

# CHAPTER 1

## 1.0 PURPOSE OF AND NEED FOR ACTION

### 1.1 Background

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 are some of the most important resources of the region. They have provided the foundation for the large 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 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 lands often have been the catalyst for public and private economic development that supports all of these activities.

The United States of America (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 with water. Approximately 508,000 acres have already been transferred by TVA to other federal and state agencies for public uses or sold for residential development. The USA owns approximately 293,000 acres that TVA manages pursuant to the *TVA Act*.

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. TVA's policy is to preserve reservoir lands remaining in public ownership under its control except in those rare instances when the benefits to the public would be so significant that transferring the land is justified.

### 1.2 Purpose and Need

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 (see Appendix A, TVA Land Policy). 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*.

TVA proposes to develop a Mountain Reservoirs Land Management Plan (MRLMP) to guide land use approvals, private water use facility permitting, and resource management decisions for the nine mountain-region reservoirs illustrated in Figure 1-1 and listed in Table 1-1. All lands under TVA management on these nine reservoirs, a total of approximately 6,220 acres, are under consideration in this planning process.



**Figure 1-1. Mountain Reservoirs (Chatuge, Hiwassee, Blue Ridge, Nottely, the Ocoees, Apalachia, and Fontana) Vicinity Map**

Land acquisition and disposal information for the nine tributary mountain reservoirs is presented in Table 1-1. Some properties (approximately 20 acres) were acquired specifically for power assets (substations, etc.) subsequent to original project land acquisition and are not included in the acquisition total. The acreages listed in the table were calculated from georeferenced 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 include land acquired and retained that is below the full summer pool elevations of the reservoirs.

**Table 1-1. Mountain Reservoirs Land Acquisition and Disposal Data**

Reservoir	Location (County, State)	Total Land Originally Acquired* (Acres)	Transferred Lands* (Acres)	Sold Lands* (Acres)	Total Lands Disposed* (Acres)	Percent of Original Acquisition Sold or Transferred	TVA- Retained Land* (Acres)
Chatuge	Clay County, N.C. Township, Ga.	3,557	1,161	629	1,790	50	1,767
Hiwassee	Cherokee County, N.C.	19,046	17,280	759	18,039	95	1,007**
Blue Ridge	Fannin County, Ga.	6,495	5,919	106	6,025	93	470**
Nottely	Union County, Ga.	3,136	2,031	276	2,307	74	829
Ocoee 1	Polk County, Tenn.	4,135	3,925	133	4,058	98	77**
Ocoee 2	Polk County, Tenn.	389	309	0	309	79	80**
Ocoee 3	Polk County, Tenn.	3,261	3,043	0	3,043	93	218**
Apalachia	Cherokee County, N.C. Polk County, Tenn.	7,506	6,661	2	6,663	89	843**
Fontana	Graham County, N.C. Swain County, N.C.	57,312	55,153	1,228	56,381	98	931**
<b>Total</b>		<b>104,837</b>	<b>95,482</b>	<b>3,133</b>	<b>98,615</b>	<b>93</b>	<b>6,220</b>

\* Does not include land inundated by the reservoirs; acreages are approximate

\*\* Includes narrow strip of TVA-retained land along shoreline; acreage not calculated

The goals of the proposed MRLMP include the following:

**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 lands are managed to provide multiple public benefits including recreation, conservation, and economic development.

**Goal 4:** Provide a clear process, consistent with TVA's Land Policy, by which TVA will respond to requests for use of public land managed by TVA.

**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 each reservoir.

**Goal 7:** Provide a mechanism that allows for local, state, and federal infrastructure projects when the use is compatible with the zone allocation and TVA's Land Policy.

TVA has prepared this environmental impact statement (EIS) to assess the potential environmental impacts of implementing a RLMP on the nine mountain reservoirs.

Alternative approaches to allocating the TVA-managed lands were analyzed in this EIS. Throughout the planning process, TVA has also sought to address issues and concerns

raised by the public regarding management of the TVA parcels. These issues were addressed in the environmental analyses of the various alternatives and include concerns such as protection of sensitive resources, natural resource conservation, and recreation.

### 1.3 The Decision

The TVA Board of Directors will decide which of the MRLMP action alternatives to adopt or whether to continue use of the Forecast System<sup>1</sup> parcel designations on the mountain reservoirs properties.

### 1.4 Other Pertinent Environmental Reviews and Documentation

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

In this study, TVA 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 MRLMP were implemented in 2004 as a result of this study, including:

- Limiting the reservoir drawdowns from June 1 to Labor Day on Blue Ridge, Chatuge, Fontana, and Hiwassee reservoirs. The January 1 Flood Guide<sup>2</sup> elevations of these reservoirs were increased. Tailwater releases at Apalachia and Ocoee 1 were modified to improve tailwater recreational opportunities.
- Implementation of continuous flows in the tailwater between Apalachia Dam and the downstream powerhouse from June 1 to November 1 to support aquatic life.

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

In this 1998 EIS, TVA analyzed possible alternatives for managing residential shoreline development throughout the Tennessee River Valley. The alternative selected established TVA's current Shoreline Management Policy (SMP), which incorporates a strategy of maintaining and gaining public shoreline through an integrated approach to conserve, protect, and enhance shoreline resources and public use opportunities while providing for reasonable and compatible use of the shoreline by adjacent residents. The standards for vegetation management, docks, shoreline stabilization, and other residential shoreline alterations were defined in the SMP. The SMI EIS is available on TVA's Web site at [http://www.tva.gov/river/landandshore/landuse\\_shore.htm](http://www.tva.gov/river/landandshore/landuse_shore.htm). More information on TVA's SMP may found on TVA's Web site at: <http://www.tva.gov/river/landandshore/pdfs/shorelnk.pdf>. The MRLMP EIS tiers from the final SMI EIS.

The analysis of shoreline data compiled for the SMI EIS revealed that about 38 percent of the shoreline along TVA reservoirs was available for residential use and that about 13

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<sup>1</sup> The Forecast System was used internally by TVA to guide land use policy on lands managed by TVA. Under the Forecast System, current and prospective uses were considered in assigning a parcel to one of 13 categories: Dam Reservation, Public Recreation, Reservoir Operations (Islands), Reservoir Operations (Mainland), Power Transmission and Power Needs, Commercial Recreation, Minor Commercial Landings, Industrial, Navigation Safety Harbors or Landings, Forestry Research, Steam Plant Study, Wildlife Management, and Small Wild Areas.

<sup>2</sup> Flood Guide elevations are the calculated target reservoir elevations that allow the reservoir to meet the desired flood storage capacity.

percent was developed at that time. The SMI EIS shoreline ownership data for the nine mountain reservoirs are presented in Table 1-2. Residential shoreline on Chatuge Reservoir comprised 15 percent of the total (18.8 miles); Hiwassee Reservoir, 12 percent (20.3 miles); Blue Ridge Reservoir, 17 percent (11.4 miles); and Nottely Reservoir, 5 percent (5 miles). There is no residential shoreline on Ocoee 1, 2, or 3 (collectively referred to as the Ocoees), Apalachia, or Fontana reservoirs.

**Table 1-2. Mountain Reservoirs Shoreline Ownership**

Reservoir	Flowage Easement Shoreline		TVA-Owned Residential Access Shoreline		TVA-Owned and Jointly Managed Shoreline		TVA-Owned and -Managed Shoreline		Total Shoreline Miles
	Miles	% of Total Miles	Miles	% of Total Miles	Miles	% of Total Miles	Miles	% of Total Miles	Miles
Chatuge	60.8	48	18.8	15	31.8	25	16.6	13	128.0
Hiwassee	0.0	0	20.3	12	141.0	86	3.5	2	164.8
Blue Ridge	14.6	21	11.4	17	37.4	55	4.7	7	68.1
Nottely	53.8	53	5.0	5	36.4	36	6.9	7	102.1
Ocoees	0.0	0	0.0	0	109.5	100	0.0	0	109.5
Apalachia	0.0	0	0.0	0	28.3	90	3.2	10	31.5
Fontana	19.3	8	0.0	0	216.6	91	1.9	1	237.8

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. 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 SMP 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 with the MRLMP.

With the MRLMP, 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.

***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)***

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>.

***Blue Ridge Mountain Electric Membership Corporation Proposed Substation, Chatuge Reservoir, Towns County, Georgia Environmental Assessment (TVA 2009)***

The Blue Ridge Mountain Electric Membership Corporation (BRMEMC) expressed an urgent need for property to construct a substation. TVA prepared this environmental review to identify and document the potential environmental effects of the transfer of 1.4 acres and the granting of a permanent easement on 0.4 acre of Parcel 52 on Chatuge Reservoir and the subsequent construction and operation of the proposed facility. The document is available online at the following site:

[http://www.tva.gov/environment/reports/BRMEMC\\_Substation/](http://www.tva.gov/environment/reports/BRMEMC_Substation/)

***North Shore Road Final Environmental Impact Statement (National Park Service [NPS] 2007)***

This study dealt with alternatives for construction of a road along the northern shore of Fontana Reservoir to discharge and satisfy obligations associated with a 1943 memorandum of agreement among the Department of Interior; TVA; Swain County, North Carolina; and the State of North Carolina. A detailed description of resources on the Fontana Dam Reservation and along the northern shore of Fontana Reservoir was provided in this EIS. In a record of decision issued in December 2007, the NPS selected the Monetary Settlement Alternative, under which the road would not be built. TVA was a cooperating agency in the preparation of the EIS.

***Control of Oriental Bittersweet (*Celastrus orbiculatus*) on TVA Property Near Fontana Dam, Graham and Swain Counties, North Carolina, Environmental Assessment (TVA 1997)***

This environmental assessment addressed the potential environmental effects of invasive species control and related natural resource management issues on the Fontana Dam Reservation.

***Upper Ocoee River Corridor Recreational Development Final EIS (U.S. Forest Service [USFS] 1997)***

TVA was a cooperating agency in the development of this EIS, which described resources in the vicinity of the Ocoee projects, with an emphasis on recreational activities.

***Land and Resource Management Plan - Nantahala and Pisgah National Forests (USFS 2003)***

This report is available at the following site:

[http://www.cs.unca.edu/nfsnc/nepa/nantahala\\_pisgah\\_plan/plans.htm](http://www.cs.unca.edu/nfsnc/nepa/nantahala_pisgah_plan/plans.htm).

***Environmental Impact Statement and Revised Land and Resource Management Plan, Cherokee National Forest (USFS 2004a)***

This USFS report may be accessed at

[http://www.fs.fed.us/r8/cherokee/planning/final\\_forest\\_plan/plan.pdf](http://www.fs.fed.us/r8/cherokee/planning/final_forest_plan/plan.pdf).

***Land and Resource Management Plan - Chattahoochee and Oconee National Forests (USFS 2004b)***

To retrieve this USFS report, go to the following Web site:

<http://www.fs.fed.us/conf/200401-plan/index.htm>.

***Ocoee and Hiwassee Rivers Corridor Management Plan, Cherokee National Forest (USFS 2008)***

This USFS report is available at

[http://www.fs.fed.us/r2/cdi/portfolio/interpretive\\_products/interp\\_master\\_plans/pdfs/Ch2\\_Interpretive\\_Plan.pdf](http://www.fs.fed.us/r2/cdi/portfolio/interpretive_products/interp_master_plans/pdfs/Ch2_Interpretive_Plan.pdf)

## **1.5 The Scoping Process**

With respect to the *National Environmental Policy Act* (NEPA), “scoping” refers to the process of identifying the range of actions, alternatives, and impacts to be considered in the environmental review. This process involves the determination of the physical and conceptual extent of the analysis as well as the identification of the environmental issues and resources to be considered. The scoping process for this EIS began when TVA published in the *Federal Register* on June 1, 2007, a notice of intent (NOI) to prepare the EIS. TVA sought comments from various state and federal agencies, elected officials, resource conservation groups, tribes, and other organizations and individuals.

In addition to the notice in the *Federal Register*, TVA advertised the scoping effort by issuing news releases and placing advertisements in 11 local newspapers and through public service announcements on local radio and television stations. Letters and questionnaires were sent to individuals in the MRLMP area, to stakeholder organizations, and to local, state, and federal agencies. Fourteen stakeholder meetings were held with state-elected officials, electric distributor cooperatives, marina operators, watershed associations, and other key stakeholders. In addition, information about the proposed land plan and an interactive questionnaire form were available on the TVA Web site.

TVA hosted a public meeting at The North Georgia Technical College in Blairsville, Georgia, on June 21, 2007. During the public meeting, information forms, writing materials, and a stenographer were available on site for attendees to make comments. A total of 83 participants attended the public meeting.

### **1.5.1 Summary of Public Participation**

TVA received 473 comments during the public scoping effort in various forms, including questionnaires completed on the TVA Web site, questionnaires mailed to TVA, letter and e-mail responses, and oral comments in the public meeting. All public comments were compiled and analyzed to identify the range of issues and concerns to be addressed in the EIS. Many commenters also recommended specific land uses or provided information regarding resources present on TVA lands. Each comment was categorized by its major issue, and comments were sorted into themes by reservoir and summarized in a scoping

document, which is contained in Appendix B. This summary includes the potential environmental issues and comment themes addressed in all the public comments received during the scoping process.

### **1.5.2 Scoping Response**

The following five predominant themes or general issues were identified from the comments: Land Planning and Policy, Recreation, Natural Resources, Compliance, and Reservoir Levels. Other comment areas included Power Delivery and Industrial Development and Appreciation for TVA Land Management Practices.

- **Land Planning and Policy**  
Land planning and land management policy-oriented comments that were received dealt with loss of public lands, maintaining natural areas, future development, land use, and other considerations for the current land planning effort.
- **Recreation**  
Most recreation comments favored the use of hiking and mountain biking trails and requests to build additional trails on public lands. Comments regarding boating restrictions, off-road vehicle use, camping, and available facilities were also submitted.
- **Natural Resources**  
Comments were received concerning all aspects of natural resource preservation and management including water quality and aquatic habitats, air quality, sedimentation and shoreline erosion, wildlife, and forestry. Concerns about cultural resources were also presented.
- **Compliance**  
Areas discussed as needing attention included littering of informal and dispersed camping areas, houseboats and all-terrain vehicle (ATV) use, boating restrictions, unpermitted boat docks, and illegal waste dumps.
- **Reservoir Levels**  
Many comments were received concerning low reservoir levels and their associated impacts. The development and implementation of the MRLMP would not affect reservoir levels. Management of water levels in TVA reservoirs was addressed in the Reservoir Operations Study (TVA 2004).

Scoping participants were asked to describe their use of and their method of access to the reservoirs. They were also asked to indicate from a list of recreation activities the frequency of their participation in each activity. Additionally, scoping participants were asked to provide their opinion regarding the allocation of public land to specific uses and whether there is currently enough, too much, or an adequate amount or availability for these uses. As shown in Table 1-3, the majority of the 473 respondents indicated a general preference for no changes in existing land uses.

**Table 1-3. Land Use Preferences of Scoping Participants**

Land Use	Too Much Land	About Right Amount	Need More Land	No Opinion
Industry/light manufacturing	206	97	7	59
Preserve natural areas/open space	4	113	247	15
Forest management/habitat improvement	8	154	182	24
Wildlife observation/photography areas	0	178	141	53
Horseback riding trails	62	163	42	98
Mountain bike trails	12	47	324	22
Hiking trails (dirt)	2	132	228	23
Greenways and paved trails	24	128	191	33
Stream/river access sites	6	184	146	41
Water trails	0	145	132	87
Hunting areas	79	145	33	110
Fishing berms or piers	22	177	48	117
Undeveloped or primitive camping areas	15	164	132	54
Recreation day use areas (swimming areas, picnic areas)	14	203	113	42
Year-round boat ramps	17	217	49	83
Developed campgrounds	25	194	94	54
Commercial marinas	78	184	15	79
Overnight lodging (cabins, cottages, resort lodges)	43	189	83	56
Museums/nature centers	15	173	108	70
Visitor centers/overlooks	10	217	84	53
<b>Other</b>				
Off-road trails	1		2	
Ball fields			1	
Rock climbing			1	
Disc golf			1	

The public scoping questionnaire results indicate that the activities with the most frequent participation on the mountain reservoirs are mountain biking on dirt trails, sightseeing and viewing natural scenery, swimming in lakes and streams (including beach use), hiking on dirt trails, motorized boating, nonmotorized/paddle-craft boating, biking on paved trails, and walking on paved trails. The next highest-ranking activities are developed camping, primitive camping, and bank fishing.

The comments that TVA received during the public scoping period indicate that the majority of people who responded generally show a preference for the existing land uses. Of the land uses listed in Table 1-3, the majority of respondents stated that they believe that the mountain reservoirs have “about the right amount” of developed land uses such as recreation day use areas, marinas, and developed campgrounds. However, the majority of respondents believe there is too much land available for industry or light manufacturing in the area. Most respondents stated that they believe more land is needed for undeveloped

land uses such as natural areas and land use that supports forest management and trails. The majority of respondents felt the recreation uses that “need more land” are mountain bike trails, hiking trails, and greenways and paved trails.

Finally, the respondents were asked to identify for each reservoir whether the number of facilities available met their current needs. The scoping results indicated a high level of interest in development and expansion of hiking and mountain biking trails, as well as improvements at existing recreation areas. Both hiking and mountain biking trails are compatible with several of TVA’s current land use allocations on the mountain reservoirs and would be compatible with some of the allocations proposed under the Action Alternatives described below in Chapter 2. Due to the large interest identified during public scoping regarding mountain biking in the mountain reservoirs region, TVA included an inventory of mountain bike trails in the region as Appendix C.

### **1.5.3 Land Use Proposals**

Several parcel-specific comments were received during scoping and are listed by reservoir in Appendix B. A majority of the parcel-specific comments can be accommodated within the existing allocations, such as mountain bike trails, hiking trails, and natural resource conservation efforts on lands previously allocated for Natural Resource Conservation. On both Chatuge and Hiwassee reservoirs, there were several comments suggesting new recreation areas for water access and trail expansion. A county government official also provided a comment regarding interest in ball fields. Most of the requests for recreation were for trails. A parcel on Chatuge Reservoir was also identified for consideration for placement of an industrial water intake. However, this request was later withdrawn. Several comments regarding Nottely Reservoir called for expansion of the existing recreation facilities, such as Poteete Creek Campground, to accommodate growing recreation demands on this reservoir.

A portion of the approximately 9-acre tract originally identified as Parcel 52 on Chatuge Reservoir was identified during scoping as a potential site for a new substation to serve the Blue Ridge Mountain Electric Membership Corporation (BRMEMC). BRMEMC expressed an urgent need to meet the projected load growth in the area and meet a substation in-service date of June 2009. Due to this urgent public infrastructure need, this 1.4-acre portion of Parcel 52 was considered for use as a substation site and was evaluated independently from the current land planning effort. TVA has approved the sale of this 1.4-acre parcel at public auction pursuant to Section 31 of the TVA Act. The remainder of the original Parcel 52 was subsequently subdivided to create the new 6.1-acre Parcel 52 and the 1.9-acre Parcel 52a, which were evaluated in the FEIS.

### **1.5.4 Issue and Resource Identification**

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 MRLMP. The effects of implementing each alternative were evaluated with respect to the following issues:

Existing Land Use patterns along the shoreline and back-lying land have been largely determined by previous TVA land acquisition, disposals, and land use agreements. Many of the parcels are committed to existing land uses with little or no potential for change in the

10-year planning horizon. Proposed allocations of the remaining uncommitted parcels will be evaluated using the goals of the MRLMP and consistent with TVA policies and regulations.

Recreation comprises a broad range of human activities on the nine mountain reservoirs. Recreation opportunities are an important resource for public use of the mountain reservoirs lands and waters.

Terrestrial Ecology includes the plants and animals comprising the terrestrial ecosystems and natural community types found adjacent to the nine mountain reservoirs. Considerations include the identification and protection of significant natural features, rare species habitat, important wildlife habitat, or locally uncommon natural community types. Pursuant to EOs 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds) and 13112 (Invasive Species), TVA considers potential impacts to migratory birds and invasive species.

Endangered and Threatened Species are populations of state-listed, federally listed, or rare plants and animals known to exist in the vicinity of the nine mountain reservoirs, including their occurrence and habitats on TVA lands and waters.

Wetlands are an important ecosystem for many types of plants and animals found on TVA land and along the mountain reservoirs shoreline. Pursuant to EO 11990 (Protection of Wetlands) and the *Clean Water Act*, TVA considers impacts to wetlands.

Floodplains are important to flood control and water quality issues and are productive natural areas. Pursuant to EO 11988 (Floodplain Management), TVA considers impacts to floodplains.

Cultural Resources are archaeological sites, historic buildings, and cultural landscapes and properties on or near the nine reservoirs lands, including sites listed in the National Register of Historic Places (NRHP).

Managed Areas and Ecologically Significant Sites are special and unique natural areas on or in the vicinity of the nine mountain reservoirs set aside for a particular management objectives or lands that are known to contain sensitive biological, cultural, or scenic resources.

Visual Resources relate to the scenic qualities of the nine mountain reservoirs and the lands surrounding them.

Water Quality conditions affect the overall ecological conditions of the nine mountain reservoirs. Water quality is influenced by activities causing shoreline erosion as well as pollution, litter, and debris control. Aquatic ecology includes the plants and animals found in the waters of the mountain reservoirs and their tributaries. Issues include the identification and protection of rare species' habitat, important aquatic habitat, or locally uncommon aquatic community types.

Air Quality and Noise are important resources for public health and welfare. An important issue is compliance with National Ambient Air Quality Standards (NAAQS), which establish safe concentration limits of various air pollutants.

Socioeconomic issues include the potential impacts of the MRLMP on current population, labor force, employment statistics, income, and property values of the mountain reservoirs region. A subset of these issues is environmental justice, the potential for disproportionate impacts to minority and low-income communities.

## **1.6 Public Review Process**

The Notice of Availability of the DEIS was published in the *Federal Register* on August 15, 2008. TVA held an open house from 4 p.m. to 8 p.m. at the Blairsville Campus of North Georgia Technical College on August 27, 2008, to solicit public comments on the DEIS. Copies of the DEIS were sent to interested federally recognized Indian tribes, government agencies, interested organizations, and members of the public. The original comment period for the DEIS was from August 15 to September 29, 2008. The comment period was subsequently extended to October 31, 2008.

Printed copies of the DEIS were made available to the public at local libraries and at the Chickamauga-Hiwassee Watershed Team Office in Murphy, North Carolina. 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 by facsimile. TVA also held briefings with community leaders and representatives of interest groups to share information and to receive their input.

Including form letters and petitions, TVA received 722 sets of comments. These comments came from approximately 575 individuals, 7 citizens' organizations, 2 local governments, 3 federal agencies, 8 state agencies, and 1 local governmental agency. Additionally, TVA received comments from the Eastern Band of the Cherokee Indians. TVA has reviewed and responded to these comments, and in some cases, the EIS was changed because of information or issues provided. Because of the large number of similar comments, like comments were combined and paraphrased to permit a collective response. Responses to comments are provided as Volume 2.

### **1.6.1 Public Comments**

The vast majority of the public comments received dealt with proposed allocation changes on Chatuge Reservoir. There were a few comments about Hiwassee and the Ocoee Reservoirs. These comments were generally supportive of proposals on Hiwassee.

Public comments reflected strong concerns about maintaining the aesthetic qualities, especially the tranquil character, of Chatuge Reservoir. Concerns about water quality were also common. Many comments were opposed to any change of parcel allocation from current uses on Chatuge. These commenters were concerned that the potential change in visual character would decrease property values, jeopardize income from tourism, and generally make the area a less desirable place to live and recreate. Other commenters stated that the county needs more developed recreational facilities and supported allocation changes that would support recreation.

There was strong opposition to the proposed allocation of Parcel 10 for future industrial use, and many commenters believed that construction of industrial manufacturing facilities on Parcel 10 would be imminent should it be allocated for industrial use (i.e., to Zone 5). Major concerns included the potential for air and water pollution, excessive noise and loss

of aesthetic character, loss of old-growth forest on the site, decrease in local property values, and loss of habitat for bald eagles.

Some commenters supported the allocation of Chatuge Parcel 52 for developed recreation use. However, others expressed concerns about potential visual effects, noise, loss of local property values, the possible need for fill below the 1,933-foot elevation contour, and the loss of wildlife habitat.

The proposed allocation of Parcel 77 for developed recreational use also generated many comments. Although some comments supported this allocation, others expressed concerns about noise, excessive lights, traffic on the access road, loss of local property values, loss of wildlife habitat, and potential decreases in water and air quality. Some commenters questioned the county's ability to develop and manage a large recreational facility on Parcel 77. Other commenters believed that Parcel 77 was not a suitable location for recreational development because of its topography, its distance from town, and the condition of the only access road to the parcel.

### **1.6.2 Agency Comments**

The U.S. Environmental Protection Agency (USEPA) commented that it does not favor Alternative A for no action and prefers Alternative B or C over Alternative A. Alternative B is preferred from a water quality perspective. USEPA expressed several concerns related to water quality and encouraged various measures to protect or improve water quality. USEPA stated that the proposed industrial use of Parcel 10 is not adequately described and was unclear of the need for the allocation of this particular waterfront parcel. Thus, USEPA recommended additional disclosure and evaluation of project impacts associated with the industrial development of Parcel 10. USEPA also requested additional clarification about future requests on the portion of Parcel 52 requested by BRMEMC. Clarification on the scope of environmental reviews of proposed future actions was requested. Although USEPA preferred adoption of Alternative B, it suggested that TVA develop an additional action alternative bracketed by Alternative B and Alternative C. USEPA rated the DEIS as an "EC-2" (i.e., Environmental Concern, additional information requested), based on concerns for potential environmental impacts from parcel reallocation under Alternative C.

The Atlanta office of the U.S. Fish and Wildlife Service (USFWS) stated that adoption of the No Action Alternative is not appropriate, and that Alternative B is the least environmentally damaging alternative. The USFWS was opposed to allocating Parcel 10 on Chatuge

Reservoir for industrial use because of unacceptable adverse effects on important wildlife habitat, riparian cover, and old-growth forest. The USFWS also opposed reallocating Chatuge Parcel 52 from its current use, citing loss of important riparian habitat and areas of mature hardwood forest. Allocation of Parcels 34 and 40 on Hiwassee for developed recreation was opposed due to the presence of other nearby facilities, important forested riparian areas, and rare aquatic species. USFWS did not oppose the allocation of Parcel 49 on Hiwassee for public recreation. USFWS recommended that TVA reconsider its Zone 7 allocation policy under Alternative A, B or C on all but extremely isolated or developed shoreline parcels on Blue Ridge, Chatuge, Hiwassee, Fontana, and Nottely reservoirs and encouraged TVA to balance the needs of adjacent private landowners and developers with the need for undeveloped shoreline in a manner that protects fish and wildlife habitats. USFWS has determined that adoption of the MRLMP would not likely have an adverse

effect on listed species and recommends that TVA adopt an alternative that has the least effects on migratory birds or their habitats.

The Cookeville, Tennessee, office of the U.S. Fish and Wildlife Service (USFWS) stated no objection to the selection of Alternative A as the preferred alternative. This office also recommended that the tailwater reaches below Apalachia Dam and below Ocoee #2 and #3 be designated for sensitive resource management (i.e., Zone 3) due to the presence of Ruth's golden aster, the tan riffleshell, and the Cumberland bean pearlymussel, should Alternative B be selected. USFWS also noted that the designation of parcels for development on Chatuge and Hiwassee Reservoirs under Alternative C would likely not have adverse effects on listed species in Tennessee.

The USFS expressed no particular concerns, but did suggest allocation modifications (i.e. allocation to Zone 6) to TVA parcels adjacent to National Forest lands on Fontana Reservoir, Chatuge Reservoir, and the Hiwassee River.

The Tennessee Department of Transportation replied that the project would not impact any program or highway project in Tennessee.

The Tennessee Wildlife Resources Agency stated a preference for Alternative B because the other alternatives would divert more land away from dispersed recreational use to developed recreation. The agency also noted that adoption of Alternative C would pose more potential effects to plant and wildlife communities.

Following review of the DEIS, the Tennessee Historical Commission determined that the project may adversely affect properties that are eligible for listing in the NRHP and recommended that TVA begin immediate consultation.

The Georgia Department of Natural Resources, Wildlife Resources Division, stated a preference for keeping lands zoned as Natural Resource Conservation Areas. The department did not support the allocation of Parcel 10 on Chatuge Reservoir for industrial use because it would be detrimental to local natural resources. The department also favors protecting shorelines with vegetation, especially forest, to protect wildlife habitat and water quality. The department did not support the allocation of Chatuge Parcel 77 for developed recreation due to the potential for loss of forest cover along the shoreline, the increase in impervious surface area on the site, and nighttime lighting.

The North Carolina Department of Transportation expressed concern that the EIS did not explain how proposed changes in parcel allocation might affect the department's ability to implement improvements to the North Carolina transportation system.

North Carolina Department of Environment and Natural Resources stated a preference for planning under Alternative B or C as opposed to the continued use of the Forecast System. The department noted the presence of several rare or listed aquatic species near Parcels 34 and 49 on Hiwassee Reservoir and recommended the use of strict erosion and sediment control measures during construction of recreational facilities.

## **1.7 Necessary Federal Permits, Licenses, and Consultations**

No federal permits are required to develop or implement the MRLMP. 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 site-specific impacts and the need for permits or mitigation.

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