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NORTHEASTERN TRIBUTARY RESERVOIRS LAND MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT STATEMENT

VOLUME V

South Holston Reservoir

PREPARED BY:
TENNESSEE VALLEY AUTHORITY

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ACRONYMS AND ABBREVIATIONS

EO(s)	Executive Order(s)
EIS	Environmental Impact Statement
ESA	<i>Endangered Species Act</i>
LAC	Limits of Acceptable Change
MSC	Maximum Shoreline Contour
msl	Mean Sea Level
NEPA	<i>National Environmental Policy Act</i>
NPS	National Park Service
NTRLMP	Northeastern Tributary Reservoirs Land Management Plan
NTRs	Northeastern Tributary Reservoirs
RFAI	Reservoir Fish Assemblage Index
RLMP(s)	Reservoir Land Management Plan(s)
RM	River Mile
RVSM	Reservoir Vital Signs Monitoring Program
SFI	Sport Fishing Index
SMI	Shoreline Management Initiative
SMP	Shoreline Management Policy
TWRA	Tennessee Wildlife Resources Agency
TVA	Tennessee Valley Authority
USA	United States of America
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service
VDGIF	Virginia Department of Game and Inland Fisheries

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1.0 INTRODUCTION

The South Holston Reservoir Land Management Plan is a study of the Tennessee Valley Authority (TVA)-managed public land surrounding South Holston Reservoir. It is one of five reservoir land management plans (RLMPs) associated with an environmental impact statement (EIS) for the northeastern tributary reservoirs (NTRs). The EIS, Volume I, contains information on the scoping process, allocation process, alternatives, comparison of the alternatives, and analysis of impacts. In addition, the EIS contains a summary, an index, and appendices.

This document provides background information about TVA land management throughout its history and specifically TVA management of public land surrounding South Holston Reservoir. It explains the purpose of this RLMP and describes the process used in its development. The RLMP includes the planning process, which lists the objectives around which the RLMP was developed and a summary of the allocation process. The South Holston Reservoir Regional Overview describes the natural and social development of the reservoir and the surrounding area. The Parcel Descriptions include total acreage and parcel descriptions documenting land management allocations. The allocation map is stored in the pocket on the back cover of this RLMP.

1.1. Background

TVA has been charged by Congress with improving navigation, controlling floods, providing for the proper use of marginal lands, providing for industrial development, and providing power at rates as low as is feasible, all for the general purpose of fostering the physical, economic, and social development of the Tennessee Valley region. The lands that TVA holds as steward in the name of the United States of America (USA) are some of the most important resources of the region. These lands have provided the foundation for the dams and reservoirs that protect the region from flooding and secure for its residents the benefits of a navigable waterway and low-cost electricity.

TVA's public lands are the sites for its power generating system and arteries for delivering power to those that need it. Many of the region's parks, recreation areas, and wildlife refuges that are so important for the region's quality of life are on lands TVA made available. TVA public lands often have been the catalyst for public and private economic development that supports all of these activities.

The USA, through TVA, originally acquired approximately 1.3 million acres of land in the Tennessee River Valley. The construction and operation of the reservoir system inundated approximately 470,000 acres. Approximately 508,000 acres have been transferred to other federal and state agencies for public uses or sold for private uses. The USA owns about 293,000 acres that TVA manages pursuant to the *TVA Act of 1933*.

TVA originally acquired a total of 10,952 acres of land above normal summer pool for the seven NTRs and associated hydroelectric generating facilities. Over the years, TVA has transferred the majority of this land to other public agencies, primarily the U.S. Forest Service (USFS), or sold it to various public and private entities. TVA presently manages a total of 4,933 acres of land on these reservoirs that is the subject of the Northeastern Tributary Reservoirs Land Management Plan (NTRLMP).

As stewards of this important resource, TVA's policy is to manage its lands to protect the integrated operation of the TVA reservoir and power systems, to provide for appropriate public use and enjoyment of the reservoir system, and to provide for continuing economic growth in the Tennessee Valley region. TVA recognizes that historical land transfers have contributed substantially to meeting these multipurpose objectives, and it is TVA's policy to preserve reservoir lands remaining in public ownership under its control except in rare instances when the benefits to the public will be so significant that transferring the land is justified.

1.2. Purpose

TVA's Land Policy (Volume I, Appendix A) was approved by the TVA Board of Directors on November 30, 2006. This policy governs how land is planned, including whether it is disposed of or retained. To systematically manage TVA public land around its reservoirs, TVA develops RLMPs, which seek to integrate land and water program goals, provide for the optimum public benefit, and balance competing and sometimes conflicting resource uses.

By providing a clear statement of how TVA intends to manage land and by identifying each parcel for specific purposes, TVA hopes to facilitate decision-making for the use of the public land in its care. Land planning guides TVA in the management of resources and property administration decisions on land under its control. RLMPs are approved by the TVA Board of Directors and adopted as agency policy, providing for long-term land stewardship and accomplishment of TVA responsibilities under the *TVA Act*.

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 benefit for the whole system. Land planning supports TVA's vision of generating prosperity in the Valley by addressing the goals of supporting a thriving river system and stimulating economic growth. To that end, the NTRLMP provides a framework for deciding the optimum use of TVA public land and promotes the efficient operation of the TVA reservoir system.

This RLMP will guide resource management and administration decisions on approximately 2,271 acres around South Holston Reservoir, which are publicly owned and managed by TVA. It identifies the most suitable uses for 79 parcels of project land by providing areas for Project Operations, Sensitive Resource Management, Natural Resource Conservation,

Industrial, Developed Recreation, and Shoreline Access. The 2,271 acres of TVA public land account for approximately 138 miles of reservoir shoreline.

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2.0 PLANNING PROCESS

Under the *TVA Act of 1933*, TVA is responsible for the control and use of the Tennessee River and its tributaries and the development and use of the resources in the Tennessee Valley. TVA has managed the public reservoir land 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, and forest and wildlife management areas. These areas also meet a variety of other needs associated with local communities.

An increasing demand for and use of reservoir land sometimes results in conflicting and uneconomical land use patterns between public and private use. These competing interests and development pressures, coupled with today's environmental awareness, underscore the need for a planned approach to the management of reservoir land and related resources.

The land planning process is subject to the *National Environmental Policy Act (NEPA)* and its implementing regulations, which require environmental review of federal actions having the potential to impact the environment. Land planning supports state and federal goals to be environmentally responsible, stakeholder-driven, and growth-oriented by providing a framework for deciding the best use of TVA-managed public land.

The reservoir land management planning process involves allocation of TVA fee-owned land to seven defined land use zones. The term *land use zone* refers to a descriptive set of criteria given to distinct areas of land based on location, features, and characteristics (see Table 1 for land use zone definitions). The process includes resource data, computer analysis, and input from the public, other agencies, and knowledgeable TVA staff. The definition of a land use zone provides a clear statement of how TVA will manage public land, and allocation of a parcel to a particular land use zone identifies that land for specific uses. Implementation of an RLMP minimizes conflicting land uses and makes it easier to handle requests for use of public land.

This RLMP was developed by a team of land managers and technical experts from TVA, knowledgeable about the reservoir and its resources. The planning team made land use decisions by integrating public needs, environmental conditions, economic benefits, state and federal policies, and the original congressional intent of the South Holston Reservoir project.

Table 1. Land Use Zone Definitions

Zone		Definition
1	Non-TVA Shoreland	<p>Shoreland that TVA does not own in fee or land never purchased by TVA. Non-TVA Shoreland allocations are based on deeded rights and, therefore, will not change as a result of the land planning process. This category is provided to assist in comprehensive evaluation of potential environmental impacts of TVA's allocation decision. Non-TVA shoreland includes:</p> <ul style="list-style-type: none"> • Flowage easement land—Privately or publicly owned land where TVA has purchased the right to flood and/or limit structures. Flowage easement rights are generally purchased to a contour elevation. Since construction on flowage easement land is subject to TVA's Section 26a permitting requirements, the SMP guidelines discussed in the definition of Zone 7 would apply to the construction of residential water use facilities fronting flowage easement land. SMP guidelines addressing land-based structures and vegetation management do not apply. • Privately owned reservoir land—This was land never purchased by TVA and may include, but is not limited to, residential, industrial, commercial, or agricultural land. This land, lying below the 500-year flood elevation, is subject to TVA's Section 26a approvals for structures.
2	Project Operations	<p>All TVA reservoir land currently used for TVA operations and public works projects, including:</p> <ul style="list-style-type: none"> • Land adjacent to established navigation operations—Locks, lock operations and maintenance facilities, and the navigation work boat dock and bases. • Land used for TVA power projects operations—Generation facilities, switchyards, and transmission facilities and rights-of-way. • Dam reservation land—Areas acquired and managed for the primary purpose of supporting the operation and maintenance of TVA dams and associated infrastructure; secondary uses may also include 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 public utility infrastructure, such as substations and rights-of-way for sewer lines, water lines, transmission lines, and major highway projects. • Land planned for any of the above uses in the future.
3	Sensitive Resource Management	<p>Land managed for protection and enhancement of sensitive resources. Sensitive resources, as defined by TVA, include resources protected by state or federal law or executive order and other land features/natural resources TVA considers important to the area viewscape or natural environment.</p> <p>Recreational natural resource activities, such as hunting, wildlife observation, and camping on undeveloped sites, may occur in this zone, but the overriding focus is protecting and enhancing the sensitive resource the site supports. Areas included are:</p> <ul style="list-style-type: none"> • TVA-designated sites with potentially significant archaeological resources.

Zone		Definition
		<ul style="list-style-type: none"> • TVA public land with sites/structures listed in or eligible for listing in the National Register of Historic Places. • Wetlands—Aquatic bed, emergent, forested, and scrub-shrub wetlands as defined by TVA. • TVA public land under easement, lease, or license to other agencies/individuals for resource protection purposes. • TVA public land fronting land owned by other agencies/individuals for resource protection purposes. • Habitat Protection Areas—These TVA Natural Areas are managed to protect populations of species identified as threatened or endangered by the U.S. Fish and Wildlife Service, state-listed species, and any unusual or exemplary biological communities/geological features. • Ecological Study Areas—These TVA Natural Areas are designated as suitable for ecological research and environmental education by a recognized authority or agency. They typically contain plant or animal populations of scientific interest or are of interest to an educational institution that would utilize the area. • Small Wild Areas—These TVA 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 segment of a river and the adjacent land along the banks. River Corridors often consist of a linear green space of TVA land serving as a buffer to tributary rivers entering a reservoir. These areas will be included in Zone 3 when identified sensitive resources are present. • Significant scenic areas—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 public 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	<p>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, timber management to promote forest health, wildlife observation, and camping on undeveloped sites. Areas included are:</p> <ul style="list-style-type: none"> • TVA public land under easement, lease, or license to other agencies for wildlife or forest management purposes. • TVA public land fronting land owned by other agencies for wildlife or forest management purposes. • TVA public land managed for wildlife or forest management projects. • Dispersed recreation areas maintained for passive, dispersed recreation activities, such as hunting, hiking, bird watching, photography, primitive camping, bank fishing, and picnicking.

Zone		Definition
		<ul style="list-style-type: none"> • 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. • Wildlife Observation Areas—TVA Natural Areas with unique concentrations of easily observed wildlife that are managed as public wildlife observation areas. • River Corridor without sensitive resources present—A River Corridor is a linear green space along both stream banks of selected tributaries entering a reservoir managed for light boat access at specific sites, riverside trails, and interpretive activities. River Corridors will be included in Zone 4 unless sensitive resources are present (see Zone 3). • Islands of 10 acres or less. • Land planned for any of the above uses in the future.
5	Industrial	<p>Land managed for economic development, including businesses in distribution/processing/assembly and light manufacturing. Preference will be given for businesses requiring water access. There are two primary types of uses for TVA land allocated for Industrial: (1) Access for water supply or structures associated with navigation such as barge terminals, mooring cells, etc., or (2) Land-based development potential.</p> <p>Areas included are:</p> <ul style="list-style-type: none"> • TVA public land under easement, lease, or license to other agencies/individuals for purposes described above. • TVA public land fronting land owned by other agencies/individuals for industrial purposes described above. • Land planned for any of the above uses in the future. <p>In some cases, TVA land allocated to industrial use would be declared surplus and sold at public auction.</p> <p>Types of development that can occur on this land are:</p> <ul style="list-style-type: none"> • Light Industrial—TVA waterfront land that would support businesses and light manufacturing activities. Industrial parks should not include retail, service-based businesses like assisted living, retirement centers, or walk-in-type businesses (excluding retail use). • Industrial Access—Access to the waterfront by back-lying property owners across TVA property for water intakes, wastewater discharge, or conveyance of commodities (i.e., pipelines, rail, or road). Barge terminals are associated with industrial access corridors. • Barge Terminal Sites—Public or private facilities used for the transfer, loading, and unloading of commodities between barges and trucks, trains, storage areas, or industrial plants. • Fleeting Areas—Sites used by the towing industry to switch barges between tows or barge terminals that have both offshore and onshore facilities. • Minor Commercial Landing—A temporary or intermittent activity that takes place without permanent improvements to the property. These sites can be used for transferring pulpwood, sand, gravel, and other natural resource commodities between barges and trucks.
6	Developed Recreation	<p>The designations below are based on levels of development and the facilities available to the public. Parcel descriptions should describe the primary type of use and identify access potential for infrastructure and potential for development:</p>

Zone	Definition
	<p>Water Access—Small parcels of land, generally less than 10 acres, and typically shoreline areas conveyed to public agencies for public access.</p> <p>Public—More recreational opportunities, some facilities, more than a parking lot and boat ramp. This includes areas conveyed for public recreation.</p> <p>Commercial—Property suitable and capable to support commercial water-based operations. This includes areas conveyed for commercial recreation.</p> <p>Land managed for concentrated, active recreational activities that require capital improvement and maintenance, including:</p> <ul style="list-style-type: none"> • TVA public land under easement, lease, or license to other agencies/individuals for recreational purposes. • TVA public land fronting land owned by other agencies/individuals for recreational purposes. • TVA public land developed for recreational purposes, such as campgrounds, day use areas, etc. • Land planned for any of the above uses in the future. <p>Types of development that can occur on this land are:</p> <ul style="list-style-type: none"> • Water access, e.g., areas that tend to have limited development and can include a launching ramp, courtesy piers, canoe access, parking areas, picnic areas, trails, etc. • Public Recreation—recreation on publicly owned land. These areas typically have facilities or uses developed by a public agency and provide amenities open to the general public. Facilities at “public recreation” areas could include playgrounds/play structures, picnic facilities, tennis courts, horseshoe areas, play courts, recreation centers, athletic fields, trails, natural areas, amphitheaters, food concessions (vending, snack bar), access to water for fishing and boating, swimming areas and swimming pools, marina facilities owned by the public entity, parking, and campgrounds. <p>Public recreation, time-forward, will not include residential use, cabins, or other overnight accommodations (other than campgrounds), except if a recreation area is owned by a state or state agency and operated as a component of a state park system, in which case cabins and other overnight accommodations will be permitted.</p> <p>Public recreation uses typically include areas and facilities owned and operated by the federal, state, county, or local government (municipalities/communities). However, private entities may operate recreation facilities on public property as concessionaires under agreement with the public entity controlling the property. The use of the facilities may be offered free or for a fee. This does not allow for public-private partnership where facilities are owned by private investors. All structures and facilities should be owned by the agreement holder.</p> <ul style="list-style-type: none"> • Commercial Recreation—is defined as recreation amenities that are provided for a fee to the public intending to produce a profit for the owner/operator. These primarily water-based facilities typically include marinas and affiliated support facilities like restaurants and lodges, campgrounds, cabins, military vessel attractions, and excursion tour vessels (restaurant on the water). These uses and activities can be accommodated through changes in existing conveyance agreements.

Zone		Definition
		<p>These areas do not include residential use, long-term accommodations or individually owned units. Where applicable, TVA will request appropriate compensation for the use of the property.</p> <ul style="list-style-type: none"> • Greenways—Linear parks or developed trails 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.
7	Shoreline Access	<p>TVA-owned land 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. Types of development/management that may be permitted on this land are:</p> <ul style="list-style-type: none"> • Residential water use facilities, e.g., docks, piers, launching ramps/driveways, marine railways, boathouses, enclosed storage space, and nonpotable water intakes. • Shoreline access corridors, e.g., pathways, wooden steps, walkways, or mulched paths that can include portable picnic tables and utility lines. • Shoreline stabilization, e.g., bioengineering, riprap and gabions, and retaining walls. • Shoreline vegetation management.

2.1. Planning Goals

The goals of this RLMP, listed below, are designed to implement TVA’s mission:

Goal 1: Apply a systematic method of evaluating and identifying the most suitable uses of TVA public lands using resource data, stakeholder input, suitability and capability analyses, and TVA staff input.

Goal 2: Identify land use zone allocations to optimize public benefit and balance competing demands for the use of public lands.

Goal 3: Identify land use zone allocations to support TVA’s broad regional resource development mission. TVA reservoir properties are managed to provide multiple public benefits, including recreation, conservation, and economic development.

Goal 4: Provide a clear process by which TVA will respond to requests for use of TVA public land.

Goal 5: Comply with federal regulations and executive orders (EOs).

Goal 6: Ensure the protection of significant resources, including threatened and endangered species, cultural resources, wetlands, unique habitats, natural areas, water quality, and the visual character of the reservoir.

Goal 7: Provide a mechanism that allows local, state, and federal infrastructure projects when the use is compatible with the zone allocation.

2.2. Allocation Process

Prior to allocating parcels, the TVA planning team reviewed the characteristics of each parcel (i.e., location and existing conditions). TVA also reviewed deeds of selected tracts previously sold to private entities to identify existing shoreline access rights. In addition, the planning team honored all existing commitments—that is, existing leases, licenses, and easements. No sensitive resources surveys were conducted on committed land. The need for field reviews for uncommitted parcels was determined based on data from the TVA Natural Heritage database. Land with identified sensitive resources was placed in the Sensitive Resource Management Zone. The remaining parcels were allocated based on reservoir planning objectives and public input. Decisions were made by consensus among the TVA planning team. During the allocation process, the planning team allocated the reservoir land to one of seven planning zones using the standard zone definitions for all TVA reservoirs (Table 1).

2.3. Committed Land

Land currently committed to a specific use was allocated to a zone compatible with that use unless there was an overriding need to change the use. Some committed land uses are determined by the covenants and provisions of easements, leases, licenses, and sale and transfer agreements. Committed lands include the following: properties where TVA has granted landrights (easements, leases, etc.) for specific uses, properties where TVA has previously identified resources in need of protection, TVA Project Operations lands (transmission lines, dam reservations, etc.), and lands fronting national forest properties. Possible reasons to change a committed land use would be to prevent or remedy ongoing adverse impacts resulting from the actions of a license or easement holder.

Approximately 2,212 acres (97 percent) of the TVA land surrounding South Holston Reservoir are committed due to existing TVA or other public infrastructure projects. Agricultural licenses are not considered as committed uses because they are an interim use of TVA land.

In the allocation process, if sensitive resources were identified on a committed parcel, that parcel remained zoned for the committed use unless an ongoing adverse impact was found. However, TVA approval would be required prior to future activities that could impact the identified sensitive resources.

2.4. Uncommitted Land

Approximately 59 acres (3 percent) of the TVA land surrounding South Holston Reservoir are uncommitted. Technical specialists collected field data on many uncommitted parcels

to identify areas containing sensitive resources. Representatives from TVA organizations including Power Generation, Land and Water Stewardship, Recreation, and Economic Development met to allocate the parcels of TVA public land into the seven planning zones. Maps that identified the location of known and potential sensitive resources (e.g., cultural resources, wetlands, and threatened and endangered species) were used in determining the capability and suitability for potential uses of each parcel.

2.5. Property Administration

In the South Holston RLMP, TVA identifies the suitable uses for each tract of TVA-managed land around the South Holston Reservoir, consistent with TVA policy and guidelines and applicable laws and regulations. As administrators of TVA land, the Holston-Cherokee-Douglas Watershed Team will use the South Holston RLMP (Volume V) and the NTRLMP EIS (Volume I), along with TVA policies and guidelines, to manage resources and to respond to requests for the use of TVA land. All inquiries about, or requests for, the use of TVA land on the NTRs should be made to the TVA Environmental Information Center at 1-800-882-5263.

Pursuant to the TVA Land Policy (Volume I, Appendix A), TVA would consider changing a land use designation outside of the normal planning process only for water access purposes for industrial or commercial recreation operations on privately owned back-lying land or to implement TVA's Shoreline Management Policy (SMP).

There are a small number of TVA parcels in the Tennessee Valley that have deeded rights for shoreline access that are currently not developed for residential use and are utilized for uses such as commercial recreation. Should the private back-lying land become residential, a request for a change of allocation of the TVA shoreline parcel to Zone 7 (Shoreline Access) would be subject, with appropriate environmental review, to action by the TVA Board or to Board-approved policy. On the NTRs, there is one non-Zone 7 parcel (South Holston Parcel 8) over which the private back-lying property owners currently have deeded access rights.

The SMP is based on the Shoreline Management Initiative (SMI), by which TVA, with public input, examined its system for granting permits for docks and other shoreline development. The primary goal was to establish a Valleywide policy that would improve the protection of shoreline and aquatic resources while allowing reasonable access to the water.

Public works/utility projects such as easements for pipelines, power or communication wires, roads or other public infrastructure proposed on any TVA public land that do not affect the zoned land use or sensitive resources would not require an allocation change as long as such projects would be compatible with the use of the allocated zone. Proposed public works/utility projects would be subject to a site-specific environmental review. Any other requests involving a departure from the planned uses would require the approval of the TVA Board of Directors.

Proposals consistent with TVA's policies and the allocated use, and otherwise acceptable to TVA, will be reviewed in accordance with NEPA and must conform to the requirements of other applicable environmental regulations and other legal authorities.

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3.0 SOUTH HOLSTON RESERVOIR REGIONAL OVERVIEW

Within the portion of the Tennessee River Valley known as the Upper Holston area are seven reservoirs: Beaver Creek, Boone, Clear Creek, Fort Patrick Henry, South Holston, Watauga, and Wilbur. Beaver Creek, Boone, Clear Creek, Fort Patrick Henry, and South Holston reservoirs, and a small portion of Wilbur Reservoir, are located in the Ridge and Valley ecoregion of Tennessee and Virginia. This region occurs between the Blue Ridge Mountains on the east and the Cumberland Plateau on the west. The region is a relatively low-lying area made of roughly parallel ridges and valleys that were formed through extreme folding and faulting events in past geologic time (Griffith et al. 1998).

3.1. The Past

According to archaeologists, humans first occupied this land around 12,000 years ago. This early population was initially nomadic, but later developed a seasonal subsistence based on the region's plant and animal resources. These abundant natural resources provided a diverse source of food, which included deer, nuts, fruits, and a variety of small animals, fish, and shellfish. Between 8000 B.C. and about 500 B.C., there were signs of population growth, settlement, and interregional trade. By 500 B.C., stable villages had developed, which are evidenced by cultivated plants, dwelling structures, pottery, and burial mounds. By A.D. 1500, there is evidence of an increasingly sophisticated society, with town centers, fortified villages, an elite class, as well as smaller and scattered hamlets or communities. The Cherokee Nation eventually occupied this area of Southern Appalachia. Cherokee territory extended throughout Southern Appalachia and included parts of Virginia, North Carolina, Kentucky, Tennessee, Georgia, and South Carolina. There is record of at least 43 towns just before the outbreak of the Revolutionary War. Their society was gradually penetrated, constrained, and eventually removed by white Europeans whose livelihood was based on capitalistic trade, manufacturing, and agricultural production.

Many early routes used by these indigenous peoples are still in use today and were originally based on early migration patterns. By instinct, herds of buffalo would find their way through this territory by selecting the lines of least resistance. One of their routes was through the mountain gap between present-day Zionville, North Carolina, and Trade, Tennessee, and into the upper part of the area drained by the Watauga River. They followed the creeks and the river itself, around Buffalo Mountain—near today's Johnson City—and into the valley near where the Watauga flows into the South Fork Holston River—the site of today's Boone Reservoir. These buffalo trails became roads followed by hunters, then pioneers, and later became routes for stagecoaches and railroads.

The first European visitors to the area followed these paths through the mountain gaps and along the waterways and settled near the rivers. During the 1760s, Daniel Boone came through the gap, followed the buffalo trail, and visited the Watauga area as a hunter. In 1768, William Bean settled at the mouth of Boone's Creek, to be followed by friends and others from Virginia and North Carolina. Still others came down the Holston Valley out of

Virginia. In 1772, these first white settlers formed the Watauga Association, believed to be the first independent governmental body constituted west of the mountains and by American-born freeman. The Watauga Association and others from North Carolina acquired land from the Cherokees at the famous treaty site at Sycamore Shoals on the Watauga.

The immigration of European white settlers into this frontier led to new territorial claims, conflicts, and adjustments. Disagreement and disputes over boundaries were inevitable, and the Holston and Watauga valleys were centers of activity. Skirmishes between the Cherokees and the new settlers occurred. Land claims were complicated by land grants from Virginia, claims for settling and clearing virgin acres, and Lord Granville's North Carolina grants. Both Virginia and North Carolina formed counties in an area they each claimed. Settlers formed the State of Franklin, which existed between 1784 and 1788, with its capitol in Jonesborough. Those who followed John Tipton in opposing the Franklinites were known as "Tiptonites" and made their seat of government at Buffalo. North Carolina ceded its western lands in 1790 to the USA, and those lands became the Southwest Territory and later Tennessee. The temporary seat of government was located at Rocky Mount, home of William Cobb near the Watauga River. Even though the Virginia-Tennessee boundary was set in 1803, as it remains today, the legal jurisdiction dispute was not put to rest until a U.S. Supreme Court decision in 1903.

This upper east Tennessee area served as an important point of departure for expeditions for both opening up new lands and protecting settled territory. From Long Island on the Holston, Daniel Boone departed in 1775, marking the trail for pioneers to follow, eventually through the Cumberland Gap and into Kentucky. In the fall of 1780, the men of the region marched from Sycamore Shoals to the upper reaches of the Watauga watershed and through Carver's Gap of Roan Mountain to fight and defeat the British troops under Colonel Patrick Ferguson at Kings Mountain. During the last years of the 18th century, two separate expeditions left Long Island to settle middle Tennessee and Nashville. The James Robertson party went overland, while the Donelson party traveled by rivers.

The early 1800s saw the extension of commerce, growing settlements, and the development of transportation systems. Area farmers grew wheat, rye, corn, barley, oats, and tobacco, and they raised cattle and swine. While the Long Island area served as a crossroads for migratory settlers and for Cherokee trails, it also was the head of navigation for the Tennessee River system. Salt, iron, and tobacco from southwest Virginia, brought by packhorse and wagon to the Holston River, were loaded on flatboats and floated as far as Nashville or New Orleans. Retail, wholesale, and shipping businesses grew around William King's Boatyard, which served as an important distribution and transfer point. In 1822, the City of Kingsport was formed there. In 1825, the first stage line was established connecting Nashville and Salem, North Carolina, via Knoxville, Johnson City, Elizabethton, and Boone Gap. In 1831, a cotton-spinning factory began operation on Boone's Creek, 9 to 10 miles from Jonesborough—the first factory of its kind in this part of east Tennessee. In 1858, the East Tennessee and Virginia Railroad was completed between Knoxville and

Bristol. It traveled through Johnson City but bypassed Kingsport. The railroad connection from Richmond and Lynchburg through southwest Virginia to Bristol also was completed in the mid-1800s.

During the Civil War, while the area was not affected by major battles, mixed loyalties among residents and alienation among families took a heavy toll. After the war, reconstruction was difficult and progress slowed. During the latter part of the 19th century, the growth of railroads helped towns regain momentum and prosper. Signs of progress in upper east Tennessee were occurring throughout the region. Changes in Johnson City exemplified this progress. New churches and schools were built, and a newspaper was established. The first real estate company was founded, as were other industries such as a tannery, foundry, and machine works. Railroad branches such as the Virginia Creeper at Abingdon linked Bristol with areas rich in timber and coal resources.

Industrialization continued into the new century, and by 1915, the Clinchfield Railroad from Spartanburg, South Carolina, to Elkhorn City, Kentucky, was completed. City planner John Nolen was hired by area leadership and drew up plans for a new industrial city of 50,000. In 1917, the new City of Kingsport was incorporated. While some industries were successfully recruited before World War I, it was after the war that Kingsport's new industrial base took shape. Eastman Kodak Company, *Kingsport Press*, Mead Fiber Company, Holliston Mills, Blue Ridge Glass, The Borden Company, and others became established there during the 1920s. Kingsport grew dramatically during the Great Depression—largely due to new product lines at Tennessee Eastman Corporation. Industrial employment quintupled between 1935 and 1945, partly due to national defense work associated with World War II. The U.S. Census of 1950 gives the following population data for the industrial cities of the upper Holston: Johnson City, 27,864; Kingsport, 19,571; Bristol, Tennessee, 16,771; Bristol, Virginia, 15,954; and Elizabethton, 10,754.

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

While the Upper Holston reservoirs were envisioned to provide flood control and electricity, they also provided new sources of recreation. The management of water levels by TVA provides seasonal recreation opportunities. Conveniently accessible to area residents, these reservoirs provided an attractive site for second-home development and lake cottages. By the year 2000, tremendous population growth in the area expanded populations in the following cities: Johnson City, 55,469 people; Kingsport, 44,905 people;

Bristol, Tennessee, 24,821 people; Bristol, Virginia, 17,367 people; Blountville, 2,959 people; Bluff City, 1,559 people; and Elizabethton, 13,372 people.

3.2. The Project

South Holston Dam is on the South Fork Holston River, 7 miles southeast of Bristol, Tennessee-Virginia. This dam is an earth-and-rock fill structure with a maximum height of 285 feet and a length along the top of 1,600 feet. The powerhouse contains a single generating unit of 38,500-kilowatt capacity. The reservoir extends 24.3 miles above the dam and provides a flood storage capacity of 252,757 acre-feet. The water level in South Holston Reservoir fluctuates about 21 feet in a normal year.

Construction of South Holston began on the same day as that of Watauga Dam—February 16, 1942—during World War II. However, eight months later, the War Production Board ordered the construction effort halted. South Holston was deemed nonessential to the war effort. Construction resumed on August 4, 1947, and the dam was completed in November 1950. The single generating unit was placed in commercial operation on February 13, 1951.

Of the 342 families who were displaced by the South Holston project, 296 relocated in Sullivan County, Tennessee, and Washington County, Virginia, and six families relocated in the general area. Seventeen businesses were impacted by the project, including a plant for salvaging lead. It employed six to 10 people. Seven churches, four schools, and 11 other community facilities were removed in the South Holston area, while 18 residences were moved intact.

3.3. The Present Shoreland

3.3.1. *Physiographic Overview*

The South Holston Reservoir is located within the Ridge and Valley ecoregion of Tennessee and Virginia. This region occurs between the Blue Ridge Mountains on the east and the Cumberland Plateau on the west and is a relatively low-lying area made up of roughly parallel ridges and valleys that were formed through extreme folding and faulting events in past geologic time (Griffith et al. 1998).

South Holston Reservoir in Virginia is located within the Southern Limestone/Dolomite Valleys and Rolling Hills subregion. This is a heterogeneous region composed predominantly of limestone and cherty dolomite. Landforms are mostly undulating valleys and rounded ridges and hills, with many caves and springs. Soils vary in their productivity, and land cover includes oak-hickory and oak-pine forests, pasture, intensive agriculture, urban, and industrial land uses. The South Holston Reservoir in Tennessee is located within the Southern Shale Valleys ecoregion, which consists of lowlands, rolling valleys and slopes and hilly areas dominated by shale materials. Small farms and rural residences occur throughout where land is used for grazing or farming tobacco, corn, or hay (Griffith et al. 1998).

3.3.2. Land Use and Prime Farmland

The percent of developed residential shoreland is approximately 14 percent on South Holston Reservoir. The majority of the shoreland on South Holston is owned by TVA and jointly managed with either the USFS or Washington County, Virginia.

South Holston Reservoir has about 181 miles of shoreline. Of the 181 miles of total shoreline, 24 percent is privately owned flowage easement land, 2 percent is owned and managed by TVA, 73 percent is owned by TVA and jointly managed, and a fraction of a percent is TVA-owned Shoreline Access shoreland. TVA owns approximately 2,271 acres of South Holston Reservoir shoreland, which total about 138 miles of shoreline. These 2,271 acres consist of property that is below the 1,747.0 maximum shoreline contour (MSC), TVA-owned islands, and those properties extending to a back-lying severance line that separates private property from TVA property.

Figure 1 represents the percent of land acreage on South Holston Reservoir that is allocated to each land use zone. Natural Resource Conservation (Zone 4) comprises the largest portion (35 percent) of all zones allocated for South Holston Reservoir. Privately owned, Non-TVA Shoreland (Zone 1) comprises the second-largest land acreage at 23 percent. However, no new reservoir land was allocated to Zone 1. Project Operations (Zone 2), Sensitive Resource Management (Zone 3), Industrial (Zone 5), Developed Recreation (Zone 6), and TVA Shoreline Access (Zone 7) ranged from less than 0.5 percent to 22 percent.

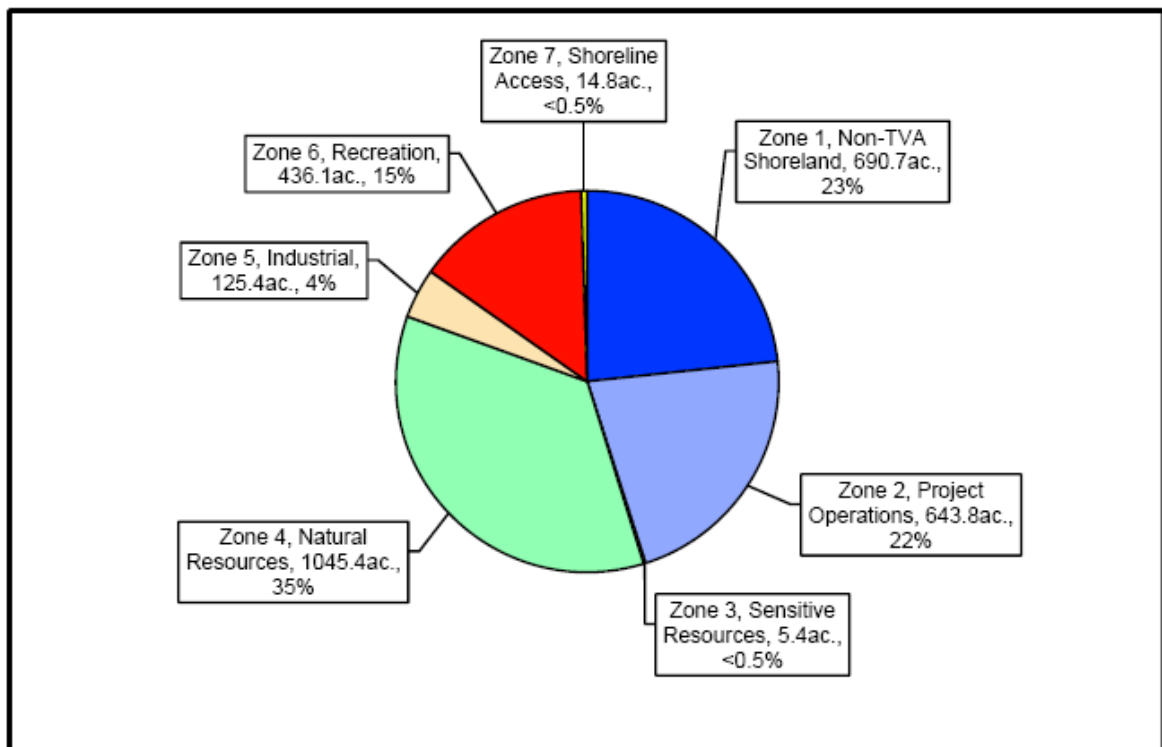


Figure 1. Percent of South Holston Reservoir Acreage Allocated by Zone

TVA has a flowage easement to the 1,747.0 MSC on approximately 690.7 acres of South Holston shoreland. Any structures placed below the 1,747.0 MSC are subject to approval under Section 26a of the *TVA Act*. Section 26a is designed to ensure that construction along the shoreline and in waters of the Tennessee River system and the TVA reservoirs does not adversely impact TVA's responsibility for managing the river system and for achieving "Unified Development and Regulation of the Tennessee River." For more information on TVA's SMP, see Section 2.5 of this RLMP.

Zone 2 (Project Operations) is all TVA reservoir land currently used for TVA operations and public works projects. The South Holston Dam Reservation contains several buildings associated with power production from South Holston Reservoir—for instance, the South Holston Dam, the control building, the powerhouse, the switchyard, and the regional hydropower production maintenance building, as well as numerous power transmission lines. Additional facilities located on the dam reservation are the South Holston Dam Visitors Center, a picnic area, public restrooms, and maintenance facilities.

South Holston Dam Reservation also includes Osceola Island, hiking trails, fishing access and other activities associated with dispersed recreation. A footbridge extends from the parking lot below the dam to Osceola Island and leads to a 1-mile loop wildlife trail. A scenic overlook building and picnic facilities are located adjacent to the roadway crossing the dam.

Bent Branch Emergency Spillway (Parcel 72) is the second-largest Zone 2 parcel and is a forested area, which is accessible by foot trail from the upper loop of Holston Dam View Road, as well as by water. This parcel is suitable for dispersed recreation activities, such as bank fishing, walking, and scenic viewing.

Zone 3 (Sensitive Resource Management) is land managed for protection and enhancement of sensitive resources. Sensitive resources, as defined by TVA, include resources protected by state or federal law or EO and other land features/natural resources TVA considers important to the area viewscape or natural environment. There is only one parcel allocated to Zone 3 on South Holston, which is Parcel 25A (Wolf Creek Sensitive). This parcel consists of high-quality wetlands and sensitive cultural resources. All-terrain and off-road vehicles are prohibited; however, activities associated with dispersed recreation are permissible, including hunting and fishing during state-regulated seasons.

About 1,045 acres of the 2,271 acres of TVA-owned property are allocated as Zone 4 (Natural Resource Conservation). Zone 4 is the largest acreage of TVA fee-owned property on South Holston Reservoir. Zone 4 lands are managed for the enhancement of natural resources for human use and appreciation. Parcel 2, the South Holston Tailwater, has the largest acreage allocated to Zone 4. Below South Holston Dam are various-aged forests, as the result of reversion of fields over the last 30 or so years. Through parts of this area is a short walking trail, which was built by local Boy Scouts. Also below the dam is a TVA-maintained canoe/boat launch and fishing access, which is located adjacent to South Holston Dam Road.

The majority of parcels allocated to Zone 4 are marginal strips of land that front lands previously transferred to the USFS for administration. These areas were placed in Zone 4 to reflect their back-lying uses, which is a portion of either the Jefferson National Forest or the Cherokee National Forest. These shorelines provide opportunities for hunting, fishing, and activities associated with dispersed recreation.

Parcel 6 is the only parcel allocated to Zone 5 (Industrial) on South Holston Reservoir. Zone 5 is TVA land managed for economic development, including businesses in distribution/processing/assembly and light manufacturing. Parcel 6 was originally purchased by TVA in 1950 as a borrow area to provide earth fill for the construction of South Holston Dam. Consequently, several temporary construction buildings were erected on the site. Later, the buildings were removed, leaving a relatively flat area surrounded by, more or less, an undisturbed perimeter; however, natural vegetation has returned the site to forest.

Zone 6 (Developed Recreation) consists of TVA lands that have been, or are available to be, developed for recreational purposes, such as public launching ramps or county parks. The USFS manages a few developed and commercial recreation areas. For instance, Parcel 46, Little Jacob Creek Recreation Area, of the Cherokee National Forest, has a paved boat ramp with developed parking, a campground, and a swimming beach. Likewise, Parcel 62, Little Oak Mountain Recreation Area, of the Cherokee National Forest has a campground, paved boat ramp, and fish-cleaning hut. Additionally, portions of Parcel 10 and Parcel 11 are under license to private individuals for the management of Laurel Marina, Hog Hollow, and King's Cove marina facilities.

Parcel 14, Sullivan County Park, is also allocated to Zone 6. Sullivan County has a permanent recreation easement for approximately 230 acres for Sullivan County Park. Sullivan County Park provides developed facilities including campgrounds, bathhouse, paved launching ramps, an *American With Disabilities Act*-accessible fishing pier, picnic areas, and day use areas. Similarly, Washington County, Virginia, has a permanent recreation easement on 56 acres for Parcel 24 for Washington County Park. The park offers a campground, picnic facilities, a paved boat launch, canoe access, and playground. In addition, Washington County, Virginia, has a permanent easement for a day use recreation area on the Area 6 ramp (Parcel 33). The area is developed with picnic facilities, designated fire rings, and paved parking. This area is a "day use only" area, and no camping is allowed.

Zone 7 (Shoreline Access) comprises 14.8 acres of the total 2,271 acres on South Holston Reservoir. Zone 7 lands are TVA-owned lands where Section 26a applications and other land use approvals for private shoreline alterations are considered. Requests for private shoreline alterations are considered on parcels identified in this zone where such use was previously considered, and/or where the back-lying landowner possesses deeded rights of access, and where the proposed use would not conflict with the interests of the public.

The South Holston Reservoir contains approximately 292 acres of prime farmland. In addition to this acreage, the Commonwealth of Virginia recognizes an additional 38 acres of Land of Statewide Importance (see Volume I, Appendix G and Table 3-6). Prime farmland has the best combination of soil physical and chemical characteristics for producing food and fiber and is protected from conversion to industrial and nonagricultural uses by the U.S. Department of Agriculture (USDA). These 292 acres of prime farmland occur in Zones 2 (Project Operations), 4 (Natural Resource Conservation), 5 (Industrial), and 6 (Developed Recreation). Approximately 155 acres occurs in Zone 2, which is subject to major soil disturbance when TVA or other public facilities are constructed. However, once these facilities are established, they often remain intact for long periods, and large tracts of land remain without adverse impacts to prime farmlands. In addition, approximately 125 acres occur in Zone 4, where little or no soil disturbance is likely, and would have no adverse impacts to prime farmlands. The remainder of the acreage ranges from 1.4-6.5 acres among the other land use zones and is subject to land disturbance activities. For more information on land use and prime farmland, see Volume I, Sections 3.2 and 3.4.

3.3.3. Recreation

TVA's recreation vision seeks to enhance recreation opportunities and address unmet recreation needs while managing resources on South Holston Reservoir. Developed recreation provides modern facilities and amenities on shoreline properties such as campgrounds, marinas, developed boat launches/ramps, and a myriad of day use facilities (picnic areas, swimming beaches, and fishing piers). These TVA lands are primarily allocated as Zone 6 (Developed Recreation) and as Zone 2 (Project Operations, as developed recreation facilities occur on South Holston Dam Reservation) (see Table 1 for land use zone definitions).

Dispersed recreation areas provide passive, unconfined opportunities that are predominantly nature-based. In general, areas that provide dispersed recreation amenities contain one or more of the following: rustic trails for fishing access, walking/hiking, and horseback riding; primitive campsites; primitive swimming and launching sites; and hunting and fishing areas. The TVA areas that provide dispersed recreation opportunities on TVA lands include many proposed Zone 2 parcels such as substations and dam reservations, Zones 3 and 4 parcels, and undeveloped Zone 6 parcels (see Table 1 for land use zone definitions).

Developed recreation facilities and amenities on South Holston Reservoir include five campgrounds, nine developed boat launches/ramps, and a myriad of day use facilities including four picnic areas, two walking trails, one swimming beach, one fishing pier, one canoe access, one playground, and numerous ball fields associated with Ruritan Park. South Holston Reservoir parcel descriptions (see Section 4.0) further describe the management entity and management prescription of recreation facilities on these lands managed either by TVA or under contractual agreement to another government entity or commercial operator. Table 2 itemizes developed recreation area lands that are managed by TVA or are under contractual agreement for recreation purposes, their managing

agency/entity, and their locations by parcel number. Table 2 does not itemize privately owned/operated recreation facilities that are adjacent to South Holston Reservoir shoreline, because they are private and beyond the scope of this RLMP.

Table 2. Developed Recreation Areas on TVA Lands on South Holston Reservoir

Recreation Area	Managing Entity	Location
Dam Reservation and Osceola Island	TVA	Parcel 3
Ruritan Ball Fields	Sullivan County, Tennessee	Parcel 4
Sullivan County Park	Sullivan County, Tennessee	Parcel 14
Highway 421 Bridge Ramp	Tennessee Wildlife Resources Agency (TWRA)	Parcel 14
Baumgardner Ramp	TWRA	Parcel 22
Washington County Park	Washington County, Virginia	Parcel 24
Area 1 Ramp	Virginia Department of Game and Inland Fisheries (VDGIF)	Parcel 30
Area 6 Ramp	VGDIF	Parcel 33
Washington County Roadside Park	Washington County, Virginia	Parcel 38
Jacob's Creek Recreation Area	USFS	Parcel 46
Little Oak Mountain Recreation Area	USFS	Parcel 62

TVA manages six dispersed recreation areas with 27 sites on South Holston Reservoir. A site is defined as an area of impact where a recreation activity occurs; an area is the sum of the sites near one another on a TVA parcel. These areas are located on Parcels 25, 32, 34, 35, 36, and 37. For further description of these parcels, see parcel descriptions in Section 4.0.

Dispersed recreation areas on South Holston Reservoir were assessed, and analysis of the data qualified five areas as beyond the biophysical "Limits of Acceptable Change" (LAC). Those areas are May's Branch Areas 3 (Parcel 36) and 4 (Parcel 35), Calleb's Cove Area 5 (Parcel 34), Wolf Creek Area 1 (Parcel 25), and Vineyard Island (Parcel 32). Areas that exceeded the LAC may be prioritized by the watershed team and proposed for improvements. For more information on recreation, see Volume I, Section 3.3.

3.3.4. Terrestrial Ecology

The Ridge and Valley ecoregion contains long stretches of ridges with adjacent valleys that run in a southwestern-to-northeastern direction. The variety of landforms, soils, climate, and geology across the Ridge and Valley have allowed for an extremely diverse assemblage of animals. Deciduous forests and mixed evergreen-deciduous forests provide wildlife habitat among the intense agriculture and urban sprawl.

Oak-hickory forest is the most abundant forest type in the eastern U.S. (Flather et al. 1999) and is prevalent in the South Holston Reservoir region. Numerous bird species nest in deciduous forests, for example, wild turkey, whip-poor-will, ruby-throated hummingbird, red-eyed vireo, blue-headed vireo, wood thrush, gray catbird, black-throated green warbler, black-and-white warbler, ovenbird, hooded warbler, and the scarlet tanager.

Evergreen and evergreen-deciduous forests provide nesting habitat for woodland birds including pine and yellow-throated warblers, great crested flycatcher, and chuck-will's-widow. Birds that winter in this forest type include red-breasted nuthatch, red crossbill, and pine siskin. Other animals that inhabit evergreen and evergreen-deciduous forests but are not restricted to them include white-tailed deer, wild turkey, black bear, eastern mole, southern bog lemming, eastern kingsnake, smooth earth snake, eastern fence lizard, and six-lined racerunner. Additionally, streams, wetlands, and other seasonally wet areas in this forest type provide habitat for a variety of salamanders, frogs, and toads. The riparian zones along streams within deciduous forests provide nesting habitat for Acadian flycatcher, northern parula, and Louisiana waterthrush. Many additional bird species migrate through and winter in the area. Common mammal species of deciduous forests include black bear, white-tailed deer, red bat, eastern chipmunk, eastern gray and southern flying squirrels, white-footed mouse, southern red-backed and woodland voles, short-tailed shrew, gray fox, least weasel, and bobcat. For more information on terrestrial ecology, see Volume I, Section 3.5.

3.3.5. Invasive Nonnative Species

Most of the TVA parcels around South Holston Reservoir have at least some invasive nonnative species. EO 13112 defines an invasive nonnative species as any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem and whose introduction does or is likely to cause economic or environmental harm or harm to human health (USDA 2007).

According to the Federal Noxious Weed List of 2006 (USDA 2007), there are no known federal noxious weeds reported from the lands around South Holston and the other NTRs. In addition, the Southeastern Exotic Plant Pest Council (2006) provides a list of nonnative invasive species that could pose potential threats to native ecosystems and human health for each southeastern state. In reviewing the Tennessee exotic plant pest list (Tennessee Exotic Plant Pest Council 2001), there were 15 (Rank 1) species that pose a severe threat to native ecosystems observed in the NTRs region. Plants listed as a severe threat include the following: autumn olive, bush honeysuckle, Chinese lespedeza, Chinese privet, English ivy, garlic mustard, Japanese honeysuckle, Japanese stiltgrass, Johnson grass, kudzu, mimosa, multiflora rose, oriental bittersweet, princess tree, and tree of heaven. Other nonnative species such as crown vetch, tall fescue, shrubby bushclover, Queen Anne's lace, periwinkle, and small carpet grass were also referenced. All of these species have the potential to adversely impact the native plant communities because of their potential to spread rapidly and displace native vegetation. All of the Rank 1 (severe threat) species are considered to be of high priority to TVA (James 2002).

3.3.6. Endangered and Threatened Species

TVA biologists and natural resource specialists used the TVA Natural Heritage database to assess the endangered and threatened species within and around each of the NTRs. The TVA Natural Heritage database was created to ensure that environmental compliance activities are conducted in a consistent manner across the TVA region and that these activities meet the requirements of NEPA and the *Endangered Species Act* (ESA). Database searches are based on the following criteria: (1) distance, (2) presence/absence of suitable habitats, (3) element occurrence rank values, and (4) species or type of element present. Accordingly, plants are assessed within a 5-mile radius, aquatic species within 10 miles, and terrestrial species within 3 miles. Federally listed and state-listed species identified during field reviews and/or results from the TVA Natural Heritage database searches are presented in Table 3.

Table 3. Federally Listed and State-listed Species Within and Near South Holston Reservoir

Common Name	Scientific Name	Federal Status	State Status*	State Rank
Common Barn Owl	<i>Tyto alba</i>	--	NMGT	S3
Common Raven	<i>Corvus corax</i>	--	THR	S2
Swainson's Warbler	<i>Limnothlypis swainsonii</i>	--	NMGT	S3
Appalachian Bewick's Wren	<i>Thryomanes bewickii altus</i>	--	END**	S1
Gray Bat	<i>Myotis grisescens</i>	LE	END	S2
Indiana Bat	<i>Myotis sodalis</i>	LE	END**	S1
Smoky Shrew	<i>Sorex fumeus</i>	--	NMGT	S4
Southern Bog Lemming	<i>Synaptomys cooperi</i>	--	NMGT	S4
Southeastern Shrew	<i>Sorex longirostris</i>	--	NMGT	S4
Meadow Jumping Mouse	<i>Zapus hudsonius</i>	--	NMGT	S4
Cherokee Clubtail	<i>Gomphus consanguis</i>	--	NOST**	S2
Southwestern Virginia Cave Isopod	<i>Caecidotea recurvata</i>	--	SPCO**	S3
A Land Snail	<i>Helicodiscus notius specus</i>	--	NOST	S1
A Ground Beetle	<i>Pseudanophthalmus sp. 5</i>	--	NOST**	S1
Black Sculpin	<i>Cottus baileyi</i>	--	TRKD	S2
Blotchside Logperch***	<i>Percina burtoni</i>	--	NMGT	S2
Emerald Shiner***	<i>Notropis atherinoides</i>	--	THR	S1/S2
Fatlips Minnow	<i>Phenacobius crassilabrum</i>	--	SPCO	S2
Greenfin Darter	<i>Etheostoma chlorbranchium</i>	--	THR	S1
Longhead Darter***	<i>Percina macrocephala</i>	--	THR	S2
Mirror Shiner	<i>Notropis spectrunculus</i>	--	SPCO	S2
River Redhorse	<i>Moxostoma carinatum</i>	--	SPCO	S2/S3
Sharphead Darter	<i>Etheostoma acuticeps</i>	--	END	S1
Spotfin Chub	<i>Cyprinella monacha</i>	LT	THR	S1
Tennessee Dace	<i>Phoxinus tennesseensis</i>	--	NMGT	S3
Black Sandshell	<i>Ligumia recta</i>	--	THR	S2
Elktoe***	<i>Alasmidonta marginata</i>	--	SPCO	S1/S2
Fluted Kidneyshell	<i>Ptychobranhus subtentum</i>	C	TRKD	S2
Little-Wing Pearlymussel***	<i>Pegias fibula</i>	LE	END	S1

Common Name	Scientific Name	Federal Status	State Status*	State Rank
Shiny Pigtoe Pearlymussel	<i>Fusconaia cor</i>	LE	END	S1
Slabside Pearlymussel	<i>Lexingtonia dolabelloides</i>	C	THR	S2
Tan Riffleshell***	<i>Epioblasma florentina walkeri</i>	LE	END	S1
Tennessee Clubshell	<i>Pleurobema oviforme</i>	--	TRKD	S2/S3
Tennessee Heelsplitter	<i>Lasmigona holstonia</i>	--	END	S1
Tennessee Pigtoe	<i>Fusconaia barnesiana</i>	--	SC	S2
American Ginseng	<i>Panax quinquefolius</i>	--	S-CE	S3/S4
Northern White Cedar	<i>Thuja occidentalis</i>	--	SPCO	S3
Pink Lady's Slipper	<i>Cypripedium acaule</i>	--	S-CE	S4
Sapsuck	<i>Buckleya distichophylla</i>	--	THR	S2
Virginia Waterleaf	<i>Hydrophyllum virginianum</i>	--	THR	S3

Federal status abbreviations: C = Candidate for listing; LE = Listed endangered; LT = Listed threatened

State status abbreviations: END = Endangered; NMGT = In need of management; NOST = No status; SC = Special concern; S-CE = Special concern-commercially exploited (plants); SPCO = Species of concern; THR = Threatened; TRKD = Tracked by State Natural Heritage Program

State rank abbreviations: S1 = Critically imperiled, often with 5 or fewer occurrences; S2 = Imperiled, often with <20 occurrences; S3 = Rare or uncommon, often with <80 occurrences; S4 = Uncommon but not rare; S#/S# = Occurrence numbers are uncertain

*Tennessee record unless otherwise specified

**Virginia record

***Historic record

3.3.6.1. Plants

Field surveys and reviews of the TVA Natural Heritage database did not indicate any federally listed endangered or threatened plant species within 5 miles of South Holston Reservoir. In addition, no designated critical habitat for rare plants is present within or near the NTRs. For more information on plant communities, see Volume I, Section 3.6.

3.3.6.2. Terrestrial Wildlife

Field surveys and reviews of the TVA Natural Heritage database indicated that two federally listed endangered terrestrial species and four Virginia state-listed endangered terrestrial species occur within 3 miles of South Holston Reservoir. In addition, eight Tennessee state-listed terrestrial species and five Virginia state-listed terrestrial species occur within and near South Holston Reservoir. For more information on terrestrial wildlife, see Volume I, Section 3.6.

3.3.6.3. Aquatic Wildlife

A total of 21 federally and/or state-listed aquatic animals are known from South Holston Reservoir and its tributaries. The Virginia Department of Game and Inland Fisheries (VDGIF) designated the South Fork Holston River as a "Threatened and Endangered Water" due to the presence of several federally listed and state listed aquatic species in that river. The Middle Fork Holston River, which flows into the South Fork Holston River, also has been designated as a Threatened and Endangered Species Water by the VDGIF. Several rare mussels have been reported from the Middle Fork Holston River within 10 miles of TVA-managed parcels including: tan riffleshell, elktoe, Tennessee pigtoe,

Tennessee heelsplitter, slabside pearlymussel, Tennessee clubshell, fluted kidneyshell, shiny pigtoe pearlymussel, black sandshell, and little-wing pearlymussel. No TVA parcels are located along the Middle Fork Holston River.

Historic records of tan riffleshell and little-wing pearlymussel are known from the South Fork Holston River upstream of South Holston Reservoir. Existing records of black sculpin, mirror shiner, river redhorse, greenfin darter, sharphead darter, and fatlips minnow are known from the South Fork Holston River upstream of South Holston Reservoir. These mussel and fish species could potentially occur near Parcel 32, which is located in the transitional area between the reservoir and the South Fork Holston River, where riverine conditions persist. Although the river redhorse prefers swift waters of medium to large rivers (Etnier and Starnes 1993), it could potentially occur near any parcels on the reservoir, since it is a highly mobile species. Parcel 32 is located within the South Fork-Middle Fork Holston River Stream Conservation Unit, which is noted for highly significant biodiversity. For more information on aquatic wildlife, see Volume I, Section 3.6.

3.3.7. Wetlands

Wetlands are transitional ecosystems between terrestrial and aquatic communities, where saturation with water is the dominant factor in determining the types of plants and animals present. Wetlands are ecologically important because of their beneficial effect on water quality, their moderation of flow regimes by retaining and gradually releasing water, their value as wildlife habitat, and as areas of botanical diversity. Wetlands exist within and adjacent to TVA reservoirs, and are influenced by surface water and groundwater connections to the water levels in these reservoirs.

According to TVA Rapid Assessment Method, which is a version of the Ohio Rapid Assessment Method (Mack 2001) designed specifically for the TVA region, wetlands may be classified into three categories. Category 1 wetlands are considered “limited quality waters” and represent degraded aquatic resources. Category 2 includes wetlands of moderate quality and wetlands that are degraded but have reasonable potential for restoration. Category 3 generally includes wetlands of very high quality or of regional/statewide concern, such as wetlands that provide habitat for threatened or endangered species.

Field surveys were conducted to determine types and locations of wetlands on uncommitted parcels on each reservoir. Wetlands on uncommitted parcels were also categorized by their functions, sensitivity to disturbance, rarity, and irreplaceability. Based on estimates from the U.S. Fish and Wildlife Service National Wetlands Inventory maps combined with data sets developed for TVA’s 2004 *Reservoir Operations Study*, South Holston Reservoir has approximately 52 acres of wetland habitat.

South Holston Reservoir has ten uncommitted parcels. Scrub-shrub wetlands are present in the cove associated with Parcel 19 and in a limited area along the shoreline. Black willow, cypress, silky dogwood, and river birch are present in these small Category 2

wetlands. An extensive wetland area is found on Parcel 25 along Wolf Creek. A mix of emergent, scrub-shrub, and forested wetlands, this high-quality/Category 3 wetland provides unique, diverse wetland habitat uncommon in the region. The mix of vegetation present in this wetland includes sycamore, soft rush, black willow, box elder, cattail, red osier dogwood, smartweed, river birch, jewelweed, moneywort, and spikerush. For more information on wetland resources, see Volume I, Section 3.7.

3.3.8. Floodplains

The area impacted by the RLMP extends from the lower limit of TVA's property at about South Fork Holston River Mile (RM) 46.5 upstream to about South Fork Holston RM 74.7 in South Holston Reservoir. South Holston Dam is located at South Fork Holston RM 49.8. The 100-year floodplain is the area that would be inundated by the 100-year flood.

The 100-year flood elevations for the South Fork Holston River downstream of South Holston Dam vary from 1,472.6 feet mean sea level (msl) at RM 46.5 to elevation 1,495.6 feet msl at the downstream side of South Holston Dam. The 500-year flood elevations for the South Fork Holston River downstream of South Holston Dam vary from 1,475.1 feet msl at RM 46.5 to elevation 1,499.2 feet msl at the downstream side of South Holston Dam.

In South Holston Reservoir, the 100-year flood elevation for the South Fork Holston River upstream of South Holston Dam is 1,738.0. The 500-year flood elevation for the South Fork Holston River upstream of South Holston Dam is 1742.0. TVA does not know how far upstream of South Holston Dam these flood elevations control. Tabulations of the 100- and 500-year flood elevations are included in Volume I (Appendix G).

All msl measurements are according to the National Geodetic Vertical Datum model of 1929.

3.3.9. Cultural and Historic Resources

TVA has identified 23 prehistoric and historic archaeological sites within the area affected by the South Holston RLMP. Prehistoric archaeological sites along the South Holston Reservoir range from small temporary camps to large permanent villages, and historic archaeological sites consist of residence, farmstead, and industry remnants.

TVA has conducted archaeological surveys and intensive archaeological research along the South Holston Reservoir from the late 1970s to the present. Approximately 884 acres of land within the RLMP have been surveyed. The surveyed areas consist of the South Holston Dam Reservation (McIlhany 1994; Kimball 2005), South Holston Dam and Osceola Island Development Area (1991), and Tract 34 (Gage 2008). The archaeological survey, which was conducted for the current land plan, resulted in the identification of an iron mine remnant used by the Ivanhoe Mineral and Smelting Company (Gage 2008). For more information on the cultural and historic resource review process, see Volume I, Section 3.9.

3.3.10. *Managed Areas and Sensitive Ecological Sites*

Natural areas include managed areas, ecologically significant sites, and Nationwide Rivers Inventory streams. *Managed areas* include lands held in public ownership that are managed by an entity (e.g., TVA, USFS, State of Tennessee, Sullivan County) to protect and maintain certain ecological and/or recreational features. A management plan or similar document defines what types of activities are compatible with the intended use of the managed area. *Ecologically significant sites* are tracts of privately owned land either that are recognized by resource biologists as having significant environmental resources or identified tracts on TVA lands that are ecologically significant but not specifically managed by TVA's Natural Areas Program. *Nationwide Rivers Inventory* streams are free-flowing segments of rivers recognized by the National Park Service (NPS) as possessing outstandingly remarkable natural or cultural values.

Natural areas adjacent to South Holston Reservoir include USFS lands and city and state parks. Zone allocations of the TVA land parcels are in agreement with the management objectives of these back-lying public lands. Natural areas that are on, immediately adjacent to, or within 3 miles of South Holston Reservoir are identified in Table 4. For more information on managed areas and sensitive ecological sites, see Volume I, Section 3.10.

Table 4. Natural Areas on, Adjacent to, or Within 3 Miles of South Holston Reservoir

Natural Area	Steward	Location
Osceola Island Ecologically Significant Site	TVA (also used as a TVA-managed recreation area)	Island portion of Parcel 3
Sullivan County Park	TVA permanent recreation easement to Sullivan County, Tennessee	Parcel 14
Washington County Park	TVA permanent recreation easement to Washington County, Virginia	Parcels 24 and 38
Cherokee National Forest	USFS	Parcels 40, 42-49, 54-71, and 74-79
North Cherokee Wildlife Management Area	TWRA	Parcels 10,11, 39-42, 44-51, 54, 55, 57-64, 66-71, 74-79
Jefferson National Forest	USFS	Parcel 39
Overmountain Victory State Scenic Trail	NPS, states, and other groups	0.8 mile northwest*
Middle Fork Holston River Megasite Ecologically Significant Site	Virginia Natural Heritage Program	1.5 miles north*
Holston River, South Fork (Nationwide Rivers Inventory stream)	NPS	1.0 mile above reservoir*

* Distance to nearest point on the reservoir

3.3.11. *Water Quality*

South Holston Dam creates a storage pool approximately 24 miles long and over 230 feet deep near the dam, with an average depth of 86.5 feet and approximately 7,600 acres in surface area. With an average annual discharge of about 950 cubic feet per second from

the dam, the average residence time (the length of time the water sits in the reservoir) is 262 days—one of the longest residence times of any TVA reservoir.

The Reservoir Ecological Health Index is made up of several component indices: dissolved oxygen, chlorophyll, fish (i.e., Reservoir Fish Assemblage Index [RFAI]), benthos, and sediments. The scores from these indices are totaled, and then the average is taken to come up with the overall reservoir ecological health score. The overall ecological condition in South Holston Reservoir rated poor in 2006. This is similar to most previous years, except for 2004, when no contaminants were detected at either monitoring site. Low ratings for two indicators (dissolved oxygen and benthos) consistently reduce the reservoir’s overall health score.

Figure 2 shows the reservoir ecological health scores for South Holston Reservoir from 1994 through 2006. The overall ecological health condition for South Holston Reservoir usually rates “poor,” but has occasionally rated from the low end to the midrange of “fair”. Areas sampled on South Holston Reservoir include the forebay at South Fork Holston RM 51.0 and the transition zone at South Fork Holston RM 62.5.

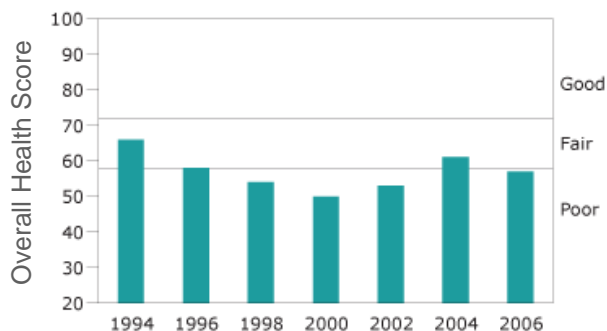


Figure 2. South Holston Reservoir Ecological Health Ratings, 1994-2006

Low dissolved oxygen concentrations are often present in the lower water column during June through October at both monitoring locations. Sediment ratings have fluctuated between “good” and “fair,” dependent on whether or not chlordane, a pesticide previously used to control termites and crop pests, was detected. Chlorophyll has rated “good” at the forebay in all years except 1994 and 2007, when the rating was at the upper end of the “fair” range. Chlorophyll rated “good” at the transition zone location the first several years of monitoring (1991 to 1996), but ratings have fluctuated between “good,” “fair,” and “poor” since 1998. Overall, chlorophyll concentrations at the transition zone site have exhibited a trend of increasing since 1991. For more information on water quality, see Volume I, Section 3.12.

3.3.12. Aquatic Ecology

Unimpounded rivers of the Ridge and Valley ecoregion typically consist of limestone rubble and bedrock riffles, sandy silty pools, and some extensive sand and gravel shoals (Etnier and Starnes 1993). These conditions exist in upper reaches of reservoirs where free-flowing streams transition into impounded reservoirs as well as in reservoir tailwaters. Water discharged into the tailwaters can be very cold and have low dissolved oxygen content, impairing water quality. Consequently, the stretch of river directly downstream of dams can have less diverse aquatic communities.

TVA has improved tailwater water quality below many of its hydroelectric facilities, including South Holston Reservoir. This has been accomplished by the establishment of the Reservoir Releases Improvement Program, which was begun officially in 1991 when the TVA Board of Directors approved a five-year plan to improve water releases from 16 dams by maintaining minimum flows and reaeration of dam discharges. Implementing minimum flows was accomplished via turbine pulses, and dissolved oxygen levels increased in a variety of ways (e.g., turbine venting, oxygen injection, and weir dams). These techniques help to mimic riverine conditions in TVA tailwaters that were more natural.

South Holston Reservoir is on the South Fork Holston River in northeast Tennessee. It extends 24 miles east of the dam into Virginia. Impoundment results in species tolerant of lakelike conditions replacing typical riverine aquatic assemblages. Often, deep tributary reservoirs stratify into temperature-distinct layers in the summer with the colder, less oxygenated water settling on the bottom. Water quality in South Holston Reservoir and the tailwaters is influenced by a variety of factors, such as size, geology, and land use conditions in the reservoir's upstream drainage areas, point and nonpoint discharges of pollutants, activities on lands adjacent to the reservoir, and the operation of the reservoir.

3.3.12.1. Reservoir Vital Signs

The Reservoir Vital Signs Monitoring Program (RVSMMP) activities focus on (1) physical and chemical characteristics of waters; (2) physical and chemical characteristics of sediments; (3) sampling the benthic macroinvertebrate community; and (4) fish assemblage sampling. The RVSMMP data include annual fish sampling on South Holston Reservoir from 1999-2007 (2008 data are not yet available) on a two-year rotation sampling cycle. Ratings are based primarily on fish community structure and function, using an analysis tool known as the RFAI (McDonough and Hickman 1999).

Both RFAI and benthic community samples were taken in the forebay area (near the dam) and in the transition zones of South Holston Reservoir. Usually, samples are taken on a two-year cycle. Available RFAI and reservoir benthic community scores results for South Holston Reservoir are presented below in Table 5. The RVSMMP data for all NTRs are available in Volume I, Section 3.13.

3.4. The Future

The shoreland of South Holston Reservoir is composed of a variety of land uses, such as residential development, suburban areas, USFS property, commercial recreation, and a few small farms. As unmanaged growth and development increase, there are impacts on the natural resources, which contribute to the quality of life that draws people to South Holston Reservoir. This quality of life could be impacted by the success or failure to achieve an appropriate balance between development and the protection of natural resources and could decrease the ecotourism and recreational value of South Holston Reservoir.

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

3.5. Parcel Allocations

The parcel allocations for South Holston Reservoir can be found below in Tables 7a and 7b, which is the parcel information matrix that coincides with South Holston Reservoir map panels 1 and 2. This table identifies each parcel number, allocation zone, number of acres, and brief parcel description. Non-TVA Shoreland (Zone 1) totals 691 acres on South Holston Reservoir and is not included in Tables 7a and 7b because it is shoreland that TVA does not own in fee or land that TVA never purchased.

Table 7a. South Holston Reservoir Parcel Allocations – Panel 1 of 2

Parcel Number	Zone Allocations							SOUTH HOLSTON RESERVOIR - Panel 1 of 2 Descriptions
	Acres	2	3	4	5	6	7	
1	97.9			●				Emmett Tailwater
2	139.5			●				Tailwater
3	373.2	●						Dam Reservation
4	16.2					●		Ruritan Ballfields
5	24.4	●						Water Treatment Plant
6	125.4				●			Industrial Park
7	1.6						●	Marginal Strip Access
8	0.8					●		Lake View Dock
9	0.8			●				Islands
10	56.2			●				Marginal (Fronting USFS)
11	7.9					●		Laurel Marina
12	4.1			●				Laurel Marina Marginal
13	1.3	●						Hwy 421
14	229.6					●		Sullivan County Park
15	8.2			●				Marginal Strip Islands (Fronting USFS)
16	55.5	●						Saddle Dam
42	90.3			●				Big Jacobs Creek Marginal Strip (Fronting USFS)
43	3.0			●				Little Jacobs Backwater
44	40.2			●				Little Jacobs Creek Marginal Strip (Fronting USFS)
45	24.3			●				Jacobs Creek / Paddy Branch (Fronting USFS)
46	13.1					●		Jacobs Creek Access (USFS)
47	12.0			●				Stout Branch Marginal Strip (Fronting USFS)
48	0.5			●				USFS Marginal Strip (Stout Branch)
49	20.1			●				Hwy 421 Marginal Strip (Fronting USFS)
50	8.6						●	Little Switzerland Access
51	4.3			●				Lucy Creek
52	2.0						●	Sharps Creek Access
53	5.2					●		Friendship Marina
54	62.4			●				Underwood Branch Marginal Strip (Fronting USFS)
55	5.9			●				Underwood Branch Marginal
56	1.3			●				Underwood Branch Marginal Strip (Fronting USFS)
57	79.4			●				North Prong Fishdam Creek (Fronting USFS)
58	1.9			●				Fishdam Creek Marginal Strip (Fronting USFS)
59	10.7			●				Oak Branch Marginal Strip (Fronting USFS)
60	2.5			●				Oak Branch Marginal Strip
61	23.5			●				Little Oak Branch Marginal Strip (Fronting USFS)
62	42.6					●		USFS Little Oak Campground
63	4.7			●				Marginal Strip Islands (Fronting USFS)
64	90.8			●				Big Oak/Josiah/Big Creek Marginal
65	3.5			●				Marginal Strip (Fronting USFS)
66	1.7			●				Marginal Strip (Fronting USFS)
67	2.3			●				Big Creek Marginal Strip (Fronting USFS)
68	77.4			●				Big Creek/Riddle Creek Marginal Strip
69	3.4			●				Big Creek Marginal Strip (Fronting USFS)
70	1.6			●				Riddle Creek Marginal Strip (Fronting USFS)
71	4.9			●				Riddle Creek Marginal Strip (Fronting USFS)
72	106.1	●						Bent Branch Emergency Spillway
73	82.7	●						Bouton River Access
74	6.5			●				Riddle Creek Marginal Strip (Fronting USFS)
75	1.8			●				Riddle Creek Marginal Strip
76	0.9			●				Riddle Creek Marginal Strip (Fronting USFS)
77	0.8			●				Riddle Creek & Island Marginal Strip (Fronting USFS)
78	4.2			●				Riddle Creek Marginal Strip
79	0.6			●				Riddle Creek & Island Marginal Strip (Fronting USFS)
Total	1990.0							Total South Holston Reservoir Acres = 2,283.7
	Committed Land - Under current agreement, used for project operations, with sensitive resources, or fronting public recreation land.							
	Uncommitted Land - Land that is considered "Plannable".							

Table 7b. South Holston Reservoir Parcel Allocations – Panel 2 of 2

Parcel Number	Zone Allocations						SOUTH HOLSTON RESERVOIR - Panel 2 of 2 Descriptions
	Acres	2	3	4	5	6	
16	55.5	●					Saddle Dam
17	0.1					●	Painter Creek Marina
18	0.1						XSH-8 Access
19	23.5					●	Baumgardner
20	0.3	●					Baumgardner Road
21	15.7			●			Baumgardner Islands
22	1.4					●	Baumgardner Ramp
23	1.4					●	Spring Creek Marginal
24	56.3					●	Washington County Park
25	7.0			●			Wolf Creek
25a	5.3		●				Wolf Creek Sensitive
26	0.4	●					Green Spring Fire Department
27	0.1					●	XSH-13 Access
28	0.3			●			Avens Bridge SW
29	1.2					●	Webb Access
30	3.3					●	Area 1 Ramp
31	1.2					●	15 Mile Creek Access
32	7.4			●			Access Area 7
33	10.9					●	Area 6 Ramp
34	2.2					●	Access Area 5
35	1.7					●	Access Area 4
36	6.0					●	Access Area 3
37	4.3			●			Access Area 2
38	14.0					●	Washington County Park Roadside
39	45.1			●			Marginal Strip (Fronting USFS)
40	7.9			●			Cave Spring Marginal Strip (Fronting USFS)
41	63.9			●			Battery Hollow (App Smelting)
42	90.3			●			Big Jacobs Creek Marginal Strip (Fronting USFS)
43	3.0			●			Little Jacobs Backwater
44	40.2			●			Little Jacobs Creek Marginal Strip (Fronting USFS)
Total	470.0						Total South Holston Reservoir Acres = 2,283.7
	Committed Land - Under current agreement, used for project operations, with sensitive resources, or fronting public recreation land.						
	Uncommitted Land - Land that is considered "Plannable".						

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4.0 PARCEL DESCRIPTIONS

(See exhibit map)

Note: Parcel descriptions have the total acreage listed that lies above the 1,730.0-foot median shoreline contour. Each parcel description contains four sections: General Description, Recreation, Sensitive Resources, and Transfers/License/Easement/Lease Agreements. In cases where the recreation section is absent, recreation activities are not compatible with the use or allocation of the parcel.

South Holston Reservoir Parcel Descriptions

Parcel 1	97.9 Acres
Common Name:	Emmett Tailwater
Allocation:	Zone 4 (Natural Resource Conservation)
Hydrologic Unit:	TN-06010102-100
County:	Sullivan, Tennessee
<i>Stream:</i>	<i>South Fork Holston River Mile 47.5 – 48.2 Right</i>

General Description:

Parcel 1 is located on the river tailwaters below South Holston Dam. The forests, which occupy the bottoms, vary from willow, on the wetter sites, to sycamore, red maple, box elder, and green ash on the moderately wet sites. This various-aged vegetation is the result of reversion of fields over the last 30 or so years. The upland sites on the northern and southwest corners and the western border are occupied by various-sized mixed (northern and upland) hardwoods, which are primarily northern red oak, black oak, white oak, hickories, basswood, yellow poplar, white ash, and red maple. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Much of this parcel is under an agricultural license for hay. The license area has been decreased in recent years to allow vegetation to grow on the wetter areas, which are considered wetlands. This parcel contains 41.8 acres of identified prime farmland.

Private water use facilities will not be considered.

Recreation:

A short walking trail, built by Boy Scouts crosses other portions of the parcel. A TVA-maintained canoe/boat launching ramp and fishing access are present here and are located adjacent to Holston Dam View Road. These types of recreation opportunities are compatible uses on Zone 4 properties.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Agriculture license for hay only exists on the majority of this parcel.
- Bristol Tennessee Essential Services has a utility license on the northern and southern tips of this parcel.
- TVA transmission lines cross the lower end of this parcel.

Prior Forecast: Reservoir Operations

Parcel 2	139.5 Acres
Common Name:	Tailwater
Allocation:	Zone 4 (Natural Resource Conservation)
Hydrologic Unit:	TN-06010102-100
County:	Sullivan
Stream:	<i>South Fork Holston River Mile 47.3 – 49.0 Left (behind Parcel 3)</i>

General Description:

Parcel 2 contains a man-made wetland area, which adjoins the river tailwater below South Holston Dam. The northern half of this parcel is primarily flat terrain and was most likely in agricultural use for row crops or pasture at the time of TVA purchase. Forest communities that reverted on the old fields are dominated by bottomland hardwood species, which include sycamore, box elder, and red maple. This vegetation is now pole and saw-timber size. Some of the flat areas appear to have been used as “borrow” material for the dam and, in addition to bottomland hardwoods, are occupied by Virginia and shortleaf pine, which may have been planted. The lower areas have more hydric conditions and are used by amphibians.

The southern half of the parcel has moderate to steep topography and is occupied by forest conditions, which are dominated by upland hardwoods with scattered white pine and eastern hemlock. Generally, saw-timber-sized scarlet oak, white oak, red maple, and hickories, with scattered white pine, occupy the poorer sites on the west- and south-facing slopes. North- and east-facing slopes are dominated by saw-timber-sized northern red oak, white ash, black oak, white oak, yellow poplar, red maple, and scattered white pine and eastern hemlock. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region. This parcel was placed in Zone 4 to reflect its management to enhance natural resources for human use and appreciation. This parcel contains 75.5 acres of identified prime farmland.

Private water use facilities will not be considered.

Recreation:

Hunting and fishing are permitted, consistent with state regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Bristol Tennessee Essential Services has a utility license on the northern and southern tips of this parcel.
- TVA transmission line crosses the middle and northern edge of this parcel.
- Sprint/United Telephone Southeast has a license on the northern edge of this parcel for telephone utilities.
- City of Bristol has a permanent easement for water lines that cross the middle of this parcel.
- Sullivan County has a permanent road easement on the northern edge of this parcel for Holston View Dam Road.

Prior Forecast: Reservoir Operations

Parcel 3	373.2 Acres
Common Name:	Dam Reservation
Allocation:	Zone 2 (Project Operations)
Hydrologic Unit:	TN-06010102-100; TN-06010102-070
County:	Sullivan, Tennessee
<i>Stream:</i>	<i>South Fork Holston River Mile 48.2 – 50.5 Left and Right Banks</i>

General Description:

Parcel 3 consists of South Holston Dam Reservation. This parcel is surrounded by private property; however, no shoreline access is available. This land is committed to Project Operations (Zone 2), in keeping with the planning objective to provide for the integrity of TVA projects on TVA land. It contains several buildings associated with power production from South Holston Reservoir. South Holston Dam, the control building, the powerhouse, switchyard, and regional hydropower production maintenance building, as well as numerous power transmission lines, are located on this parcel. The dam is equipped with one 38.5-megawatt power generator. This parcel also contains a regulation weir dam and Stophel Cemetery. This parcel contains 80.2 acres of identified prime farmland.

Private water use facilities will not be considered.

Recreation:

Additional facilities, located on the dam reservation are the South Holston Dam visitor building, a picnic area, and public restrooms. Recreation is considered a compatible use on Zone 2 properties.

Also located on this parcel is Osceola Island. There is a footbridge, which extends from the parking lot below the dam to Osceola Island and leads to a 1-mile loop wildlife trail. A scenic overlook building with picnic facilities is located adjacent to the roadway crossing the dam.

South Holston Reservoir Land Management Plan

Sensitive Resources:

Sensitive aquatic resources have been identified in the area, any future construction or ground disturbance will be subject to TVA's Heritage review process.

Transfers/License/Easement/Lease Agreements:

- City of Bristol has a permanent easement for water lines that cross the middle of this parcel.
- Sullivan County has a permanent road easement on the southern edge of this parcel for Holston View Dam Road.

Prior Forecast: Reservoir Operations

Parcel 4	16.2 Acres
Common Name:	Ruritan Ball Fields
Allocation:	Zone 6 (Developed Recreation)
Hydrologic Unit:	TN-06010102-100
County:	Sullivan, Tennessee
Stream:	<i>(Off Reservoir) South Fork Holston River Mile 48.5 Right</i>

General Description:

Parcel 4 is under a permanent easement to Sullivan County and is managed as Ruritan Park Ball Fields. This parcel is located off the reservoir itself by approximately 1 mile. This parcel contains 1.4 acres of identified prime farmland.

Private water use facilities will not be considered.

Recreation:

Ruritan Park Ball Field has numerous athletic fields, as well as the South Holston Ruritan Building.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Sullivan County has a permanent recreation easement on this entire parcel.
- Sullivan County has a permanent road easement on the southern edge of this parcel for Meadow Creek Road.

Prior Forecast: Industrial

Parcel 5 **24.4 Acres**
Common Name: **Water Treatment Plant**
Allocation: **Zone 2 (Project Operations)**
Hydrologic Unit: **TN-06010102-100**
County: **Sullivan**
Stream: *(Off Reservoir) Opposite South Fork Holston River Mile 48.5 Right*

General Description:

Parcel 5 contains the City of Bristol, Tennessee, regional water treatment facility. This parcel is located off the reservoir itself by approximately 1 mile. This parcel contains 3.5 acres of identified prime farmland.

Private water use facilities will not be considered.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- City of Bristol has a permanent easement for a water treatment plant on the entire parcel.
- Sullivan County has a permanent road easement on the southern edge of this parcel for Meadow Creek Road.

Prior Forecast: Industrial

Parcel 6 **125.4 Acres**
Common Name: **Industrial Park**
Allocation: **Zone 5 (Industrial)**
Hydrologic Unit: **TN-06010102-100**
County: **Sullivan, Tennessee**
Stream: *(Off Reservoir) South Fork Holston River Mile 48.5 Right*

General Description:

Parcel 6 was originally purchased by TVA in 1950 as a borrow area to provide earth fill for the construction of South Holston Dam. Consequently, several temporary construction buildings were erected on the site. Later, the buildings were removed, leaving a relatively flat area surrounded by, more or less, an undisturbed perimeter. Natural vegetation has returned the site to forest. The property is located about 4 miles from the Bristol city limits. This parcel contains 6.5 acres of identified prime farmland.

Unlike many of TVA's holdings, this tract is not located adjacent to the reservoir. The City of Bristol, Tennessee, and the Bristol-Kingsport/Sullivan County Industrial Commissions have expressed interest in developing the tract in the past, but neither group has been able to secure an industrial developer. The tract has had an environmental assessment completed on it in 1995, clearing it for light industrial and recreational use. This use can be generally defined as an industry that does not cause adverse environmental consequences, such as obnoxious odors, toxic waste, injurious or

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obnoxious noise, vibrations, excessive airborne particulates, fire hazards, or other injurious conditions.

Private water use facilities will not be considered.

Recreation:

To reflect its committed use, and for safety reasons, no hunting is allowed on this parcel.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land for this land plan. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Sullivan County has a permanent road easement on the southern edge of this parcel for Holston Dam View Road.

Prior Forecast: Industrial

Parcel 7	1.6 Acres
Common Name:	Marginal Strip Access
Allocation:	Zone 7 (Shoreline Access)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan, Tennessee
Stream:	<i>South Fork Holston River Mile 50.1 – 51.1 Right</i>

General Description:

Parcel 7 is a narrow, wooded strip of land fronting flowage easement adjacent to South Holston Dam Reservation. Because water use facilities were permitted prior to 1994, facilities are still allowed, using Shoreline Management Initiative (SMI) guidelines. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will be considered.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: No Forecast

Parcel 8 **0.8 Acre**
Common Name: **Lake View Dock**
Allocation: **Zone 6 (Developed Recreation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 51.3 Right*

General Description:

Parcel 8 is designated Developed Recreation, because it is under a license agreement to Lakeview Marina. The allocation of this parcel is consistent with the current back-lying land use. However, should the private back-lying land become residential, a request for a change of allocation of the parcel to Zone 7 (Shoreline Access) would be subject, with appropriate environmental review, to action by the TVA Board or to Board-approved policy.

Private water use facilities will not be considered.

Recreation:

The marina, which is mostly on the back-lying property, is a commercial marina that includes launching ramp, restrooms, boat storage, and moorings.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Lakeview Marina has a commercial recreation license on this entire parcel.

Prior Forecast: No Forecast

Parcel 9 **0.8 Acre**
Common Name: **Islands**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 52.1 – 54.0 Islands*

General Description:

Parcel 9 is made up of three small islands. Sparse vegetation, dominated by upland hardwood and scattered yellow pine, occupy these small islands. This parcel was placed in Zone 4 to reflect its management to enhance natural resources for human use and appreciation. The shoreline vegetation provides a riparian zone to the reservoir, and the islands are beneficial to local wildlife.

Private water use facilities will not be considered.

Recreation:

The islands are suitable for activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with state regulations.

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Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: Reservoir Operations

Parcel 10	60.6 Acres
Common Name:	Marginal Strip (Fronting USFS Property)
Allocation:	Zone 4 (Natural Resource Conservation)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan, Tennessee
Stream:	<i>South Fork Holston River Mile 52.1 – 57.8 Right and Islands</i>

General Description:

Parcel 10 is a retained, narrow strip of land fronting USFS property and contains four islands. Hardwoods and pine dominate the islands and narrow strip and vary from pole to saw-timber size. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region. This parcel was placed in Zone 4 to reflect its management to enhance natural resources for human use and appreciation.

Private water use facilities will not be considered.

Recreation:

The islands are suitable for activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with state regulations. Portions of the parcel are under license to be managed as Laurel Marina, Hog Hollow, King's Cove, and the main marina facilities.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.
- Laurel Marina has a commercial recreation license on this entire parcel.

Prior Forecast: No Forecast

Parcel 11 **3.4 Acres**
Common Name: **Laurel Marina**
Allocation: **Zone 6 (Developed Recreation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 57.0 Right*

General Description:

Parcel 11 is a narrow strip of land fronting USFS property and includes a license for a portion of Laurel Marina. This parcel was placed in Zone 6 to reflect its committed use as a public and commercial recreation development.

Private water use facilities will not be considered.

Recreation:

Laurel Marina provides public boat slips, houseboat rentals, a concrete launching ramp and fishing pier, and is a TVA-certified Clean Marina.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.
- Laurel Marina has a commercial recreation license on a portion of this parcel.

Prior Forecast: No Forecast

Parcel 12 **4.1 Acres**
Common Name: **Laurel Marina Marginal Strip**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 57.9 Right and Island*

General Description:

Parcel 12 is a narrow strip of land fronting private property, which is adjacent to Laurel Marina. One private water use facility has been permitted; however, additional private water use facilities will not be allowed due to the Zone 4 designation.

A small island is also a part of Parcel 12. Various-sized upland hardwoods and scattered yellow and white pine occupy this parcel. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region. This parcel was placed in Zone 4 to reflect its management to enhance natural resources for human use and appreciation.

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Private water use facilities will not be considered.

Recreation:

This parcel is suitable for activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with state regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- City of Bristol has a permanent utility easement that crosses the southern edge of this parcel.
- Sullivan County has a permanent road easement on the northern edge of this parcel for Highway 421.

Prior Forecast: Reservoir Operations

Parcel 13	1.3 Acres
Common Name:	Highway 421
Allocation:	Zone 2 (Project Operations)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan, Tennessee
Stream:	South Fork Holston River Mile 57.9 Right

General Description:

Parcel 13 is a narrow strip of land designated as project operations and contains the northwestern, downstream portion of the Highway 421 Bridge.

Private water use facilities will not be considered.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- City of Bristol has a permanent utility easement, which crosses the northern edge of this parcel.
- Sullivan County has a permanent road easement on the entire parcel for Highway 421.

Prior Forecast: No Forecast

Parcel 14 **229.6 Acres**
Common Name: **Sullivan County Park**
Allocation: **Zone 6 (Developed Recreation)**
Hydrologic Unit: **TN-06010102-100; TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 57.8 – 61.2 Right and Island*

General Description:

Parcel 14 is under a term easement for recreation to Sullivan County, Tennessee, for public recreation. Highway 421 and bridge bisect the tract on the southern portion and border it on the northern portion. Dayboard Marker 6 is located within this area. This parcel contains 3.6 acres of identified prime farmland.

Private water use facilities will not be considered.

Recreation:

Approximately 230 acres are designated as Sullivan County Park, also known as Observation Knob. Sullivan County Park provides developed facilities including campgrounds, concrete launching ramps, an *Americans With Disabilities Act*-accessible fishing pier, picnic areas, and day use areas.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Sullivan County has a permanent recreation easement on this entire parcel.
- City of Bristol has a permanent utility easement that crosses the southern and northern edges of this parcel.
- Sullivan County has a permanent road easement on the southern edge of this parcel for Highway 421.

Prior Forecast: Public Recreation

Parcel 15 **8.2 Acres**
Common Name: **Marginal Strip and Islands (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-0**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 59.4 Islands*

General Description:

Parcel 15 is a retained, narrow strip of land fronting USFS property on two islands with wooded vegetation. Hardwoods and pine dominate this parcel and vary from pole to saw-timber size. The shoreline vegetation provides a riparian zone to the reservoir, and the islands are beneficial to wildlife and water quality in the region. This parcel was placed in Zone 4 to reflect its management

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to enhance natural resources for human use and appreciation. This parcel contains 7.8 acres of identified prime farmland.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with state regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 16	55.5 Acres
Common Name:	Saddle Dam
Allocation:	Zone 2 (Project Operations)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan, Tennessee
Stream:	<i>South Fork Holston River Mile 60.6 – 61.2 Right</i>

General Description:

Parcel 16 is a saddle dam that includes an agricultural license. Portions of this parcel are under a term easement for recreation purposes and managed as part of Sullivan County Park, which is also known as Observation Knob.

Private water use facilities will not be considered.

Recreation:

This parcel receives recreation use associated with passive, unconfined recreation opportunities like fishing, walking, and scenic viewing. These types of recreation activities are considered compatible with Zone 2 properties.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Sullivan County has a permanent road easement on the northern edge of this parcel for Highway 44.
- Sullivan County has a term easement for recreation purposes on Observation Knob.
- Intermont Utility District has a water line license on the north side of this parcel.
- A private agriculture license lies on this parcel for hay only.

Prior Forecast: Reservoir Operations

Parcel 17 **0.1 Acre**
Common Name: **Painter Creek Marina**
Allocation: **Zone 6 (Developed Recreation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 61.3 Right*

General Description:

This parcel is a retained, narrow strip of land fronting Painter Creek Marina.

Private water use facilities will not be considered.

Recreation:

This parcel was placed in Zone 6 to reflect its back-lying use. Painter Creek Marina is a full service operation, which includes boat slips, pontoon rentals, picnic areas, a floating picnic area, bait and tackle shop, grill and convenience shop.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Painter Creek Marina has a commercial recreation license on this entire parcel.
- Bristol Tennessee Essential Services has a utility license crossing the middle of this parcel.

Prior Forecast: No Forecast

Parcel 18 **0.1 Acre**
Common Name: **XSH-8 Access**
Allocation: **Zone 7 (Shoreline Access)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 61.3 Right*

General Description:

Parcel 18 is a small, narrow strip of land fronting residential property. This parcel was placed in Zone 7 to reflect the existence of deeded ingress and egress rights associated with back-lying residential property.

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Private water use facilities will be considered.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Bristol Tennessee Essential Services has a utility license crossing the middle of this parcel.

Prior Forecast: No Forecast

Parcel 19	23.5 Acres
Common Name:	Baumgardner
Allocation:	Zone 6 (Developed Recreation)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan, Tennessee
Stream:	<i>South Fork Holston River Mile 61.3 – 61.5 Right</i>

General Description:

This parcel is an uncommitted Zone 6 that fronts a privately owned campground. The southwest half of this parcel is primarily open and mowed, and there is no license/lease agreement to use TVA land in this manner. The northeast portion is a reverted old field, which is occupied by pole and saw-timber upland hardwood, red cedar, and Virginia pine.

Private water use facilities will not be considered.

Recreation:

This parcel was placed in Zone 6 to reflect the potential to assign an agreement for recreation use and development.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Bristol Tennessee Essential Services has a utility license crossing the middle of this parcel.

Prior Forecast: Public Recreation

Parcel 20 **0.3 Acre**
Common Name: **Baumgardner Road**
Allocation: **Zone 2 (Project Operations)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 61.5 Right*

General Description:

Parcel 20 is the access road to the Baumgardner ramp (Parcel 22) and is maintained by Tennessee Wildlife Resources Agency (TWRA).

Private water use facilities will not be considered.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- TWRA has a license agreement for recreational use on this parcel.

Prior Forecast: Public Recreation

Parcel 21 **15.7 Acres**
Common Name: **Baumgardner Islands**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 61.3 – 61.8 Islands*

General Description:

This parcel consists of several tracts of varying sizes, some of which are islands at full reservoir water levels. Much of the area was in pasture at the time of TVA purchase and reverted naturally to Virginia pine. This pine component is now pole- and small saw-timber-sized trees, which are approaching maturity. Scattered hardwoods (red maple, hickory, and various oaks), eastern red cedar, and white pine are also present. The large eastern segment is reverted to old fields of Virginia pine on the western side and saw-timber-sized upland hardwood and white pine on the eastern side. The hardwood is dominated by white oak, chestnut oak, scarlet oak, and beech. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region. This parcel was placed in Zone 4 to reflect its management to enhance natural resources for human use and appreciation.

Private water use facilities will not be considered.

Recreation:

The islands are suitable for activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with state regulations.

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Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Bristol Tennessee Essential Services has a utility license crossing the middle of this parcel.

Prior Forecast: Public Recreation

Parcel 22 **1.4 Acres**
Common Name: **Baumgardner Ramp**
Allocation: **Zone 6 (Developed Recreation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 61.3 Island*

General Description:

This parcel is developed with a paved ramp and a TWRA-maintained gravel parking area. This parcel was placed in Zone 6 to reflect its use as a developed public recreation area.

Private water use facilities will not be considered.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- TWRA has a license agreement for recreational use on this entire parcel.

Prior Forecast: Public Recreation

Parcel 23 **1.4 Acres**
Common Name: **Spring Creek Marginal**
Allocation: **Zone 6 (Developed Recreation)**
Hydrologic Unit: **VA-06010102-006**
County: **Washington, Virginia**
Stream: *South Fork Holston River Mile 63.1 Right*

General Description:

Parcel 23 consists of a riparian strip that provides somewhat of a buffer between adjacent land uses and the river corridor. This narrow, rocky strip, which comprises this parcel, is occupied by pole- and small saw-timber-sized black cherry, yellow poplar, red maple, and black locust.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for activities associated with dispersed recreation, receives some fishing use, and has an informal boat launching ramp.

Sensitive Resources:

Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: Public Recreation

Parcel 24	56.3 Acres
Common Name:	Washington County Park
Allocation:	Zone 6 (Developed Recreation)
Hydrologic Unit:	TN-06010102-070; VA-06010102-006
County:	Washington, Virginia
Stream:	<i>South Fork Holston River Mile 62.5 – 63.4 Right</i>

General Description:

This parcel is managed as the 56-acre Washington County Park.

Private water use facilities will not be considered.

Recreation:

The park offers a campground, picnic facilities, a paved boat launch, canoe access, and playground. It was placed in Zone 6 to reflect its committed use as a developed public recreation area.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Washington County, Virginia, has a permanent recreation easement on the majority of this parcel.
- Bristol Tennessee Essential Services has a utility license crossing the middle of this parcel.

Prior Forecast: Public Recreation

Parcel 25 **9.2 Acres**
Common Name: **Wolf Creek**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **VA-06010102-006**
County: **Washington, Virginia**
Stream: *South Fork Holston River Mile 66.0 Right*

General Description:

This parcel provides a diversity of wildlife habitat, including an intact riparian zone; however, the quality of the habitat declines in proximity to the mouth of Wolf Creek. The southern segment of this parcel is a reverted old field, which was formerly under a TVA agricultural license that expired in 1989. Situated along Wolf Creek, this area is now occupied by pole and scattered small saw-timber box elder, black cherry, green ash, and sycamore. The wetter areas along the creek are dominated by willow. TVA property along the left-descending bank is a narrow strip of bottomland hardwood, which includes pole and small saw-timber sycamore, box elder, and red maple. A 3-acre agricultural license for hay is also located on this segment. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region. This parcel contains 4.7 acres of identified prime farmland.

Private water use facilities will not be considered.

Recreation:

This parcel is marked as a Virginia Bird and Wildlife Viewing Area. This parcel receives pressure from informal recreational users, particularly campers. The parcel contains two impact sites, due to camping, and the severity of those impacts is considered beyond the Limits of Acceptable Change (LAC). The recreational use could be allowed to continue, if it is restricted to specific areas. Hunting and fishing are permitted, consistent with state regulations.

Sensitive Resources:

Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Inter Mountain Telephone Company has an aerial telephone license on the north side of this parcel.
- Commonwealth of Virginia has a transfer for a road and bridge crossing the middle of this parcel for Lake Road.

Prior Forecast: Reservoir Operations

Parcel 25A **5.3 Acres**
Common Name: **Wolf Creek Sensitive**
Allocation: **Zone 3 (Sensitive Resource Management)**
Hydrologic Unit: **VA-06010102-006**
County: **Washington, Virginia**
Stream: *South Fork Holston River Mile 66.0 Right*

General Description:

This parcel is located just west of Wolf Creek. This parcel contains extremely high-quality wetlands, which provide habitat for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds. The shoreline vegetation provides a riparian zone to the reservoir.

Private water use facilities will not be considered.

Recreation:

Other than all-terrain and off-road vehicles, activities associated with dispersed recreation are permissible, including hunting and fishing during state-regulated seasons.

Sensitive Resources:

Sensitive cultural resources have been identified on this portion of Wolf Creek. Additionally, this parcel contains Category 3 high-quality wetlands and good wildlife habitat and plant diversity. This area has been designated as a Virginia Bird and Wildlife Viewing Area. Disturbance from all-terrain and off-road vehicle use is a serious problem on this parcel. TVA has taken actions to block vehicle access in order to keep the sensitive resources protected from future disturbance. No other sensitive resources were identified.

Transfers/License/Easement/Lease Agreements:

- Commonwealth of Virginia has a transfer for a road and bridge crossing the middle of this parcel for Lake Road and Green Springs Church Road.
- A private agriculture license is on the south section of this parcel for hay only.

Prior Forecast: Reservoir Operations

Parcel 26 **0.1 Acre**
Common Name: **Green Spring Fire Department**
Allocation: **Zone 2 (Project Operations)**
Hydrologic Unit: **VA-06010102-006**
County: **Washington, Virginia**
Stream: *South Fork Holston River Mile 66.2 Right*

General Description:

Parcel 26 is located on Wolf Creek, and Green Spring Volunteer Fire Department is located on this parcel. This parcel is located off reservoir and is located within Parcel 25.

Private water use facilities will not be considered.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Washington County, Virginia, has a permanent easement on this parcel for a fire department.

Prior Forecast: Reservoir Operations

Parcel 27 **0.1 Acre**
Common Name: **XSH-13 Access**
Allocation: **Zone 7 (Shoreline Access)**
Hydrologic Unit: **VA-06010102-006**
County: **Washington, Virginia**
Stream: *South Fork Holston River Mile 66.1 Right*

General Description:

Parcel 27 is a small narrow strip of shoreline fronting residential property. This parcel was placed in Zone 7 to reflect the existence of deeded ingress and egress rights associated with back-lying residential property. The shoreline vegetation provides a riparian zone to the reservoir.

Private water use facilities will be considered.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- A private agriculture license lies on this parcel for hay only.

Prior Forecast: No Forecast

Parcel 28 **0.3 Acre**
Common Name: **Avens Bridge SW**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **VA-06010102-006**
County: **Washington, Virginia**
Stream: *South Fork Holston River Mile 66.2 Right*

General Description:

Parcel 28 is a small parcel occupied by saw-timber hardwoods. This parcel was placed in Zone 4 to reflect its management to enhance natural resources for human use and appreciation.

Private water use facilities will not be considered.

Sensitive Resources:

Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: No Forecast

Parcel 29 **1.2 Acres**
Common Name: **Webb Access**
Allocation: **Zone 7 (Shoreline Access)**
Hydrologic Unit: **VA-06010102-006**
County: **Washington, Virginia**
Stream: *South Fork Holston River Mile 66.2 Left and Right Banks*

General Description:

Parcel 29 is a retained, narrow strip of land fronting flowage easement and Webb Subdivision. Because water use facilities were permitted prior to 1994, this parcel was placed in Zone 7 to reflect the existence of deeded ingress and egress rights associated with back-lying residential property. Facilities are still allowed, using SMI guidelines.

Private water use facilities will be considered.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: No Forecast

Parcel 30 **3.3 Acres**
Common Name: **Area 1 Ramp**
Allocation: **Zone 6 (Developed Recreation)**
Hydrologic Unit: **VA-06010102-006**
County: **Washington, Virginia**
Stream: *South Fork Holston River Mile 68.5 Right*

General Description:

Area 1 Ramp is a developed public recreation area and is managed under a transfer agreement to Washington County Park.

Private water use facilities will not be considered.

Recreation:

The parcel has a paved boat ramp and parking area.

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Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Commonwealth of Virginia, through the Virginia Department of Game and Inland Fisheries (VDGIF), has a recreation license on the majority of this parcel.

Prior Forecast: Public Recreation

Parcel 31 **1.2 Acres**
Common Name: **15 Mile Creek Access**
Allocation: **Zone 7 (Shoreline Access)**
Hydrologic Unit: **VA-06010102-006**
County: **Washington, Virginia**
Stream: *South Fork Holston River Mile 68.6 Right*

General Description:

Parcel 31 is a retained, narrow strip of land fronting flowage easement. Because water use facilities were permitted prior to 1994, this parcel was placed in Zone 7 to reflect the existence of deeded ingress and egress rights associated with back-lying residential property. Facilities are still allowed, using SMI guidelines.

Private water use facilities will be considered.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: No Forecast

Parcel 32 **7.4 Acres**
Common Name: **Access Area 7**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **VA-06010102-006**
County: **Washington, Virginia**
Stream: *South Fork Holston River Mile 73.4 – 73.6 Right*

General Description:

The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

Parcel 32 supports recreation opportunities associated with dispersed recreation, such as bank fishing, primitive camping, and swimming. There is a small, undeveloped parking area. Hunting and fishing are permitted, consistent with state regulations.

Sensitive Resources:

Existing data indicated a sensitive aquatic species at this location. Any future construction or ground disturbance will be subject to TVA's Heritage review process. No other sensitive resources were identified on this parcel.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: Public Recreation

Parcel 33	10.9 Acres
Common Name:	Area 6 Ramp
Allocation:	Zone 6 (Developed Recreation)
Hydrologic Unit:	VA-06010102-006
County:	Washington, Virginia
Stream:	South Fork Holston River Mile 70.8 – 71.0 Left

General Description:

Parcel 33 is placed in Zone 6 to reflect its committed use as a developed public recreation.

Private water use facilities will not be considered.

Recreation:

The parcel, which is developed with picnic facilities, designated fire rings, and paved parking, is a day use only area; no camping is allowed.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Washington County, Virginia, has a permanent easement on the majority of this parcel for a day use area, which is managed by the Virginia Department of Game and Inland Fisheries (VDGIF).

Prior Forecast: Public Recreation

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Parcel 34 **2.2 Acres**
Common Name: **Access Area 5**
Allocation: **Zone 6 (Developed Recreation)**
Hydrologic Unit: **VA-06010102-006**
County: **Washington, Virginia**
Stream: *South Fork Holston River Mile 70.6 Left*

General Description:

Parcel 34 has been placed in Zone 6 for its potential to provide developed recreation opportunities from an external operator. The back-lying property owners have expressed interest in expanding a campground business on this parcel. Such an agreement would help alleviate management issues associated with problematic dispersed recreation activities, as there has been a history of dumping and misconduct on the parcel.

Private water use facilities will not be considered.

Recreation:

This parcel receives pressure from recreation users, particularly campers. It has several impact sites due to camping, and the severity of those impacts is considered beyond the LAC.

Sensitive Resources:

Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: Public Recreation

Parcel 35 **1.7 Acres**
Common Name: **Access Area 4**
Allocation: **Zone 6 (Developed Recreation)**
Hydrologic Unit: **VA-06010102-006**
County: **Washington, Virginia**
Stream: *South Fork Holston River Mile 70.3 Left*

General Description:

This is a small parcel, which provides good wildlife habitat and is dominated by younger trees. The shoreline vegetation provides a riparian zone to the reservoir. Parcel 35 has been placed in Zone 6 for its potential to provide developed recreation opportunities from an external operator. The back-lying property owners have expressed interest in expanding a campground business on this parcel.

Private water use facilities will not be considered.

Recreation:

Parcel 35 supports recreation opportunities such as bank fishing, primitive camping, and swimming. It has several impact sites due to camping, and the severity of those impacts is considered beyond the LAC.

Sensitive Resources:

Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: Public Recreation

Parcel 36 **6.0 Acres**
Common Name: **Access Area 3**
Allocation: **Zone 6 (Developed Recreation)**
Hydrologic Unit: **VA-06010102-006**
County: **Washington, Virginia**
Stream: *South Fork Holston River Mile 70.0 Left*

General Description:

Parcel 36 has been placed in Zone 6 for its potential to provide developed recreation opportunities from an external operator. The back-lying property owners have expressed interest in expanding a campground business on this parcel. This parcel is often times littered with debris and unlawful dumping activities. Signage has been posted indicating No Dumping and Leave No Trace ethics.

Private water use facilities will not be considered.

Recreation:

Parcel 36 supports recreation opportunities, such as bank fishing, primitive camping, and swimming, and has several impact sites due to camping. The severity of those impacts is considered beyond the LAC.

Sensitive Resources:

Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: Public Recreation

Parcel 37 **4.3 Acres**
Common Name: **Access Area 2**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **VA-06010102-006**
County: **Washington, Virginia**
Stream: *South Fork Holston River Mile 69.7 Left*

General Description:

This parcel has excellent wildlife habitat with larger trees and more snags than those observed on other uncommitted tracts. The shoreline vegetation provides a riparian zone to the reservoir. This

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parcel was placed in Zone 4 to reflect its management to enhance natural resources for human use and appreciation. Dayboard Marker 11 is located on this parcel.

Private water use facilities will not be considered.

Recreation:

This parcel supports dispersed recreation opportunities, such as bank fishing, primitive camping, and swimming. Some significant damage to the undergrowth from dispersed recreation activities was noted on this parcel.

Sensitive Resources:

This parcel ranked high for Indiana bats, and overall, consists of good wildlife habitat. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: Public Recreation

Parcel 38	29.1 Acres
Common Name:	Washington County Park Roadside
Allocation:	Zone 6 (Developed Recreation)
Hydrologic Unit:	VA-06010102-006
County:	Washington, Virginia
Stream:	South Fork Holston River Mile 66.3 – 67.2 Left

General Description:

This parcel was placed in Zone 6 to reflect its committed use as a developed public recreation area and is managed under a recreation easement to Washington County Park.

Private water use facilities will not be considered.

Recreation:

The parcel has picnic facilities, bank fishing access, and limited parking.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Washington County, Virginia, has a permanent recreation easement on this entire parcel.
- Appalachian Power Company has a utility license for a transmission line running in the middle of the entire parcel.

Prior Forecast: Public Recreation

Parcel 39 **45.1 Acres**
Common Name: **Marginal Strip (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **VA-06010102-006**
County: **Washington, Virginia**
Stream: *South Fork Holston River Mile 63.0 – 65.3 Left*

General Description:

This parcel is a narrow strip of land fronting land transferred to the USFS. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Jefferson National Forest. Hardwoods and pine dominate this parcel and vary from pole to saw-timber size. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

This parcel contains 3.6 acres of identified prime farmland.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable to support recreation activities associated with dispersed recreation.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 40 **7.9 Acres**
Common Name: **Cave Spring Marginal Strip (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 62.4 – 62.8 Left*

General Description:

This parcel is a retained, narrow strip of land fronting land transferred to the USFS. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. Hardwoods and pine dominate this parcel and vary from pole to saw-timber size. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

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Recreation:

This parcel is suitable to support recreation activities associated with dispersed recreation.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 41	63.9 Acres
Common Name:	Battery Hollow (App Smelting)
Allocation:	Zone 4 (Natural Resource Conservation)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan, Tennessee
Stream:	<i>South Fork Holston River Mile 62.4 – 63.0 Left</i>

General Description:

Parcel 41 has a gated access to a former road, which is now unmaintained. The road had previously been used for mitigation and forestry purposes. Forest cover varies on this parcel with slope and aspect; generally, the west- and south-facing slopes are drier and poorer in productivity while the north- and east-facing slopes are moister and more productive. Species composition and tree size vary within each site. The poorer sites are occupied by pole and saw-timber scarlet oak, hickories, red maple, sourwood, and scattered shortleaf and Virginia pine. Upland and cove hardwoods dominate the better sites with small and large saw-timber northern red oak, black oak, white oak, hickory, yellow poplar, basswood, white ash, and scattered white pine and eastern hemlock. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

During state-regulated hunting seasons, this parcel provides opportunities for small game, game bird, and deer hunting.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: No Forecast

Parcel 42 **90.3 Acres**
Common Name: **Big Jacobs Creek Marginal Strip (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 60.9 – 62.7 Left*

General Description:

This parcel is a retained, narrow strip of land fronting land transferred to the USFS. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. Hardwoods and pine, which vary from pole to saw-timber size, dominate this parcel. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with state regulations.

Sensitive Resources:

Sensitive aquatic resources have been identified in the area, any future construction or ground disturbance will be subject to TVA's Heritage review process.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 43 **3.0 Acres**
Common Name: **Little Jacobs Backwater**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 59.9 – 61.0 Left*

General Description:

This small parcel has two noncontiguous portions occupied by upland hardwoods with scattered pines. Parcel 43 was placed in Zone 4 to reflect the back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

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Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: No Forecast

Parcel 44	40.2 Acres
Common Name:	Little Jacobs Creek Marginal Strip (Fronting USFS Property)
Allocation:	Zone 4 (Natural Resource Conservation)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan, Tennessee
Stream:	<i>South Fork Holston River Mile 59.6 – 61.1 Left</i>

General Description:

This parcel is a retained, narrow strip of property fronting land transferred to the USFS. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. Hardwoods and pine, which vary from pole to saw-timber size, dominate this parcel. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 45 **31.1 Acres**
Common Name: **Jacobs Creek/Paddy Branch (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 59.6 – 60.0 Left*

General Description:

This parcel is a retained, narrow strip of land dominated by hardwoods and pine with size varying from pole to saw-timber fronting land transferred to the USFS. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 46 **2.1 Acres**
Common Name: **Jacobs Creek Access (Fronting USFS Property)**
Allocation: **Zone 6 (Developed Recreation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 59.7 Left*

General Description:

This parcel is a retained, narrow strip of land fronting land transferred to the USFS, and it was placed in Zone 6 to reflect its committed use as a developed public recreation asset. It is managed as part of the Little Jacob Creek Recreation Area of the Cherokee National Forest.

Private water use facilities will not be considered.

Recreation:

The Little Jacob Creek Recreation Area has a paved boat ramp with developed parking, a campground, and a swimming beach.

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Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 47	12.0 Acres
Common Name:	Stout Branch Marginal Strip (Fronting USFS Property)
Allocation:	Zone 4 (Natural Resource Conservation)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan, Tennessee
Stream:	<i>South Fork Holston River Mile 59.6 Left</i>

General Description:

Parcel 47 is a narrow strip of property, consisting of hardwoods and pine, varying from pole to saw-timber size. This parcel was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.

Prior Forecast: No Forecast

Parcel 48 **0.5 Acre**
Common Name: **Stout Branch Marginal Strip (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 59.6 Left*

General Description:

Parcel 48 is a narrow strip of property, consisting of hardwoods and pine, varying from pole to saw-timber size. This parcel was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 49 **20.1 Acres**
Common Name: **Highway 421 Marginal Strip (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 57.5 – 59.6 Left*

General Description:

This parcel is a retained, narrow strip of property fronting land transferred to the USFS. Hardwoods and pine dominate this parcel. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

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Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.
- Bristol Tennessee Essential Services has a utility license for a transmission line crossing the middle of this parcel.
- The State of Tennessee has a permanent road easement crossing the middle of this parcel for Highway 421.

Prior Forecast: No Forecast

Parcel 50	8.6 Acres
Common Name:	Little Switzerland Access
Allocation:	Zone 7 (Shoreline Access)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan, Tennessee
Stream:	South Fork Holston River Mile 57.2 – 57.4 Left

General Description:

This parcel is a retained, narrow strip of land fronting flowage easement, as well as Little Switzerland Subdivision and the adjacent residential property. Because water use facilities were permitted prior to 1994, facilities are still allowed, using SMI guidelines.

Private water use facilities will be considered.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Bristol Tennessee Essential Services has a utility license for a transmission line crossing the northern section of this parcel.

Prior Forecast: Reservoir Operations

Parcel 51 **4.3 Acres**
Common Name: **Lucy Creek**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 56.9 – 57.2 Left*

General Description:

This parcel has two noncontiguous portions occupied by hardwood and scattered pines of various size. Parcel 51 was placed in Zone 4 to reflect its management to enhance natural resources for human use and appreciation. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

The parcel provides opportunities for activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The State of Tennessee has a permanent road easement crossing the two western parcels for Highway 421.

Prior Forecast: Public Recreation

Parcel 52 **2.0 Acres**
Common Name: **Sharps Creek Access**
Allocation: **Zone 7 (Shoreline Access)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 56.9 – 57.1 Left*

General Description:

Parcel 52 is a retained, narrow strip of land adjacent to Friendship Marina and fronting Sharp's Creek Subdivision with deeded access rights. Facilities may be allowed, using SMI guidelines.

Private water use facilities will be considered.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: No Forecast

Parcel 53 **5.2 Acres**
Common Name: **Friendship Marina**
Allocation: **Zone 6 (Developed Recreation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 56.9 – 57.1 Left*

General Description:

This parcel was placed in Zone 6 to reflect its commitment to the back-lying use, the Friendship Resort and Marina. This parcel is a 4(k), a sale tract with an alienation clause.

Private water use facilities will not be considered.

Recreation:

The Friendship Resort and Marina rents boat slips, pontoons, Aqua Lodges, and manages a commercial boat launch and is a TVA-certified Clean Marina.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: No Forecast

Parcel 54 **62.4 Acres**
Common Name: **Underwood Branch Marginal Strip (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 54.0 – 57.1 Left*

General Description:

Parcel 54 is a narrow strip of property, consisting of hardwoods and pine, varying from pole to saw-timber size. This parcel was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 55	5.9 Acres
Common Name:	Underwood Branch Marginal Strip (Fronting USFS Property)
Allocation:	Zone 4 (Natural Resource Conservation)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan, Tennessee
<i>Stream:</i>	<i>South Fork Holston River Mile 54.5 – 55.5 Left</i>

General Description:

This parcel is a retained, narrow strip of property fronting land transferred to the USFS. Hardwoods and pine dominate this parcel. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: No Forecast

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Parcel 56 **1.3 Acres**
Common Name: **Underwood Branch Marginal Strip (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 55.0 Left*

General Description:

Parcel 56 is a narrow strip of property, consisting of hardwoods and pine, varying from pole to saw-timber size. This parcel was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 57 **79.4 Acres**
Common Name: **North Prong Fishdam Creek (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 52.8 – 54.1 Left*

General Description:

Parcel 57 is a narrow strip of property, consisting of hardwoods and pine, varying from pole to saw-timber size. This parcel was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: No Forecast

Parcel 58	1.9 Acres
Common Name:	Fishdam Creek Marginal Strip (Fronting USFS Property)
Allocation:	Zone 4 (Natural Resource Conservation)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan, Tennessee
<i>Stream:</i>	<i>South Fork Holston River Mile 53.0 Left</i>

General Description:

This parcel is a retained, narrow strip of property fronting land transferred to the USFS. Hardwoods and pine dominate this parcel. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

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Parcel 59 **10.7 Acres**
Common Name: **Oak Branch Marginal Strip (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 52.9 Left*

General Description:

This parcel is a retained, narrow strip of property fronting land transferred to the USFS. Hardwoods and pine dominate this parcel. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 60 **2.5 Acres**
Common Name: **Strip Oak Branch Marginal Strip**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 52.5 Left*

General Description:

Parcel 60 is a narrow strip of property, consisting of hardwoods and pine, varying from pole to saw-timber size. This parcel was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: No Forecast

Parcel 61	23.5 Acres
Common Name:	Little Oak Branch Marginal Strip (Fronting USFS Property)
Allocation:	Zone 4 (Natural Resource Conservation)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan, Tennessee
Stream:	<i>South Fork Holston River Mile 52.3 – 52.9 Left</i>

General Description:

This parcel is a retained, narrow strip of property fronting land transferred to the USFS. Hardwoods and pine dominate this parcel. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

South Holston Reservoir Land Management Plan

Parcel 62 **42.6 Acres**
Common Name: **USFS Little Oak Campground**
Allocation: **Zone 6 (Developed Recreation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 50.6 – 51.6 Left*

General Description:

This parcel is retained land fronting property transferred to the USFS and was placed in Zone 6 to reflect its committed use as a developed public recreation area. It is managed as part of the Little Oak Mountain Recreation Area of the Cherokee National Forest.

Private water use facilities will not be considered.

Recreation:

The Little Oak Mountain Recreation Area has a campground, paved boat ramp, and fish-cleaning hut.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent recreation easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 63 **4.7 Acres**
Common Name: **Marginal Strip Islands (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 50.4 Island*

General Description:

This parcel is a retained, narrow strip of property fronting land transferred to the USFS. Hardwoods and pine dominate this parcel. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir, and the islands are beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 64	90.8 Acres
Common Name:	Big Oak/Josiah/Big Creek Marginal
Allocation:	Zone 4 (Natural Resource Conservation)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan, Tennessee
Stream:	<i>South Fork Holston River Mile 50.0 – 51.0 Left</i>

General Description:

Parcel 64 is a narrow strip of property, consisting of hardwoods and pine, varying from pole to saw-timber size. This parcel was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: No Forecast

South Holston Reservoir Land Management Plan

Parcel 65 **3.5 Acres**
Common Name: **Marginal Strip (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 50.4 Left*

General Description:

Parcel 65 is a narrow strip of property, consisting of hardwoods and pine, varying from pole to saw-timber size. This parcel was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 66 **1.7 Acres**
Common Name: **Marginal Strip (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *South Fork Holston River Mile 50.2 Left*

General Description:

This parcel is a retained, narrow strip of property fronting land transferred to the USFS. Hardwoods and pine dominate this parcel. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 67	2.3 Acres
Common Name:	Big Creek Marginal Strip (Fronting USFS Property)
Allocation:	Zone 4 (Natural Resource Conservation)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan, Tennessee
<i>Stream:</i>	<i>South Fork Holston River Mile 50.0 Left</i>

General Description:

Parcel 67 is a narrow strip of property, consisting of hardwoods and pine, varying from pole to saw-timber size. This parcel was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

South Holston Reservoir Land Management Plan

Parcel 68 **77.4 Acres**
Common Name: **Big Creek/Riddle Creek Marginal Strip**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *(Riddle, Little, and Big Creeks) South Fork Holston River Mile 50.0 Left*

General Description:

This parcel is a retained, narrow strip of property fronting land transferred to the USFS. Hardwoods and pine dominate this parcel. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: No Forecast

Parcel 69 **3.4 Acres**
Common Name: **Big Creek Marginal Strip (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *(Big Creek) South Fork Holston River Mile 50.0 Left*

General Description:

This parcel is a retained, narrow strip of property fronting land transferred to the USFS. Hardwoods and pine dominate this parcel. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 70	1.6 Acres
Common Name:	Riddle Creek Marginal Strip (Fronting USFS Property)
Allocation:	Zone 4 (Natural Resource Conservation)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan, Tennessee
<i>Stream:</i>	<i>(Riddle Creek) South Fork Holston River Mile 50.0 Left</i>

General Description:

Parcel 70 is a narrow strip of property, consisting of hardwoods and pine, varying from pole to saw-timber size. This parcel was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

South Holston Reservoir Land Management Plan

Parcel 71 **4.9 Acres**
Common Name: **Riddle Creek Marginal Strip (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *(Riddle Creek) South Fork Holston River Mile 50.0 Left*

General Description:

Parcel 71 is a narrow strip of property, consisting of hardwoods and pine, varying from pole to saw-timber size. This parcel was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 72 **106.1 Acres**
Common Name: **Bent Branch Emergency Spillway**
Allocation: **Zone 2 (Project Operations)**
Hydrologic Unit: **TN-06010102-070; TN 06010102-100**
County: **Sullivan, Tennessee**
Stream: *(Riddle Creek) South Fork Holston River Mile 46.7 Left*

General Description:

The Bent Branch Emergency Spillway is located in Parcel 72 about 1.5 miles south of the dam site on the divide between the Riddle Creek and Bent Creek drainage areas. The spillway is situated in a low saddle in the rim that separates the Bent Creek drainage area from the reservoir. It discharges into Bent Branch, which enters the South Fork Holston River about 2.8 miles below the main dam.

The majority of this parcel remains heavily forested providing habitat to many species of mammals, birds, and amphibians. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: Dam Reservation

Parcel 73	82.7 Acres
Common Name:	Bouton River Access
Allocation:	Zone 2 (Project Operations)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan
Stream:	<i>South Fork Holston River Mile 46.5 – 47.1 Right</i>

General Description:

The majority of this parcel remains heavily forested, providing habitat to many species of mammals, birds, and amphibians. Potential for dispersed recreation opportunities are high. The surrounding land use is agricultural, woodland, and residential. This parcel is managed to enhance the natural resources to provide for human use and appreciation. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region. This parcel contains 71.3 acres of identified prime farmland.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Bristol Tennessee Essential Services has a utility license for a transmission line crossing the middle of this parcel.
- Sullivan County has a permanent road easement on the northern portion of this parcel for River Bend Road.

Prior Forecast: Reservoir Operations

South Holston Reservoir Land Management Plan

Parcel 74 **6.5 Acres**
Common Name: **Riddle Creek Marginal Strip and Island (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *(Riddle Creek) South Fork Holston River Mile 50.0 Left*

General Description:

This parcel is a retained, narrow strip of property fronting land transferred to the USFS. Hardwoods and pine dominate this parcel. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 75 **1.8 Acres**
Common Name: **Riddle Creek Marginal Strip**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *(Riddle Creek) South Fork Holston River Mile 50.0 Left*

General Description:

This parcel is a retained, narrow strip of property fronting land transferred to the USFS. Hardwoods and pine dominate this parcel. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: No Forecast

Parcel 76	0.9 Acre
Common Name:	Riddle Creek Marginal Strip and Island (Fronting USFS Property)
Allocation:	Zone 4 (Natural Resource Conservation)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan, Tennessee
Stream:	<i>(Riddle Creek) South Fork Holston River Mile 50.0 Left</i>

General Description:

Parcel 76 is a narrow strip of property, consisting of hardwoods and pine, varying from pole to saw-timber size. This parcel was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

South Holston Reservoir Land Management Plan

Parcel 77 **0.8 Acre**
Common Name: **Riddle Creek Marginal Strip and Island (Fronting USFS Property)**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *(Riddle Creek) South Fork Holston River Mile 50.0 Left*

General Description:

This parcel is a retained, narrow strip of property, fronting land transferred to the USFS. Hardwoods and pine dominate this parcel. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

Parcel 78 **4.2 Acres**
Common Name: **Riddle Creek Marginal Strip**
Allocation: **Zone 4 (Natural Resource Conservation)**
Hydrologic Unit: **TN-06010102-070**
County: **Sullivan, Tennessee**
Stream: *(Riddle Creek) South Fork Holston River Mile 50.0 Left*

General Description:

This parcel is a retained, narrow strip of property, fronting land transferred to the USFS. Hardwoods and pine dominate this parcel. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

Prior Forecast: No Forecast

Parcel 79	0.6 Acre
Common Name:	Riddle Creek Marginal Strip and Island (Fronting USFS Property)
Allocation:	Zone 4 (Natural Resource Conservation)
Hydrologic Unit:	TN-06010102-070
County:	Sullivan, Tennessee
Stream:	<i>(Riddle Creek) South Fork Holston River Mile 50.0 Left</i>

General Description:

This parcel is a retained, narrow strip of property, fronting land transferred to the USFS. Hardwoods and pine dominate this parcel. It was placed in Zone 4 to reflect its back-lying use, which is a portion of the Cherokee National Forest. The shoreline vegetation provides a riparian zone to the reservoir and is beneficial to wildlife and water quality in the region.

Private water use facilities will not be considered.

Recreation:

This parcel is suitable for recreation activities associated with dispersed recreation. Hunting and fishing are permitted, consistent with statewide regulations.

Sensitive Resources:

No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- The USFS has a permanent easement on the entire parcel for the use and benefit of the USFS.
- TVA previously transferred the back-lying property to the USFS for administration.

Prior Forecast: No Forecast

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6.0 GLOSSARY OF TERMS

100-year floodplain	The area inundated by the 1 percent annual chance (or 100-year) flood.
agricultural licensing	Some parcels or portions of parcels designated for other purposes or uses may also be suitable for interim agricultural licensing. These parcels have been identified, using the criteria contained in TVA's agriculture instruction. Normal tenure for a TVA agricultural license is five years. Land with extreme erosion potential may not be licensed for agricultural use unless erosion and sediment controls, including the use of best management practices, can be successfully implemented. Further investigation and/or mitigation of adverse impacts to natural or cultural resources may be required prior to approval of license agreements.
benthic	Refers to the bottom of a stream, river, or reservoir.
benthos	Organisms that live on the bottom of a stream, river, or reservoir.
dam reservation	Lands generally maintained in a parklike setting by TVA to protect the integrity of the dam structure, hydroelectric facilities, and navigation lock. The reservation also provides for public visitor access to the TVA dam facilities and recreation opportunities, such as public boat access, bank fishing, camping, picnicking, etc.
deciduous	Vegetation that sheds leaves in autumn and produces new leaves in the spring.
dissolved oxygen	The oxygen dissolved in water, necessary to sustain aquatic life. It is usually measured in milligrams per liter or parts per million.
ecoregion	A relatively homogeneous area of similar geography, topography, climate, and soils that supports similar plant and animal life.
emergent wetland	Wetlands dominated by erect, rooted herbaceous plants, such as cattails and bulrush.
endangered species	A species in danger of extinction throughout all or significant portions of its range or territory. Endangered species recognized by the ESA or similar state legislation have special legal status for their protection and recovery.
evergreen	Vegetation with leaves that stay green and persist all year.

evergreen-deciduous	Vegetation consisting of a mixture of plants that are both evergreen and deciduous often referred to as mixed deciduous.
floodplains	Any land area susceptible to inundation by water from any source by a flood of selected frequency. For purposes of the National Flood Insurance Program, the floodplain, as a minimum, is that area subject to a 1 percent or greater chance of flooding (100-year flood) in any given year.
flowage easement land	Privately owned lakeshore properties where TVA has (1) the right to flood the land as part of its reservoir operations, (2) no rights for vegetation management, and (3) the authority to control structures, under Section 26a of the <i>TVA Act</i> .
forest	Vegetation having tree crowns overlapping, generally forming 60-100 percent cover (Grossman et al. 1998).
hydrologic units	Hydrologic Unit Codes (HUCs) are cataloging units assigned to each watershed by the U.S. Geological Survey for the purpose of assessment and management activities.
macroinvertebrates	Bottom-dwelling aquatic animals without vertebrates, such as mollusks and arthropods.
marginal strip	The narrow strip of land retained by TVA between the summer operating pool and back-lying tracts that are owned by private or other public entities.
maximum shoreline contour (MSC)	An elevation typically 5 feet above the top of the gates of a TVA dam. It is often the property boundary between TVA marginal strip property and adjoining private property.
prime farmland	Generally regarded as the best land for farming, these areas are flat or gently rolling and are usually susceptible to little or no soil erosion. Prime farmland produces the most food, feed, fiber, forage, and oil seed crops with the least amount of fuel, fertilizer, and labor. It combines favorable soil quality, growing season, and moisture supply and, under careful management, can be farmed continuously and at a high level of productivity without degrading either the environment or the resource base. Prime farmland does not include land already in or committed to urban development, roads, or water storage.
riparian	The communities of plants and animals that occur within the influence of a stream, river, or body of water.

riparian zone	An area of land that has vegetation or physical characteristics reflective of permanent water influence. Typically a streamside zone or shoreline edge.
riprap	Stones placed along the shoreline for bank stabilization and other purposes.
riverine	Having characteristics similar to a river.
Section 26a review process	Section 26a of the <i>TVA Act</i> requires TVA review and approval of plans for obstructions, such as docks, fills, bridges, outfalls, water intakes, and riprap, before they are constructed across, in or along the Tennessee River and its tributaries. Applications for this approval are coordinated appropriately with TVA programs and the U.S. Army Corps of Engineers (USACE). USACE issues a joint public notice for those applications that are not covered by a USACE nationwide, general, or regional permit. The appropriate state water pollution control agency must also certify that the effluent from outfalls meets the applicable water quality standards.
scrub-shrub	Woody vegetation less than about 20 feet tall. Species include true shrubs, young trees, and trees or shrubs that are small or stunted because of environmental conditions.
shoreline/shoreland	The line where the water of a TVA reservoir meets the shore when the water level is at the normal summer pool elevation.
threatened species	A species threatened with extinction throughout all or significant portions of its range or territory. Threatened species recognized by the ESA or similar state legislation have special legal status for their protection and recovery.
tributary reservoirs	Impoundments created by dams constructed across streams and rivers that eventually flow into the Tennessee River.
upland	The higher parts of a region, not closely associated with streams or lakes.
wetlands	As defined in <i>TVA Environmental Review Procedures</i> , "Wetlands are those areas inundated by surface or groundwater with a frequency sufficient to support and under normal circumstances do or would support a prevalence of vegetation or aquatic life that requires saturated or seasonably saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas, such as sloughs, potholes, wet meadows, mud flats, and natural ponds.

wildlife management area	Land and/or water areas designated by state wildlife agencies, such as the Tennessee Wildlife Resources Agency, for the protection and management of wildlife. These areas typically have specific hunting and trapping regulations as well as rules regarding appropriate uses of these areas by the public.
woodland	Open stands of trees with crowns not usually touching, generally forming 25-60 percent cover (Grossman et al. 1998).