

CHAPTER 1

1.0 PURPOSE OF AND NEED FOR ACTION

1.1. Background

The Tennessee Valley Authority (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 affordable power, 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. They have provided the foundation for the great dams and reservoirs that protect the region from flooding and secure for its residents the benefits of a navigable waterway and low-cost hydroelectricity.

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 owned or formerly owned by TVA. TVA's public lands often have been the catalyst for public and private economic development.

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 with water. TVA has transferred to other federal and state agencies for public uses or sold for private (primarily residential) development approximately 508,000 acres. TVA currently owns approximately 293,000 acres that are managed pursuant to the *TVA Act*.

As stewards of this important resource, TVA's policy is to manage its public 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 under its control in public ownership except where different ownership would result in significant benefits to the public.

1.2. Purpose and Need

TVA proposes to implement a Northeastern Tributary Reservoirs Land Management Plan (NTRLMP) for TVA-managed public lands surrounding seven northeastern tributary reservoirs (NTRs) along the South Fork Holston and Watauga rivers in northeast Tennessee and southwest Virginia (Figure 1-1). All lands under TVA stewardship around Beaver Creek, Clear Creek, Boone, Fort Patrick Henry, South Holston, Watauga, and Wilbur reservoirs, a total of 4,933 acres, are under consideration in this planning process.

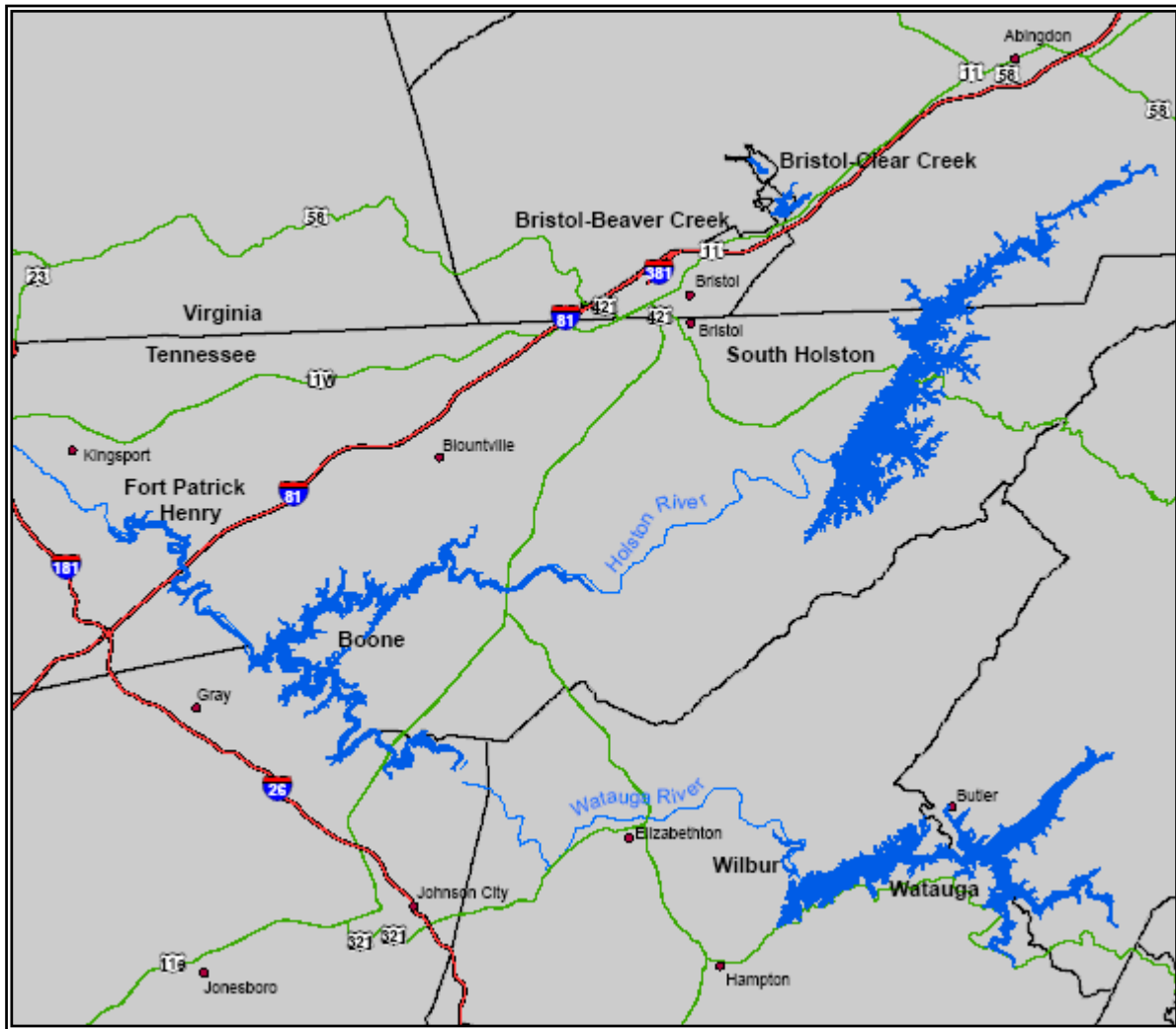


Figure 1-1. Northeastern Tributary Reservoirs (Beaver Creek, Clear Creek, Boone, Fort Patrick Henry, South Holston, Watauga, and Wilbur) Locator Map

Land acquisition and disposal information for the seven NTRs is shown in Table 1-1. The acreages listed in Table 1-1 were calculated from geo-referenced mapping data and aerial photography of the reservoir land parcels and do not completely align with acreage totals in recorded deeds. The acreages also do not account for land acquired and retained below the full summer pool elevations of the reservoirs. These acreages also do not include other lands located off-reservoir and acquired by TVA for operation of the power system (e.g., transmission line rights-of-way, substations).

Table 1-1. Northeastern Tributary Reservoirs Land Acquisition and Disposal Data

Reservoir	Location (County, State)	Total Land Originally Acquired Above Pool Elevation (Acres)	Transferred Lands (Acres)	Sold Lands (Acres)	Total Lands Disposed (Acres)	Percent Lands Disposed	TVA-Retained (Acres)
Beaver Creek	Washington, Va.	375	0	85	85	23%	290
Clear Creek	Washington, Va.	443	11	418	429	97%	14
Boone	Washington, Tenn. Sullivan, Tenn.	897	16	1	17	2%	880
Fort Patrick Henry	Sullivan, Tenn.	950	349	318	667	70%	283
South Holston	Sullivan, Tenn. Washington, Va.	3,115	808	36	844	27%	2,271
Watauga	Carter, Tenn. Johnson, Tenn.	5,003	3,864	2	3,866	77%	1,137
Wilbur	Carter, Tenn.	170	112	0	112	66%	58
Total		10,953	5,160	860	6,020	55%	4,933

TVA develops reservoir land management plans (RLMPs) to facilitate the management of reservoir lands in its custody. In general, TVA manages public land to protect and enhance natural resources, generate prosperity, and improve the quality of life in the Tennessee Valley region. The purpose of an RLMP is to 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. The RLMP also supports compliance with federal regulations and executive orders, and helps 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 reservoirs. RLMPs are submitted to the TVA Board of Directors for approval and provide a plan for long-term land stewardship and accomplishment of TVA's responsibilities under the *TVA Act*. Additional information about land planning goals is found in Chapter 4 of individual RLMPs (Volumes II-VI).

The proposed NTRLMP is designed to guide land use approvals, private water use facility permitting, and resource management decisions on the seven NTRs. The Holston-Cherokee-Douglas Watershed Team would use the proposed NTRLMP along with TVA policies and guidelines to manage resources and respond to requests for the use of TVA public land. In the land planning process, TVA would allocate public lands and land rights to one of seven land use zones (Table 1-2). In the late 1990s, TVA established this zoning system to implement TVA policies of planning lands for multiple uses and responding to stakeholder requests. In the NTRLMP, land use allocations will be determined with consideration of the social, economic, and environmental conditions around the reservoir.

In November 2006, the TVA Board of Directors approved the TVA Land Policy (Appendix A) to govern the retention, disposal, and planning of interests in real property. This policy provides for the continued development of RLMPs for reservoir properties with substantial public input and with approval of the TVA Board of Directors. An updated RLMP is needed to make land planning on the seven reservoirs consistent with the TVA Land Policy.

Finally, an updated RLMP is needed to incorporate TVA's goals for managing natural resources on public lands. TVA is currently developing a new natural resources management strategy to promote implementation of sustainable practices to balance protection of cultural and ecological resources while providing dispersed recreation opportunities. In managing its public lands and resources, TVA seeks to provide efficient resource stewardship that is responsive to stakeholder interests. TVA intends to manage its public land for an optimum level of multiple uses and benefits that protect and enhance natural, cultural, recreational, and visual resources in a cost-effective manner. Through this approach, TVA ensures that resource stewardship issues and stakeholder interests are considered while optimizing benefits and minimizing conflicts. Resource management is based on cooperation, communication, coordination, and consideration of stakeholders potentially affected by resource management. TVA recognizes that the management or use of one resource affects the management or use of others; therefore, an integrated approach is more effective than considering resources individually.

In managing public lands and resources under its authority, TVA seeks to:

- Provide effective and efficient management of natural, cultural, visual, and recreation resources to meet all regulatory requirements and applicable guidelines.
- Apply an integrated, proactive approach to natural resource management that balances the competing interests of stakeholders, while conserving and enhancing natural, cultural, visual, and recreation resources.
- Ensure the availability of quality, affordable public outdoor recreation opportunities.
- Manage resources in a cost-effective manner.

Table 1-2. 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. • 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

	Zone	Definition
		<p><i>agencies/individuals</i> for resource protection purposes.</p> <ul style="list-style-type: none"> • 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. • 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

Zone	Definition
	<p>interpretive activities. River Corridors will be included in Zone 4 unless sensitive resources are present (see Zone 3).</p> <ul style="list-style-type: none"> • Islands of 10 acres or less. • Land planned for any of the above uses in the future.
5	<p>Industrial</p> <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	<p>Developed Recreation</p> <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> <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>

Zone	Definition
	<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. 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. • 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	<p>Shoreline Access</p> <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

Zone	Definition
	<p>intakes.</p> <ul style="list-style-type: none"> • 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.

1.3. Structure of the Northeastern Tributary Reservoirs Land Management Plan

The NTRLMP consists of six volumes. Volume I is the environmental impact statement (EIS), which has been developed in accordance with the *National Environmental Policy Act* (NEPA), 42 United States Code Section (§) 4321 *et seq.*, to address the potential environmental impacts of implementing the NTRLMP. The EIS includes the project purpose and need, description of alternative actions, overview of the affected environment, analyses of environmental consequences, and other elements associated with the NEPA process. Five individual RLMPs are found in Volumes II-VI of this document. Beaver Creek and Clear Creek reservoirs are addressed in a single RLMP due to the similarities of the two reservoirs. Likewise, Wilbur and Watauga reservoirs are addressed in a single RLMP. Boone, Fort Patrick Henry, and South Holston reservoirs are each described in individual RLMPs. The RLMPs contain detailed descriptions of the environment around each reservoir and descriptions of each parcel of land addressed in the plans, as well as their proposed use.

1.4. The Decision

The TVA Board of Directors will decide which of the NTRLMP alternatives to adopt for the planning and management of TVA-controlled public land around the NTRs.

1.5. Other Pertinent Environmental Reviews or Documentation

Boone Reservoir Land Management Plan Final Environmental Assessment (TVA 1999)

TVA developed this land management plan and environmental assessment (EA) for Boone Reservoir in 1999. The plan updated the 1965 land use forecast and allocated shoreline access into five zones: Project Operations, Sensitive Resource Management, Natural Resource Conservation, Recreation, and Residential Access. The EA identified no significant impacts from implementation of the proposed Land Management Plan, and TVA issued a finding of no significant impact (FONSI) in April 1999.

Boone Management Unit Resource Management Plan and Final Environmental Assessment, Boone Reservoir, Sullivan and Washington Counties, Tennessee (TVA 2002)

TVA prepared a resource-management plan and final EA (FEA) for 566 acres of public land known as the Boone Unit and issued a FONSI in August 2002. This land is on Boone Reservoir in Sullivan and Washington counties, Tennessee, about 10 miles southeast of Kingsport, 9 miles north of Johnson City, and 16 miles southwest of Bristol. The unit is made up of land along both banks of the South Fork Holston River (River Mile [RM] 18.6 to RM 35), the Watauga River (mouth to RM 15.2), and the left-descending bank of Beaver Creek (mouth to RM 1.8).

The Boone Management Unit Plan is intended to guide TVA's resource management activities for a period of 25 years, or until amended or supplemented through subsequent planning. The plan seeks to: (1) provide sustainable public use benefits through effective management of natural resources; (2) protect sensitive resources in accordance with existing regulations and principles of good stewardship; and (3) contribute to improved water quality in this portion of the Beaver Creek, South Fork Holston River, and Watauga River watersheds.

Clear Creek Golf Course and Housing Development Final Environmental Assessment (TVA 1994)

In 1994, TVA issued an FEA and FONSI for the sale of 418 acres of TVA property to the City of Bristol, Virginia, for the construction of a municipal golf course. The Clear Creek Flood Control Project was the result of a joint effort by Bristol and TVA to provide comprehensive flood control in the Beaver Creek Valley. When the project was completed, TVA granted the city a permanent easement over 418 acres for public recreational development. Prior to the sale of the property, the land was not substantially developed and was used as a city park.

Bristol Flood Reduction Final Environmental Assessment (U.S. Army Corps of Engineers [USACE] 2004)

The USACE, Nashville District, prepared an EA evaluating various alternative ways to address flood damage reduction along Beaver Creek for the cities of Bristol, Tennessee, and Bristol, Virginia, in which existing conditions and the potential environmental consequences of taking no action as well as five action alternatives were considered. The USACE concluded that selection of its preferred alternative, which included widening selected channels, removal of a building, bridge improvements, and modification to the Beaver Creek Dam, would not significantly impact the environment. TVA was a cooperating agency for the EA. In March 2006, TVA adopted the USACE EA and signed a FONSI (TVA 2006a). Subsequently, TVA and USACE developed a draft Memorandum of Agreement (MOA) for construction, operation, and maintenance of the proposed outlet structure on Beaver Creek Dam. However, due to lack of funding, USACE has not pursued construction of the modified outlet, and the MOA was not signed.

Sugar Hollow Business Complex Easement Final Environmental Assessment (TVA 2007)

In 2007, TVA issued an FEA and FONSI for the Sugar Hollow Business Complex Easement. The City of Bristol, Virginia, was developing a new business park complex on 83.7 acres of land it bought from TVA for industrial use in the mid-1990s. In order to provide road access to the complex, Bristol requested a general-purpose easement over land owned by TVA. The access road will be located on TVA's Beaver Creek Dam Reservation, a portion of which is already under permanent recreational easement to Bristol for Sugar Hollow Park. Construction of the access road and business park currently is underway.

Proposed Land Conveyance of 126.6 Acres Near South Holston Dam, Tennessee Final Environmental Assessment (TVA 1995)

At the request of the Bristol Tennessee Electric System, TVA prepared this FEA to assess impacts of future disposal of this tract to a private entity for industrial or recreational development, should one be identified. TVA issued a FONSI in October 1995. 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. Therefore, conveyance of the tract has not yet occurred.

Reservoir Operations Study Final Programmatic Environmental Impact Statement (TVA 2004)

This study evaluated alternative ways to operate the TVA reservoir system to produce greater overall public value. Specific changes in the operation of the reservoirs included in the NTRLMP were implemented in 2004 because of this study, including:

- TVA will use weekly average-flow requirements to limit the drawdown of South Holston and Watauga reservoirs June 1 through Labor Day to increase recreation opportunities.
- Based on results of the flood risk analysis, TVA raised winter flood guides and winter operating ranges on Boone, South Holston, and Watauga reservoirs.
- TVA formally schedules water releases to increase tailwater recreation opportunities below South Holston, Watauga, and Wilbur reservoirs. With variation in the amounts of flow and days of release, water releases are provided from South Holston from April 1 through October 31 and from Watauga for recreational flows below Wilbur between Memorial Day and October 31.

Shoreline Management Initiative (SMI): An Assessment of Residential Shoreline Development Impacts in the Tennessee Valley Final Environmental Impact Statement (SMI EIS) (TVA 1998)

In 1998, TVA completed an EIS analyzing possible alternatives for managing residential shoreline development throughout the Tennessee River Valley. The selected alternative determined TVA's current SMP, which incorporates a strategy of managing public shoreline through an integrated approach that conserves, protects, and enhances shoreline resources and public use opportunities, while providing for reasonable and compatible use of the shoreline by adjacent residents. The SMP defines the standards for vegetation management, docks, shoreline stabilization, and other residential shoreline alterations. Across the TVA reservoir system, 38 percent of the total shoreline is available for residential development, and a third of that available shoreline had been developed by the mid-1990s. The SMI EIS is available on TVA's Web site and information on the SMP may be found on TVA's Web site at <http://www.tva.gov/river/landandshore/pdfs/shorelnk.pdf>.

The NTRLMP EIS tiers from the final SMI EIS concerning the categorization and management of TVA-owned shoreline access land along the NTRs. TVA-owned shoreline access land comprises 9 miles (2 percent) of the total 451 miles of shoreline on the NTRs. A detailed description of individual reservoirs can be found in Section 3.2, Table 3-2. In accordance with TVA's SMP, TVA has traditionally categorized the residential shoreline for previous land plans based on resource data collected from field surveys. To implement the categorization, a resource inventory was conducted for sensitive species and their potential habitats, archaeological resources, and wetlands along the residential shoreline. The shoreline categorization system established by SMI was composed of three categories: Shoreline Protection, Residential Mitigation, and Managed Residential.

As new data were collected on the spatial location and significance of endangered species, wetlands, cultural resources, or navigation restrictions, adjustments to category boundaries have been necessary. Through experience with the shoreline categorization process set up

in 1999 by the SMI EIS, TVA believes that the value of advance categorization is less than when SMP was implemented. Today's technology provides the ability to identify sensitive resources during permitting evaluations. Today's resource databases are interactive and are updated continually to allow ease of use of the latest information in permitting decisions. Furthermore, TVA's experience in permitting suggests that the Shoreline Protection category is not a prohibition on permitting because mitigation techniques are often available. Because resource data are continually updated, shoreline categorized as Managed Residential may change as updated resource surveys are conducted. Based on these considerations, TVA is not providing a complete categorization of residential shoreline in the NTRLMP.

TVA has categorized shoreline in areas undergoing high development pressure as indicated by the volume of Section 26a and land use requests in the last few years. In the future, the shoreline will be gradually categorized in response to permit requests. Because the permit reviews provide current real-time information, over time this will result in more accurate shoreline resource inventories, thus meeting the intent of the SMP shoreline categorization system.

Proposed Issuance of Regulations Under Section 26a of the TVA Act for Nonnavigable Houseboats, Storage Tanks, Marina Sewage Pump-Out Stations, Wastewater Outfalls and Septic Systems, and Development Within Flood Control Storage Zones Environmental Assessment (TVA 2001)

In 2001, TVA completed an EA and FONSI for its issuance of regulations for nonnavigable houseboats, storage tanks, marina sewage pump-out stations, wastewater outfalls, septic systems, and development within flood control storage zones of TVA reservoirs. The complete update of the 1971 Section 26a regulations, incorporating the standards for residential development in the SMI EIS and the miscellaneous updates above, became final on September 8, 2003. Taken together, these regulations comprehensively updated the TVA requirements for development along the shoreline of TVA reservoirs, including the NTRs. The regulations for marina sewage pump-out stations and holding tanks, fuel storage tanks and handling facilities, and development within the flood control storage zones were new. Actions requiring Section 26a approval by TVA frequently are requested and occur on TVA reservoir lands and consequently are governed by TVA Section 26a regulations.

Complete details on the Section 26a regulations may be obtained from TVA watershed teams or by viewing the regulations at <http://www.tva.gov/river/26apermits/index.htm>.

Environmental Impact Statement and Revised Land and Resource Management Plan - Cherokee National Forest (U.S. Forest Service [USFS] 2004)

This plan and final EIS, prepared by the USFS, describe the existing environment and management of national forest lands adjacent to Boone, Fort Patrick Henry, South Holston, Watauga, and Wilbur reservoirs. This report may be accessed at http://www.fs.fed.us/r8/charokee/planning/final_forest_plan/plan.pdf

1.6. The Scoping Process

Scoping, which is integral to the process for implementing NEPA, is a procedure that solicits public input to the NEPA process to ensure that: (1) issues are identified early and properly studied; (2) issues of little significance do not consume substantial time and effort; (3) the NEPA document is thorough and balanced; and (4) delays caused by an inadequate review are avoided. TVA's NEPA procedures require that the scoping process commence soon after a decision has been reached to prepare a NEPA review in order to provide an early and open process for determining the scope and for identifying the significant issues related to a proposed action.

TVA determined that the development of an EIS would allow for a better understanding of the impacts of the proposed land use implementation. Accordingly, on May 5, 2008, TVA published in the *Federal Register* a notice of intent (NOI) to prepare an EIS and initiated scoping for the proposal. In addition, several newspaper articles and television news reports were published during the comment period by the local news media. During the 30-day public comment period, a toll-free phone line was established for people to make verbal comments. Information about the proposed RLMPs, including maps and an interactive comment form, was available on the TVA Web site. Copies of the NOI were sent to federal, state, and regional agencies. Between May 5 and June 5, 2008, TVA sought comments from citizens, various state and federal officials, elected officials, resource conservation groups, and other organizations. Comments were also collected during a public scoping meeting held on May 20, 2008, at Sullivan Central High School in Blountville, Tennessee, where attendees were given the opportunity to have a court reporter record their oral comments and to submit written comments. A total of 42 participants attended the public scoping meeting. The scoping document (see Appendix B) describes efforts to involve the public and other agencies during the scoping period.

1.6.1. Scoping Response

During the scoping period, a total of 24 comments were received at the public scoping meeting, via the TVA Web site, through e-mail, or by letter. Comments were received from individuals, local groups (Northeast Tennessee Mountain Bike Association), and a local commercial facility (Clear Creek Golf Club).

The comments received during the public scoping period are summarized in the *Summary of Public Participation Report* section attached to the scoping document issued in August 2008 (Appendix B). The results of the public scoping provided suggestions on land use allocations for certain parcels and a characterization of respondents' use of the seven NTRs. From the comments provided, three predominant themes or general issues were identified: Natural Resources, Recreation Resources, and Reservoir Levels. Several individuals expressed their interest in additional recreational opportunities on the NTRs. The USFS expressed interest in increased access to some of the NTRs.

1.6.2. Land Use Proposals

Two land use proposals were considered when determining proposed zone allocations for subject parcels:

1. The Watauga River Regional Water Authority (WRRWA) is a regional water utility created to provide water services for the residents of Carter County, Tennessee. The WRRWA proposes to construct a water intake structure on Wilbur Reservoir. Preliminary conceptual plans involve about 2 acres of land. The structure would

include a pump building and associated water lines that would be placed within the existing road rights-of-way to a treatment plant located on private property.

2. The Virginia Department of Transportation is planning to widen Beaver Creek Reservoir Route 11 (Lee Highway) and relocate the highway entrance at Sugar Hollow Recreation Area to align with an existing signalized intersection. The minor changes to TVA-managed land (no more than approximately 1 acre) would remain consistent with the recreational use of the subject parcel on Beaver Creek Reservoir.

1.6.3. Issue and Resource Identification

This EIS is a programmatic document that addresses the proposed implementation of an NTRLMP, which would allocate TVA-managed lands to land use zones. This EIS also evaluates potential impacts associated with the various types of uses permitted under each zone. The proposed NTRLMP does not include specific projects, such as developing campgrounds or industrial sites, and effects of such projects are not evaluated in this programmatic review. Whenever such individual projects are proposed in the future, TVA will determine the need for permits, coordination with other agencies (e.g., State Historic Preservation Officer [SHPO], U.S. Fish and Wildlife Service [USFWS]), and the appropriate level of NEPA review and documentation. Additionally, this programmatic review does not address the operation of existing facilities, such as dams, electrical substations, or visitor centers. Similarly, this EIS does not address the management of water levels in the reservoirs, which was evaluated in the *Reservoir Operations Study Final Programmatic Environmental Impact Statement* (TVA 2004).

TVA internal reviews of current and historical information, reservoir data collected, and public input were used to identify the following resources/issues for evaluation in the NTRLMP. Existing conditions of these resources are described in Chapter 3, and the effects of each alternative on these resources are evaluated in Chapter 4:

Land Use and Prime Farmland - Existing land use patterns along the shoreline and back-lying land have been determined on most NTRs parcels by TVA land acquisition, disposals, and land use agreements. About 95 percent of the parcels are committed to existing land uses with little to no potential for change of those land uses. Proposed allocations of the remaining uncommitted parcels were evaluated using the goals of the individual RLMPs and TVA policies and regulations. TVA will comply with the 1981 *Farmland Protection Policy Act* (FPPA).

Recreation - Existing developed (public or commercial) recreation facilities available to meet public needs were identified, as were those lands that are important for dispersed recreation (e.g., hunting, bank fishing, bird watching, hiking, etc.). The effects of each alternative on recreation opportunities in the vicinity of the NTRs were evaluated.

Terrestrial Ecology - Terrestrial plant and animal communities found adjacent to the seven NTRs were characterized using existing databases and field visits. Issues include the identification and protection of significant natural features, rare species habitat, important wildlife habitat, or locally uncommon natural community types. TVA will comply with Executive Orders (EOs) 13186 and 13112 on migratory birds and invasive species.

Endangered and Threatened Species - TVA identified plants and animals that are state-listed or federally listed as threatened and endangered and are known or are likely to exist in the vicinity of the seven NTRs, as well as habitat suitable for these species. TVA will comply with the *Endangered Species Act* (ESA), the *Bald and Golden Eagle Protection Act*, and similar state laws.

Wetlands - Wetlands on TVA land along the NTRs shorelines were identified. TVA will comply with EO 11990 on wetlands and the *Clean Water Act* (CWA).

Floodplains - Floodplains on TVA land along the NTRs shorelines were identified. TVA will comply with EO 11988 on floodplains.

Cultural and Historic Resources - Prehistoric or historic districts, known sites, buildings, structures, or objects on or near the seven reservoirs lands were identified. TVA will comply with Section 106 of the *National Historic Preservation Act* (NHPA).

Managed Areas and Ecologically Significant Sites - TVA identified special and unique natural areas on or in the vicinity of the seven reservoirs. The potential effect of implementing each alternative on these areas was evaluated.

Aesthetics and Visual Resources - The aesthetic settings of the reservoirs were characterized, and scenic and distinctive areas frequently seen by reservoir users and adjacent reservoir residents were identified. The potential effect of implementing each alternative on the natural beauty of the shoreline was evaluated.

Water Quality - TVA described water quality conditions within the seven NTRs, based upon the Reservoir Ecological Health Monitoring Program or similar indices, as well as state classifications and advisories. The effect of implementing each alternative on water quality in the NTRs was evaluated.

Aquatic Ecology - TVA characterized the aquatic plants and animals found in the waters of the NTRs and their tributaries. TVA identified habitat for rare species, important aquatic habitat, or locally uncommon aquatic community types. The effect of implementing each alternative on aquatic ecology was evaluated.

Air Quality - Compliance with National Ambient Air Quality Standards (NAAQS), which establish safe concentration limits of various air pollutants, was discussed.

Noise - The potential for nuisance noises to be generated under each alternative was examined.

Socioeconomics - The current population, labor force, employment statistics, income, and property values of the NTRs region were identified. A subset of these issues is environmental justice, the potential for disproportionate impacts to minority and low-income communities. The effect of implementing each alternative on socioeconomics was evaluated.

1.7. Public Review Process

The notice of availability of the draft EIS was published in the *Federal Register* on October 9, 2009. Copies of the draft EIS were mailed to government agencies as well as individuals who requested copies. TVA notified interested federally recognized Indian tribes, elected

officials, and other stakeholders that the draft EIS was available for review and comment. Printed copies of the draft EIS were made available to the public at local libraries and at the Holston-Cherokee-Douglas Watershed Team Offices in Morristown and Gray, Tennessee. Electronic versions of the document were posted on the TVA Web site, where comments could be provided electronically. TVA also accepted comments by regular mail, e-mail, telephone, and facsimile. On October 27, 2009, TVA held an open house from 4 p.m. to 8 p.m. at the Johnson City Power Board Office in Johnson City, Tennessee, to answer questions and collect comments from the public. Forty people attended the public open house. TVA accepted comments on the NTRLMP draft EIS until November 23, 2009.

Thirty-seven written and oral comments were received from 20 commenters (some commenters submitted more than one comment), including one organization, nine citizens, and ten interested agencies. The U.S. Department of the Interior (DOI) submitted comments on behalf of the USFWS's Ecological Services offices in Tennessee and Virginia. Letters from agencies and some organizations are provided in Appendix C. TVA reviewed and prepared responses to all of these comments (Appendix D). In some instances, the EIS was changed because of the information or issues presented. All original comments and letters are part of the official record and are available upon request.

1.7.1. Public Comments

Several individuals expressed appreciation for the public outreach and support for Alternatives B and/or C. Other public comments addressed recreation opportunities, land use, and water access rights. One citizen suggested a new land use zone be developed to include resources of historic or community value. Two comments expressed concern about shoreline erosion and trash.

Two members of the Boone's Creek Historical Trust expressed interest in developing the parcel containing the William Bean Historical Monument near Boone Reservoir to improve public access to and appreciation of the site.

1.7.2. Agency Comments

The Virginia Department of Conservation and Recreation (VDNR) and the Virginia Department of Game and Inland Fisheries (VDGIF) provided data from the Virginia Natural Heritage database on records of federally listed and state-listed aquatic species in the South Fork Holston and Middle Fork Holston rivers and Beaver Creek. The VDNR provided the location of a cave near South Holston Reservoir and encouraged TVA to coordinate with the agency to minimize impacts to karst features. The VDGIF also provided information about designated trout streams near South Holston and Beaver Creek reservoirs and a state stream conservation area in the South Holston Reservoir. Both agencies recommended emphasizing recreation opportunities on South Holston and Beaver Creek reservoirs. The VDNR recommended that TVA implement erosion and sediment controls and storm water management practices. Both agencies recommended that TVA coordinate with the USFWS and VDGIF to ensure future compliance with regulations protecting rare species.

The DOI recommended that TVA contact the DOI during future site-specific reviews to evaluate the potential for future proposed projects to impact federally listed species. In the opinion of DOI, reaching a determination of "likely to adversely affect" federally listed species would be unlikely. DOI stated that the requirements of Section 7 of the ESA of 1973, as they apply to NTRLMP, have been fulfilled. The DOI expressed support for Alternative C.

The Tennessee Department of Environment and Conservation (TDEC) Division of Water Supply, Ground Water Management Section, provided information about privately owned dams, public and private water supplies, underground injection control sites, and other groundwater resources. They recommended that TVA coordinate with that agency if future projects are located near karst, sinkholes, or other connections to groundwater.

The USACE, Norfolk District, Western Virginia Regulatory Section, indicated that coordination with that office and permits under the *Clean Water Act* or *Rivers and Harbors Act* may be necessary depending upon the nature of any projects proposed on NTR lands in the future. The USACE Nashville District commented that TVA should include modifications to Beaver Creek Dam that were evaluated in a 2004 USACE EA, which TVA adopted.

The U.S. Environmental Protection Agency (USEPA), Region 4, provided detailed comments related to the Beaver Creek watershed in Knox County, Tennessee, which is not within the scope of the NTRLMP EIS. The agency also encouraged TVA to coordinate with state and federal programs for monitoring and improving water quality in the Beaver Creek watershed. The USEPA indicated the final EIS should evaluate potential direct, indirect, and cumulative impacts. The USEPA expressed a preference for Alternative B, and rated the draft EIS EC-2, expressing concern that the preferred alternative would have impacts on the environment that could and should be avoided.

TDEC expressed support for Alternative C. The Tennessee Department of Transportation had no comment, and the Virginia Department of Transportation indicated TVA should coordinate with that agency should any future proposed projects involve changes to, or use of, existing state-owned rights-of-way.

The Tennessee Wildlife Resources Agency recommended a new alternative that would blend Alternatives B and C and would honor existing land use commitments, increase boating access for hunters and fishermen, protect rare plants, and increase acres allocated to Natural Resource Conservation.

1.8. Necessary Federal Permits, Licenses, and Consultations

No federal permits are required to develop an RLMP. Site-specific information on reservoir resources has been characterized in this EIS, and potential impacts on these resources were considered in making land use allocation recommendations. Appropriate agencies regulating wetlands, endangered species, and historic resources have been consulted during this planning process. When specific actions are proposed, additional environmental reviews for these actions would be undertaken as necessary to address potential project-specific impacts.

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