

SUMMARY

PURPOSE OF AND NEED FOR ACTION

The Tennessee Valley Authority (TVA) manages 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. As part of the implementation of these goals, TVA develops comprehensive plans for the management of lands associated with its reservoir projects. TVA is developing the *Mountain Reservoirs Land Management Plan (MRLMP)* to guide the management of its lands on the following reservoirs: Chatuge, Hiwassee, Blue Ridge, Nottely, Ocoees 1, 2, and 3, Apalachia, and Fontana. All public lands under TVA management on these nine reservoirs, a total of approximately 6,220 acres, are included in this planning process. About three-fourths of this land area was previously planned under the Forecast System adopted in the 1960s. The remaining lands have never been planned.

TVA has prepared this environmental impact statement (EIS) to assess the impacts of implementing the MRLMP. Alternative approaches to allocating the TVA lands to various land use categories are analyzed in this EIS. Throughout the planning process, TVA has sought public input to identify public use patterns, define alternative uses, and define issues and concerns associated with the TVA lands. These topics are addressed in the development and analysis of the various alternatives and include concerns such as the conservation of natural resources and enhancement of recreation opportunities.

ALTERNATIVES INCLUDING THE PROPOSED ACTION

TVA has identified the following four alternatives for analysis and comparison in this EIS:

1. The No Action/Forecast System Alternative (Alternative A), under which TVA would continue to use the existing Forecast System to manage 4,611 acres of its mountain reservoir lands
2. The Proposed Land Use Plan Alternative (Alternative B), under which TVA would allocate its reservoir lands to facilitate their management and to be more consistent with their existing uses
3. The Proposed Modified Land Use Plan Alternative (Alternative C), which differs from Alternative B by including consideration of some of the land use requests submitted to TVA during the public scoping process
4. The Blended Alternative (Alternative D), which was developed in response to public input on the draft EIS and additional site suitability considerations. This alternative is a combination of Alternatives B and C.

Under the three action alternatives, i.e., Alternatives B, C, and D, TVA would allocate each parcel to one of six land use zones. A seventh zone, (Zone 1) is used to designate non-TVA shoreline. Allocations are not made to Zone 1. Under the No Action Alternative (Alternative A), these allocations would be equivalent to the existing Forecast System designation for each parcel. Under all alternatives, a parcel's allocation would guide how that parcel would be used or managed in the future. Specifically, the allocation for a parcel would determine the appropriateness of proposals for land use or management on that

parcel, including requests from outside TVA. Land use proposals inconsistent with the allocation of a parcel would be inappropriate and would not merit further consideration by TVA.

Under each of the alternatives, TVA would conduct a site-specific environmental review of proposed development or activity on TVA-managed shoreline property, provided the proposed action is consistent with the parcel allocation. This environmental review would be used to determine the significance of potential environmental effects of the actions. Such environmental reviews would be completed prior to the approval or denial of any proposed development or activity on public land managed by TVA.

No Action/Forecast System Alternative (Alternative A) - Under Alternative A, TVA would continue to use the Forecast System designations established by TVA in 1965 and applied to 4,611 acres (approximately 74 percent) of the mountain reservoir lands. Before 1979, when TVA began the comprehensive planning of its reservoir lands in a public forum, the Forecast System was used to guide land use decisions on most TVA reservoir lands. Under Alternative A, the approximately 1,630 acres of TVA mountain reservoirs lands unplanned under the Forecast System, including all TVA lands on Fontana Reservoir, would continue to be managed according to existing land use agreements and TVA's Shoreline Management Policy and Land Policy. However, the unplanned parcels are not allocated to current land use zones; therefore, complete alignment with existing policies would not occur.

Proposed Land Use Plan Alternative (Alternative B) - TVA's recent comprehensive reservoir land planning efforts allocate land to the following seven land use zones: Non-TVA Shoreland (Zone 1), Project Operations (Zone 2), Sensitive Resource Management (Zone 3), Natural Resource Conservation (Zone 4), Industrial (Zone 5), Developed Recreation (Zone 6), and Shoreline Access (Zone 7). Under Alternative B, TVA would adopt a new land management plan based on the current reservoir land planning process and zone allocation definitions to guide land use decisions over the next decade. Implementation of Alternative B would involve the lands previously planned under the Forecast System as well as the remaining TVA lands not previously planned. The allocations for the 230 previously unplanned parcels would reflect existing land uses. The vast majority of these parcels are committed due to land use agreements or deeded rights, and therefore, they are not subject to potential changes in land use.

Proposed Modified Land Use Plan Alternative (Alternative C) - The allocations under Alternative C are the same as those under Alternative B for 354 (of 360) parcels containing approximately 6,115 (of 6,220) acres. Alternative C differs from Alternative B in that additional lands would be allocated for Developed Recreation (Zone 6) and Industrial (Zone 5) uses on Chatuge and Hiwassee reservoirs under Alternative C. These allocations, developed in response to proposals received during the scoping process, affect 101.6 acres on four parcels on Chatuge Reservoir and 4.0 acres on two parcels on Hiwassee Reservoir. The four parcels on Chatuge (i.e., Parcels 10, 52, 52a, and 77) are allocated under Alternative B to Zone 4 (Natural Resource Conservation). Under Alternative C, the 27.2-acre Parcel 10 would be allocated to Zone 5 (Industrial), while Parcel 52 (6.1 acres), 52a (1.9 acres), and Parcel 77 (66.4 acres) would be allocated to Zone 6 (Developed Recreation). On Hiwassee Reservoir, Parcel 34 (2.4 acres) and Parcel 49 (1.6 acres), which are both allocated under Alternative B to Zone 4, would be allocated for Developed Recreation (Zone 6). The Alternative C allocations are the same as the Alternative B

allocations for shoreline parcels on Blue Ridge, Nottely, the Ocoees, Apalachia, and Fontana reservoirs.

Blended Alternative (Alternative D) - As the name implies, allocations under this alternative are a combination those under Alternatives B and C. Under this alternative, there would be no parcels allocated for industrial use (Zone 5). Parcels 10, 52a, and 77 on Chatuge Reservoir would be allocated to Zone 4, which is consistent with their current use and their allocation under Alternative B. However, Chatuge Parcel 52 would be allocated to Zone 6 for developed recreational use, as it would be under Alternative C. On Hiwassee Reservoir, Parcel 34 would be allocated to Zone 4, which is consistent with its current use, but Parcel 49 would be allocated to Zone 6, as it is under Alternative C. The allocation of all other parcels under the Blended Alternative would be the same as under Alternative B.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Land Use

Affected Environment - Existing land use patterns along the shoreline and back-lying land have been influenced by whether TVA acquired the land and whether TVA has subsequently sold, transferred, or retained the land. TVA originally acquired 104,837 acres of land above the full summer pool elevation on the nine mountain reservoirs. About 91 percent (95,482 acres) of this land has been transferred to other federal and state agencies for public use. Approximately 3,133 acres (3 percent) of the originally acquired land was sold for private uses. Approximately 20 acres were acquired for power assets (substations, etc.) subsequent to original project land acquisition and are not included in the acquisition total.

TVA retained a total 6,220 acres on the nine mountain reservoirs. Many of the parcels have existing land use agreements that commit them to a specific use. The majority of the land use agreements are for utilities, highways, and other public infrastructure. The acreage subject to these agreements is relatively small due to the narrow linear nature of many of the uses.

Most of the residential development along the reservoirs occurs on land TVA sold or on private land where TVA only acquired the right to flood to a certain elevation. The proportion of shoreline available for residential development varies greatly by reservoir and ranges from 57 percent on Chatuge Reservoir to none on Apalachia Reservoir. The proportion of this residential shore land that has already been developed also varies greatly and ranges from 44 percent on Nottely Reservoir to all of the available residential shore lands on the Ocoees, Hiwassee, and Apalachia. TVA's Land Policy does not allow additional land to be provided for residential use, and therefore, the amount of shoreline available for residential use will not change because of the land planning process.

Prime farmland totaling approximately six acres occurs on Parcel 52 on Chatuge Reservoir. A change in use for this acreage is proposed under Alternative C.

Environmental Consequences - Under all of the alternatives, no significant direct or indirect impacts to land use are anticipated. The amount of shoreline available for private residential water use facility development is based primarily on deeded access rights and land ownership patterns and would not change under any of the alternatives. The existing trends of increasing residential development in areas of the reservoir currently available for

development are more related to broad socioeconomic trends and would be unaffected by selection of any of the land plan alternatives.

Adoption of either Alternative A or B would not result in any parcels changing from an undeveloped land use to a developed use. Unplanned parcels are primarily committed to the existing use by transfer agreement covenants, deeded rights, or TVA land use agreements, and therefore, the land use of the unplanned committed parcels also would not change.

Implementation of Alternative C would result in changing five parcels (105.4 acres) from an undeveloped land use to a developed land use; however, at a minimum, only localized changes to land use patterns would result. When compared to the total scope of the MRLMP, these potential land use changes would be insignificant. Under Alternative C, impacts to prime farmlands are expected to be minimal due to surrounding land usage, urban buildup, and compatibility with existing agricultural use in the area.

Adoption and implementation of Alternative D would result in the change in land use of the 6.1-acre Parcel 52 on Chatuge Reservoir and the 1.6-acre Parcel 49 on Hiwassee. Both parcels are currently being used for natural resource conservation, and both would be allocated to Zone 6 for possible use for developed recreation under Alternative D. Due to the localized nature of the changes and the small amount of acreage involved, potential changes in land use would be minor and insignificant.

Recreation

Affected Environment - A recreation analysis was completed with the two primary objectives being to (1) identify recreation needs on the nine mountain reservoirs and (2) identify specific parcels on the mountain reservoirs suitable for and capable of meeting unmet recreation needs. High-priority recreation needs were determined by analyzing the National Survey on Recreation and the Environment (NSRE 1999-2005) demand data and the comments received from the public during the scoping period. This information was then compared to existing recreation facilities on each reservoir. The comparison between recreation needs and existing facilities determined that most recreational needs could be met with expansion of facilities in existing developed recreation areas or enhancements to areas being currently utilized for dispersed recreation. Development of new facilities to support unmet needs identified on some reservoirs for stream access, reservoir access, and trails would be accomplished through partnerships with other public agencies or entities to meet projected recreation demands.

Shoreline development and boating density were analyzed to determine how trends in shoreline development might affect future boating density and thus capacity issues. No areas of concern regarding boating density were identified.

Environmental Consequences - Under Alternative A, potential environmental impacts to recreation would be insignificant, as there would be no change in the use of lands presently used for recreation. Any future development of new recreation facilities would be limited to lands already forecast for this use.

Under Alternative B, all parcels that are currently committed to a Developed Recreation use would be allocated to Zone 6. These commitments include transfer agreement covenants and TVA licenses, leases, and easements. The parcels allocated to Zone 6 would include those previously allocated under Alternative A to Public Recreation as well as those parcels

allocated to Reservoir Operations that have been utilized for Developed Recreation. In addition, the unplanned parcels under Alternative A that are committed to a Developed Recreation use would be allocated to Zone 6. Any future demand for developed recreational needs would be met by expansion of recreation facilities in these existing areas, and these areas are the same under Alternative B as under Alternative A. Therefore, the potential environmental impacts would be the same. Potential impacts under Alternative B to dispersed recreation are expected to be insignificant.

Potential impacts to recreation under Alternative C would be identical to those expected under Alternative B with the exception of six parcels, four of which would be allocated for Developed Recreation (two additional parcels on Hiwassee Reservoir and two additional parcels on Chatuge Reservoir). Allocation of these parcels to Zone 6 would shift the existing dispersed recreational use to recreational activities on these parcels associated with developed recreational facilities, which could result in the elimination of dispersed recreational activities. However, these additional facilities would provide greater recreational opportunity on Chatuge and Hiwassee reservoirs. Under Alternative C, a fifth parcel (Parcel 10 on Chatuge Reservoir) would be allocated to Zone 5 (Industrial). The dispersed recreation opportunities currently available on the parcel could continue as an interim use; however, industrial development on Parcel 10 would likely eliminate those opportunities. Elimination of the dispersed recreational opportunity would be regionally insignificant due to the availability of other forest areas for similar activities.

Potential recreation-related effects under Alternative D would be similar to those anticipated under Alternative B. As with Alternative B, dispersed recreation would remain available on three parcels (Chatuge Parcels 10 and 77 and Hiwassee Parcel 34). Dispersed recreation would continue to occur on Chatuge Parcel 52 and Hiwassee Parcel 49 until new proposals for developed recreation are reviewed and approved by TVA and facilities are subsequently constructed. Recreational opportunities would be enhanced if developed recreational facilities were placed on Parcels 52 and 49.

Terrestrial Ecology

Affected Environment - The mountain reservoirs are in a heavily forested, biologically diverse region, and the major vegetative classes on and around the mountain reservoir lands are evergreen forest, evergreen-deciduous forest, deciduous forest, shrub lands, and herbaceous vegetation. A few areas of old-growth occur on the lands being planned, and invasive plants are present on several parcels.

Several forest types occur on TVA lands although the diversity of forest types on these lands is somewhat limited due to the relatively low elevation of the TVA lands. Many of the TVA lands consist of narrow strips or small blocks of forest, and many of the narrow strips are adjacent to larger contiguous blocks of forest owned by other federal and state agencies. These large forest blocks provide important habitat for area-sensitive wildlife species that favor interior woodland habitats.

Pasturelands and other early successional habitats are common around some reservoirs, notably Nottely and Chatuge reservoirs. All of the mountain reservoirs provide open water habitats and associated riparian zones that are used by a variety of wildlife. This open water habitat, however, is very limited on several of the reservoirs especially during the winter, and consequently, waterfowl numbers are relatively low. Shorebird use of the mountain reservoirs is limited, as most reservoirs have steep, rocky banks that provide few mud flat foraging areas.

Environmental Consequences - Under Alternatives A and B, there would be minor changes in the current land uses; thus, there would be insignificant effects on plant and wildlife communities. Without widespread action, invasive species would continue to proliferate, which would result in a decrease in forest productivity, forest use, and management activities, as well as the degradation of plant diversity and wildlife habitat.

Under Alternative C, the development of the five parcels allocated to industrial and developed recreational uses would affect plant and wildlife communities. These impacts would be minor on four of the tracts. The development of Parcel 10 on Chatuge Reservoir, however, would likely eliminate the old-growth forest, a rare community type and high-quality habitat for wildlife.

Under Alternative D, land use on Chatuge Parcel 52 and Hiwassee Parcel 49, containing a total of 7.7 acres, could change from its current status (Natural Resource Conservation) to developed recreation. Old-growth forest on Parcel 10 would not be disturbed, as this parcel would retain its current natural resource conservation allocation. Because of the small amount of acreage involved, potential changes in the local plant and wildlife communities are expected to be minor and insignificant.

Endangered and Threatened Species

Affected Environment - Nineteen species listed as endangered or threatened under the *Endangered Species Act* and three candidate species for listing have been reported from the counties encompassing the nine mountain reservoirs. Fourteen of these federally listed or candidate species occur on or in the immediate vicinity of mountain reservoir lands. These listed species include five plants, one mammal, one bird, two fish, one land snail, and four mussels. Critical habitat for one threatened fish species, the spotfin chub, has been designated in the vicinity of Fontana Reservoir. Several additional species listed as endangered, threatened, or of other conservation concern by the States of Georgia, North Carolina, and/or Tennessee occur on or near mountain reservoir lands.

Parcel 10 on Chatuge Reservoir contains a population of American columbo, a North Carolina state rare plant species, and Parcel 77 on Chatuge Reservoir has a population of butternut and a population of pink lady's slipper.

Environmental Consequences - Under Alternatives A and B, there would be no immediate changes in land use. Therefore, adoption of either of these alternatives would not result in a significant cumulative loss of protected terrestrial animal or plant species or their habitat or cumulative impacts to any listed aquatic animal species.

Under Alternative C, there would be changes in land use on five parcels. Most of these parcels have scant suitable habitat for protected species. Thus, adoption of this alternative would not result in cumulative impacts to protected terrestrial plant or animal species or their habitats. Parcel 10 on Chatuge Reservoir contains suitable habitat for Indiana bats and bald eagles, which would be impacted by industrial development on this parcel. Under Alternative C, no impacts to aquatic animal species are expected to occur.

Under Alternative D, the 6.1-acre Parcel 52 on Chatuge Reservoir and the 1.6-acre Parcel 49 on Hiwassee Reservoir would be allocated to Zone 6. Possible future recreation development on these two parcels is not expected to adversely affect any endangered or threatened plants or any protected terrestrial or aquatic animals. On the remainder of the

reservoirs, any potential effects to endangered and threatened species would be similar to those expected under Alternative B.

Wetlands

Affected Environment - Wetlands on and near the mountain reservoirs are primarily riverine/floodplain forests located in the floodplains of rivers and streams and small (typically less than 0.10 acre) areas of emergent/scrub-shrub wetlands along reservoir shorelines. Emergent herbaceous wetlands and scrub-shrub wetlands are uncommon on the mountain reservoirs. Isolated wetlands such as bogs, seeps, and fens are relatively rare on the mountain reservoir lands.

Environmental Consequences - Under all of the alternatives, TVA would continue to protect wetlands in accordance with the requirements of the *Clean Water Act* and Executive Order (EO) 11990 on wetlands. Because there would be essentially no change in the current land use under Alternative A or B, no effects to wetlands or their functions are expected under either of these two alternatives. With the exception of narrow fringe riparian emergent wetlands on Chatuge Parcel 52, no wetlands occur on the six tracts that would be allocated to developed uses under Alternative C. No effects to any fringe shoreline wetlands are likely to occur on the two parcels (Parcel 52 on Chatuge Reservoir and Hiwassee Parcel 49) that would be allocated for developed recreation under Alternative D. Thus, direct, indirect, or cumulative impacts to wetlands are not expected under any of the alternatives. Impacts to wetlands would be avoided under all the alternatives.

Floodplains

Affected Environment - As a federal agency, TVA is subject to the requirements of EO 11988 (Floodplain Management). The EO is not intended to prohibit floodplain development in all cases but rather to create a consistent government policy against such development under most circumstances. The EO requires that agencies avoid the 100-year floodplain unless there is no practicable alternative.

Environmental Consequences - Under all alternatives, the development and/or management of properties and evaluations of proposed actions would be done individually to ensure consistency with EO 11988. Potential development would generally consist of water use facilities and other repetitive actions in the floodplain that would result in minor floodplain impacts. Under Alternatives A, C, and D, floodplain impacts would be somewhat greater than those expected under Alternative B because more parcels of the available land on Chatuge and Hiwassee reservoirs would be allocated to zones allowing industrial and/or recreational development. Although there are impacts to floodplains of varying degrees under all alternatives, potential impacts to floodplain values would be insignificant.

Cultural Resources

Affected Environment - Several historic properties, including both archaeological sites and historic structures such as buildings and some of the dams, occur on or near mountain reservoir lands. Surveys conducted on or near reservoir lands have identified 602 archaeological sites. Archaeological surveys have been conducted on approximately one-quarter of the lands involved in this land planning process, and many of the reported archaeological sites have not been assessed for their eligibility for the National Register of Historic Places (NRHP).

Historic structures on or in the immediate vicinity of mountain reservoir lands that are listed in the NRHP include the Ocoee 1 hydroelectric station and the Ocoee 2 hydroelectric plant. Other dams and powerhouses are eligible for listing in the NRHP.

Environmental Consequences - Regardless of the alternative selected, TVA will continue the present case-by-case assessments of proposed land-disturbing actions such as shoreline stabilization, construction of water use facilities, or recreational development through phased identification and evaluation of historic properties. Archaeological resources identified within these areas would be avoided and protected whenever possible. If avoidance were not possible, then proper procedures would be implemented in the mitigation of the historic property. Under any alternative, the cumulative effects to significant archaeological resources would be minimized by avoidance and protection of the resource or by mitigation through data recovery excavations pursuant to 36 Code of Federal Regulations (CFR) Part 800.

Managed Areas and Ecologically Significant Sites

Affected Environment - A large portion of the TVA mountain reservoir lands adjoin managed areas such as national forests, state parks, and the Great Smoky Mountains National Park. The only TVA land formally designated as a managed area is the Raven Rock Small Wild Area on the Hiwassee Dam Reservation.

Environmental Consequences - No adverse effects to managed areas or ecologically significant sites would result from adoption of Alternative A or B because current land uses would not change. Under Alternatives C and D, because the proposed land use changes would not deviate substantially from current land uses, continued benefits to natural areas in the vicinity of these reservoirs are anticipated. No TVA natural areas occur on or adjacent to the parcels that would be subject to different allocations under Alternative C or D. Thus, no TVA natural areas would be affected under Alternative C or D.

Visual Resources

Affected Environment - All of the reservoir lands have distinctive scenic attractiveness and high scenic integrity. There are a variety of landforms, including rock, mixed vegetation, and other features that contrast with the reservoirs. Reservoir lands appear intact and unaltered, with minor deviations along the developed parcels. Most views from the water have high scenic visibility and are in the foreground and middle ground of contrasting elements, such as scenic bluffs along the shoreline and prominent peaks at greater distances.

Environmental Consequences - Under Alternative A or B, there would be no major changes in the land use or management of the subject reservoir properties. Thus, the adoption of Alternative A or B would not affect visual resources adversely, as there would be no noticeable change in the visual character of these TVA lands. Under Alternative A, the potential development of the two parcels (Parcels 35 and 36) on Hiwassee Reservoir currently allocated for Industrial use could affect visual resources. Although overall impacts to visual quality would likely be insignificant, under Alternative C or Alternative D, development on Chatuge Reservoir would result in impacts to the visual landscape character. For these parcels and land within their view shed, scenic value class and aesthetic sense of place would be reduced. However, scenic integrity would remain moderate or higher for the entire reservoir. The developments proposed on Hiwassee Reservoir are unlikely to cause adverse visual impacts.

Water Quality and Aquatic Ecology

Affected Environment - TVA has monitored the ecological health of the mountain reservoirs on an annual or biennial basis since the early 1990s. The ecological health scoring system is based on five indicators: dissolved oxygen, chlorophyll, sediment quality, benthic macroinvertebrates, and fish assemblage. The overall reservoir ecological health ratings for the mountain reservoirs are as follows: “poor” for Chatuge and Nottely reservoirs, “fair” for Hiwassee, Ocoee 1, and Fontana reservoirs, “fair-good” for Apalachia Reservoir, and “good” for Blue Ridge Reservoir. TVA does not routinely sample the reservoir ecological health of Ocoee 2 or Ocoee 3 reservoirs.

Environmental Consequences - There is a small amount of TVA land on the mountain reservoirs compared to the overall area land base. Under any of the alternatives, various state and federal environmental regulations would apply, and the use of identified impact reduction methods, including best management practices, would be applied. Thus, development opportunities on TVA lands would have insignificant direct, indirect, and cumulative impacts to water quality and aquatic ecology. Cumulative impacts to water quality and aquatic life associated with the implementation of Alternative C or D are anticipated to be insignificant, and the overall reservoir ecological health of Chatuge and Hiwassee reservoirs would most likely not change if either of these alternatives were adopted.

Air Quality and Noise

Affected Environment - All of the counties containing the mountain reservoirs are currently in attainment of the National Ambient Air Quality Standards except for the portion of Swain County, North Carolina, that is in the Great Smoky Mountains National Park, which is in nonattainment of the 8-hour ozone standard.

Although there are many sources of noise, the greatest potential for noise impacts comes from industrial development, which could occur on Parcel 10 on Chatuge Reservoir under Alternative C. Likewise, Parcels 35 and 36 on Hiwassee Reservoir would be available for industrial use under Alternative A. However, development on either of the two parcels on Hiwassee Reservoir is unlikely due to local topography. Potential noise impacts due to industrial development would largely depend on the type of industry recruited. Noise could be generated by activities on those parcels allocated for developed recreation (Parcels 52 and 77 on Chatuge Reservoir and Parcels 34 and 49 on Hiwassee). Because of the size of Parcel 77 and the likelihood that more extensive recreational development could occur on it, activities on this parcel would be more likely to generate noise than actions on the other parcels. However, the potential noise effects from recreational development and use would depend on the type of facilities available, hours of operation, and noise attenuating measures implemented in the development of these parcels.

Environmental Consequences - Because the current uses of the great majority of the TVA lands on the mountain reservoirs would not change under any of the alternatives, potential impacts to air quality and potential noise-related effects would likely be minor. For Blue Ridge, Nottely, Fontana, Apalachia, and the Ocoees reservoirs, there is little to no difference in anticipated air quality and noise impacts among the various alternatives. There is a somewhat greater potential for air quality and localized noise-related impacts due to the land allocations for Industrial use on Hiwassee and Chatuge reservoirs under Alternative A and Alternative C.

Socioeconomics

Affected Environment - The primary drivers of the economy and population growth in the area are the housing and tourism sectors, which are dependent on the natural scenery associated with the reservoir and adjacent lands. Incomes tend to be lower and poverty rates higher than national averages because of fewer high-wage jobs such as manufacturing and professional services. Unemployment rates tend to be somewhat higher than national averages because of the decline of manufacturing jobs in recent years.

The counties are very rural, with low population densities and only a few small towns. Most of the subject counties have high percentages of land in governmental ownership, particularly for national and state forests and the Great Smoky Mountains National Park. Populations of most of the counties have grown rapidly in recent years, especially for those counties with good roads connecting them to the Atlanta metropolitan area. On the other hand, populations have actually decreased in some of the counties with the poorest access to Atlanta or other nearby large population centers and the most land in governmental ownership and thus least available for second-home development. Minority populations are much lower than national averages except for Swain County, North Carolina, where many members of the Eastern Band of Cherokee Indians live.

Environmental Consequences - Potential socioeconomic impacts under any of the alternatives are expected to be minor and insignificant. The overall TVA land base is small, and the existing uses of the majority of the TVA land would not change. With the possible exception of Parcels 35 and 36 on Hiwassee Reservoir, which would be allocated for industrial uses under Alternative A, the TVA parcels on all reservoirs would continue to be managed as they are now under Alternatives A and B.

Under Alternative C, the allocation of Parcel 10 on Chatuge Reservoir to Zone 5 could create the potential for new jobs in the area, which would be beneficial to the economy of the area. An additional benefit would be increased property taxes from private ownership of Parcel 10. However, depending on the type of industrial development, this could have some negative socioeconomic impacts by lowering the value of nearby property and interest in residential development of available nearby property, at least relative to other properties in the area. Upgrades to the existing infrastructure, e.g., roads, power, water, sewer service, etc., would be necessary should an industrial facility choose to locate on Parcel 10 on Chatuge Reservoir. The change of Parcels 52, 52a, and 77 on Chatuge Reservoir to Zone 6 could enhance the attractiveness of the community and indirectly contribute to further population and economic growth. However, as noted above, the reservoir and scenery are the main economic drivers in the area, and high-intensity developed recreational use on Parcels 52, 52a, and 77 could be incompatible with overall enjoyment of the reservoir and scenic quality. Although this is not expected to lower appraised property values, it could potentially affect the marketability of local residential properties and possibly reduce the interest in the residential development of available nearby property. Infrastructure improvements, especially upgrading Mull Road, would be required to accommodate a large-scale recreational development on Parcel 77.

Under Alternative C, the use of two parcels on Hiwassee Reservoir for developed recreation would enhance the attractiveness of the area, thus possibly indirectly contributing to further population and economic growth. Under Alternative C, the change of these parcels to developed recreation, which could include walking trails and public river access, would enhance the availability of parks in the area to all area residents, including low-income citizens.

Development of the 6.1-acre Parcel 52 on Chatuge Reservoir and the 1.6-acre Parcel 49 on Hiwassee for recreational uses under Alternative D could provide some economic benefit by increasing the attractiveness of the local area. However, the direct economic benefit would likely be small based on the limited size of these two parcels. Potential aesthetic concerns could possibly result in decreased marketability of residential property values near Parcel 52, depending on the nature of future recreational development on that parcel.

The proposed allocations under all of the alternatives are consistent with existing transportation easements and known upgrades. TVA would be willing to work with the various state transportation departments in the event future road upgrades could involve property managed by TVA. Thus, the ability of the respective state transportation departments to implement improvements to the local road systems would not be affected significantly under any of the alternatives.

PREFERRED ALTERNATIVE

The preferred alternative is Alternative D, the Blended Alternative.

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- o Blue Ridge Reservoir Land Management Plan, Nottely Reservoir Land Management Plan

- o Ocoee Projects Reservoir Land Management Plan, Apalachia Reservoir Land Management Plan

- o Fontana Reservoir Land Management Plan