern red cedar, loblolly pine, and miscellaneous upland hardwoods. The steepest terrain is located on the small peninsula on the northern end of the parcel fronting the reservoir. This peninsula has a significant component of cedar suggesting that bedrock is very near the surface. Small pockets of fringe wetlands occur in backs of small coves. Vegetation extends down to shoreline. Most of the forested lands are dominated by loblolly pine and upland hardwoods. Much of the shoreline is gently sloped with gravel substrate which provides a significant amount of suitable spawning habitat for reservoir fishes. Much of the parcel fronting the main reservoir between CCM 29 and 30 has standing timber fronting the parcel. The parcel is significant because of the buffering capacity of the standing timber along the shoreline. Exposed bedrock is common along the shoreline. An osprey nest is located in a large standing snag over the water. This parcel will be managed to protect significant heritage, visual, and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### **Parcel 21 (48.4 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Visual

Parcel 21 is located on the left bank of Cedar Creek at approximate CCM 30.5. This parcel was committed for the existing use. It includes two islands. Exposed bedrock is common along the shoreline. Most of the forested lands are dominated by a mixture of loblolly pine and upland hardwoods. Most of the parcel is gently sloped. The two islands fronting this tract have a visual prominence on the reservoir and should be protected as a visual resource. This parcel will be managed to protect significant heritage and visual resources. Requests for water-use facilities will not be considered.

### **Parcel 22 (80.3 acres)**

Zone 6, Recreation

Located on the left bank of Cedar Creek, Parcel 22 is adjacent to Slickrock Public Use Area. This parcel was committed for its existing use. It will be considered for future expansion of the campground and related facilities. The parcel is forested with eastern red cedar and upland hardwoods. The parcel is gently sloped. Requests for private water-use facilities will not be considered.

#### **Parcel 23 (73.3 Acres)**

Zone 6, Recreation

Located on the left bank of Cedar Creek, Parcel 23 includes Slickrock Public Use Area, managed by BCDA. This parcel was committed for existing use. Developed facilities include a campground, resident manager's site, boat ramp and parking lot, pavilion and picnic facilities. The Greenhill-Ezell Cemetery is a private inholding on the parcel. This parcel is accessed by County Road 33. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. This parcel was placed in Zone 6 to reflect current use.

#### **Parcel 24 (40.6 acres)**

Zone 4, Natural Resource Conservation

Parcel 24 is located in the upper end of Lick Creek. The entire parcel is located upstream of County Road 33 and separated from the reservoir by the road. It has a rocky shoreline which is mostly exposed during winter drawdown of the reservoir. This area contributes to the ecology of the reservoir by providing food and habitat for diverse populations of plants and animals. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Requests for water-use facilities will not be considered.

# **Parcel 25 (26.4 acres)**

Zone 7, Residential Access

Parcel 25 is a narrow, shoreline strip fronting Lick Creek Cove Subdivision developed by BCDA. This parcel was committed for existing use. It is mostly forested with pine and upland hardwoods. There has been some clearing of the understory fronting residential developments. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will be considered.

### **Parcel 26 (0.9 acres)**

Zone 6, Recreation

Located on the left bank of Cedar Creek at approximate CCM 32.5, this parcel includes Britton Bridge boat ramp and parking lot managed by BCDA. It is bordered on the upstream side by County Road 49 and on the downstream side by Lick Creek Cove Subdivision. Requests for private water-use facilities will not be considered. This parcel was placed in Zone 6 to reflect current use.

### **Parcel 27 (8.4 acres)**

Zone 4, Natural Resource Conservation

Parcel 27 is located on the left bank at approximate CCM 33. It is traversed by County Road 49 at Britton Bridge. The parcel has gentle to moderate slopes. The parcel is

forested with a mixture of oak, hickory, and pine. It appears that the pines have been affected by pine beetles. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Requests for water-use facilities will not be considered.

# **Parcel 28 (83.2 acres)**

Zone 3, Sensitive Resource Management

- Cultural
- Heritage

Parcel 28 is a long, narrow shoreline strip fronting private property along the left bank of Cedar Creek between CCM 33.3 and 35.7. The TVA, Colbert/Smithville 161-kV transmission line crosses the parcel in two locations. The parcel is varied and has moderate to steep slopes. The limestone bluffs provide habitat suitable for several species of mammals, reptiles, and amphibians. It has mostly mature oak, hickory, ash, basswood, sourwood, and buckeye. This parcel will be managed to protect significant heritage and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for wateruse facilities will not be considered.

# **Parcel 29 (41.4 acres)**

Zone 4, Natural Resource Conservation

Parcel 29 is located on the left bank of Cedar Creek approximately between CCM 35.7 and 36.7. Six acres of the parcel are in an agriculture license for pasture and will be converted to hay crop. One private water-use facility is located in the westernmost cove. The parcel is forested with elm, willow, sycamore, and eastern red cedar, common along the shoreline. Emergent wetlands are located in shoreline depressions and coves. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Requests for additional water-use facilities will not be considered.

# **Parcel 30 (1.7 acres)**

Zone 4, Natural Resource Conservation

Parcel 30 is a narrow, shoreline strip along the left bank of Cedar Creek at approximate CCM 36.8. BCDA is the back-lying property owner. It has steep forested slopes dominated by ash, oak, walnut, basswood and sycamore with black willow occurring along the shoreline. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Requests for water-use facilities will not be considered.

### Parcel 31 (371.3 acres)

Zone 3, Sensitive Resource Management

- Cultural
- Wetland
- Heritage

Parcel 31 encompasses all the upper reaches of Cedar Creek Reservoir generally above County Road 41 at Hester Bridge. It has five agricultural tracts on both sides of the reservoir totaling 120 acres. An informal recreation area is near the bridge. During late 1999 the City of Russellville extended a waterline from Lake Elliott to Cedar Creek Lake to a location in the upper reaches of this parcel. Pumping facilities were developed to pump water to Lake Elliott. Forested wetlands are common along the shoreline. These areas provide significant water quality benefits by filtering runoff from adjoining livestock operations. Excessive erosion, as evidenced by heavy sediment load and severe undercutting of the creek bank, occurs in places where cattle are allowed access to the creek. The parcel fronts a narrow, shallow riverine environment. This parcel will be managed to protect significant heritage, wetland, and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### **Parcel 32 (17.0 acres)**

Zone 7, Residential Access

Parcel 32 is located on the right bank of Cedar Creek just downstream of Hester Bridge to approximate CCM 35.9. Five private water-use facilities are scattered along the approximately 1 mile length of the parcel. The parcel features forested wetlands dominated by black willow and ash. The western end of the parcel has rock bluffs with cedar and ash predominant. Wetland vegetation is well established along much of the shoreline. The understory has been removed in the far western sector by an adjacent landowner. This parcel will be managed to protect significant wetland and cultural resources by avoidance or mitigation during any future development activities. Requests for water-use facilities will be considered; however, an environmental site review will be required during the 26a application process.

### **Parcel 33 (128.8 acres)**

Zone 3, Sensitive Resource Management

Cultural

Parcel 33 is a varied shoreline strip along the right bank of Cedar Creek between CCM 32.6 and 35.9. The TVA, Colbert/Smithville 161-kV power line crosses this parcel. There are three residential openings on the parcel with water-use facilities permitted by BCDA. The parcel features rock bluffs with shallow soils, moderately sloped landscapes with upland hardwood forests, and fringe wetlands. This parcel will be managed to protect significant cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

#### **Parcel 34 (47.1 acres)**

Zone 4, Natural Resource Conservation

Parcel 34 is on the right bank of Cedar Creek and includes County Road 49 at Britton Bridge. This parcel consists of a relatively narrow and moderately sloped shoreline on the right bank to Camp Creek Bridge. The shoreline is rocky and forested with ash, eastern red cedar, elm, sycamore, oak, hickory, and pine. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Requests for private water-use facilities will not be considered. The city of Russellville has expressed an interest in a water intake at this parcel, which will be considered.

### Parcel 35 (73.6 acres)

Zone 3, Sensitive Resource Management

Wetland

Parcel 35 is bordered on the south by the County Road 33 causeway and bridge over Camp Creek. It includes the upper reaches of Camp Creek. A gravel road and power line traverses the parcel on the west side of Camp Creek fronting private residences. The east side of the parcel is moderately sloped with a rocky shoreline. The west side features fringe wetlands with forested wetlands in the back of the cove. The open fields and wetland vegetation provide prime habitat for a large concentration of small mammals, which in turn support foraging habitat for barn owls and other predators more common to the region. This parcel will be managed to protect significant wetland resources. Back-lying landowners will be encouraged to protect similar resources. Requests for water-use facilities will not be considered.

#### **Parcel 36 (31.6 acres)**

Zone 6, Recreation

Parcel 36 is on the right bank at the mouth of Camp Creek. Portions are currently in an agriculture license and are used for group camp activities. Developed facilities include an amphitheater, volleyball pit, maintained lawn, and a water-use facility. It is gently to moderately sloped. Its varied shoreline includes pine, cedar, and hardwoods. A gravel road parallels the shoreline along the northern part of the parcel. This parcel was placed in Zone 6 to reflect current use. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed.

### **Parcel 37 (13.9 acres)**

Zone 3, Sensitive Resource Management

- Cultural
- Visual
- Heritage

Parcel 37 is on the right bank of Cedar Creek at approximate CCM 31. There are dead hardwood snags in the water fronting the parcel. The parcel features a steep, rocky shoreline. This parcel is one of the most scenic parcels located on Cedar Creek Reservoir. A large rock bluff located along the shoreline with a backdrop of standing timber in the reservoir creates a unique scenic vista. The forest along this parcel warrants preservation based on high quality habitat, significant community occurrence of southern hardwoods, and buffering capacity for standing timber. This parcel will be managed to protect significant heritage, visual, and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### **Parcel 38 (7.6 acres)**

Zone 3, Sensitive Resource Management

- Cultural
- Visual
- Heritage

Parcel 38 is a narrow shoreline strip fronting a large tract of BCDA back-lying property. It is located on the right bank of Cedar Creek at the mouth of Lost Creek embayment. Flooded standing timber fronts the parcel on the main reservoir. This parcel has steep topography and boulder-strewn, vertical-rock outcrops. These bluffs afford striking vistas of the reservoir and surrounding landscape. Mature, upland hardwoods, including oak, hickory, ash, maple, and cedar dominate this parcel. Understory species include elm, dogwood, oak, hickory, and scattered loblolly pine. Scattered, large, eastern red cedars on rock outcroppings indicate the parcel is likely unsuitable for septic systems. The parcel appears to have shallow soils and exposed chert along the shoreline. Small, emergent and scrub-shrub wetlands dominated by buttonbush, sycamore, and water willow occur within shoreline depressions. Shoreline erosion is common in Lost Creek embayment. This parcel will be managed to protect significant heritage, visual, and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

#### **Parcel 39 (41.9 acres)**

Zone 3, Sensitive Resource Management

Cultural

This parcel is located on the left bank of Lost Creek. BCDA is the back-lying property owner. The parcel is forested and dominated by upland hardwoods with eastern red cedar common along the shoreline and within the parcel. The large, mature hardwoods on this parcel provide perching sites for osprey and potential nesting sites for bald eagles. The shoreline varies from rocky, where erosion is minimal, to areas where rock is absent and erosion is common as a result of wave action. The parcel has a relatively

steep slope with bedrock exposed at various levels. This parcel will be managed to protect significant cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# **Parcel 40 (9.7 acres)**

Zone 6, Recreation

Parcel 40 is on the left bank of Lost Creek embayment and includes the Lost Creek boat ramp operated by BCDA. This parcel was committed for existing use. It has a security light, courtesy pier, and paved parking. It features a flat, rocky shoreline with a narrow, forested riparian zone of large trees along the shoreline. Small patches of river cane occur on the point and along the shoreline areas. This parcel will be managed to protect significant cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. This parcel was placed in Zone 6 to reflect current use. Requests for private water-use facilities will not be considered.

### **Parcel 41 (25.3 acres)**

Zone 4, Natural Resource Conservation

Parcel 41 is on the left bank of Lost Creek immediately upstream of the Lost Creek boat ramp. County Road 33 bisects the parcel. An old roadbed exists at the boundary with Parcel 40. A 3-acre agriculture license exists on the parcel. The license area is predominantly maintained pastureland which extends to the waterline. One water-use facility permitted by BCDA is present. Fringe emergent and scrub-shrub wetlands dominated by sedges, rushes, scattered buttonbush and black willow are present. This parcel will be managed to protect significant cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Requests for water-use facilities will not be considered.

#### **Parcel 42 (5.3 acres)**

Zone 6, Recreation

Parcel 42 is on the left bank of Lost Creek and fronts the Lost Creek Bait Shop. This is a private facility which includes camping sites on adjacent private property. Historical use of this property includes a swimming beach. The commercial recreation aspects of this parcel have historically been operated under an agricultural license. A commercial recreation license will be pursued with the adjoining property owner. This parcel was placed in Zone 6 to reflect current use.

### **Parcel 43 (10.1 acres)**

Zone 4, Natural Resource Conservation

Parcel 43 is located on the left bank of Lost Creek. It fronts several residential properties and has maintained lawns to the shoreline. There are three water-use facilities on the shoreline permitted by BCDA. The TVA property has historically been placed under two agricultural licenses. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Requests for additional water-use facilities will not be considered.

# Parcel 44 (204.0 acres)

Zone 3, Sensitive Resource Management

- Cultural
- Visual
- Wetland

Parcel 44 includes the upper reaches of Lost Creek. Six agriculture licenses representing 95 acres are included in the parcel. The entire embayment is an emergent and scrub-shrub wetland with cattail, water willow, black willow, and sycamore present. A small portion has a rocky shoreline with a single-tree-width riparian zone. Other areas are bordered by open lands. Four water-use facilities are present on the western end of the parcel. Informal recreation is occurring on the peninsula at the center of the parcel. Wetlands at the back of the cove are extremely important to filter an adjoining poultry operation. The wetlands' vegetation forms a scenic focal point at the rear of the west fork of Lost Creek. The open grassy fields and wetland margins support small mammal populations that in turn support foraging zones for hawks, owls, carnivores and reptiles. The area is also very important habitat for shorebirds, wading birds, waterfowl, and a diverse group of passerines. County Road 33 traverses the parcel. This parcel will be managed to protect significant wetlands, visual, and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional wateruse facilities will not be considered.

### **Parcel 45 (0.6 acres)**

Zone 4, Natural Resource Conservation

This parcel is a steep-sloped, narrow TVA strip fronting BCDA property on the right bank of Lost Creek. Fringe wetlands occur along the shoreline. The upper slope is dominated by typical oak and hickory species. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Should BCDA develop back-lying land for residential, TVA would consider changing the allocation to Zone 7, subject to applicable review and approval.

### **Parcel 46 (40.8 acres)**

Zone 7, Residential Access

This parcel is on the right bank of Lost Creek. There are 32 water-use facilities located along this shoreline permitted by BCDA. Rock outcrops are common along the shoreline. It has generally steep, forested terrain dominated by large, upland hardwoods including oak, hickory, and ash. Some shoreline erosion does exist where removal of vegetation has occurred. Occasional pockets of water willow and river cane occur along the shoreline of this parcel. Requests for water-use facilities will be considered.

#### **Parcel 47 (39.7 acres)**

Zone 3, Sensitive Resource Management

- Cultural
- Visual

Parcel 47 is located on the right descending bank of Lost Creek embayment. There is one 10-acre hay crop agricultural license on this parcel. Two water-use facilities have been permitted by BCDA on this parcel. Emergent and scrub-shrub wetlands are present at the heads of coves. The terrain is gently sloped. The low-lying point serves as a scenic buffer to private adjacent facilities and a visual focal point to the boater entering Lost Creek. Loblolly pine is common in what appears to be old, reverting field areas. This parcel will be managed to protect significant visual and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional water-use facilities will not be considered.

### **Parcel 48 (41.7 acres)**

Zone 3, Sensitive Resource Management

Cultural

Parcel 48 is located on the right descending bank of Lost Creek at the mouth at approximate CCM 28.5. This is a narrow, shoreline strip with a large, back-lying BCDA tract. The portion on Lost Creek has a flat to gentle slope with shallow water fronting the parcel. The shoreline appears to be abandoned fields reverting to loblolly pine and other hardwoods. Fringe wetlands occur along the shoreline. Some erosion occurs along the shoreline at the mouth. Fronting the main reservoir, the shoreline area has numerous eastern red cedars. Upland areas are dominated by hardwoods. An old roadbed fronts the parcel along the main reservoir. Noteworthy is the occurrence of a small glade-like opening along the western portion of the tract. Although small and sparsely vegetated, and while containing no species of special concern, the tract supports a suite of plants not observed elsewhere along the reservoir. This parcel will be managed to protect significant cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have

been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional water-use facilities will not be considered.

### **Parcel 49 (17.3 acres)**

Zone 3, Sensitive Resource Management

- Cultural
- Heritage

Parcel 49 is a steep, narrow strip on the right bank of Cedar Creek from CCM 25.9 to 27.6. BCDA has a large tract back lying the parcel. Flooded standing timber fronts the main reservoir varying approximately 50 feet to 500 feet from the shoreline. Exposed bedrock outcroppings occur throughout the upland areas dominated by large, upland hardwoods. Eastern red cedar is common along the shoreline and within the upland forest. This parcel is important as a buffer for the entire length of standing timber habitat. The entire length, as well as back-lying property, should be free from development pressures. This parcel will be managed to protect significant heritage and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional wateruse facilities will not be considered.

# **Parcel 50 (22.1 acres)**

Zone 3, Sensitive Resource Management

Cultural

Parcel 50 is located along the left bank of Taylor Branch to the mouth at CCM 25.5. It is a narrow, shoreline strip with BCDA as the back-lying property owner. The shoreline is cherty with minor erosion from wave action. Away from the shoreline, the tract is forested with upland hardwoods and scattered loblolly pines. Small fringe emergent and scrub-shrub wetlands dominated by rushes, sedges, and occasional buttonbush occur along the shoreline. A small stand of planted pine occurs on an unnamed harbor on Taylor Branch. The shoreline has moderate slopes with occasional rocky outcrops and good water. Some stumps were left in the reservoir at the north end of an unnamed slough. This parcel will be managed to protect significant cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional water-use facilities will not be considered.

# **Parcel 51 (11.6 acres)**

Zone 3, Sensitive Resource Management

Heritage

Parcel 51 encompasses an unnamed cove on the left bank of Taylor Branch. Two water-use facilities are on the right bank of the cove surrounded by flooded standing

timber. Flooded standing timber or high-cut stumps were left within this embayment for aquatic habitat. They provide shade, cover, and a food source for fish. The stumps create safety concerns for recreational use of water-use facilities. Scrub-shrub wetlands are located at the head of the embayment which benefits water quality by filtering runoff from adjoining land. Most of the parcel is forested with upland hardwoods dominated by hickory and poplar. This parcel will be managed to protect significant heritage resources. Back-lying landowners will be encouraged to protect similar resources. Requests for additional water-use facilities will not be considered.

### **Parcel 52 (11.5 acres)**

Zone 7, Residential Access

Parcel 52 is located on the left descending bank of Taylor Branch. Eleven water-use facilities are located along the shoreline that have been permitted by BCDA. The vegetation has been cleared to the shoreline in some places. Requests for additional water-use facilities will be considered.

### Parcel 53 (26.1 acres)

Zone 3, Sensitive Resource Management

- Cultural
- Visual

Parcel 53 includes the upper reaches of Taylor Branch. One 4-acre agriculture license and one water-use facility permitted by BCDA occur on this parcel. Other non-permitted facilities are located along the shoreline. Shoreline features include emergent scrub-shrub and forested wetlands. The scenic quality of this cove is a visual focal point to lake users as their view extends beyond a number of private water-use facilities. This parcel will be managed to protect significant visual and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional water-use facilities will not be considered.

### Parcel 54 (3.3 acres)

Zone 7, Residential Access

Parcel 54 is a narrow, shoreline strip on the right bank of Taylor Branch. BCDA is the back-lying property owner. This forested tract is dominated by upland hardwoods and loblolly pine. The terrain is gently sloped. The shoreline consists of exposed clay with areas of exposed bedrock. Should BCDA develop the back-lying area for residential, TVA would consider applications for water-use facilities.

#### **Parcel 55 (47.2 acres)**

Zone 3, Sensitive Resource Management

Cultural

Parcel 55 is on the right descending bank of Taylor Branch and includes a portion fronting the main reservoir at CCM 25.4. A high-pressure, underground gas line right-of-way traverses this parcel. The terrain is flat with scattered, upland hardwoods, and fringe emergent and scrub-shrub wetlands occur along much of shoreline. A power line traverses the property within Taylor Branch. County Road 84 crosses the upper reaches of the parcel in two locations. Significant wetlands occur above these road crossings. Heavy informal recreation use occurs on the parcel because of its accessibility. This parcel will be managed to protect significant cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional water-use facilities will not be considered.

### Parcel 56 (89.9 acres)

Zone 3, Sensitive Resource Management

- Cultural
- Visual

Parcel 56 is on the right descending bank of Cedar Creek at approximate CCM 24.5. County Road 84 crosses the parcel in the upper reaches. The terrain is gently to moderately sloped. Due to its accessibility, the parcel receives considerable informal recreation pressure. The shoreline is rocky with scattered loblolly pines occurring near the water's edge. The parcel includes several islands and a peninsula separated from the mainland by a low-lying area. Emergent and scrub-shrub wetlands dominated by water willow and wool grass occur within cove areas. Planted cypress trees front this parcel. As efforts continue to protect the islands and shoreline of this tract, and as these areas continue to revegetate, the visual quality of this tract, as seen by the lake user and visitors to the dam reservation, will increase. The western end of the parcel has exposed rock outcrops, fronted with upland hardwoods, dominated by oak and hickory. This parcel will be managed to protect significant visual and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### Parcel 57 (17.6 acres)

Zone 6, Recreation

Parcel 57 is located on the right bank of Cedar Creek and adjoins the Cedar Creek Dam Reservation. County Road 84 crosses the parcel in the upper reaches. BCDA is the back-lying property owner. Exposed rock outcrops occur along the shoreline

Parcel Descriptions

dominated by volunteer hardwood species. Larger hardwoods occur on the upper slopes interspersed with loblolly pine. No wetlands were identified along this shoreline. Shoreline erosion is minimal. Heavy informal recreation use occurs due to its accessibility. Water depth is suitable most of the year to support water-based recreation development. This parcel was placed in Zone 6 in response to public comments regarding the need for commercial marina facilities. Any such development would necessitate combining TVA land with BCDA land. There is no known interest at this time, but TVA would consider proposals. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed.

# **Little Bear Creek Parcel Descriptions**

Parcel 1 - (211.4 acres)

Zone 2, TVA Project Operations

Parcel 1 is located at Little Bear Creek Mile (LBM) 11.6 and includes the dam reservation with nearby public fishing pier, parking area, and small BCDA courtesy dock. This parcel was committed for its existing use. County Road 88 crosses the dam and bisects the parcel. The BCDA office building and maintenance base, as well as the TVA maintenance base, are also located on the dam reservation. The remainder of the shoreline is forested with loblolly pine and upland hardwoods including red oak, white oak, and occasional yellow poplar. Shoreline vegetation includes scattered, planted cypress and black willow. Scattered, rocky, limestone outcrops occur along the gently sloping shoreline. Shoreline erosion is minimal. A large portion of the parcel occurs below the dam. A cave exists on the north side of the dam and west side of the access road which is popular with school groups. Uncommon northern myotis have been observed in this cave, and local recreationists often report large numbers of bats in the cave during summer months. Although the cave receives high levels of human visitation, this cave may still be used by rare species. Requests for private water-use facilities will not be considered for this parcel.

# **Parcel 2 (51.6 acres)**

Zone 6, Recreation

Parcel 2 is located on the left bank at LBM 12.5 and contains BCDA's Elliott Branch Public Use Area including camping areas, beach, ramp, parking lot, courtesy pier attached to ramp, and another dock in a cove immediately upstream of the ramp. This parcel was committed for its existing use. Scattered shagbark hickory occurs in the upland forest with scattered black willow and planted cypress along the shoreline. Shoreline areas near the ramp are devoid of vegetation. All of this parcel is forested except for those areas that have been developed. Gentle to moderate slopes exist. Shoreline erosion is common on exposed cherty clay banks. Planted and volunteer loblolly pine is common along the shoreline and within reverting open areas. Upland hardwoods including red oak and white oak are common, with sycamore and black willow occurring along the shoreline areas. A soft-shell turtle and green heron were seen on this tract. Small fringe emergent and scrub-shrub wetlands consisting of water willow and alder occur along the shoreline. Occasional informal use areas occur along the left bank of Elliott Branch behind campsites. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. This parcel was placed in Zone 6 to reflect current use.

### **Parcel 3 (10.5 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual

This forested parcel is located on the left bank at LBM 13.6. Dominant species in the upland forest include red oak, white oak, hickory, and ash, and an occasional loblolly pine. Redbud is common in the understory. Shoreline species include alder, black gum, and cedar. Shoreline erosion caused by fluctuating water levels and wave action is common along exposed chert banks. Several areas along the shoreline appear to have been old fields and are in various stages of reversion. Scattered fringe wetlands, consisting of water willow, rushes, and buttonbush occur around the shoreline. This tract is a valuable resource which serves as an upstream scenic buffer to users of the Elliott Branch Public Use Area. It also supports a diverse assemblage of animals. Within the mature, upland forest, leaf litter and fallen logs are abundant, providing habitat structure for woodland salamanders, small mammals, and reptiles. This parcel will be managed to protect cultural, heritage, and visual resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# **Parcel 4 (17.5 acres)**

Zone 7, Residential Access

Located at LBM 14, this narrow shoreline strip fronts BCDA. The main road access is available near the left descending bank (south). Shoreline areas are forested and gently sloped with occasional limestone outcrops. Some of the back-lying lands appear to be in loblolly pine plantations. A transmission line (Colbert-Smithville 161-kV) right-of-way traverses this parcel. Upland hardwoods dominate this parcel with a diversity of size and age classes represented. Fringe wetlands consisting of water willow and alder are more common toward the eastern end of Parcel 4 between the power line right-of-way and Parcel 5. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Should BCDA develop the back-lying area for residential, TVA would consider applications for water-use facilities.

# Parcel 5 (5.0 acres)

Zone 6, Recreation

Located on the left bank at LBM 14.8, this site receives informal recreation use. The southern portion of Parcel 5 is predominantly forested with some open reverting areas along the shoreline. Upland forests are dominated by loblolly pine, red oak, and white oak. Emergent and shrub-scrub wetlands occur in pockets within the first small embayment in the southern portion of Parcel 5. Wetland species include water willow, alder, and buttonbush. Slopes are gentle, and erosion is minimal with occasional

bedrock outcroppings along the shoreline. Back-lying lands behind Parcel 5 were retained by BCDA for future development. This parcel is accessible via an old roadbed and has a protected harbor. It would be suitable as a small, commercial marina and/or for community dock facilities for the adjoining potential residential development.

# Parcel 6 (26.0 acres)

Zone 7, Residential Access

Located on the left bank at LBM 15, Parcel 6 fronts the existing Cleveland Subdivision. Seventeen private water-use facilities have been permitted by BCDA on this parcel. A small area in the southern portion of this parcel has not been disturbed. The southeastern portion of Parcel 6 near the back of an unnamed cove also remains undisturbed. Slopes in this area are variable, but generally range from moderate to steep. Sedimentation in back of this unnamed cove appears to be coming from the adjoining roadbed or other eroding areas. It would be desirable to leave this area undisturbed as a buffer. Shoreline fronting the existing private subdivision has been cleared of undergrowth exposing mineral soils and rock outcroppings. This is an undesirable condition from a resource management standpoint. The remainder of Parcel 6 is forested. Limestone bedrock is visible around the majority of the shoreline. Forested areas are dominated by upland hardwoods including oak, hickory, and ash. Shoreline fronting the main lake on Parcel 6 has additional shoreline clearing associated with private development. TVA land along this shoreline extends several hundred feet landward. Major clearing activities have significantly impacted native shoreline vegetation. A portion of this parcel located along the eastern portion of Parcel 6 fronting the main reservoir has been undisturbed and remains forested. This area should be managed with minimal vegetative removal to serve as a shoreline visual buffer from adjoining development activities. The portion of Parcel 6 on the left bank of Grimes Branch is developed with numerous water-use facilities, gazebos, and shoreline clearing. It is zoned residential because it fronts an existing developed subdivision. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Additional requests for water-use facilities will be considered.

# **Parcel 7 (11.3 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual

Parcel 7 begins on the left bank of Grimes Branch at LBM 15.3 and extends to the back of the cove. This parcel was committed for its existing use. Emergent and shrub-scrub wetlands occur at the back of the cove. Fringe wetlands are present along several shoreline areas consisting of water willow, black willow, alder, scattered rushes and cut-grass species. Slopes are moderate. Lands adjoining the shoreline are

forested. Dominant species include loblolly pine, white oak, red oak, and numerous shagbark hickories, which provide good roosting and maternity areas for endangered Indiana bats. These areas also provide good foraging habitat for gray bats. Water depth in the back of Grimes Branch is extremely shallow. The tract exhibits a variety of vegetative cover and serves as a scenic focal point at the rear of the cove. It is recommended that this area be left undisturbed to provide a buffer. This parcel will be managed to protect cultural, heritage, and visual resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# **Parcel 8 (14.3 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural

Located at LBM 15.6, Parcel 8 begins on the right bank of Grimes Branch. This predominantly forested, narrow, moderate to steep, sloped shoreline tract fronts BCDA property. Exposed bedrock is common along the shoreline, and erosion is minimal in the cove areas but is more common along the shoreline fronting the main reservoir. This forested tract is dominated by upland hardwoods including white oak, red oak, hickory, persimmon, and sugar maple with scattered red maple along the shoreline. Scattered loblolly pine occur near the eastern end of Parcel 8. Redbud is common in the understory. Scattered, large shagbark hickories occur on this parcel. Most of this parcel is forested down to the shoreline. There are a few shoreline areas where scattered buttonbush and alder are common. Some pockets of flooded, standing timber and visible stumps are present along the shoreline. Small fringe wetlands consisting of water willow and alder occur at various locations along the shoreline. This exemplary parcel not only supports rare plants but also a rich assemblage of small mammals, breeding songbirds, reptiles and amphibians. This parcel will be managed to protect heritage and cultural resources. BCDA and other back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# Parcel 9 (16.9 acres)

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual

Parcel 9 begins in a small, unnamed cove on the left bank of Reid Branch at LBM 16 and extends around the back of the cove. This parcel was committed for its existing use. Standing timber or high-cut stumps were left along this shoreline for aquatic habitat. They provide shade, cover, and a food source for fish. This parcel contains significant amounts of alder along the shoreline. This dense alder cover has reduced

shoreline erosion to a bare minimum and preserves shoreline beauty for lake users. In addition to exhibiting shoreline preservation by native plant material, this tract helps preserve this small cove as a scenic boat anchorage. Back-lying lands are forested. Dominant species include red oak, white oak, poplar, occasional beech, and hickory. This forested zone along the shoreline contributes to the ecology of the reservoir by providing food and habitat for diverse populations of plants and animals. This parcel will be managed to protect heritage, cultural, and visual resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# Parcel 10 (18.5 acres)

Zone 3, Sensitive Resource Management

- Heritage
- Cultural

This moderately sloped parcel begins about midway (right bank) of Reid Branch at LBM 16.2 and fronts BCDA retained land. Limestone bedrock is visible along the shoreline. Upland hardwoods dominate the tract. Dominant species include red oak, white oak, hickory, and ash. Persimmon is common along the shoreline. Scattered stumps were left along the shoreline for aquatic habitat within Reid Branch. Rock outcrops are more prominent fronting the main river channel. Along the middle portion of this parcel is shoreline indentation containing a significant amount of alder and water willow. These dense alder stands along the shoreline appear to be providing significant protection from erosion and wave action. Erosion is relatively nonexistent along areas where these dense alder thickets occur. Parcel 10 serves as important shoreline buffers separating the shoreline from back-lying land managed as loblolly pine plantations. Minor erosion was noted in areas lacking dense alder cover. Any development and associated shoreline vegetation clearing on Parcel 10 would greatly accelerate shoreline erosion leading to degradation of water and aquatic habitat. Limestone outcroppings are more prominent along the eastern portion of Parcel 10 near Rollins Spring Branch. This area likely contains species that are unique to gladelike habitat. Scattered, mature, eastern red cedar occur in this area. The remainder of Parcel 10 between the old existing roadbed and the mouth of Rollins Spring Branch is dominated by dense alder thickets along the shoreline. The value of this has been previously described. This parcel will be managed to protect heritage and cultural resources. BCDA and other back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for wateruse facilities will not be considered.

### **Parcel 11 (15.6 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural

This parcel begins on the left bank near the mouth of Rollins Spring Branch and extends around this scenic cove to about midway of the east (right) bank. This parcel was committed for existing use. This shoreline is characterized by areas of exposed limestone bedrock, dense alder thickets, and scattered stumps fronting portions of much of this shoreline for aquatic habitat. A few small, emergent wetland areas consisting of water willow are also present. Upland hardwood are present on moderate to steep slopes. Species are typical, upland hardwood including white oak, red oak, hickory, and beech. Any shoreline development would significantly impact the aesthetics of this small scenic cove and would likely accelerate shoreline erosion on these steep slopes. This parcel will be managed to protect heritage and cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### **Parcel 12 (7.9 acres)**

Zone 3, Sensitive Resource Management

Cultural

This parcel begins about midway on the east bank of Rollins Spring Branch and extends out to and along the main reservoir fronting BCDA land. Scattered limestone boulders and areas of minor erosion are present along the shoreline. This parcel is forested with moderate to steep slopes. Upland hardwood species dominate the parcel and include white oak, red oak, beech, hickory, and scattered elm. Hop hornbeam and persimmon occur along the shoreline areas. Stumps are present along portions of this tract fronting the main reservoir and provide shade, cover, and a food source for fish. The shoreline of Parcel 12 fronting the main channel is forested down to the water's edge. Limestone bedrock covers the majority of this shoreline. The shoreline of the small finger embayment located toward the eastern end of Parcel 12 has a shoreline dominated by alder. This small, unnamed embayment contains pockets of emergent wetlands dominated by water willow. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### Parcel 13 (271.1 acres)

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual

Parcel 13 begins at the mouth of Massey Branch extending upstream and includes all the upper reaches of Little Bear Reservoir along both sides of the embayment. This parcel was committed for existing use. The most scenic bluffs and sections of rock outcrop are found along the shoreline of this tract. The left bank is bordered with pockets of emergent and scrub-shrub wetlands dominated by water willow, alder, scattered black willow, and sycamore. Mature, upland hardwoods are present on

moderate to steep slopes dominated by hickory, ash, red oak, white oak, scattered cedar, and black walnut. Along the right bank of Massey Creek, the shoreline is dominated by alder with a back-lying loblolly pine stand. Massey Creek shoreline is gravelly with no visible erosion. Some minor erosion was identified along the shoreline of Parcel 13 fronting the main reservoir. Scattered, small pockets of water willow are present. Limestone rock outcrops are common along these shoreline areas, and where upland hardwoods are present, they are of poor quality with a high occurrence of red cedar. This is typical of much of the shoreline where shallow soils and limestone bedrock occurs near the surface. A significant amount of clear-cut timber harvesting has occurred on adjoining land. It is important that forested Parcel 13 remain intact because it serves as a shoreline buffer from back-lying commercial timber operations. The near vertical nature of much of this shoreline also makes it unsuitable for public water-use facilities. Some informal recreational use occurs at the left mouth of Scott Hollow. This scenic parcel offers some of the best, most diverse hardwoods found on any of the Bear Creek Reservoirs. Numerous shagbark hickories and snags along the shoreline provide valuable bat habitat and nesting cavities. The upper portion of the parcel is riverine in nature with exposed rock outcrops, scenic limestone bluffs, flooded stump beds, and large, mature, upland hardwoods dominated by white oak, shagbark hickory, and eastern red cedar. The parcel contains state-listed, plant species considered rare and imperiled. This parcel will be managed to protect heritage, visual, and cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### **Parcel 14 (11.3 acres)**

Zone 6, Recreation

Parcel 14 is a narrow shoreline parcel located on the right bank of Little Bear Creek beginning on the right bank of Williams Hollow and extending downstream. This parcel fronts BCDA land which includes the Williams Hollow Public Use campground, beach area, boat ramp and parking lot operated by BCDA. This parcel was committed for existing use. Campsites are located on the back-lying property with many well-established, informal trails and access points traversing Parcel 14 between campsites and the shoreline. Some limestone bedrock occurs along the shoreline. Much of the shoreline is covered with alder with numerous fringe emergent wetland areas consisting of water willow. Back-lying lands are predominantly upland hardwood with small stands of loblolly pine next to the beach area. This parcel will be managed to protect both cultural and visual resources. BCDA and other back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. This parcel was placed in Zone 6 to reflect current use.

### **Parcel 15 (10.6 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual

Parcel 15 begins at the back of an unnamed cove adjacent to and downstream of Williams Hollow Public Use Area along the right bank of Little Bear Creek. Shoreline fronting this parcel consists of areas of exposed bedrock and areas of emergent and scrub-shrub wetlands dominated by water willow, alder, and black willow, and buttonbush where bedrock is absent. This steep, forested parcel is dominated by upland hardwoods including shagbark hickory, ash, white oak, and red oak. This tract has a scenic rock bluff just downstream from the Williams Hollow Public Use Area. One private water-use facility permitted by BCDA exists on the eastern end of the parcel. Visual management of this tract will help preserve an adjacent scenic buffer to the Public Use Area. This parcel will be managed to protect heritage, visual, and cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional water-use facilities will not be considered.

### **Parcel 16 (4.0 acres)**

Zone 7, Residential Access

Parcel 16 is located on the right bank of Little Bear Creek just upstream of Rocky Branch. The western portion of Parcel 16 near an old road has been cleared by adjoining private landowners and is maintained in grass. Only a few scattered, large trees remain on the site. Five private water-use facilities were permitted by BCDA on this parcel. Old dock remnants are present in this area. The old roadbed has been converted into a launching ramp with dock facilities. The remainder of the parcel contains extensive bluffs, mature forests, rock outcroppings, and boulders, which provide suitable habitat for a variety of mammals. Two rare plants were found on this parcel. This parcel will be managed to protect significant heritage resources by avoidance or mitigation during any future development activities. Requests for additional water-use facilities will be considered; however, an environmental site review will be required during the 26a application process.

# **Parcel 17 (1.3 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural

Parcel 17 is a steep, very narrow shoreline parcel located on the right bank of Little Bear Creek at the mouth of Rocky Branch fronting land retained by BCDA. This parcel contains a critically imperiled plant which is state-listed and very rare in Alabama. Additionally, the parcel contains a forest community which is structurally

mature, floristically diverse, and is represented by high forest integrity. This parcel contains vertical limestone bluffs and rock outcroppings which provide suitable habitat for high animal diversity and may support rare animal occurrences. Much of the significant portion of this community and habitat occurs on property other than that owned by TVA. BCDA and other back-lying landowners will be encouraged to protect similar resources possibly through some form of conservation easement or agreement to preserve this site. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# **Parcel 18 (2.3 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural

Located on the left bank of Rocky Branch, Parcel 18 is an extremely narrow, moderate to steep, shoreline strip containing three private water-use facilities permitted by BCDA. With the exception of areas cleared for water access, the parcel is forested, and the shoreline is rocky. Erosion is minimal. Upland forest species include white and red oaks and hickory, with occasional yellow poplar and beech. The forest cover extends down to the water's edge. Hop hornbeam, red bud, beech and basswood are common along the shoreline fringe. This forest community is structurally mature and floristically diverse and is represented by high forest integrity. This parcel contains limestone bluffs and rock outcroppings which provide suitable habitat for high animal diversity and may support rare animal occurrences. Most of the significant portion of this community and habitat occurs on property other than that owned by TVA. Backlying landowners will be encouraged to protect similar resources possibly through some form of conservation easement or agreement to preserve this site. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional water-use facilities will not be considered.

#### Parcel 19 (25.5 acres)

Zone 3, Sensitive Resource Management

Heritage

This moderate-sloped, shoreline tract is located on left and right banks of Rocky Branch upstream of an old road. This parcel was committed for existing use. Shoreline is rocky, and erosion is minimal. The parcel is forested and dominated by upland hardwoods including red oak, white oak, hickory, and shagbark hickory. Several larger beech trees occur in the upper reaches of this cove. Standing timber or high-cut stumps were left along this shoreline for aquatic habitat. They provide shade, cover, and a food source for fish. Emergent and scrub-shrub wetlands, dominated by water willow, alder, and buttonbush, occur in the back of the cove along the right bank. This tract contains suitable habitat for foraging bats, small mammals, deer, shorebirds,

wading birds, waterfowl, reptiles, and woodland salamanders. This area provides suitable shoreline buffer and would be desirable to maintain as such. This parcel will be managed to protect significant heritage resources. Requests for water-use facilities will not be considered.

### **Parcel 20 (14.6 acres)**

Zone 3, Sensitive Resource Management

Cultural

Parcel 20 begins on the right bank of Rocky Branch in a small cove adjoining an old roadbed. This cove is forested with dense alder thickets present along the shoreline. Immediately downstream of this cove is an adjoining residential lot. All understory vegetation has been removed to the shoreline, and all that remains is a loblolly pine stand with a maintained lawn beneath the pines. Two private water-use facilities were permitted by BCDA on this parcel. The private lawn is located on moderate slopes, but immediately downstream, the slopes become steep with fringe wetlands along the shoreline. Large, mature, upland hardwoods are present on this parcel. Most of the shoreline is rocky and forested down to the waterline. Alder, hop hornbeam, scattered sweet gum saplings, and red bud dominate the cover along the shoreline. Proceeding on downstream toward the second water-use facility, there is a rock outcropping present with numerous large, eastern red cedars identified within the upland forest stand. The area surrounding the second back-lying residence has been cleared of undergrowth to expose rock outcrops and mineral soils and has been recently burned. An old well or cistern appears to be located on TVA property. Slopes on most of this parcel are moderate to steep with rock outcrops and are forested with upland hardwoods and a significant amount of an eastern red cedar component. This parcel terminates near back of another unnamed cove containing emergent and scrub-shrub wetlands. This cove contains a shoreline dominated by water willow, rushes, black willow, and dense alder thickets at the water's edge. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional water-use facilities will not be considered.

# **Parcel 21 (11.4 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural

Parcel 21 is a narrow, moderate to steep slope parcel beginning at the head of an unnamed cove and extending downstream along the right bank mouth of Rocky Branch and along the right bank of Little Bear Creek where it terminates at a cleared residential lot and dock facility. This parcel was committed for existing use. The shoreline has heavy concentrations of alder with scattered pockets of emergent water willows. Shoreline erosion is minimal. Upland hardwoods dominate the parcel. Species include red and white oaks, hickory with a significant component of yellow poplar, and red maple. A portion of the parcel fronting the reservoir has exposed

limestone bedrock. Where bedrock is absent, the slopes become moderate, the shoreline is gravel lined and fringe emergent, and scrub-shrub wetlands consisting of water willow and alder are common. The area provides excellent fish spawning habitat. The high integrity of portions of this parcel provides suitable habitat for a diverse assemblage of animals. Overall, this parcel provides habitat that can support high levels of species diversity. This parcel will be managed to protect significant heritage and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### Parcel 22 (5.2 acres)

Zone 3, Sensitive Resource Management

- Heritage
- Cultural

This narrow shoreline parcel is located on the right bank of Little Bear Creek at LBM 16 and fronts residential lots that have been cleared to shoreline. Two private wateruse facilities were permitted by BCDA on this parcel. Shoreline erosion is common where all vegetation has been removed. A small cove located between two lots is still heavily vegetated with alder which has prevented shoreline erosion. Mature, upland hardwood species, including red and white oak and hickory, dominate the parcel with scattered, eastern red cedar, loblolly pine, and numerous cavity trees. A small slough located on the right bank contains a small, emergent and scrub-shrub wetland. Portions of the parcel near the west end are steep with exposed limestone bedrock and bluff areas. The bluff area is important for small mammals, nesting birds, reptiles, and woodland salamanders. This parcel will be managed to protect heritage and cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### **Parcel 23 (6.4 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual

This parcel begins on the right bank, fronting the main reservoir at LBM 15.6, and extends downstream where it terminates at the head of McAfee Spring Branch. Land behind this parcel was retained by BCDA. The shoreline can be characterized as rocky with exposed bedrock, scenic rock outcrops and bluffs occurring along its length. Slopes become more gradual proceeding downstream. Some shoreline areas are heavily vegetated with alder, black willow, and scattered pockets of emergent water willow. Emergent wetlands occur near the head of McAfee Spring Branch. The gravelly shoreline provides excellent spawning habitat for fish. Mature, upland forest

dominate the parcel. Common species include white oak, red oak, and beech with scattered pockets of loblolly pine near the shoreline. It would be desirable for TVA to request additional shoreline areas on this parcel to provide a more suitable buffer. The mature forest throughout sections of this parcel represents excellent wildlife habitat that has potential of supporting a high level of species diversity. This parcel will be managed to protect cultural, heritage, and visual resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# Parcel 24 (2.0 acres)

Zone 3, Sensitive Resource Management

Cultural

Parcel 24 is a moderately sloped parcel that begins at the head of McAfee Spring Branch and extends along the right bank to a small, unnamed cove near McAfee boat ramp. One utility line right-of-way, which serves a security light, traverses this parcel near the northwest corner of the parcel. Bedrock is visible along much of the shoreline with scattered, eastern red cedar and volunteer loblolly pine. Mature, upland hardwoods are common on adjoining back-lying land. Large, mature beech and white oak are common. An emergent wetland is located near the head of McAfee Spring Branch. This parcel has potential of supporting a high level of species diversity. Because of the narrowness of this small finger cove, it would be undesirable to consider water-use facilities. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### Parcel 25 (2.5 acres)

Zone 6, Recreation

This parcel begins at the power line right-of-way in back of an unnamed stream near the mouth of McAfee Branch, LBM 15.3, and fronts all of McAfee boat ramp and parking lot operated by BCDA. This parcel was committed for existing use. A small area of kudzu was noted under the power line right-of-way. This is the first occurrence of kudzu noted on the shoreline. This public use area has a gravel parking lot with security light. Considerable shoreline erosion was noted on the site. Because sensitive resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. This parcel was placed in Zone 6 to reflect current use.

### **Parcel 26 (3.8 acres)**

Zone 3, Sensitive Resource Management

Heritage

This parcel begins downstream of McAfee Public Use Area at LBM 15 and fronts BCDA property. Parcel 26 is an extremely narrow, one- or two-tree-width zone fronting BCDA-retained land. The shoreline is variable with areas of exposed

bedrock, exposed chert banks and occasional scattered clumps of alder along its length. Typical, upland hardwoods occur on the parcel and on back-lying land including red oak, white oak, hickory, and occasional loblolly pine. On the downstream portion of Parcel 26, exposed bedrock becomes more prominent, slopes become steep, and eastern red cedar becomes more prevalent. Much of the parcel located upstream of the 161-kV line has exposed bedrock and is undesirable for water-use facilities. Because of steep slopes, shallow soils, rocky conditions, it would be undesirable to remove vegetation and trees from this parcel. This parcel will be managed as a shoreline buffer to protect significant heritage resources. Most of these significant heritage resources occur on property other than that owned by TVA. BCDA and other backlying landowners will be encouraged to protect similar resources possibly through some form of conservation easement or agreement to preserve this site. Requests for water-use facilities will not be considered.

#### **Parcel 27 (8.5 acres)**

Zone 3, Sensitive Resource Management

Cultural

Parcel 27 begins on the right bank of Little Bear Creek at LBM 14 and ends at the head of an unnamed cove on the left bank of Trace Creek immediately upstream of a 161-kV line fronting the main reservoir. All of the back-lying land was retained by BCDA. The shoreline is characterized by areas of exposed bedrock, scattered rock outcrops, shoreline fringe wetlands, and exposed red clay-chert banks where bedrock is less prominent. Fringe wetlands consist of water willow and buttonbush. Upland hardwood forests are present on this parcel and the back-lying BCDA land. Dominant species include red oak, white oak, hickory, and scattered, eastern red cedar. Persimmon, red bud, and hop hornbeam are common along the shoreline. Rock outcrops appear to terminate on the point entering Trace Creek. Terrain is mostly gentle to moderately sloped. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

#### **Parcel 28 (8.1 acres)**

Zone 3, Sensitive Resource Management

Cultural

This moderately sloped parcel is located on the left descending bank of Trace Branch and fronts BCDA property. Limestone bedrock persists along much of shoreline and supports a significant amount of eastern red cedar. Small loblolly pine plantations occur near the upstream end of this parcel near an existing private water-use facility permitted by BCDA. All understory shoreline vegetation near this water-use facility has been removed and is mowed to the water's edge. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### Parcel 29 (186.8 acres)

Zone 3, Sensitive Resource Management

- Heritage
- Cultural

This relatively large, moderately sloped, contiguous parcel of land surrounds the head of Trace Branch embayment at LBM 13.3. This parcel was committed for existing use. It contains shoreline areas of flooded stumps and timber and exposed bedrock with significant concentrations of eastern red cedar and a potential glade-type habitat. Scrub-shrub and emergent wetlands are located along most of the shoreline where bedrock is not exposed. Upland hardwoods with scattered pockets of loblolly pines are present. Upland hardwood communities are typical of those previously described with red oak, white oak, and hickory representing the dominant species and eastern red cedar occurring where bedrock exists. The TVA Colbert-Smithville 161-kV right-ofway traverses a large segment of the parcel located on the left bank of Trace Branch. An open field is being maintained in the back of Hughes Branch but is not under an existing agricultural license. Standing timber and high-cut stumps were left along this shoreline and at the head of Hughes Branch for aquatic habitat. They provide shade, cover, and a food source for fish. Emergent and scrub-shrub wetlands are located along the shoreline and at the head of Hughes and Guinn Branches. Wetland vegetation consists of water willow, buttonbush, scattered rushes, black willow, and sycamore. This parcel will be managed to protect heritage and cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# **Parcel 30 (24.7 acres)**

Zone 4, Natural Resource Conservation

Parcel 30 is gently to moderately sloped and fronts BCDA land on the right descending bank of Trace Branch. This forested parcel has shoreline areas of exposed bedrock and areas of emergent and scrub-shrub wetlands consisting of water willow and buttonbush at the heads of the unnamed coves. The parcel is forested with a variety of species including planted loblolly pine stands and reverting shoreline areas dominated by oak, hickory, beech, sycamore, red bud, and numerous eastern red cedar. Back-lying BCDA land appears to be predominantly mature, upland hardwoods. This parcel was determined to be suitable for development purposes. Any future development or permitting activities would be designed to avoid or minimize impacts to identified wetlands on this parcel. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Should BCDA develop the back-lying area for residential, TVA would consider changing the allocation to Zone 7 subject to applicable review and approval.

### **Parcel 31 (4.1 acres)**

Zone 3, Sensitive Resource Management

- Cultural
- Visual

This parcel surrounds the large prominent point on the main reservoir between the mouth of Trace and Dry Branches. This narrow parcel fronts a large BCDA tract that has steep terrain and prominent bedrock outcrops. Most of Parcel 31 consists of rocky shoreline, scattered cedars and upland hardwoods. Large, mature, upland hardwoods including oak and hickory are present on the BCDA land. Should BCDA ever develop the back-lying property, it will be desirable for TVA to obtain a wider protective buffer in this area. Underwater stumps are present fronting the parcel in Dry Branch. This parcel will be managed to protect cultural and visual resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### **Parcel 32 (19.3 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural

Parcel 32 extends from a midpoint on the left bank of Dry Branch embayment at LBM 13 around the back of the cove and downstream to the midpoint of the right bank of Dry Branch. A portion of this parcel on the right bank of Dry Branch fronts BCDA property. This parcel was committed for existing use. This moderate to steep sloped parcel is forested with exposed bedrock along much of the shoreline. Upland forest includes a mix of oak, hickory, eastern red cedar, loblolly pine, and sourwood. Emergent and scrub-shrub wetlands occur at the head of the branch. Flooded, underwater stumps and standing timber were left for fish habitat within the cove and create safety concerns for recreational use of water-use facilities. These areas provide shade, cover, and a food source for fish. This parcel will be managed to protect heritage and cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### **Parcel 33 (9.4 acres)**

Zone 3, Sensitive Resource Management

- Cultural
- Visual

This narrow shoreline parcel fronts a large BCDA-retained peninsula between Dry Branch and Carpenter Branch around the main reservoir and ends at the confluence of Dempsey Spring at Carpenter Branch. The parcel is forested with rock outcrops common along some sections. Upland hardwoods, dominated by red oak, white oak and hickory occur on Parcel 33 and the back-lying BCDA land. Understory vegetation

is sparse. Some minor erosion is occurring on chert banks where bedrock is absent. This parcel could potentially contain sensitive species unique to limestone outcrop areas. It would be desirable to obtain a wider buffer on this parcel should BCDA ever develop back-lying property. A small fringe wetland was identified at the back of an unnamed cove along the northwest portion of this parcel. Visual management of the shoreline on this and adjoining parcels in Carpenter Branch will help protect a scenic cove for anchorage by pleasure boats and use by fishermen. This parcel will be managed to protect cultural and visual resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

#### Parcel 34 (66.9 acres)

Zone 3, Sensitive Resource Management

- Heritage
- Cultural

Parcel 34 begins on left bank of Dempsey Spring extending around the embayment to slightly past the head of Carpenter Branch where it terminates at a small, unnamed cove adjoining private land that has been cleared of all understory vegetation to the shoreline. This moderately sloped, forested parcel was committed for existing use. This parcel contains small fringe emergent water willow and rush wetlands at several locations within the embayment. More extensive emergent and scrub-shrub wetlands occur at the head of Dempsey and Carpenter Branches. Upland forests are typical red oak, white oak and hickory, with eastern red cedar occurring along the more open shoreline areas. These areas contain emergent and scrub-shrub wetlands consisting of water willow, buttonbush and alder which filters runoff from the adjoining land. This parcel will be managed to protect heritage and cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

#### **Parcel 35 (10.0 acres)**

Zone 3, Sensitive Resource Management

Cultural

Parcel 35 is located on the right bank of Dempsey Branch at LBM 12.6. Several acres have been cleared of all understory vegetation by the adjoining property owner. Three water-use facilities exist on the parcel which were permitted by BCDA, one of which is dilapidated and has been posted for removal. Where clearing has not occurred, the parcel has bedrock occurring along the shoreline. Numerous cedars and persimmon occur on this parcel. Some minor wetland vegetation occurs within small shoreline indentations which include water willow, black willow, buttonbush, and sycamore. Terrain is gentle in slope with upland hardwood habitat on upper elevations. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional water-use facilities will not be considered.

# **Parcel 36 (5.5 acres)**

Zone 3, Sensitive Resource Management

- Cultural
- Visual

Parcel 36 is located on the right bank of Carpenter Branch at the confluence with Little Bear Creek at LBM 12.6. This narrow shoreline parcel fronts land retained by BCDA. The parcel is forested and dominated by red oak, white oak, hickory, and scattered loblolly pine. Exposed bedrock is common along the shoreline with rock outcropping more prominent on the point of the peninsula fronting the main reservoir. Shoreline vegetation includes scattered, eastern red cedar, locust, and persimmon. Visual management of the shoreline of this and adjoining tracts in Carpenter Branch will help protect a scenic cove for anchorage by pleasure boats and use by fishermen. This parcel will be managed to protect cultural and visual resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# **Parcel 37 (45.0 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- TVA Small Wild Area

Parcel 37 is a large block of TVA land located along the right bank of Little Bear Creek adjoining the dam reservation at LBM 12. This parcel has gentle to moderate slopes. The shoreline is a combination of exposed bedrock, gravel and chert with small pockets of emergent and scrub-shrub wetlands consisting of water willow, rushes, buttonbush, and sycamore. Upland hardwoods dominate the parcel. Large red oak, white oak, hickory, and numerous large snags along the shoreline provide good perching sites for black vultures. This parcel also includes a maturing deciduous forest that supports a series of low-lying limestone outcrops. Several isolated outcroppings are extensive and oriented in interesting patterns. For example, at least two of the outcrops are oriented in a labyrinth or maze-like pattern with a network of paths among the boulders. The outcroppings and forest are important for wildlife habitat and may support occurrences of rare animals such as the red milk snake and the state-protected least weasel. This parcel will be managed to protect heritage and cultural resources. Due to the biological significance of this site this parcel is designated a TVA Natural Area-Small Wild Area. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# **Parcel 38 (13.7 acres)**

Zone 5, Industrial/Commercial

TVA has received an application from the Franklin County Water Service Authority for a water intake and water treatment plant at this location. Any activity considered here will require Dam Safety review and approval in addition to other applicable review and approval. Any proposal should require appropriate buffers and other consideration for the Small Wild Area located on Parcel 37.

# **Upper Bear Creek Parcel Descriptions**

# **Parcel 1 (192.0 acres)**

Zone 2, TVA Project Operations

Located at BCM 114.7, Parcel 1 includes the Upper Bear Creek Dam Reservation. This parcel was committed for existing use. Part of the parcel is located in the city limits of Bear Creek and adjoins Phillips High School. It includes a TVA satellite maintenance base and related facilities and the Upper Bear Creek Water Filter Plant which is on a permanent easement. Downstream of the dam face at the tailwater area is a small parking area which receives some informal recreation use. A portion of the parcel is forested with dominant species of yellow poplar and sweet gum. There are planted pine behind shoreline areas. The remainder of the shoreline is forested with scattered loblolly pine, white oak, red oak, and European alder. There are no water-use facilities on this parcel, and none will be considered. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed.

# **Parcel 2 (53.7 acres)**

Zone 4, Natural Resource Conservation

Parcel 2 is located immediately upstream of the dam reservation on the left bank of Bear Creek at approximate Upper Bear Mile (UBM) 116.5. There are three existing water-use facilities on the parcel which were permitted by BCDA. The parcel is diverse and includes shallow water areas with numerous stumps left in reservoir and fringe emergent and scrub-shrub wetlands. The emerging wetlands are dominated by rushes, sedges, buttonbush and scattered maples. Some bank erosion exists in low-lying cove areas. The slope is gentle to moderate. The upper end of the parcel has rock outcrops near the shoreline. Oak-hickory forests are common along the shoreline area. Emerging and scrub-shrub wetlands tend to disappear along rocky shoreline. This parcel was placed in Zone 4 to protect the shoreline vegetation zone and help minimize shoreline erosion. This parcel is immediately upstream of the water intake for the Upper Bear Creek Water Filter Plant. Requests for additional water-use facilities will not be considered.

### Parcel 3 (18.9 acres)

Zone 3, Sensitive Resource Management

Cultural

This parcel is located on the left bank of Bear Creek at approximate UBM 117 and includes the unnamed cove downstream of the Old Union Church. The parcel is a narrow strip of land surrounded by pastureland which is primarily BCDA property. There are emerging and scrub-shrub wetlands in the back of the unnamed cove. Two

private water-use facilities exist on the parcel in the cove which were permitted by BCDA. The right bank of the cove has been severely impacted by cattle with unfenced access to the shoreline. The rocky shoreline riparian zone consists of scattered oak, hickory, sweet gum, maple, black gum, black cherry, and water oak. The portion of the parcel fronting the main channel is rocky with minimal erosion. A power line traverses the parcel and crosses the reservoir. An informal recreation area is on the narrow peninsula at UBM 117.5 and has severely impacted the site. An area has been cleared and maintained, and erosion is substantial. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional water-use facilities will not be considered. Best agricultural management practices are encouraged for back-lying property owners.

## Parcel 4 (22.1 acres)

Zone 4, Natural Resource Conservation

This parcel is located on the left bank at approximate UBM 118.3 It has a rocky shoreline and is forested with old hickory and patches of loblolly pine to the waterline. The slope is moderate with bedrock exposed near the western end of the parcel. A beaver lodge was observed along the main channel. Farkleberry and St. John's wort are common in the understory. On the eastern end of the parcel on the left bank of an unnamed cove, the back-lying land is developed, maintained lawns. One water-use facility permitted by BCDA is on the right bank of the unnamed cove on the eastern end. The shoreline is rocky and erosion is restricted to the wave line. Back-lying land is pasture. A power line traverses the parcel. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Requests for additional water-use facilities will not be considered.

### Parcel 5 (10.9 acres)

Zone 3, Sensitive Resource Management

• Cultural

This parcel is located on the left bank at approximate UBM 118.8. It begins on the right bank of an unnamed cove on the western end to midway of the left bank of State Branch on the eastern end. BCDA is the back-lying property owner. Predominantly, the western portion is rocky with exposed bedrock along the shoreline and back-lying pasture. The shoreline is forested with oak and hickory. It has moderate to gentle slopes. Shoreline erosion is minimal. Some areas have steeper rocky slopes. Scattered hemlock occur on more prominent rock outcrops. The forested riparian zone appears narrow in width along the main reservoir. The mouth of State Branch has standing stumps in the water along the narrow shoreline with back-lying land in pasture. Some emerging scrub-shrub wetlands are along the western side of State Branch. One water-use facility exists on the parcel in State Branch permitted by BCDA. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional water-use facilities will not be considered.

# **Parcel 6 (101.9 acres)**

Zone 3, Sensitive Resource Management

- Cultural
- Wetland

Parcel 6 is located at the head of State Branch and includes portions of both sides of the Branch at approximate UBM 119.1. The left bank has a rocky shoreline and has an existing agriculture license for pasture. The head has emerging and scrub-shrub wetland brushes with sedges, buttonbush, and black willow. The area is low and flat with numerous shorebirds noted. Standing timber remains in the shallow embayment. The upland area is low lying with upland hardwood oak and hickory. The right bank of the parcel is dominated by hardwood and has moderate slopes and a rocky shoreline with minimum erosion. The wave line is well vegetated by buttonbush and other hardwoods, shrubs, red maple, and scattered, large loblolly pine. A power line crosses the head of the slough. This parcel was placed in Zone 3 to protect sensitive cultural resources and significant wetlands. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### **Parcel 7 (161.8 acres)**

Zone 3, Sensitive Resource Management

Cultural

This parcel extends from the right bank of State Branch at UBM 119.1 to the left bank of an unnamed cove near the abandoned Hager Mine at UBM 119.8. The right bank of State Branch has an old roadbed which receives informal recreation use. The shoreline has rock outcrops and bedrock exposed above the shoreline. The back-lying land has young saplings in a reverting field and has reverting mine land. There are emerging and scrub-shrub wetlands in low-lying embayments. Alder is more prevalent near the mouth of State Branch. The portion fronting the main reservoir consists of mature, upland hardwood forests and sawtimber-size trees of oak, hickory, and scattered loblolly pine. The rocky shoreline has minimum erosion. Alder, buttonbush, rushes, and sedges are present in shallow shoreline depressions. Hardwood shrubs dominate the immediate shoreline. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# **Parcel 8 (70.0 acres)**

Zone 3, Sensitive Resource Management

Cultural

This parcel begins on the left bank of an unnamed cove at UBM 119.8, along both sides of the cove and along the main reservoir to UBM 121.7. The out slopes of the parcel have the appearance of overburden from surface mines. Steep slopes have

scattered white oak, red oak, occasional sweet gum, hemlock, autumn olive, and polonia. There is no evidence of any surface mine drainage, i.e., iron stains, etc., along the western end of the parcel, indicating reclamation was successful. The head of the slough consists of build up of delta from silt coming from the adjoining surface mine, and has developed into emergent and scrub-shrub wetlands with rushes to sedges and black willow. Fringe wetlands occur on the shoreline where rocky shoreline is absent and appears to be controlling shoreline erosion from wave action. The remainder is forested with upland hardwood and scattered loblolly pine. Shoreline wetlands become more extensive on the eastern end of the parcel. One water-use facility permitted by BCDA exists on the eastern end of the parcel. This parcel was placed in Zone 3 to protect sensitive cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional water-use facilities will not be considered.

#### **Parcel 9 (15.3 acres)**

Zone 4, Natural Resource Conservation

This parcel extends toward the confluence of Bear Creek at UBM 121.7 on the left bank to the left descending bank of Falls Creek at UBM 122. This relatively narrow parcel appears to be overburden from old surface mine activities. Much of this parcel appears to be reclaimed mine land. A portion of the parcel fronting Bear Creek is forested with species including yellow poplar, scattered oaks and hickory, Virginia pine, alder, sycamore, and autumn olive. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Requests for water-use facilities will not be considered.

### **Parcel 10 (73.8 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural

This parcel includes both sides of the upper reaches of Falls Creek at UBM 122. This parcel was committed for existing use. Standing timber or high-cut stumps were left along this shoreline and provide for a significant aquatic habitat. They provide shade, cover, and a food source for fish on both sides of Falls Creek embayment. Both shorelines are forested with upland hardwoods, typically old hickory. A road bisects the parcel in the upper reaches where the standing timber continues. This parcel will be managed to protect heritage and cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

#### **Parcel 11 (43.0 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual

#### • TVA Habitat Protection Area

This parcel is located from the right bank of Falls Creek at UBM 122 to UBM 123.1 on the left bank of Bear Creek. It has stretches of exposed sandstone bedrock with steep slopes. There is a dominant old hickory forest on upland areas; some are large, sawtimber-size. Alder is common along the shoreline. Back-lying lands appear to be old strip mine. Two portions of the parcel are representative of sandstone glade communities receiving minimal disturbance and high species diversity. The glades are linear shaped and within a matrix of low-growing trees, shrubs, and herbs. These occurrences also support multiple plant populations that are considered globally rare and imperiled and are suitable for other rare plants. In addition to the visual diversity seen in the plant communities on this tract, the rock bluff and shoreline rock formations mark it as a scenic resource. One water-use facility permitted by BCDA exists on the parcel. This parcel is designated as a TVA Habitat Protection Area due to the biological significance of this site. This parcel will be managed to protect heritage, visual, and cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### **Parcel 12 (10.4 acres)**

Zone 4, Natural Resource Conservation

Parcel 12 is on the left bank of Bear Creek from UBM 123.1 to UBM 124.2. BCDA is the back-lying landowner. Back-lying lands are reclaimed surface mines. Back-lying lands appear to be homogenous stands of Virginia pine. Sandstone bedrock is exposed around the shoreline and is forested in sapling small sawtimber-size. Scattered loblolly pine, oak, and hickory appear to be very narrow in nature along the shoreline and immediately adjoin a reclaimed mine. An old roadbed and power line right-of-way traverse the parcel. Downstream of the power line right-of-way, forests appear to be more mature with a larger-size class species composition of similar oak and hickory. Should BCDA develop the back-lying area for residential, TVA would consider changing the allocation to Zone 7, subject to applicable review and approval.

### **Parcel 13 (25.1 acres)**

Zone 4, Natural Resource Conservation

This parcel is on the left bank of Bear Creek beginning at UBM 124.2 and continuing upstream up to and including the County Road 71 bridge crossing at approximate UBM 124.8. The shoreline is vegetated to water's edge. There are occasional sandstone outcroppings along the shoreline. Species are composed of more upland hardwood, red and white oak, hickory, and occasional Virginia pine. Heavy informal recreation use occurs near the bridge crossing. Eastern hemlock and understory of mountain laurel are common near the bridge. Occasional clay areas are cherty in nature. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Requests for water-use facilities will not be considered.

# Parcel 14 (163.3 acres)

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Wetland
- Visual

This parcel begins on the left bank of Bear Creek at UBM 124.8 and includes all of Quarter Creek. The parcel ends on the right mouth of Quarter Creek at UBM 125.2. Most of the embayment has standing timber areas and fringe wetlands. Standing timber or high-cut stumps were left along this shoreline and provide for a significant aquatic habitat. They provide shade, cover, and a food source for fish. The standing timber and the diversity in shoreline plant variety make this cove a visual resource to the reservoir. Surrounding lands are forested with hemlock, beech, big leaf magnolia, Virginia pine, red oak, white oak, yellow poplar, and sweet gum. Plant species considered rare to uncommon in Alabama occur on this parcel. The habitat is considered high quality, and there is good potential for expansion of the species. The slopes are moderate to steep. Shoreline areas are dominated by alder, button ball, and rushes. An abused, informal recreation area and dumping ground occur near an adjacent road in the downstream quarter of the embayment. This parcel was placed in Zone 3 to protect sensitive heritage, visual and cultural resources, and significant wetlands. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

#### **Parcel 15 (49.2 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural

Parcel 15 begins near the right mouth of Quarter Creek at UBM 125.2 to approximate UBM 126.3 on the left bank of Bear Creek. The parcel was committed for existing use. The parcel has significant concentrations of button ball, alder, and cut-grass along the shoreline areas which help control shoreline erosion. Back-lying lands are moderately sloped with small pole sawtimber-size class forests in red oak, white oak, red maple, and hickory. The Alabama Power, Wilson Dam/Haleyville 161-kV power line crosses in the upper reaches of the upstream, unnamed slough. Some standing timber, beginning at the transmission right-of-way, and emergent wetlands are also present at back of the embayment. Eastern hemlock are scattered at various locations. Preliminary plans provided by the Alabama Department of Transportation indicate a proposed bridge crossing on this parcel. This parcel will be managed to protect heritage and cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# **Parcel 16 (9.1 acres)**

Zone 4, Natural Resource Conservation

Parcel 16 is on the left bank descending Bear Creek from approximate UBM 126.3 to 127. Sandstone outcrops are exposed on the shoreline. Vegetation clearing has occurred in some areas, and residential development is occurring on back-lying land. There are no water-use facilities existing, and the channel is too narrow for safe use of private water-use facilities. A dead-end road on the parcel contributes to abuse and receives informal fishing use. Virginia pine, white oak, eastern hemlock (occasional), hickory, alder, and laurel are common along rock areas along the shoreline. Button ball and alder are common along the shoreline area. The Alabama Power, Wilson Dam/Haleyville 161-kV power line crosses the parcel. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Requests for water-use facilities will not be considered.

### Parcel 17 (513.0 acres)

Zone 3, Sensitive Resource Management

- Heritage
- Cultural

Parcel 17 includes all the upper reaches of the Bear Creek arm of Upper Bear Reservoir from the left bank UBM 127 to the right bank at approximate UBM 126.5. This parcel was committed for existing use. Standing timber occurs on the entire length. Feeder streams and embayments including Bagwell Branch, Little Dice Branch, Posey Creek, Butler Falls Branch, and other named and unnamed branches and creeks contain standing timber and emerging scrub-shrub wetlands. Scrub-shrub and emerging wetlands dominate the shoreline. Back-lying areas have larger black willow, red maple, and sycamore. Upland areas are dominated by oak, hickory, and scattered stands of Virginia pine. Shoreline areas are built up with heavy silt, creating shallow water habitat. A significant buffer area is filtering sediment from back-lying, reclaimed mine land. Pine dominate on upper slopes, where mine lands have been reclaimed. Some exposed rock outcrops along the shoreline, and laurel and rhododendron are common. St. John's wort is also common in these areas. Reclaimed surface mines present on the right bank have been planted with sericea lespedeza and loblolly. Possibly cattle are accessing the creek on the left bank across from the mouth of Little Dice Branch. County Road 69 crosses the upper reaches of the reservoir. This parcel will be managed to protect significant heritage and cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

#### **Parcel 18 (42.1 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- TVA Habitat Protection Area

This parcel is on the right descending bank of Bear Creek immediately upstream of Quarter Creek Public Use Area. The upper reaches of the parcel have an old roadbed and is traversed by the Alabama Power, Wilson Dam/Haleyville 161-kV power line right-of-way. Preliminary plans provided by the Alabama Department of Transportation indicate a proposed bridge crossing on this parcel. The parcel has occasional sandstone bedrock exposed along the shoreline, with a linear-shaped glade. This parcel possesses high integrity and species diversity. It includes multiple plant species that are considered rare and imperiled in Alabama. Some shoreline vegetation clearing has taken place. Shoreline area where bedrock is not exposed contains American alder, button ball, and red maple. There is a significant area of emergent scrub-shrub wetlands at the back of the embayment on the northern end of the parcel. Scattered Virginia pine and hickory occur on upper slopes. Red maple and water oak are occasionally seen. This parcel is designated as a TVA Habitat Protection Area due to the biological significance of this site. This parcel will be managed to protect significant heritage and cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### **Parcel 19 (14.8 acres)**

Zone 6, Recreation

Located on the right bank of Bear Creek between UBM 124 and 125.4, Parcel 19 fronts the Quarter Creek Public Use Area operated by BCDA. This parcel was committed for existing use. Developed facilities include a beach, pavilion, paved parking lot, boat ramp with paved parking, and a courtesy dock. The parcel is a narrow, shoreline strip with back-lying BCDA land. County Road 71 bisects the parcel and has a bridge crossing. The shoreline is forested and back-lying lands appear to be a reclaimed mine site. Virginia pine is common and scattered white oak and red maple are along the shoreline. Alder is common in shallow cove areas. Shoreline erosion is minimal. There is rocky shoreline with occasional sandstone bedrock exposure. Slope is gentle; some old field areas are in early succession. European alder becomes much heavier in concentration near the developed beach area. Emerging scrub-shrub wetlands between Quarter Creek beach and the bridge on Dime Road (Highway 71). There has been clearing of undergrowth by a back-lying landowner at the western end of the parcel. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for private water-use facilities will not be considered.

#### **Parcel 20 (6.1 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- TVA Habitat Protection Area

This parcel is located on the right bank of Bear Creek at approximate UBM 123.8. It includes two private water-use facilities permitted by BCDA. One back-lying property owner has removed all trees and burned the understory vegetation. It is a narrow forested shoreline area with the exception of the western end of the parcel where significant shoreline clearing has occurred. Sandstone rock outcroppings occur along the shoreline of this parcel. Terrain is steep, with forested dominate species including chestnut oak, Virginia pine, and scattered eastern hemlock near the shoreline. Understory along the shoreline areas include shrubby St. John's wort, mountain laurel, beech, and polonia. This parcel possesses high integrity and species diversity. It includes multiple-plant species that are considered rare and imperiled in Alabama. This parcel is designated as a TVA Habitat Protection Area due to the biological significance of this site. This parcel will be managed to protect significant heritage resources. Back-lying landowners will be encouraged to protect similar resources. Requests for additional water-use facilities will not be considered.

### **Parcel 21 (13.3 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- TVA Habitat Protection Area

Parcel 21 is located on the right descending bank of Bear Creek just upstream of the mouth of Pretty Branch at approximate UBM 123.5. Land cover consists of forested shoreline with sandstone bedrock exposed along the shoreline. Slope is moderate to steep. Forest cover includes Virginia pine and scattered oaks. This parcel includes multiple plant species that are considered rare and imperiled in Alabama. This parcel is designated as a TVA Habitat Protection Area due to the biological significance of the site. This parcel will be managed to protect significant heritage resources. Backlying landowners will be encouraged to protect similar resources. Requests for water-use facilities will not be considered.

#### **Parcel 22 (23.9 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- TVA Habitat Protection Area

This parcel is located at the mouth of and contains both sides of Pretty Branch at approximate UBM 123.4. Standing timber or high-cut stumps were left along this shoreline and provide for a significant aquatic habitat. They provide shade, cover, and a food source for fish. Topographical sheets indicate the site of the old Davis Mill

Dam at this location. This parcel is designated as a TVA Habitat Protection Area due to the biological significance of this site. This parcel will be managed to protect significant heritage and cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# **Parcel 23 (79.8 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual
- TVA Habitat Protection Area

This parcel is on the right descending bank of Bear Creek between UBM 120.9 and 123.4. This is a long, narrow, forested shoreline. The shoreline is rocky with occasional sandstone bedrock. It has moderate to steep slopes. Dominated by upland hardwoods, the shoreline is all forested. Dominant species include white oak, red oak, hickory, red maple, willow, and scattered Virginia pine. Pine plantations appear to be located on adjoining properties, suggesting that this land could possibly be reclaimed mines. There is acid drainage staining on rocks and iron and manganese (red and black) staining. There are pockets of emergent scrub-shrub wetlands along the shoreline depressions/indentations. There is good potential for rare plants because of a different little ecosystem that has developed from sedimentation. Alder is common along the shoreline. Some glade-like areas occur on the southwestern part of the parcel. A power line traverses the parcel. A private water-use facility exists that is apparently not permitted. This parcel possesses high integrity and species diversity. It includes multiple plant species that are considered rare and imperiled in Alabama. This peninsula exhibits a number of shoreline rock formations and supports a small scenic cove near its southernmost tip. Visual protection of this tract further supports the visual protection of Parcel 11 across the reservoir. This parcel is designated as a TVA Habitat Protection Area due to the biological significance of the site. This parcel will be managed to protect significant heritage, visual, and cultural resources. Backlying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# **Parcel 24 (40.5 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual
- TVA Habitat Protection Area

Located at approximate UBM 120.8, this parcel includes both sides of Bethel Branch. This scenic cove supports standing timber and a wide diversity of shoreline plant

species. Standing timber or high-cut stumps were left along this embayment and provide for a significant aquatic habitat. They provide shade, cover, and a food source for fish. The stumps create safety concerns for recreational use of water-use facilities. Rock outcrops are common surrounding the area. Terrain is steep. Upland hardwood dominant species including, red oak, white oak, and scattered loblolly pine are present. This parcel possesses high integrity and species diversity. It includes multiple-plant species that are considered rare and imperiled in Alabama. This parcel is designated as a TVA Habitat Protection Area due to the biological significance of this site. This parcel will be managed to protect significant heritage, visual, and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# **Parcel 25 (25.3 acres)**

Zone 3, Sensitive Resource Management

Visual

This parcel is on the right descending bank of Bear Creek approximately between UBM 120.4 and 120.8. It is a narrow piece of TVA land, with no BCDA back-lying property. This tract supports two scenic bluffs that exhibit unusual rock formations, adding to the visual quality in the portion of the reservoir. It contains forested shoreline with scattered loblolly pine plantations with red oak and white oak. The shoreline is rocky with sandstone outcrops common. Slopes are moderate, to steep, to vertical. Forested shoreline areas of steep, upland hardwoods are common. Backlying lands contain scattered houses with some undergrowth removal and informal recreation occurring in front of the houses. One water-use facility permitted by BCDA exists at the back of the westernmost unnamed embayment. A vulture nest was observed in rock outcrops. This parcel will be managed to protect significant visual resources. Requests for additional water-use facilities will not be considered.

# **Parcel 26 (7.6 acres)**

Zone 7, Residential Access

This parcel is located on the right descending bank of Bear Creek fronting BCDA at approximate UBM 120. It is a narrow riparian zone fronting BCDA. Typical, dry, upland hardwood, alder, and vacinium species are located on the shoreline. The slope is moderate, and shoreline erosion is minimal. Very small wetland areas occur in backs of coves; these areas will be protected via permit requirements. Should BCDA develop the back-lying area for residential, TVA would consider applications for water-use facilities.

## **Parcel 27 (1.3 acres)**

Zone 7, Residential Access

This parcel fronts BCDA-developed Tanglewood residential subdivision. This parcel was committed for existing use. Most of the shoreline is adjoining residential development, and access areas are developed with water-use facilities and decks. Nine water-use facilities were permitted by BCDA on this parcel. Requests for additional water-use facilities will be considered.

### **Parcel 28 (0.8 acres)**

Zone 4, Natural Resource Conservation

This parcel is immediately downstream of the developed Tanglewood Subdivision at approximate UBM 119.6. This is a narrow, TVA, shoreline strip fronting back-lying BCDA property. It is a narrow, forested, shoreline riparian zone. Back lands appear to be open. Forest species appear to be typical, upland red oak, white oak, and hickory. It has a rocky shoreline with moderate slope to gentle. No erosion is evident. Should BCDA develop the back-lying area for residential, TVA would consider changing the allocation to Zone 7, subject to applicable review and approval.

### Parcel 29 (53.5 acres)

Zone 3, Sensitive Resource Management

Cultural

Located on the right bank of Bear Creek and occupying most of a large peninsula at UBM 119, much of this parcel (40 acres) is currently in agriculture license for pasture. A portion of one cove is fenced off for watering livestock and appears to be receiving heavy use. No undergrowth is present there. Portions of the parcel are fenced at the shoreline, and woody vegetation is absent on some areas. The shoreline has rocky slopes that are gentle to moderate. A forested, riparian zone exists along the shoreline. Common species include red oak, white oak, red maple, scattered poplars, and loblolly pines. Early successional growth is present, and open habitat is present. It is recommended that cattle be moved further back from the shore to help protect the shoreline vegetation and to help prevent erosion. The northern portion of this parcel has a well-developed, riparian buffer zone and large, sawtimber-size hardwood, including red oak, white oak, hickory, and yellow poplar. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### Parcel 30 (60.6 acres)

Zone 3, Sensitive Resource Management

Cultural

This parcel is located on the right descending bank of Bear Creek immediately upstream of Twin Forks Recreation Area. St. Johns' wort and a sandstone outcrop

borders the shoreline area. The riparian zone is forested; dominant species include white oak, yellow poplar, scattered red maple, and big leaf magnolia. Understory vegetation includes hop hornbeam, red buckeye, mountain laurel, and pockets of loblolly pine that have the appearance of being planted. There is a moderate slope. A private water-use facility is located in the small Y-shaped cove. The parcel features a long, narrow peninsula and has a forested shoreline dominated by loblolly pine and scattered big leaf magnolia along the shoreline areas. There is a gentle slope where some pine plantings appear to have been thinned in the past. Shoreline erosion is minimal. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

## **Parcel 31 (17.1 acres)**

Zone 6, Recreation

Located across from the dam reservation, this parcel includes Twin Forks Public Recreation Area and was committed for existing use. County Road 79 is the northwestern boundary of this parcel. The majority of the developed portion is on BCDA land and is leased to the town of Bear Creek. Developed facilities include boat ramp and parking lot, campground, ball fields, pavilion, and beach. A narrow, predominantly forested, shoreline strip fronts this development. Species include red oak, hickory, yellow poplar, alder, and other woody species along the shoreline. There are spots of minimal shoreline erosion. Bank erosion appears to be from campground use. The eastern end of parcel has not been developed. Erosion is occurring where campsites are located near the water. Informal camping appears to be along the back end of the parcel. All of this parcel is gently to moderately sloped. This is a typical, dry, upland hardwood site with oak, hickory dominant in cover, scattered loblolly, big leaf magnolia, and sourwood. Shoreline ranges from red clay chert to rocky. Shoreline erosion is minimal to nonexistent in rocky areas. Erosion and understory vegetation is abundant in areas where informal use is low. A transmission line rightof-way crosses the parcel. This parcel ends upstream where the rock outcrop becomes more exposed. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. This parcel was placed in Zone 6 to reflect current use.

#### **Parcel 32 (25.4 acres)**

Zone 3, Sensitive Resource Management

Cultural

This parcel is located on the left descending bank of Little Bear Creek immediately upstream of Twin Forks Recreation Area. Back-lying land is agricultural. Small, wetland pockets should be protected from future development actions as they serve as filters for sedimentation. Understory has been cleared. This parcel begins with a forested, riparian zone on which the understory has been mechanically or chemically removed by adjoining landowners. Two water-use facilities permitted by BCDA are

present along this shoreline. Forested shoreline is typical of a dry, well-drained, upland hardwood site. Species include white oak, red oak, hickory, and scattered alder along the shoreline. Small pieces of water willow occur along the shoreline. The shoreline is rocky with minimal erosion. Back-lying land appears to be open. Small agriculture license is on the south end of the parcel. A portion of the parcel near the County Road 79 bridge contains an area where forest cover has been removed, and exposed mineral soils are present. Pine species are volunteering on this site. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional water-use facilities will not be considered.

#### **Parcel 33 (5.9 acres)**

Zone 4, Natural Resource Conservation

Located on the left bank of Little Bear Creek, the northern portion begins in back of an unnamed cove with wetland species. Back-lying land is BCDA pasture with agriculture license. The shoreline buffer zone along the pasture (northern portion of parcel) needs to be enlarged to protect water quality and prevent erosion. After the first 1,000 feet or so, the depth of the riparian forest zone increases, and a typical hardwood stand occurs. Little woody understory is present. Common species include white oak, hickory, and occasional Virginia pine. Small pockets of emergent and scrub-shrub wetlands occur in shoreline depressions. If agriculture use continues on this tract, cattle need to be fenced well back from the shoreline. A woody buffer should be maintained. Loblolly pines are scattered. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Should BCDA develop the back-lying area for residential, TVA would consider changing the allocation to Zone 7, subject to applicable review and approval.

### **Parcel 34 (5.4 acres)**

Zone 4, Natural Resource Conservation

Located on the left descending bank of Little Bear Creek, this parcel begins on the northernmost end in an unnamed cove with rock shoreline. The parcel is forested with eastern hemlock back in an unnamed cove. BCDA land is back lying. Dominant species include white oak, yellow poplar, American beech, and sourwood. Understory consists of scattered loblolly pine. Alder is common along the shoreline, and slopes are moderate. This parcel is a pretty typical, dry, upland hardwood site. A small, emergent wetland is located at the back of the southernmost cove. No other shoreline wetlands were identified along this parcel. Vegetation removal along the shoreline of the parcel should be minimized to prevent erosion. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Should BCDA develop the back-lying area for residential, TVA would consider changing the allocation to Zone 7, subject to applicable review and approval.

# Parcel 35 (3.8 acres)

Zone 4, Natural Resource Conservation

This parcel is located on the left descending bank of Little Bear Creek. Back-lying land is BCDA. The natural rock wall that borders the cove along the southern portion of this tract is visually unique to this portion of the reservoir. It contains moderate to steep topography and does not appear to have sandstone outcrops that are common on other portions of the reservoir. Shoreline areas are forested, dominated with white oak, red oak, hickory, and scattered, volunteer loblolly pine. Small fringe wetlands occur in shoreline depression areas. The parcel is typical of upland hardwoods in this areas. The portion of this parcel where it terminates into an unnamed cove (southern end of parcel) has the presence of a sandstone ledge along the shoreline. There is good water 12-feet deep with a 6-foot path in back of the cove. This parcel was placed in Zone 4 to protect significant visual resources and to protect the shoreline vegetation zone. Should BCDA develop the back-lying area for residential, TVA would consider changing the allocation to Zone 7, subject to applicable review and approval.

# **Parcel 36 (17.8 acres)**

Zone 4, Natural Resource Conservation

This parcel is located on the left descending bank of Little Bear Creek. The northern part of the parcel begins in back of an unnamed cove with a back-lying, abandoned mine. The parcel has a shallow wetland area at the back of the northernmost cove which needs to be avoided. This wetland is filtering out sediments from runoff from abandoned mines. This area should continue to fill in from this runoff. A beaver dam was observed in back of the cove. This parcel is forested with dominant species of white oak, chinquapin or chestnut oak, loblolly pine, some Virginia pine, mixed in sourwood and scattered yellow poplars. The terrain is moderately sloped. There are no rock outcroppings, and shoreline is rocky and sandy with clay substrate. Fringe and scrub-shrub wetlands occur at the back of the shoreline depression and coves. These areas appear to be formed by silt and sediment from back-lying mine lands and are currently functioning to capture this sediment load during rainfall events. The southern part of the parcel has some clearing with some half-built structures on the back-lying property. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Requests for water-use facilities will not be considered.

# **Parcel 37 (9.3 acres)**

Zone 7, Residential Access

This parcel is located on the left descending bank of Little Bear Creek. One private water-use facility permitted by BCDA exists on this parcel. Emergent and scrub-shrub wetlands are common in small shoreline coves/depression areas. Planted loblolly pine stands occur on portions of the parcel. Some harvesting of wind-damaged pines have taken place in the recent past. Three property owners along this parcel were given permission to apply for water-use facility permits during an interim period between

BCDA permitting policies and when TVA began shoreline permitting. Requests for water-use facilities will be considered.

#### **Parcel 38 (12.4 acres)**

Zone 4, Natural Resource Conservation

Located on the left bank of Little Bear Creek, the northern boundary of this parcel begins in an unnamed cove. Going in a southerly direction, it consists of cleared shoreline and back-lying residential property. There are two water-use facilities permitted by BCDA on this parcel. Areas that have not been cleared are forested with sapling and small sawtimber-size trees. Dominant species include yellow poplar, Virginia pine, and white oak. The parcel is directly across from vertical sandstone bluffs approximately 60-feet high that are an important habitat for birds of prey. Fringe wetlands are common along the shoreline areas, consisting of water willow and American alder. Most of the shoreline is moderately sloped with no sandstone outcroppings present. Back-lying land use is residential and also reclaimed strip mines. This parcel was placed in Zone 4 to help protect the ecological and aesthetic value of the bluffs as well as to protect the shoreline vegetation zone. Requests for additional water-use facilities will not be considered.

# **Parcel 39 (10.1 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Visual
- TVA Habitat Protection Area

Located on the left bank of Little Bear Creek, the northern part of the parcel begins in a beautiful, small, unnamed cove with sandstone rock outcroppings with small waterfalls, which become large running waterfalls during rainfall events. It has steep topography with sandstone outcrops. The parcel is forested, dominated with white oak, chestnut oak, yellow poplar, big leaf magnolia, eastern hemlock, and scattered American beech. Miscellaneous woody understory includes mountain laurel. The southern portion of the parcel terminates in back of an unnamed slough. A small point at the head of the slough is dominated by loblolly pine, which appear to be planted. There are fringe wetlands, including emergent scrub-shrub at the southern parcel cut line. The sandstone bluffs include rock houses and rock ledges that support woodland salamanders, small mammals, and breeding birds. This area also supports rare plants and is, overall, biologically diverse. This parcel is designated as a TVA Habitat Protection Area due to the biological significance of the site. This parcel will be managed to protect significant heritage and visual resources. Back-lying landowners will be encouraged to protect similar resources. Requests for water-use facilities will not be considered.

#### Parcel 40 (51.3 acres)

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual
- TVA Habitat Protection Area

The northern part of Parcel 40 begins on the left bank of the mouth of Dime Spring Branch at Little Bear Creek. Preliminary plans provided by the Alabama Department of Transportation indicate a proposed bridge crossing on this parcel. This parcel is 100 percent forested. Fringe wetlands occur in shoreline depressions. Shallow water areas consist of water willow and alder at the water's edge. Sandstone outcroppings are common. The forest includes eastern hemlock, American beech, Virginia pine, sourwood, big leaf magnolia, and scattered sweet gum. Scattered yellow poplar and a significant amount of mountain laurel are in the understory. Sandstone outcroppings, appear to be contiguous around most of this parcel. Eastern hemlock, big leaf magnolia, and hop hornbeam are extremely prevalent along sandstone outcroppings along this parcel. The western end of the parcel, becomes moderately sloped near the shoreline. White oak and other upland hardwood species are more common in this area. A small embayment, with large sandstone outcroppings/bluff, has emergent scrub-shrub wetlands. The head of the slough is shallow. This parcel terminates at back of an unnamed cove where topography changes to steep slopes and large outcrops. The parcel encompasses an excellent habitat of extensive rock houses, tall sandstone bluffs, and occurrences of rare plants. The geological features of this parcel are heavily shaded by mature hemlocks and various hardwoods. Within this area, the very rare little mountain meadow-rue and mountain camellia occur, along with a rich diversity of amphibians, reptiles, songbirds, and mammals. To preserve the biodiversity and rare occurrences at this site, the parcel must be protected and preserved from development. A portion of this parcel is designated as a TVA Habitat Protection Area due to the biological significance of the site. This parcel will be managed to protect significant heritage, visual, and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

#### **Parcel 41 (31.8 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual
- TVA Habitat Protection Area

Located on the left bank of Little Bear Creek, Parcel 41 surrounds most of the Dime Spring Branch cove area. Standing timber or high-cut stumps were left along this embayment and provide for a significant aquatic habitat. They provide shade, cover,

and a food source for fish. The stumps create safety concerns for recreational use of water-use facilities. The shoreline consists of several large, sandstone rock outcroppings/ bluffs. The shoreline is 100 percent forested. Species composition includes white oak, red oak, and hickory. Emergent scrub-shrub wetlands are common and fairly contiguous around the shoreline of this parcel. The north side of the cove has steep rock outcrops and vertical bluffs. The south side has more moderately sloped terrain. Alder is common along the shoreline with mountain laurel common and prevalent near rocky outcrops. Virginia pine appears to occur in greater abundance near upper elevations on this parcel. Woodland seeps flowing over and along the bases of rock houses and bluffs support several amphibian species and add to the ecological integrity of this area. This site holds high potential for supporting rare species and should be protected. Standing timber, unusual rock outcrops, and diverse plant communities add to the scenic resource of this portion of the reservoir. This parcel is designated as a TVA Habitat Protection Area due to the biological significance of the site. This parcel will be managed to protect significant heritage, visual, and cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### **Parcel 42 (41.0 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- TVA Habitat Protection Area

This parcel begins in Turkey Creek, left bank descending, to its confluence with Little Bear Creek, down the left bank to the right bank mouth of Dime Spring Branch. It includes County Road 71 and the highway bridge at Mon Dye. The Turkey Creek eastern portion of the tract begins with sandstone outcrop and vertical bluff approximately 300 feet in length. There is a small, emergent wetland in the cove area immediately downstream. Near the shoreline, the forest cover is Virginia pine, hemlock, big leaf magnolia, American beech, sourwood, hickory, ash, hop hornbeam, and scattered sourwood. The shoreline is steep with numerous large beech trees on this parcel. Small, emergent wetland areas, present along portions of the parcel along the shoreline indentations and shallow areas, include water willow. Alder is common along the land-water interface adjoining these emergent wetland areas. White oaks, red oaks, and hickories are more common on the downstream portion of the parcel near the bridge. A portion of the parcel near the bridge appears to have been cleared and currently has early successional species, weeds and grasses with scattered, woody volunteer species. A power line traverses the parcel adjacent to the downstream side of the bridge. Downstream of the bridge, there is a significant bluff line back from shore with numerous rock ledges. The southwestern portion of the parcel in the peninsula area has the appearance of some reverting fields or other site disturbance that has left patches of early successional vegetation. The adjoining areas are forested. Fringe wetlands are more common is this area. The complex structural component of

bluffs and forest provides prime habitat for the state-protected green salamander and a diverse assemblage of amphibians, reptiles, nesting birds, and mammals. Portions of this parcel is designated as a TVA Habitat Protection Area due to the biological significance of the site. This parcel will be managed to protect significant heritage and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

### Parcel 43 (111.7 acres)

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual

This parcel is located on Turkey Creek. It begins near the confluence of Turkey Creek and Little Bear, and extends up to and includes all the upper reaches of the creek influenced by Upper Bear Reservoir. This parcel was committed for existing use. Standing timber or high-cut stumps were left along this embayment and provide for a significant aquatic habitat. They provide shade, cover, and a food source for fish. The stumps create safety concerns for recreational use of water-use facilities. The Alabama Power, Wilson Dam/Haleyville 161-kV power line crosses the parcel on the upper end. Upstream of the power line, eastern hemlock, big leaf magnolias, and scattered yellow poplar are more common. Heavy siltation occurs in upper reaches due to past backlying land practices by strip mining. Undisturbed forest buffer borders both sides. Beech, eastern hemlock, oak, hickory, sweet gum, big leaf magnolia, mimosa, scattered Virginia pine, rhododendron, and mountain laurel are common on understory. Fringes of water willows and fringe wetlands exist along the borders dominated by water willow, rushes, and American alder. At full pool, much of the area has shoreline fringes: water willow, iron wood, sweet gum, and loblolly pine pockets. There is sandstone bedrock with shallow soil and a good habitat potential for rare plants. The parcel is representative of a unique river gorge area. This parcel includes a major fish spawning and nursery area. It is visually significant. It provides a significant buffer for back-lying mines or timber harvests. A wide, forested, buffer riparian zone reduces sediment from entering the reservoir and provides important habitat for unique plant and animal resources. Exotic mimosa, hemlock, big leaf magnolia, rock ledges and wet seeps are common along all of the parcel. Sandstone rock outcrops are prevalent along the shoreline. The majority of the shoreline is steep with rock outcrops and bluffs. This parcel will be managed to protect significant heritage, visual, and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

#### **Parcel 44 (58.5 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual
- TVA Habitat Protection Area

This parcel begins on the right descending bank of Turkey Creek and goes downstream to the mouth, then along the left descending bank of Little Bear Creek, past Wilson Mine (abandoned) on the left bank of Little Bear Creek. A portion of the shoreline vegetation consists of alder, black gum, and scattered hickory. Sandstone bedrock occurs at the shoreline, which has a moderate slope. Other sections of these shorelines consist of vertical sandstone bluffs. Fringe wetlands consists predominantly of water willow along much of the shoreline. The riparian zone is forested, consisting of short leaf Virginia pine, black gum, and sweet gum with scattered white oak, and some mountain laurel. Most of the forest is small sawtimber. Site index is extremely low. Shallow soils are common in this area. Riparian forests are mostly in small sawtimber stands, probably as a result of the site conditions. There are emergent scrub-shrub wetlands along the shoreline toward the upper end of the parcel. The shoreline management zone is healthy. The intact, undisturbed, riparian buffer along this stretch is extremely diverse. There is some standing timber in one slough. Oak leaf hydrangea is mixed in all along the parcel. There is one water-use facility on this tract permitted by BCDA. The complex structural component of bluffs and forest provides prime habitat for the state-protected green salamander and a diverse assemblage of amphibians, reptiles, nesting birds, and mammals. A Portion of this parcel is designated as a TVA Habitat Protection Area due to the biological significance of the site. This parcel will be managed to protect significant heritage, visual, and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional water-use facilities will not be considered.

# Parcel 45 (153.9 acres)

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Wetland
- Visual
- TVA Habitat Protection Area

This parcel includes both sides of Little Bear Creek, beginning at the County Road 81 bridge, crossing on the left descending bank to the left bank of Timmons Branch on the right descending bank of Little Creek. The forest cover consists of scattered hemlock, Virginia pine, sweet gum, oak, chestnut, beech, and red maple, which are small to medium sawtimber-size, probably due to prevalent site conditions. The soil

experiences low productivity which, if cleared, would take a long time to revegetate. Mountain laurel and alder are common understory species. Sandstone rock outcroppings are common and are covered with moss and lichens. On the upstream half of the parcel, both banks have fringe wetlands consisting of water willow. This narrow, vegetative buffer provides buffer for back-lying land use. Big leaf magnolia are scattered along the shoreline. The parcel has a large, vertical bluff with much character. The TVA, Browns Ferry/West Point 500-kV power line traverses the parcel in the upper reaches. There is one BCDA-permitted dock. The complex structural component of bluffs and forest provides prime habitat for the state-protected green salamander and a diverse assemblage of amphibians, reptiles, nesting birds, and mammals. This parcel is designated as a TVA Habitat Protection Area due to the biological significance of the site. This parcel will be managed to protect significant heritage, wetland, visual, and cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional water-use facilities will not be considered.

### **Parcel 46 (32.3 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Visual
- TVA Habitat Protection Area

Parcel 46 is located along both sides and includes the upper reaches of Timmons Branch. This parcel was committed for existing use. A rock bluff and waterfall are a significant scenic resource on this tract and a visual asset to this portion of the reservoir. The forested shoreline along both sides of Timmons Branch consists of short leaf pine, sweet gum, yellow poplar, pin oak, big leaf magnolia, eastern hemlock, scattered white oak, and hickory. The understory has mountain laurel. Vertical sandstone outcroppings are common. There are considerable deposits of sedimentation in the upper reaches. This parcel is designated as a TVA Habitat Protection Area due to the biological significance of the site. This parcel will be managed to protect significant heritage and visual resources. Requests for water-use facilities will not be considered.

# **Parcel 47 (4.2 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- TVA Habitat Protection Area

This parcel is located immediately upstream of the County Road 81 bridge on the right descending bank of Timmons Branch. This is a narrow forested shoreline area between the highway and the lake. Heavy informal recreation use occurs in this area. With the exception of the recreation area, it is heavily vegetated with white oak and scattered hickory. This parcel is designated as a TVA Habitat Protection Area due to

the biological significance of the site. This parcel will be managed to protect significant heritage resources. Requests for water-use facilities will not be considered.

# Parcel 48 (38.0 acres)

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- TVA Habitat Protection Area

This parcel extends along the right bank of Little Bear Creek from the County Road 81 bridge, crossing to near the confluence of Little Bear and Turkey Creek. The old Wilson mine is the back-lying property along much of the parcel. The parcel has a steep sandstone shoreline with a well vegetated water's edge. Species include eastern hemlock, chinquapin oak, American beech, big leaf magnolia, and sourwood. The understory near the shoreline consists of laurel river cane and various shrubs. Sandstone outcroppings are less common on the downstream end of the parcel. Fringe wetlands are common along this parcel and are more extensive in areas where sandstone does not extend to the water's edge. There is one private water-use facility on the tract that was permitted by BCDA. This parcel features prime habitat for supporting several species of rare animals. A portion of this parcel is designated as a TVA Habitat Protection Area due to the biological significance of this site. This parcel will be managed to protect significant heritage and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for additional water-use facilities will not be considered.

# **Parcel 49 (6.2 acres)**

Zone 6, Recreation

This parcel is located on the left descending bank of Gas Branch to its mouth at Little Bear Creek and upstream on the right descending bank of Little Bear to near the mouth of Turkey Creek. The parcel includes Mon Dye Public Use Area operated by BCDA. This parcel was committed for existing use. Developed facilities include a boat ramp and parking area, beach, pavilion, and a toilet building. County Road 71 crosses the parcel at Mon Dye Bridge. One private water-use facility, permitted by BCDA, is on the parcel. It has a fairly steep shoreline with underlying sandstone. Back-lying land contains a solid stand of Virginia pine and is the site of the old Cummings mine. A rock bluff is at the end of the parcel where standing timber and fish habitat area starts in Gas Branch. This parcel was placed in Zone 6 to reflect current use.

#### Parcel 50 (101.2 acres)

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual

This parcel includes the left and right banks of Gas Branch. This parcel was committed for existing use. Preliminary plans provided by the Alabama Department of Transportation indicate a proposed bridge crossing on this parcel. The parcel has numerous sandstone rock outcrops and vertical bluffs. All the area contained within this embayment is prime aquatic habitat with standing timber or high-cut stumps. They provide shade, cover, and a food source for fish. The stumps create safety concerns for recreational use of watercraft and water-use facilities. The shoreline is forested with oak, hickory, and some eastern hemlock near the shoreline. Upper areas are predominately Virginia pine. Fringe wetlands occur around most of this parcel. This parcel contains the site of the triple natural arches. It has significant vertical bluffs and rock outcrops which support a diversity of wildlife habitat. It is a pristine embayment with no development and a well-forested erosion zone. Siltation is prevalent in the upper end. The steep, vertical bluffs are visually significant. This parcel will be managed to protect significant heritage, visual, and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# **Parcel 51 (1.1 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Cultural
- Visual

This parcel is on the right bank mouth of Gas Branch at its confluence with Little Bear Creek. BCDA has the back-lying land. The parcel has vertical slopes and is not suitable for water access. This area consists of a 60-plus-foot, vertical, sandstone bluff with standing timber in front. The open cavities along the bluff provide habitat for nesting vultures and could support barn owls. The site is also important for aesthetic as well as ecological value. This parcel will be managed to protect significant heritage, visual, and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

#### **Parcel 52 (10.1 acres)**

Zone 4, Natural Resource Conservation

The parcel is on the right descending bank of Little Bear Creek. It consists of a narrow, flat peninsula underlain by sandstone. This parcel is forested with sapling and small sawtimber-size trees, consisting of red oak, hickory species, white oak, and scattered Virginia pine. The shoreline is a sandy natural beach area with some clay

bank areas. The parcel fronts BCDA property and was placed in Zone 4 to protect the shoreline vegetation zone. Requests for water-use facilities will not be considered.

### **Parcel 53 (11.3 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Visual

This parcel is located on the right descending bank of Little Bear Creek and was committed for existing use. Preliminary plans provided by the Alabama Department of Transportation indicate a proposed bridge crossing on the parcel. The upstream end of this parcel consists of emergent and scrub-shrub wetlands along the water line. The back-lying land is forested with red oak, Virginia pine, hickory, and white oak. The southwest portion of this tract is dominated by sandstone outcrops and large, vertical bluffs. There are several natural drains along these bluffs. The vertical bluffs and rock outcrops are significant and support a diversity of wildlife habitat. The steep, vertical bluffs are also visually significant. This parcel will be managed to protect significant heritage and visual resources. Back-lying landowners will be encouraged to protect similar resources. Requests for water-use facilities will not be considered.

### **Parcel 54 (41.4 acres)**

Zone 6, Recreation

This parcel is on the right descending bank of Little Bear Creek. It includes the Batestown public boat ramp and informal use area managed by BCDA. This parcel was committed for existing use and is suitable for possible future developed recreation uses. The parcel is accessed by County Road 10. It includes Batestown Branch which has standing timber in the back of the cove as well as a nice pocket of emergent scrubshrub wetland. There is erosion off the road. This parcel receives heavy informal recreation use. There are sandstone outcrops around the shoreline. The riparian forest consists of Virginia pine, white oak, sourwood, beech, farkleberry, and mountain laurel. The south portion of this parcel is more flat and gently sloped with more weathered sandstone. Fringe wetlands occur along the western shoreline. This parcel was placed in Zone 6 to reflect current use.

#### **Parcel 55 (8.5 acres)**

Zone 7, Residential Access

Parcel 55 is located on the left bank of Caney Branch near the mouth and its confluence with Little Bear Creek. It has nine water-use facilities on the shoreline of this parcel that were permitted by BCDA. It is characterized by mowed lawns and very few scattered shade trees. This area has been highly disturbed. Small pockets of fringe wetlands occur along this shoreline. A riparian buffer needs to be reestablished. This parcel contains an occurrence of a plant species which is rare to uncommon in Alabama. This parcel will be managed to protect significant heritage resources by

avoidance or mitigation during any future development activities. Back-lying landowners will be encouraged to protect similar resources. Requests for water-use facilities will be considered.

# **Parcel 56 (31.1 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Visual

This parcel includes the upper end of Caney Branch and extends along both sides of the branch. This parcel was committed for existing use. Slopes are moderately steep, particularly near the back of Caney Branch. This parcel is forested with Virginia pine primarily with occasional white oak. A large, emergent scrub-shrub wetland occurs at the back of the embayment. There are fringe wetlands along the shoreline consisting of willow and European alder. Part of this parcel is fronted by standing timber or high-cut stumps left in the water. This provides prime aquatic habitat including shade, cover, and a food source for fish. The stumps create safety concerns for recreational use of watercraft and water-use facilities. This parcel will be managed to protect significant heritage and visual resources. Back-lying landowners will be encouraged to protect similar resources. Requests for water-use facilities will not be considered.

# **Parcel 57 (8.6 acres)**

Zone 3, Sensitive Resource Management

- Heritage
- Visual

This parcel is located on the right descending bank of Caney Branch at its confluence with Little Bear. It continues along the right bank of Little Bear and contains one private water-use facility that was permitted by BCDA. The undisturbed portion of this parcel has moderate slopes to vertical sandstone cliffs. There are a few hickory, red maple, white oak, and Virginia pines on the parcel. There is an emergent scrubshrub wetland at the southern end of the parcel, with standing timber also in the cove. The vertical bluffs are an important habitat for vulture nests and are a suitable habitat for additional birds of prey. Apart from the ecological value of the area, the site has aesthetic value as well. This parcel will be managed to protect significant heritage and visual resources. Back-lying landowners will be encouraged to protect similar resources. Requests for water-use facilities will not be considered.

# **Parcel 58 (22.6 acres)**

Zone 7, Residential Access

This is a long, narrow parcel on the right bank of Little Bear Creek. Portions of the shoreline along this parcel have been impacted by adjoining residential development through shoreline clearing. Lawns are terraced and mowed to shoreline. There are two permitted water-use facilities on the northern end of the parcel and three on the

southern end that were permitted by BCDA. The sandstone shoreline has a layered appearance. The remaining forest cover consists of Virginia pine, white oak, and hickory. Very small, emergent wetland areas exist along portions of the shoreline, particularly in small cove areas. Portions of the parcel have not been disturbed by residential. Requests for additional water-use facilities will be considered, and an environmental site review will be required during the 26a application process. The review will include requirements to avoid and/or minimize impacts to wetland vegetation and existing shoreline vegetation.

# **Parcel 59 (5.5 acres)**

Zone 4, Natural Resource Conservation

This parcel on Little Bear Creek is on the right descending bank and on the left bank of an unnamed slough. The parcel has a flat slope and appears to be a reverting agriculture field. It has small fringe wetlands in gentle slope areas and emergent wetland areas around the shoreline. There are a few, scattered yellow poplar and red maples. This riparian zone along the shoreline contributes to the ecology of the reservoir by providing food and habitat for diverse populations of plants and animals. Requests for water-use facilities will not be considered.

### Parcel 60 (27.4 acres)

Zone 3, Sensitive Resource Management

- Heritage
- Cultural

Located on the right descending bank of Little Bear Creek, this parcel includes two low-lying peninsulas in a slough. This parcel was committed for existing use. Emergent scrub-shrub wetlands are located in the back of the small embayment. The parcel has the appearance of a reverted agriculture field. Forested points with hickory, red maple, red oak, alder, and water willow are common along the shoreline area. The southern portion consists of another forested peninsula with sapling and sawtimber-size trees including red oak, white oak, and Virginia pine. The embayment fronting the southwestern portion of the parcel includes emergent wetlands and standing timber left in the water for fish attractors. This provides prime aquatic habitat including shade, cover, and a food source for fish. This parcel will be managed to protect significant heritage and cultural resources. Back-lying landowners will be encouraged to protect similar resources. Requests for water-use facilities will not be considered.

# **Parcel 61 (2.8 acres)**

Zone 4, Natural Resource Conservation

Located on the right descending bank of Little Bear Creek, this parcel consists of a very narrow, shoreline riparian zone. Back-lying property is BCDA owned. There is clay and some sandstone rock showing along the shoreline areas. Big leaf magnolia, scattered Virginia pine, and sourwood occur along the shoreline. The adjoining forest

cover consists of red oak, sourwood, white oak, devils walking stick, red maple, and scattered short leaf pine. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Requests for water-use facilities will not be considered.

# **Parcel 62 (22.6 acres)**

Zone 4, Natural Resource Conservation

Parcel 62 is located on the right descending bank of Little Bear Creek. It has moderate slopes with dry upper hardwood areas forested with white oak, red oak, scattered hickory, and red maple. A beaver lodge was sighted on the parcel. Fringe wetlands are located at the back of embayments with water willow and alder. A recently planted pine stand exists on back-lying land. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Requests for water-use facilities will not be considered.

#### **Parcel 63 (8.5 Acres)**

Zone 4, Natural Resource Conservation

Parcel 63 is on the right descending bank of Little Bear Creek and includes most of a large peninsula at the mouth of Melton Branch. BCDA is the back-lying landowner. It appears that much of the peninsula has been clear-cut and replanted in pine. The parcel is a narrow riparian zone dominated by white oak with some pine. The shoreline is clay and would represent the potential for erosion, especially if vegetation is removed in the future. This parcel was placed in Zone 4 to protect the shoreline vegetation zone. Requests for water-use facilities will not be considered.

### **Parcel 64 (27.7 acres)**

Zone 3, Sensitive Resource Management

- Wetland
- Visual

This parcel is located in the upper end and left bank of Melton Branch. There is one agriculture license on the parcel representing approximately 7 acres. Much of the parcel lies across a road and embankment from the main reservoir. It serves as an important filtering device from upstream sedimentation. Melton Branch provides an undeveloped place for recreational boaters. This parcel will be managed to protect significant wetland and visual resources. Back-lying landowners will be encouraged to protect similar resources. Requests for water-use facilities will not be considered.

# **Parcel 65 (15.7 acres)**

Zone 3, Sensitive Resource Management

- Wetland
- Visual

Located on the right descending bank of Melton Branch, this parcel has a moderate slope with pockets of small fringe wetlands. Upland areas of this parcel are open lands

and include an agriculture license on TVA land representing approximately 10 acres. The quiet anchorage provided to boaters in this cove is an important aesthetic resource in this portion of the reservoir. Along the shoreline are alder, scattered Virginia Pine, big leaf magnolia, and large, sawtimber-size short leaf pine. This parcel will be managed to protect significant wetland and visual resources. Back-lying landowners will be encouraged to protect similar resources. Requests for water-use facilities will not be considered.

### **Parcel 66 (7.0 acres)**

Zone 3, Sensitive Resource Management

Cultural

Located on the right descending bank of Melton Branch to the confluence with Little Bear Creek, this parcel is mostly a narrow shoreline strip fronting BCDA property. There are red oak, white oak, mixed short leaf pine, loblolly pine, hickory, red maple and alder near the shoreline. An emergent scrub-shrub wetland at the back of an unnamed branch should be left undisturbed. Future permitting actions should avoid impacting this wetland. This parcel will be managed to protect significant cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# **Parcel 67 (26.6 acres)**

Zone 3, Sensitive Resource Management

Cultural

The parcel begins at the mouth of Melton Branch, down the right bank of Little Bear Creek, to and including the highway bridge at County Road 79. The boundary between this parcel and Parcel 68 is the old roadbed adjacent to the beach area on Parcel 68. There are two power line crossings on this parcel. This is a typical, dry, upland hardwood site with dominant species including white oak, red oak, hickory, and loblolly pine. The parcel has a stone and cobble shoreline with minimal erosion. The understory consists of farkleberry, occasional big leaf magnolia, sourwood, and alder. This parcel will be managed to protect significant cultural resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for water-use facilities will not be considered.

# Parcel 68 (2.2 acres)

Zone 6, Recreation

This parcel is on the right bank of Little Bear Creek at the confluence of Bear Creek. It includes Twin Forks Public Use Area managed by BCDA. Developed facilities include a beach and picnic area. Most of the shoreline is maintained lawn. This parcel was placed in Zone 6 to reflect current use.

# Parcel 69 (34.3 acres)

Zone 3, Sensitive Resource Management

- Cultural
- Visual

This parcel is located adjacent to the dam reservation on the right bank. The shoreline is cobble and rock with some exposed clay banks. Scattered loblolly pine occur on the parcel along with white oak, hickory, and scattered red oak. Erosion is minor and the slope is gentle. A narrow band of grassy area less than 6-feet wide is along the shoreline. Emergent wetlands are located near the back of an unnamed cove where the parcel joins the dam reservation. The parcel includes an island in front of the dam and Twin Forks Public Use Area. The island appears to be an old borrow area, so it has little topsoil. The island portion of this tract should receive visual management and shoreline protection. Rehabilitation of this tract will be necessary in this heavily used portion of the reservoir to protect the aesthetic resource that islands in TVA reservoirs are considered to have. This parcel will be managed to protect significant cultural and visual resources. Because sensitive cultural resources have been identified on this parcel, any proposed land disturbance must be carefully reviewed. Requests for wateruse facilities will not be considered.

# PLANNING TEAM MEMBERS

Allsbrooks, Donald, Pickwick Watershed Team, Regional Wildlife Biologist

Cornhill, Ronnie, Pickwick Watershed Team, Regional Forester

Crosby, Buff, Pickwick Watershed Team, Manager

Gabel, Merry, Pickwick Watershed Team, Clerk

Hunt, Carolyn, Pickwick Watershed Team, Engineering Associate - Civil

Johnson, Danny, Pickwick Watershed Team Land Use Specialist

McDonald, Larry, Pickwick Watershed Team, Land Use Specialist

Murphy, Doug, Pickwick Watershed Team, Senior Field Representative

Pflueger, Richard, Pickwick Watershed Team, Regional Land Use Specialist

Shedd, Jim, Pickwick Watershed Team, Land Use Specialist

Simbeck, Damien, Pickwick Watershed Team, Biologist

Stalcup, Berry, Pickwick Watershed Team Biologist