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**DOUGLAS-NOLICHUCKY TRIBUTARY  
RESERVOIRS  
LAND MANAGEMENT PLAN AND  
ENVIRONMENTAL IMPACT STATEMENT**

**VOLUME III**

**Nolichucky Reservoir**

**PREPARED BY:**  
TENNESSEE VALLEY AUTHORITY

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For information, contact:

Tennessee Valley Authority  
Holston-Cherokee-Douglas Watershed Team  
3726 E. Morris Boulevard  
Morristown, Tennessee 37813  
Phone: (423) 585-2123  
Fax: (423) 585-2151

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## **1.0 INTRODUCTION**

The Nolichucky Reservoir Land Management Plan is a study of the Tennessee Valley Authority (TVA) managed public land surrounding Nolichucky Reservoir. It is one of two reservoir land management plans (RLMPs) associated with an environmental impact statement (EIS) for the Douglas-Nolichucky tributary reservoirs. The EIS, Volume I, contains information on the purpose of and need for action, the alternatives, the affected environment, and environmental consequences of TVA's proposed actions. In addition, the EIS contains a summary, a list of preparers, a list of those who received a copy of the EIS, supporting information, an index, and appendices.

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

### **1.1. Background**

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

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

TVA originally acquired a total of 3,757 acres of land above full summer pool for the Douglas and Nolichucky tributary reservoirs and associated hydroelectric generating facilities. Over the years, TVA has transferred some of this land to other public agencies, primarily the Tennessee Wildlife Resources Agency (TWRA). TVA presently manages a total of 3,191 acres of land on these reservoirs that is the subject of this Douglas and Nolichucky Tributary Reservoirs Land Management Plan (DNTRLMP).

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

## **1.2. Purpose**

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

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

TVA's integrated resource management approach focuses on balancing flood control, navigation, power generation, water quality, recreation, and land use needs to obtain the optimum benefit for the whole system. Land planning supports TVA's vision of generating prosperity in the Valley by addressing the goals of supporting a thriving river system and stimulating economic growth. To that end, the RLMP provides a framework for deciding the optimum use of TVA public land and promotes the efficient operation of the TVA reservoir system.

This RLMP will guide resource management and administration decisions on approximately 1,136 acres around Nolichucky Reservoir, which are publicly owned and managed by TVA. It identifies the most suitable uses for 39 parcels of TVA public land, providing areas for project operations, sensitive resource management, natural resource conservation,

industrial/commercial development, recreation, and shoreline access. The 1,136 acres of TVA public land accounts for approximately 17 miles of Nolichucky River shoreline.

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## 2.0 PLANNING PROCESS

Under the TVA Act of 1933, TVA is responsible for the control and use of the Tennessee River and its tributaries and the development and use of the resources in the Tennessee Valley. TVA has managed the public reservoir land under its stewardship to meet a wide range of regional and local resource development needs and to improve the quality of life, both within specific reservoir areas and throughout the Tennessee Valley. Reservoir properties, together with adjoining private lands, have been used for public parks, industrial development, commercial recreation, residential development, tourism development, and forest and wildlife management areas. Reservoir properties also meet a variety of other needs associated with local communities.

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

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

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

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

**Table 1. Land Use Zone Definitions**

Zone		Definition
1	<b>Non-TVA Shoreland</b>	<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"> <li>• <b>Flowage easement land</b>—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.</li> <li>• <b>Privately owned reservoir land</b>—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.</li> </ul>
2	<b>Project Operations</b>	<p>All TVA reservoir land currently used for TVA operations and public works projects, including:</p> <ul style="list-style-type: none"> <li>• <b>Land adjacent to established navigation operations</b>—Locks, lock operations and maintenance facilities, and the navigation work boat dock and bases.</li> <li>• <b>Land used for TVA power projects operations</b>—Generation facilities, switchyards, and transmission facilities and rights-of-way.</li> <li>• <b>Dam reservation land</b>—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.</li> <li>• <b>Navigation safety harbors/landings</b>—Areas used for tying off commercial barge tows and recreational boats during adverse weather conditions or equipment malfunctions.</li> <li>• <b>Navigation dayboards and beacons</b>—Areas with structures placed on the shoreline to facilitate navigation.</li> <li>• <b>Public works projects</b>—Includes public utility infrastructure, such as substations and rights-of-way for sewer lines, water lines, transmission lines, and major highway projects.</li> <li>• <b>Land planned for any of the above uses in the future.</b></li> </ul>
3	<b>Sensitive Resource Management</b>	<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>

Zone	Definition
	<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"> <li>• TVA-designated sites with potentially <b>significant archaeological resources</b>.</li> <li>• TVA public land with <b>sites/structures listed on or eligible for listing in the National Register of Historic Places</b>.</li> <li>• <b>Wetlands</b>—Aquatic bed, emergent, forested, and scrub-shrub wetlands as defined by TVA.</li> <li>• <b>TVA public land under easement, lease, or license to other agencies/individuals</b> for resource protection purposes.</li> <li>• <b>TVA public land fronting land owned by other agencies/individuals</b> for resource protection purposes.</li> <li>• <b>Habitat Protection Areas</b>—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.</li> <li>• <b>Ecological Study Areas</b>—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.</li> <li>• <b>Small Wild Areas</b>—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.</li> <li>• <b>River Corridor with sensitive resources</b>—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.</li> <li>• <b>Significant scenic areas</b>—Areas designated for visual protection because of their unique vistas or particularly scenic qualities.</li> <li>• <b>Champion tree site</b>—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.</li> <li>• <b>Other sensitive ecological areas</b>—Examples of these areas include heron rookeries, uncommon plant and animal communities, and unique cave or karst formations.</li> <li>• <b>Land planned for any of the above uses in the future.</b></li> </ul>

Zone		Definition
4	<b>Natural Resource Conservation</b>	<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"> <li>• <b>TVA public land under easement, lease, or license to other agencies</b> for wildlife or forest management purposes.</li> <li>• <b>TVA public land fronting land owned by other agencies</b> for wildlife or forest management purposes.</li> <li>• <b>TVA public land</b> managed for wildlife or forest management projects.</li> <li>• <b>Dispersed recreation areas</b> maintained for passive, dispersed recreation activities, such as hunting, hiking, bird watching, photography, primitive camping, bank fishing, and picnicking.</li> <li>• <b>Shoreline Conservation Areas</b>—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.</li> <li>• <b>Wildlife Observation Areas</b>—TVA Natural Areas with unique concentrations of easily observed wildlife that are managed as public wildlife observation areas.</li> <li>• <b>River Corridor without sensitive resources present</b>—A River Corridor is a linear green space along both stream banks of selected tributaries entering a reservoir managed for light boat access at specific sites, riverside trails, and interpretive activities. River Corridors will be included in Zone 4 unless sensitive resources are present (see Zone 3).</li> <li>• <b>Islands of 10 acres or less.</b></li> <li>• <b>Land planned for any of the above uses in the future.</b></li> </ul>
5	<b>Industrial</b>	<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: <b>(1) Access for water supply or structures associated with navigation such as barge terminals, mooring cells, etc., or (2) Land-based development potential.</b></p> <p>Areas included are:</p> <ul style="list-style-type: none"> <li>• <b>TVA public land under easement, lease, or license to other agencies/individuals</b> for purposes described above.</li> <li>• <b>TVA public land fronting land owned by other agencies/individuals</b> for industrial purposes described above.</li> <li>• <b>Land planned for any of the above uses in the future.</b></li> </ul> <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>

	Zone	Definition
		<ul style="list-style-type: none"> <li>• <b>Light Industrial</b>—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).</li> <li>• <b>Industrial Access</b>—Access to the waterfront by back-lying property owners across TVA property for water intakes, wastewater discharge, or conveyance of commodities (i.e., pipelines, rail, or road). Barge terminals are associated with industrial access corridors.</li> <li>• <b>Barge Terminal Sites</b>—Public or private facilities used for the transfer, loading, and unloading of commodities between barges and trucks, trains, storage areas, or industrial plants.</li> <li>• <b>Fleeting Areas</b>—Sites used by the towing industry to switch barges between tows or barge terminals that have both offshore and onshore facilities.</li> <li>• <b>Minor Commercial Landing</b>—A temporary or intermittent activity that takes place without permanent improvements to the property. These sites can be used for transferring pulpwood, sand, gravel, and other natural resource commodities between barges and trucks.</li> </ul>
6	Developed Recreation	<p>The designations below are based on levels of development and the facilities available to the public. Parcel descriptions should describe the primary type of use and identify access potential for infrastructure and potential for development:</p> <p><b>Water Access</b>—Small parcels of land, generally less than 10 acres, and typically shoreline areas conveyed to public agencies for public access.</p> <p><b>Public</b>—More recreational opportunities, some facilities, more than a parking lot and boat ramp. This includes areas conveyed for public recreation.</p> <p><b>Commercial</b>—Property suitable and capable to support commercial water-based operations. This includes areas conveyed for commercial recreation.</p> <p>Land managed for concentrated, active recreational activities that require capital improvement and maintenance, including:</p> <ul style="list-style-type: none"> <li>• <b><i>TVA public land under easement, lease, or license to other agencies/individuals</i></b> for recreational purposes.</li> <li>• <b><i>TVA public land fronting land owned by other agencies/individuals</i></b> for recreational purposes.</li> <li>• <b><i>TVA public land</i></b> developed for recreational purposes, such as campgrounds, day use areas, etc.</li> <li>• <b><i>Land planned for any of the above uses in the future.</i></b></li> </ul> <p>Types of development that can occur on this land are:</p> <ul style="list-style-type: none"> <li>• <b><i>Water access</i></b>, e.g., areas that tend to have limited development</li> </ul>

Zone		Definition
		<p>and can include a launching ramp, courtesy piers, canoe access, parking areas, picnic areas, trails, etc.</p> <ul style="list-style-type: none"> <li> <p><b>Public Recreation</b>—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> <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> </li> <li> <p><b>Commercial Recreation</b>—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.</p> </li> <li> <p><b>Greenways</b>—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.</p> </li> </ul>
7	<b>Shoreline Access</b>	<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>

Zone	Definition
	<ul style="list-style-type: none"> <li>• <b>Residential water use facilities</b>, e.g., docks, piers, launching ramps/driveways, marine railways, boathouses, enclosed storage space, and nonpotable water intakes.</li> <li>• <b>Shoreline access corridors</b>, e.g., pathways, wooden steps, walkways, or mulched paths that can include portable picnic tables and utility lines.</li> <li>• <b>Shoreline stabilization</b>, e.g., bioengineering, riprap and gabions, and retaining walls.</li> <li>• <b>Shoreline vegetation management.</b></li> </ul>

## 2.1. Planning Goals

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

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

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

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

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

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

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

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

## 2.2. Allocation Process

Prior to allocating parcels, the TVA planning team reviewed the characteristics of each parcel (i.e., location and existing conditions). TVA also reviewed deeds of selected tracts previously sold to private entities to identify existing shoreline access rights. In addition, the planning team honored all existing commitments—that is, existing leases, licenses, and easements. No sensitive resources surveys were conducted on committed land. Field reviews for uncommitted parcels were determined based on data from the TVA Natural Heritage database. Land with identified sensitive resources was placed into the Sensitive

Resource Management Zone. The remaining parcels were allocated based on reservoir planning objectives and public input. Decisions were made by consensus among the TVA planning team. During the allocation process, the planning team allocated the reservoir land to one of seven planning zones using the standard zone definitions for all TVA reservoirs (Table 1).

### **2.3. Committed Land**

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

Approximately 1,043 acres (92 percent) of the TVA land surrounding Nolichucky Reservoir are committed due to existing TVA or other public infrastructure projects. Agricultural licenses are not considered committed uses because they are an interim use of TVA land.

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

### **2.4. Uncommitted Land**

Approximately 93 acres (8 percent) of the TVA land surrounding Nolichucky Reservoir are uncommitted. Technical specialists collected field data on many uncommitted parcels to identify areas containing sensitive resources. Representatives from TVA organizations including power generation, land and water stewardship, recreation, and economic development met to allocate the parcels of TVA public land into the seven planning zones. Maps that identified the location of known and potential sensitive resources (e.g., cultural resources, wetlands, and threatened and endangered species) were used in determining the capability and suitability for potential uses of each parcel.

### **2.5. Property Administration**

In the Nolichucky RLMP, TVA identifies the suitable uses for each tract of TVA-managed land around the Nolichucky Reservoir, consistent with TVA policy and guidelines and applicable laws and regulations. As administrators of TVA land, the Holston-Cherokee-Douglas Watershed Team will use the Nolichucky RLMP (Volume III) and the DNTRLMP EIS (Volume I) along with TVA policies and guidelines, to manage resources and to respond to requests for the use of TVA land. All inquiries about, or requests for, the use of



TVA land on Nolichucky Reservoir should be made to TVA's Environmental Information Center at 1-800-882-5263.

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

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

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

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

## **2.6. Landrights**

During the scoping process for the DNTRLMP, proposed zoning allocations prompted landowners to question TVA's ownership of certain properties along the Nolichucky River. Private property owners believed TVA was planning privately owned land to which they had title and on which they had been paying taxes.

These private property owners expressed their objection through holding their own public meetings and initiating newspaper articles. This public outcry resulted in TVA holding individual meetings with approximately 20 stakeholders at locations convenient to them (Morristown and Greeneville). During those meetings, TVA committed to investigating the title issues raised by the property owners and communicating that information, along with the public documentation (deeds) TVA found to support its claims of ownership.

TVA acquired the vast majority of Nolichucky Reservoir property via a 1945 deed from East Tennessee Light and Power. This deed quitclaimed any interest the company had in these properties to TVA. The private property owners in these cases probably did not go back far enough in the chain of title to discover the 1945 TVA deed nor the previous deeds.

TVA's Realty Services researched title records to obtain information regarding ownership of properties. A survey would be necessary to mark where those properties are on the ground. Because of the nature of the descriptions in the deeds, it would be very expensive to survey these properties.

TVA received title objections from 13 private landowners. TVA's title work determined:

- TVA has full fee ownership of lands affecting six private landowners
- TVA has 2/3 of the ownership interest of lands affecting four private landowners
- TVA has either no interest or a very small interest of lands affecting three private landowners

Those parcels that TVA had no interest or a small interest in were not included in this land plan. A description of these parcels is provided at the end of the parcel descriptions.

### **3.0 NOLICHUCKY RESERVOIR REGIONAL OVERVIEW**

The Nolichucky Reservoir lies in the southeastern section of the Ridge and Valley ecoregion located in the upper Tennessee Valley. This area falls entirely within the Southern Appalachian region, which is characterized by rugged topography, abundant rainfall, and a multitude of native plant and animal species. The amount of public national forest and parkland in Southern Appalachia is greater than anywhere east of the Mississippi River.

#### **3.1. The Past**

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

Many early routes used by these indigenous peoples are still in use today and were originally based on natural migration patterns. By instinct, herds of buffalo would find their way through this territory by selecting the paths of least resistance. One of their routes was through the mountain gap between present-day Zionville, North Carolina, and Trade, Tennessee. These buffalo trails became roads followed by hunters, then pioneers, and later became routes for stagecoaches or railroads.

The first European visitors to the area followed these paths through the mountain gaps and along the waterways and settled near the rivers. During the 1760s, Daniel Boone came through the Cumberland Gap, followed the buffalo trail, and visited the Watauga area as a hunter. In 1768, William Bean settled at the mouth of Boone's Creek, to be followed by friends and others from Virginia and North Carolina. Still others came down the Holston Valley out of Virginia. Jacob Brown, accompanied by a few families from North Carolina, moved to a camp on the banks of the Nolichucky River around 1772, becoming the first settlers in the Nolichucky River Valley and in the area that would become Greene County. In 1772, these first white settlers formed the Watauga Association, believed to be the first independent governmental body constituted west of the mountains and by American-born

freeman. They acquired lands upon which they had settled from the Cherokees at the same time others from North Carolina acquired a vast domain of Cherokee territory at the famous treaty site at Sycamore Shoals on the Watauga.

The immigration of European white settlers into this frontier led to new territorial claims, conflicts, and adjustments. Disagreement and disputes over boundaries were inevitable, and skirmishes between the Cherokee and the new settlers occurred. Land claims were complicated by land grants from Virginia, claims for settling and clearing virgin acres, and Lord Granville's North Carolina grants. Both Virginia and North Carolina formed counties in an area they each claimed. Settlers also formed their own state, the State of Franklin, which existed between 1784 and 1788 with its capitol located at Jonesborough. However, in the midst of this political turmoil, settlement continued. In 1783, John Gilliland became the first white settler to claim land on the Pigeon River in what would be Cocke County; the first permanent settlement at Dandridge, in present-day Jefferson County, dates to 1783; and the first court of Sevier County, State of Franklin, was held at Samuel Newell's Station on Boyd's Creek in March 1785. In 1790, North Carolina ceded its western lands to the United States and these lands became the Southwest Territory, and later, in 1796, these lands became Tennessee, the 16th state to enter the Union.

The early 1800s saw growing settlements, the extension of commerce, and the development of transportation systems. In 1800, total population in the area of present-day Cocke, Greene, Jefferson, and Sevier counties was about 20,000. By 1830, the population of this area had almost doubled. Most settlers lived an agrarian lifestyle. For much of the period between 1800 and 1850, corn and livestock dominated agriculture in northeast Tennessee. The Elmwood Farm on the banks of the Nolichucky, established by Swiss immigrant Heinrich Ernst (Henry Earnest) in 1777, provides an excellent example of early 19th century agricultural production. Ernst grew wheat, corn, hay, and raised cattle, horses, and swine. Manufacturing at this time included cottage industries, mills, and ironworks. The most famous ironworks in the region was the Embree Ironworks established in the 1820s on the banks of the Nolichucky in nearby Washington County. There were smaller ironworks, such as the bloomery forge at Pigeon Forge and the Sweden Furnace. However, transportation problems stymied the export of local agricultural and industrial goods. Construction of railroads, however, bolstered these efforts. The East Tennessee and Virginia Railroad was chartered in 1848 in Greene County, Tennessee, and the railroad was completed in 1858, running between Knoxville and Bristol. Even with this railroad, though, local rivers remained the primary means of transportation until after the Civil War.

During the Civil War, East Tennessee was notable for mixed loyalties among its residents. It was not uncommon to have family members fighting on opposite sides of the conflict. While the area was not affected by major battles, there were numerous skirmishes. On Christmas Eve, 1863, at Dandridge, federal cavalry engaged Confederate soldiers from the command of General James Longstreet, who was moving to the Greeneville area for winter headquarters. Both Union and Confederate troops scavenged the area searching for food

and supplies. By winter's end, the landscape was devastated. Even the buildings of church-supported Carson-Newman College, established in 1851, were vandalized. In nearby Greene County, Confederate cavalry commander John Hunt Morgan was killed after he and his officers were surprised by a Union force from the command of Alvan C. Gillem.

After the war, reconstruction was difficult and progress slowed. During the latter part of the 19th century, the growth of railroads helped towns regain momentum and prosper. Cocke County saw the construction of the Cincinnati, Cumberland Gap, and Charleston Railroad. Because of this railroad, the county seat, Newport, moved to a new site overlooking the French Broad River. Another railroad, the Western North Carolina Railroad, was completed in 1882 and connected Cocke County to Knoxville and Asheville. The Knoxville, Sevierville and Eastern Railroad, built in Sevier County circa 1909, provided rail service from Sevierville to Knoxville.

The turn of the century saw increased progress, both in agricultural production and industry. The success of the region's agricultural production encouraged the establishment of canning factories, such as Stokely and Bush Brothers. Dairy farming gained in importance with the establishment of Pet Milk in Greeneville in 1928. Greeneville also developed into the region's most important tobacco market. Tobacco, along with beef cattle, and hay remain important products in the region. Logging flourished in parts of Sevier County between 1900 and 1930. The American Zinc Company discovered zinc ore deposits in 1914, and between 1950 and 1995, Jefferson County held the distinction of being the largest producer of zinc ore in the United States.

While there were a few industries in this four-county area, agriculture remained the primary way to earn a living. With the coming of the Great Depression, much of the Southeast, including this region, was in poor condition. In 1933, the annual per capita income in the Valley region was \$168, and the birthrate was one-third above the national average. Levels of literacy were low and the labor force largely unskilled. Valley residents suffered from malnutrition; malaria affected up to 30 percent of the population in some areas. More than half the region's three-million people lived on farms, and of these, half lived on farms they did not own. Soil-depleting row crops such as corn, cotton, and tobacco provided most of the farm income. Because these crops left the topsoil exposed to winter rains, about half the Valley's open land was severely eroded or abandoned. Only three farms in 100 had electricity. Unchecked fires burned 10 percent of the region's woodlands every year, and poor logging practices had nearly ruined forests that once offered endless miles of timber.

To address the problems in the southeastern part of the country, Congress created TVA in May 1933. TVA's mission was to improve the quality of life for the people of the Tennessee Valley by providing navigation, flood control, and cheap electricity. TVA was also mandated to provide for the national defense. The Great Smoky Mountains National Park, another federal entity, was established soon after in 1934.

At midcentury, the U.S. Census cited the following population data for the counties of the Douglas and Nolichucky reservoirs: Cocke, 22,991; Greene, 41,098; Jefferson, 19,667; and Sevier, 23,375.

The post-World War II economy of this four-county area rapidly changed from one largely based on agriculture to a more balanced combination of farming and industry. This change provided larger incomes for families of the area and made additional demands for trained personnel in business, industry, and agriculture. The wartime baby boom created need for more schools in the 1950s and 1960s. In the late 1970s, Interstate Highway construction improved access to the area, stimulating further growth and development. Homes “out in the county,” neighborhood shopping centers, fast food outlets, shopping plazas, office parks, and scattered residential subdivisions became more accessible and residents demanded even better roads.

The estimated 2008 population figures for this four-county region include Cocke, 35,688; Greene, 66,157; Jefferson, 51,074; and Sevier, 84,835. Because of the beauty of the region, the quality of life, and economic and recreational opportunities, this area continues to attract people.

### **3.2. The Project**

Nolichucky Dam is located about 7.5 miles south of Greeneville, in Greene County, Tennessee, on the Nolichucky River. The Nolichucky River, also known as Davy Crockett Lake, extends about 6 miles upstream. Nolichucky Dam is a concrete, gravity overflow structure, 482 feet long and (now) 94 feet high. The powerhouse measures 59 feet by 104 feet and is located on the right bank of the river just downstream from the intake structures in the dam.

The Tennessee Eastern Electric Company built the Nolichucky Dam and Powerhouse as a single-purpose hydropower production project. The original project, which began operation in 1913, included the dam with a concrete overflow spillway at a crest elevation of 1,210.4 feet and the powerhouse containing two generating units and spaces for two additional units. In 1923, the spillway section was raised by approximately 30 feet, 7-foot-high flashboards were installed (raising the pool level to elevation 1,247.9), and the other two generators were installed. Later, the height of the flashboards was reduced to 5 feet (adjusting the pool level to elevation 1,245.9). The four vertical Francis electric generators in the powerhouse have a total nameplate capacity of 10,640 kilowatts.

All of the Nolichucky Project facilities and rights were acquired by the East Tennessee Light and Power Company in 1929, and were acquired by TVA in 1945 (TVA 1972). When TVA acquired the Nolichucky Project, the purchase included Nolichucky Dam and Powerhouse, the switchyard, title to approximately 750 acres of land around and under the reservoir, and flowage easements over an additional 300 acres adjacent to the reservoir.

### **3.3. The Present Shoreland**

#### *3.3.1. Physiographic Overview*

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

Lands surrounding the Nolichucky Reservoir are within the Southern Limestone/Dolomite Valleys and the Rolling Hills subregion, which is a heterogeneous region, composed predominantly of limestone and cherty dolomite. Landforms are mostly undulating valleys and rounded ridges and hills, with many caves and springs. Soils vary in their productivity, and land cover includes oak-hickory and oak-pine forests, pasture, intensive agriculture, and urban and industrial (Griffith et al. 1998).

#### *3.3.2. Land Use and Prime Farmland*

The shoreland of Nolichucky Reservoir and river are composed of a variety of land uses, such as residential development, golf courses, TWRA wildlife management areas, and a few moderate-sized farms. Since 2005, new middle- and upper-income residential subdivisions have begun to replace farmland acreage and alter the scenic vistas of the Nolichucky River. Through a cooperative effort, TVA and TWRA provide opportunities for public river access.

TVA public land on the Nolichucky contains 193 acres of identified prime farmland. Prime farmland has the best combination of soil physical and chemical characteristics for producing food and fiber and is protected from conversion to industrial and nonagricultural uses by the United States Department of Agriculture (USDA). These 193 acres occur in Zone 2 (Project Operations), Zone 3 (Sensitive Resource Management), 4 (Natural Resource Conservation), Zone 5 (Industrial) and Zone 6 (Developed Recreation). The majority of this acreage occurs in Zones 3 and 4, which by their function, would have little or no soil disturbance and would have no adverse impacts to prime farmlands. Only about 17 acres occur in Zone 6, where major soil disturbances could occur in specific locations, if recreation facilities are constructed. Conversely, large areas could remain unaffected for more dispersed recreation management. Thirteen acres occur in Zone 2 where major soil disturbance could occur when TVA or other public facilities are constructed. However, once these facilities are established, they often remain intact for long periods, and large tracts of land remain without adverse impacts to prime farmlands. Less than 0.5 acre of prime farmland occurs in Zone 5. For more information on land use and prime farmland, see Volume I, Sections 3.2 and 3.4.

The Nolichucky River has approximately 36 miles of shoreline, of which, TVA owns about 17 miles of shoreline and has flowage rights over about 2 miles of shoreline, including sections of shoreline above and below the Nolichucky Dam. Of the 36 miles of total river

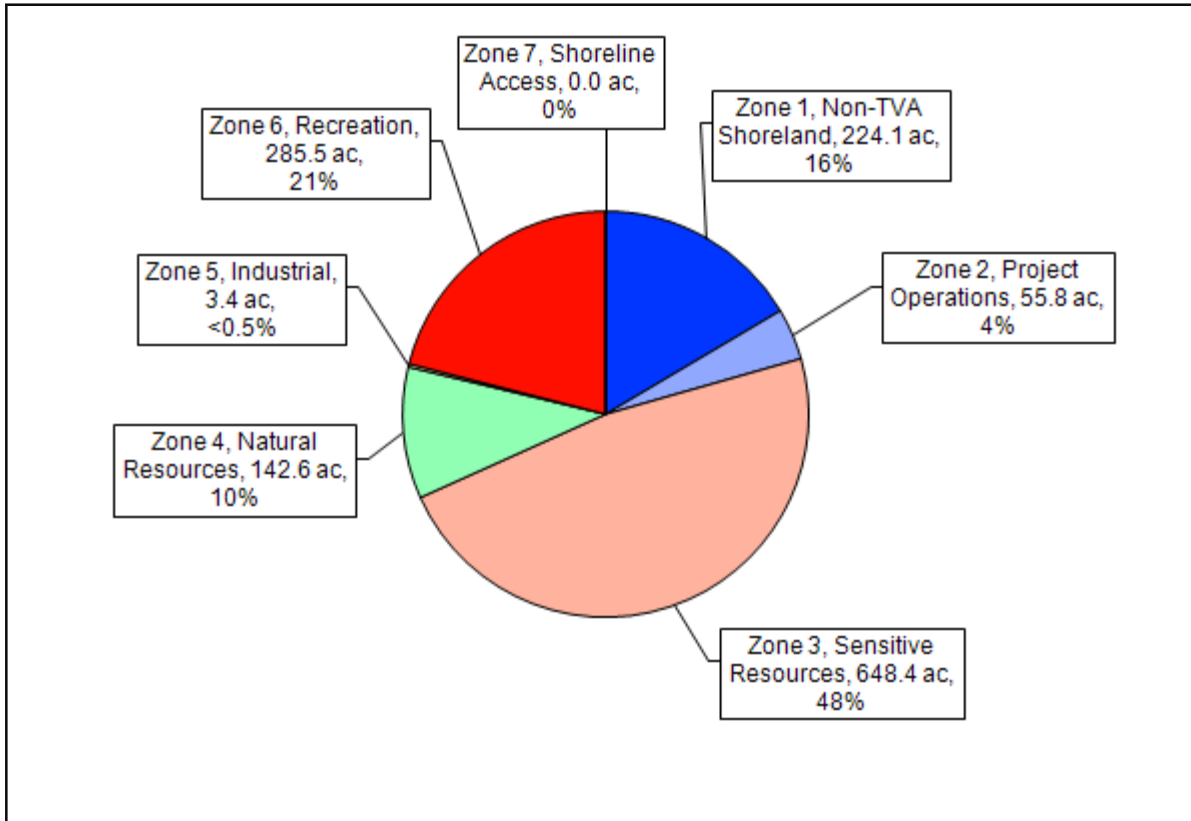
shoreline, 6 percent is privately owned flowage easement land, 3 percent is owned and managed by TVA, 42 percent is owned by TVA and jointly managed, and TVA-owned shoreline access shoreland does not exist. The remaining 48 percent of shoreline is private property. TVA owns approximately 1,136 acres of public land along the Nolichucky Reservoir and River, which total about 17 miles of shoreline. These 1,136 acres consists of property that are islands and those properties extending to a back-lying severance line that separates private property from TVA property.

Nolichucky Dam was built as a single-purpose power project that offers virtually no downstream flood control benefits; however, as a result of silt and sediment accumulations in the reservoir, flood elevations upstream from the dam are higher that what they would have been when TVA acquired the project in 1945. In 1972, power production stopped because of sediment-related problems. There is no summer pool elevation. The uncontrolled spillway crest is at elevation 1,240.9, and the volume of water going over the spillway determines the water elevation upstream of the spillway.

In the mid-1970s, TVA purchased fee title to approximately 330 acres of previous flood easement land and fee title to approximately 163 acres of additional land adjacent to the reservoir. By 1980, descriptions of the Nolichucky Project indicated that it included 901 acres in fee and approximately 178 acres of flowage easements (TVA 1980). Any structures placed within these flowage easements are subject to Section 26a of the TVA Act. Section 26a is designed to ensure that construction along the shoreline and in waters of the Tennessee River system and the TVA reservoirs does not adversely impact TVA's responsibility for managing the river system and for achieving "Unified Development and Regulation of the Tennessee River." For more information on TVA's SMP, see Section 2.4 of this RLMP.

Figure 1 represents the percent of land acreage of TVA public land on the Nolichucky Reservoir and River that are allocated to each land use zone. Sensitive Resource Management (Zone 3) comprised the largest portion, 48 percent, of all zones allocated for the TVA-owned lands on Nolichucky Reservoir and River. The second-largest zone allocation was for Developed Recreation (Zone 6), comprising 21 percent. Natural Resource Management (Zone 4) comprised 10 percent, whereas Project Operations (Zone 2) totaled 4 percent. The acreage allocated for Industrial (Zone 5) comprised less than 0.5 percent, and there were no shoreland allocations for TVA Shoreline Access (Zone 7). Privately owned, Non-TVA Shoreland (Zone 1) comprised 16 percent of the land acreage due to flowage easements; however, no new reservoir land was allocated to this zone.





**Figure 1. Percent of TVA Public Land Acreage Allocated by Zone on the Nolichucky Reservoir and River**

Zone 2 (Project Operations) is all TVA reservoir land currently used for TVA operations and public works projects. There are 55.8 acres allocated to Zone 2 (Project Operations). The largest parcel allocated as Zone 2 is the Nolichucky Dam Reservation, which contains the historic powerhouse and several buildings associated with the Cedar Creek Learning Center Environmental Education Program, which ceased in 2005. Currently, TWRA manages the dam reservation property as a wildlife refuge.

The Nolichucky Reservoir extends about 6 miles upstream and is known as Davy Crockett Lake. The commercial surface mining of mica and kaolin in the upper Nolichucky River watershed has affected the reservoir. Mining began during the 1870s in Yancey, Mitchell, and Avery counties, North Carolina. Unusually large amounts of sand and silt have existed in the river and reservoir upstream from Nolichucky Dam for many years. The 19,000 acre-feet of sediment estimated to be present in 1999 occupies about 90 percent of the reservoir volume below elevation 1,240.9 (the present pool level) and about 73 percent of the space in the valley below elevation 1,251.0 (the highest elevation included in the silt ranges). The water in Nolichucky Reservoir now occupies only about 10 percent of the reservoir volume, and any floodwater coming through this part of the river valley must go over or around all of the accumulated sediment.

Zone 3 (Sensitive Resource Management) lands are managed for protection and enhancement of sensitive resources. Sensitive resources, as defined by TVA, include resources protected by state or federal law or EO and other land features/natural resources TVA considers important to the area viewscape or natural environment. Most of the TVA public land on the Nolichucky River is allocated to Zone 3 due to high-quality wetland habitat, state- or federally listed species, or cultural and historic resources.

Zone 4 makes up the fourth-largest acreage of TVA fee-owned property. Zone 4 lands are 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.

The two largest parcels allocated as Zone 4 are Parcels 3 and 12. Parcel 3 is a marginal strip that fronts the River Trace Golf Course, and TWRA manages the land for wildlife habitat. Parcel 12 is a mixture of pasture, wooded bluffs, riparian vegetation, and scattered small pockets of high-quality wetlands. This parcel provides a diverse array of wildlife habitat; however, the quality is moderate due to cattle impacts and illegal dumping in places.

Lands allocated to Zone 5 (Industrial) are managed for economic development including businesses in distribution/processing/assembly and light manufacturing. Only Parcel 21 is allocated to Zone 5 on the Nolichucky River. Vulcan Construction Materials has a sand operation and a license for dredging purposes on this parcel.

Zone 6 (Developed Recreation) is the second-largest TVA fee-owned land use zone on the Nolichucky River. These TVA lands are lands that are developed for recreational purposes, such as public launching ramps or county parks. For example, Parcel 4 comprises 265 acres, which are under a permanent easement to Greene County and the City of Greeneville for the development and management of Kinser Park. Kinser Park has many recreation facilities including a campground, waterslide, swimming pool, golf course, picnic pavilions, ball fields, a walking trail, video arcade, and a boat launch with graveled parking area.

Lands allocated to Zone 7 (Shoreline Access) are TVA-owned lands where Section 26a applications and other land use approvals for private shoreline alterations are considered. Requests for private shoreline alterations are considered on parcels identified in this zone where such use was previously considered and where the proposed use would not conflict with the interests of the public. There are no lands allocated to Zone 7 on the Nolichucky Reservoir or River.

### **3.3.3. Recreation**

TVA's Recreation Vision seeks to enhance recreation opportunities and address unmet recreation needs while managing resources on Nolichucky Reservoir. Developed

recreation provides modern facilities and amenities on shoreline properties such as campgrounds, marinas, developed boat launches/ramps, and a myriad of day use facilities (picnic areas, swimming beaches, and fishing piers). These TVA lands are primarily allocated as Zone 6 (Developed Recreation) and as Zone 2 (Project Operations); because developed recreation facilities occur on dam reservations (see Table 1 for land use zone definitions).

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

Developed recreation facilities and amenities on Nolichucky Reservoir include one campground with day use facilities with four boat ramps, one picnic area, one golf course, and one swimming pool. Nolichucky Reservoir parcel descriptions (see Section 4.0) further describe the management entity and management prescription of said recreation facilities that occur on these lands managed either by TVA or under contractual agreement to another government entity or commercial operator. Table 2 itemizes developed recreation area lands that are managed by TVA or are under contractual agreement for recreation purposes, their managing agency/entity, and their locations by parcel number. Table 2 does not itemize privately owned/operated recreation facilities that are adjacent to Nolichucky Reservoir shoreline, because they are private and beyond the scope of this RLMP.

**Table 2. Developed Recreation Areas on TVA Lands on Nolichucky Reservoir**

Recreation Area	Managing Entity	Location
Tailwater Access	Tennessee Department of Transportation and TVA	Parcel 1
Kinser Park	Greene County and City of Greeneville	Parcel 4
Joe Johnson Ramp	TWRA	Parcel 7
Jones Bridge	TVA	Parcel 10
Kinser Bridge	TVA	Parcel 14
Highway 321	TVA	Parcel 33

Dispersed recreation areas on Nolichucky Reservoir have not been assessed. For more information on recreation, see Volume I, Section 3.3.

### **3.3.4. Terrestrial Ecology**

Several forest types are found on TVA-owned lands around Nolichucky Reservoir. Oak-hickory forest is the most abundant forest type in the eastern U.S. (Flather et al. 1999) and in the project area. Locally, mesic cove hardwood forests and forested wetlands are also common. The numerous bird species that nest in these forest types include wild turkey, whip-poor-will, ruby-throated hummingbird, red-eyed vireo, wood thrush, gray catbird, black-throated green warbler, black-and-white warbler, ovenbird, hooded warbler, and scarlet tanager. Riparian corridors within deciduous forests in the area provide nesting habitat for Acadian flycatcher, northern parula, and Louisiana waterthrush. Many additional bird species migrate through and winter in the area. Common mammal species of deciduous forests include black bear, white-tailed deer, eastern red bat, eastern chipmunk, eastern gray and southern flying squirrels, white-footed mice, woodland vole, short-tailed shrew, raccoon, opossum, striped skunk, gray fox, and bobcat.

Evergreen and evergreen/deciduous forests account for less than 10 percent of the land cover on Nolichucky Reservoir. These habitats provide nesting habitat for woodland birds including pine, yellow-throated warblers, and great crested flycatcher. Birds that winter in this forest type include red-breasted and white-breasted nuthatches and dark-eyed junco. Other animals that inhabit evergreen and evergreen/deciduous forests but are not restricted to them include white-tailed deer, wild turkey, black bear, eastern mole, southern bog lemming, northern fence lizard, and six-lined racerunner.

Herbaceous vegetation found in early successional habitats including old fields, agricultural lands, and transmission line rights-of-way accounts for almost 60 percent of the land surrounding the Nolichucky River. Early successional habitats provide habitat for a variety of bird species including eastern bluebird, northern mockingbird, eastern meadowlark, American crow, American kestrel, and red-tailed hawk. Amphibians and reptiles that use these habitats include spring peeper, chorus frog, and common garter snake.

Bird and mammal diversity greatly increases at edge habitats especially those between forested areas bordered by early successional habitats. Birds commonly found at these edge habitats include wild turkey, great crested flycatcher, white-eyed vireo, Carolina wren, blue-gray gnatcatcher, brown thrasher, blue-winged warbler, prairie warbler, common yellowthroat, yellow-breasted chat, indigo bunting, eastern towhee, field and song sparrow, and orchard oriole. Mammals expected at edges include eastern cottontail, woodchuck, eastern harvest mouse, red fox, coyote, long-tailed weasel, and striped skunk.

The character of the riparian corridor along the Nolichucky River differs from Douglas Reservoir. The landscape along the river includes areas ranging from steep, forested hillsides dominated by bluffs and rock outcrops to flat agricultural dominated areas more typical of the region. Most of the forest along the river includes a mixture of sycamore, large white oaks, tulip poplar, and sassafras. A mixture of evergreen forest occurs along more remote portions of the river. Large sandstone bluffs and rock outcrops are common

along the river, and a few small caves exist in these areas. These areas provide nesting habitat for a variety of songbirds, mammals, and reptiles. Large wetlands occur along the margins of the impounded section of the river; waterfowl, songbirds, several species of herons, and semiaquatic mammals commonly occur in these areas. Several island complexes also occur throughout the river, providing nesting habitat for belted kingfisher, great blue herons, Canada geese, and many species of songbirds. For more information on terrestrial ecology, see Volume I, Section 3.5.

### **3.3.5. *Invasive Nonnative Species***

Most of the planned TVA parcels around Nolichucky Reservoir have a few too many species of invasive nonnative species. EO 13112 defines an invasive nonnative species as any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem and whose introduction does or is likely to cause economic or environmental harm or harm to human health (USDA 2007). According to the Federal Noxious Weed List of 2006 (USDA 2007), there are no known federal noxious weeds reported from the lands around Nolichucky Reservoir. In addition, Southeastern Exotic Plant Pest Council (2006) provides a list of nonnative invasive species that could pose potential threats to native ecosystems and human health for each southeastern state. A review of the Tennessee Exotic Plant Pest Council (TN-EPPC) list (2001) revealed 15 (Rank I) species that pose a severe threat to native ecosystems observed around Nolichucky Reservoir. Plants listed as a severe threat include the following: autumn olive, bush honeysuckle, Chinese lespedeza, Chinese privet, English ivy, garlic mustard, Japanese honeysuckle, Japanese stilt grass, Johnson grass, kudzu, mimosa, multiflora rose, oriental bittersweet, princess tree, and tree-of-heaven. Other nonnative species such as crown vetch, tall fescue, shrubby bushclover, Queen Anne's lace, periwinkle, and small carpet grass were also encountered. All of these species have the potential to adversely impact the native plant communities because of their potential to spread rapidly and displace native vegetation. All of the Rank 1 (severe threat) species are considered high priority to TVA (James 2002).

### **3.3.6. *Endangered and Threatened Species***

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

**Table 3. Federally Listed and State-Listed Species Within and Near Nolichucky Reservoir**

Common Name	Scientific Name	Federal Status	State Status	State Rank
Appalachian cliff fern	<i>Woodsia appalachiana</i>	--	SPCO	S1/S2
Ash-leaved bush-pea	<i>Thermopsis fraxinifolia</i>	--	THR	S3
Branching whitlow-wort	<i>Draba ramosissima</i>	--	END	S1
Gray bat	<i>Myotis grisescens</i>	END	END	S2
Southern bog lemming	<i>Synaptomys cooperi</i>	NMGT	--	S4
Swainson's warbler	<i>Limnothlypis swainsonii</i>	-	NMGT	S3
Blue sucker	<i>Cycleptus elongates</i>	THR	--	S2
Chucky madtom	<i>Noturus crypticus</i>	END	CAND	S1
Highfin carpsucker	<i>Carpionodes velifer</i>	NMGT	--	S2/S3
Rosyface shiner	<i>Notropis rubellus</i>	TRKD	--	S2
Snail darter	<i>Percina tanasi</i>	THR	THR	S2/S3
Tangerine darter	<i>Percina aurantiaca</i>	NMGT	--	S3
Birdwing pearlymussel**	<i>Lemiox rimosus</i>	END	END	S1
Cumberlandian combshell#	<i>Epioblasma brevidens</i>	END	END	S1
Cumberland bean#	<i>Villosa trabalis</i>	END	END	S1
Fluted kidneyshell	<i>Ptychobranhus subtentum</i>	TRKD	CAND	S2/S3
Oyster mussel	<i>Epioblasma capsaeformis</i>	END	END	S1
Pink mucket#*	<i>Lampsilis abrupta</i>	END	END	S2
Rayed bean#	<i>Villosa fabalis</i>	TRKD	CAND	S1
Rough rabbitsfoot#	<i>Quadrula cylindrica strigillata</i>	END	END	S2
Slabside pearlymussel#	<i>Lexingtonia dolabelloides</i>	TRKD	CAND	S2
Spectaclecase	<i>Cumberlandia monodonta</i>	NOST	CAND	S2/S3
Tennessee clubshell#	<i>Pleurobema oviforme</i>	TRKD	--	S2/S3
Spiny riversnail#	<i>Io fluviialis</i>	NOST	--	S2

**Federal status abbreviations:** END = Endangered; THR = Threatened; PROT = Protected; NMGT = In need of management; NOST = No status; TRKD = Tracked

**State status abbreviations:** END = Endangered; THR = Threatened; SPCO = Special concern

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

# = Historical Record

\* = Occurs near a TVA tract

\*\* = Species is believed to occur in Nolichucky River

### 3.3.7. Plants

Field surveys and reviews of the TVA Natural Heritage database showed that no federally listed and three Tennessee state-listed species occur within 5 miles of Nolichucky Reservoir in Greene County, Tennessee. In addition, there are no federally listed species known to occur within Greene County. During field surveys, previously unreported state species were found on unplanned parcels on Nolichucky Reservoir. For more information on plant communities, see Volume I, Section 3.6.

### **3.3.8. Terrestrial Wildlife**

Field surveys and reviews of the TVA Natural Heritage database showed that one federally listed and two Tennessee state-listed species occur within and near the Nolichucky Reservoir. For more information on terrestrial wildlife, see Volume I, Section 3.6.

### **3.3.9. Aquatic Wildlife**

The TVA Natural Heritage database indicated that nine federally and state-listed aquatic animals are currently known from areas near TVA properties on Nolichucky Reservoir. There are preimpoundment (historical) records of several fish and mussels from the Nolichucky River. Where they occur, state and federal law now protects these species. For more information on aquatic wildlife, see Volume I, Section 3.6.

### **3.3.10. Wetlands**

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

Field surveys were conducted to determine types and locations of wetlands on uncommitted parcels on each reservoir. Wetlands on uncommitted parcels were also categorized by their functions, sensitivity to disturbance, rarity, and irreplaceability. Based on estimates from the U.S. Fish and Wildlife Service National Wetlands Inventory maps combined with data sets developed for TVA's 2004 *Reservoir Operations Study*, Nolichucky Reservoir has approximately 334 acres of wetland habitat.

Nolichucky Reservoir has 12 uncommitted parcels. Three of these parcels are above Nolichucky Dam. Field surveys indicate scattered, small Category 2 (moderate quality) emergent and scrub-shrub wetlands are present along the shoreline of Parcel 12. Nine uncommitted parcels are located below Nolichucky Dam. This section is more riverine in nature. Parcels 26, 31, 33, and 34 have a mix of Category 3 (high quality) scrub-shrub, emergent, and forested wetland habitats associated with islands and lower-lying floodplain areas. Parcels 35, 36, 37, and 38 do not contain wetlands due to the steep topography. Common wetland vegetation includes sycamore, soft rush, black willow, slippery elm, cattail, silky dogwood, smartweed, river birch, jewelweed, river cane, waterwillow, and spikerush.

Siltation associated with upstream mining activities has created extensive and unique wetland types as sediment has filled in the reservoir. These wetlands include mixes of forested areas, scrub-shrub wetlands, and emergent/herbaceous wetlands. Wetlands below Nolichucky Dam are typically more riverine and associated with islands and floodplains. Although a few of the floodplain wetlands on the reservoir have been impacted

by cattle, many of the areas are relatively undisturbed by human activity. Ecologically, these undisturbed areas represent some of the best examples of wetland communities that exist in the Tennessee River Valley (TVA 2006).

Fieldwork conducted in 2004 indicated populations of the purple loosestrife (*Lythrum salicaria*) occurred in many of the wetlands around Nolichucky Reservoir and along the reservoir shoreline (TVA 2006). This invasive plant was found in highest densities in the island and sandbar wetlands close to the dam, on tree stumps and stationary logs all around the reservoir shoreline, and in many of the floodplain wetlands. Individual plants also were seen in at least one location downstream from Nolichucky Dam. Each purple loosestrife plant produces hundreds of thousands of seeds, and the species can spread rapidly throughout a wetland or a river system. Since it arrived in North America in the early 1800s, purple loosestrife has become widespread, including many locations in the Tennessee River Valley. Once it becomes established, this plant dominates formerly diverse emergent wetlands, excluding other plant species and the variety of animal species, which depend upon them (U.S. Department of Agriculture, 2008). For more information on wetland resources, see Volume I, Section 3.7.

#### **3.3.11. Floodplains**

The area impacted by the RLMP extends from the lower limit of TVA's property at Nolichucky River Mile (NRM) 45.6 upstream to about NRM 63.5. Nolichucky Dam is located at NRM 46. The 100-year floodplain is the area that would be inundated by the 100-year flood. We have no flood information for the area downstream of Nolichucky Dam.

Upstream of Nolichucky Dam, the present 100-year flood elevation along the river varies from elevation 1,260.3 at the dam site (NRM 46) to elevation 1,317.3 at NRM 62.06 (the upper limit of the floodplain study area). The 500-year flood elevation varies from elevation 1,266.3 at the dam site to elevation 1,329.2 at NRM 62.06. TVA has no flood information upstream of NRM 62.06. For 100-year and 500-year flood elevations, consult Volume I, Appendix E, Table E-2.

#### **3.3.12. Cultural and Historic Resources**

Relatively little archaeological research has been conducted on TVA fee-owned land on Nolichucky Reservoir. Prior to the survey conducted for the DNTRLMP, the majority of archaeological knowledge of the Nolichucky River basin resulted from the interest of amateur archaeological societies, museums, and universities. Early research focused on the discovery of easily identifiable Indian mounds but gradually shifted to the excavation of less visible archaeological sites buried by flood deposits (Dickens 1976; Lewis and Kneberg 1957). Calvert McIlhaney's (1978) Master's thesis on the cultural history of the Middle Nolichucky River basin stands as the largest-scale archaeological survey of the basin to date.

In preparation for the DNTRLMP, an archaeological survey was conducted on TVA-owned parcels (Gage 2008). The survey resulted in the identification of previously unrecorded



archaeological sites. The archaeological sites include multiple prehistoric campsites, a Historic Cherokee farmstead, late 19th century to early 20th century European-American farmsteads, and a remnant of the Ivanhoe Coal and Iron mining operations in use from the late 19th century to early 20th century. Eight of those sites are considered eligible for the National Register of Historic Places (NRHP) based on their potential to provide information important to prehistory and history. No archaeological sites near Nolichucky Reservoir have been listed in the NRHP to date. For more information on cultural and historic resource review process, see Volume I, Section 3.9.

### **3.3.13. *Managed Areas and Sensitive Ecological Sites***

Natural areas include managed areas, ecologically significant sites, and Nationwide Rivers Inventory (NRI) streams. Managed areas include lands held in public ownership that are managed by an entity (e.g., TVA, USDA, State of Tennessee, Greene County) to protect and maintain certain ecological and/or recreational features. A management plan or similar document defines what types of activities are compatible with the intended use of the managed area. Ecologically significant sites are tracts of privately owned land either that are recognized by resource biologists as having significant environmental resources or identified tracts on TVA lands that are ecologically significant but not specifically managed by TVA's Natural Areas Program. No ecologically significant sites are indicated on the Nolichucky Reservoir lands. NRI streams are free-flowing segments of rivers recognized by the National Park Service as possessing remarkable natural or cultural values.

The TVA Natural Heritage Database indicated four managed areas on or immediately adjacent to Nolichucky Reservoir. These include Kinser Park, Davy Crockett Lake Potential National Natural Landmark, Nolichucky Wildlife Management Area, and Davy Crockett Birthplace State Park. No TVA-managed areas are located on this reservoir, and no NRI streams or Wild and Scenic Rivers are near Nolichucky Reservoir. Additionally no natural areas were indicated near Parcels 25-38.

Three additional natural areas are within a 3-mile radius of Nolichucky Reservoir. These include the Tobacco University of Tennessee Agricultural Experiment Station (approximately 0.7 mile northeast of Parcel 5), the Unicoi State Bear Reserve/Cherokee (North) Wildlife Management Area (approximately 2.5 miles south of the Nolichucky River at NRM 70.0), and the Cherokee National Forest (approximately 2.5 miles east of the Nolichucky River at NRM 61.0). For more information on managed areas and sensitive ecological sites, see Volume I, Section 3.10.

### **3.3.14. *Water Quality***

In 1999, when the sediment volume was last evaluated, the remaining water volume in the reservoir pool was estimated to be about 1,716 acre-feet below elevation 1,240.9. This open water volume is most likely maintained by continued scouring in the active river channel.

Relatively little sedimentation data have been collected over the years, but enough information is available to show that the large volume and long duration of the sediment load in the Nolichucky watershed is unique in the Tennessee River system. In recent decades, regulations affecting the sediment sources have resulted in declining sedimentation rates and improvements to water quality; however, so much sediment remains in the river channel that high sedimentation rates in parts of the Nolichucky River are likely to continue for many more years (TVA 2006).

In 2000, the physical and chemical characteristics of the sediments in Nolichucky Reservoir were determined by analyzing core samples collected at five land-accessible sites (NRMs 46.0, 46.6, 47.7, 56.6, and 60.4). No polychlorinated biphenyls or pesticides were detected, and all metals concentrations were within expected background levels (TVA 2006).

Basic water quality information was collected at NRMs 20.8, 38.5, 39.3, 41.8, 57.2, 63.0, and 66.8 by the Tennessee Department of Environment and Conservation (STORET data 1999-2008) and at NRM 10.3 by TVA (TVA data 1989-2008). The maximum temperature measurement was 28.5 degrees Celsius. The pH ranged from 6.5 to 8.7, and dissolved oxygen concentrations ranged from 2.6 to 17.3 milligrams per liter (mg/L). Dissolved oxygen was below 5 mg/L at NRM 20.8 during two sampling events. The water in the Nolichucky River is moderately hard, averaging about 70 mg/L, with moderate alkalinity (average total alkalinity of 68 mg/L). Average organic nitrogen (0.276 mg/L), nitrate+nitrite nitrogen (0.59 mg/L), and total phosphorus (0.070 mg/L) concentrations were in the midrange of average concentrations found at 12 TVA stream monitoring sites across the Tennessee Valley. For more information on the Reservoir Ecological Health Monitoring Program, see Volume I, Section 3.12.

### **3.3.15. Aquatic Ecology**

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

TVA has improved tailwater water quality below many of its hydroelectric facilities. This has been accomplished by the establishment of the Reservoir Releases Improvement Program, which was begun officially in 1991 when the TVA Board of Directors approved a five-year plan to improve water releases from 16 dams by maintaining minimum flows and reaeration of dam discharges. Implementing minimum flows was accomplished via turbine pulses, and dissolved oxygen levels increased in a variety of ways (e.g., turbine venting, oxygen injection, and weir dams). These techniques helped to mimic more natural riverine conditions in TVA tailwaters. The Reservoir Releases Improvement Program does not

include the Nolichucky Dam, since the dam is no longer in operation and the river constantly flows over the dam.

#### 3.3.15.1. *Reservoir Vital Signs*

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

No RFAI data are available from the Nolichucky Reservoir. Because conditions above and below the Nolichucky Dam are more riverlike than reservoir, TVA's Index of Biotic Integrity (IBI) and EPT Index (see paragraph following Table 4 for explanation of EPT Index) were used instead of the RVSM (see Tables 4 and 5). The IBI assesses stream environmental quality by applying ecologically based metrics or community characteristics to the resident fish community as originally developed by Karr (1981). Twelve metrics address species richness and composition, trophic structure, fish abundance, and fish condition. Each metric reflects the condition of one aspect of the fish community and is scored against that which would be expected to occur in an unimpacted stream of comparable size and location. Potential ratings for each metric are 1-poor, 3-intermediate, or 5-the best to be expected. Scores for the 12 metrics are summed to produce the IBI for the site with a range from 12 (all metrics poor) to 60 (all metrics good). The IBI is then classified using the system developed by Angermeier and Karr (1986) rating the site from "very poor" to "excellent." Results from benthic evaluations and habitat assessments are used to augment and understand results of the IBI score.

From 1990 to 2000, samples for IBI scores were taken on the Nolichucky Reservoir. Under IBI protocols, all discernible habitats at a given site are sampled until no previously uncollected species are found, thus assuring a permissible sample. IBI scores and ratings for fish community samples collected in the Nolichucky River from 1990-2000 are listed in Table 4. Overall results indicate that the Nolichucky fish assemblage has been consistently in the "good" range throughout the river.

**Table 4. Index of Biotic Integrity Ratings for Fish Community Samples Collected in the Nolichucky River, 1990-2000**

Sample Site	1990	1991	1992	1993	1994	1996	1997	1998	2000
NRM 8.5	F	G	F	G	G	G	G	G	G
NRM 27.9	-	-	-	-	-	-	-	-	G
NRM 42.1	-	-	-	-	-	-	-	-	G
NRM 50.6	-	-	-	-	-	-	-	-	F/P
NRM 60.5	-	-	-	-	-	-	G	-	G
NRM 89.0	-	-	-	-	-	-	F	-	G/E
NRM 97.5	G	-	-	-	-	-	-	-	-
NRM 106.8	-	-	-	-	-	-	G	-	-

IBI ratings: F = Fair; P = Poor; G = Good; E = Excellent

The EPT Index is named for three orders of aquatic insects that are common in the benthic macroinvertebrate community: *Ephemeroptera* (mayflies), *Plecoptera* (stoneflies), and *Trichoptera* (caddisflies). The EPT Index is based on the premise that high-quality streams usually have the greatest species richness. The greater the pollution, the lower the species richness expected. The index totals the number of EPT families and assigns an EPT classification ranging from 0-5 (poor) to >13 (good).

The benthic community was sampled in five areas of the Nolichucky River in 2000, as part of TVA's *Nolichucky Flood Remediation Environmental Impact Statement* (TVA 2006). Evaluated in this way, the bottom-dwelling community at the site in Nolichucky Reservoir (NRM 50.6) was rated "poor" while all four of the other sites were rated "fair" (Table 5). For more information on RVSMP data for the Douglas-Nolichucky tributary reservoirs, see Volume I, Section 3.13.

**Table 5. Benthic Index of Biotic Integrity Ratings for Benthic Invertebrate Community Surveys in the Nolichucky River, 2000**

Sample Site	Score
NRM 8.5	F
NRM 27.9	F
NRM 42.1	F
NRM 50.6	P
NRM 60.6	F

Benthic IBI Rating Codes: P = Poor, F = Fair

### 3.3.15.2. Sport Fishing Index

Nolichucky Reservoir is not sampled for a Sport Fishing Index score, but according to a 2007 TWRA fisheries report of the Nolichucky River between the North Carolina state line and the French Broad River, the Nolichucky River supports one of the best warm water sport fisheries in the area (Carter et al. 2007). Anglers have the opportunity to catch muskellunge, flathead catfish, channel catfish, all species of black bass, and rock bass. In the winter when water temperatures permit, rainbow trout are stocked from the U.S. Fish

and Wildlife Service hatchery in Erwin, Tennessee. Carter et al. 2007 concluded that muskellunge should continue to be stocked as fish become available.

### **3.4. The Future**

As unmanaged growth and development increase, there is impact on the natural resources that contribute to the quality of life that draws people to the Nolichucky Reservoir. This quality of life will be impacted by the success or failure to achieve an appropriate balance between development and the protection of natural resources and could decrease the eco-tourism and recreational value of Nolichucky Reservoir.

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

### **3.5. Parcel Allocations**

The parcel allocations for Nolichucky Reservoir can be found below in Table 6, which is the Parcel Information Matrix and coincides with the Nolichucky Reservoir map. The tables identify each parcel number, allocation zone, number of acres, and parcel description. Non-TVA Shoreland (Zone 1) does not occur on Nolichucky Reservoir and is not included in Table 6 because it is shoreland that TVA does not own in fee or land that TVA never purchased.

**Table 6. Nolichucky Reservoir Parcel Allocations**

Parcel Number	Zone Allocations						NOLICHUCKY RESERVOIR Descriptions
	Acres	2	3	4	5	6	
1	9.4					●	Tailwater Access
2	52.7	●					Dam Reservation
3	48.9			●			Golf Course
4	265.3					●	Kinser Park
5	22.5		●				Richland Creek
6	42.5		●				River Hill
7	1.0					●	Joe Johnson Ramp- TWRA
8	62.0		●				Mutton Creek
9	63.5		●				Jones Bridge South
10	2.5					●	Jones Bridge Access- TWRA
11	43.3		●				Jones Bridge North
12	38.0			●			Gasteiger Project
12a	2.8		●				Gasteiger Project Bluff
13	3.5			●			Johnson Hollow
14	3.1					●	Kinser Bridge
15	2.5			●			Kinser Bridge Island
16	4.7			●			Mile 57
17	3.0			●			Island
18	33.5		●				Bird Island Shoreline
19	102.2		●				Johnson Island Shoreline
20	64.8		●				Duck Blind
21	3.4				●		Vulcan
22	80.7		●				Mud Creek
23	94.7		●				Flag Branch
24	3.1	●					Dam Reservation
25	15.3		●				Kiker 1
26	7.6			●			Kiker 2
27	3.5		●				Kiker 3
28	7.3		●				Gray's Island
29	3.1		●				Kiker 5
30	6.9			●			Kiker 6
31	1.3			●			Kiker 7
32	6.7		●				Kiker 8
33	4.2					●	Highway 321 Access
34	1.8			●			Kiker 9
35	5.7			●			Kiker 10
36	12.3			●			Kiker 11
37	1.9			●			Kiker 12
38	4.5			●			Kiker 13
<b>Total</b>	<b>1135.7</b>						
	<b>Committed Land</b> - Under current agreement, used for project						
	<b>Uncommitted Land</b> - Land that is considered "Plannable".						

## 4.0 PARCEL DESCRIPTIONS

(See exhibit map)

Note: Parcel descriptions represent the total acreage listed in the acquisition deeds. Each parcel description is discussed in four sections: General Description, Recreation, Sensitive Resources, and Transfers/License/Easement/Lease Agreements. In cases where the recreation section is absent, recreation activities are not compatible with the use or allocation of the parcel.

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### Nolichucky Reservoir Parcel Descriptions

<b>Parcel 1</b>	<b>9.4 Acres</b>
<b>Common Name:</b>	<b>Tailwater Access</b>
<b>Allocation:</b>	<b>Zone 6 (Developed Recreation)</b>
<b>Hydrological Unit:</b>	<b>TN-06010-108-190</b>
<b>County:</b>	<b>Greene, Tennessee</b>
<b>Stream:</b>	<i>Nolichucky River Mile 45.6-45.8 Right</i>

#### General Description:

This parcel was placed in Zone 6 to reflect potential future use as a developed stream access area. A small paved parking lot is easily accessible from State Route 70. Illegal dumping and littering has historically been a problem here. This parcel contains pine and mixed deciduous forest, riparian vegetation, rocky shoreline, and exotic species (e.g., honeysuckle, kudzu). Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the reservoir. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for reservoir users.

Private water use facilities will not be considered.

#### Recreation:

This site is used for dispersed recreation activities, such as bank fishing and viewing of the river tailwater and wildlife. This site also includes an informal canoe launching.

#### Sensitive Resources:

State-listed species of plants have been identified in the area. Current allocation as developed recreation is compatible although TVA must review any future construction or work on the parcel. No other sensitive resources were identified on this parcel.

Transfers/License/Easement/Lease Agreements:

- The Tennessee Department of Transportation has a permanent easement for a bridge crossing the east side of this parcel for State Route 70.

*Prior Forecast: No Forecast*

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**Parcel 2**                      **52.7 Acres**  
**Common Name:**        **Dam Reservation**  
**Allocation:**            **Zone 2 (Project Operations)**  
**Hydrological Unit:**    **TN-06010-108-190; TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
**Stream:**                *Nolichucky River Mile 45.8-46.7 Right*

General Description:

Nolichucky Dam was built in 1913 as a hydropower project and stands 94 feet high and 482 feet long. TVA acquired the dam and other land assets from East Tennessee Light and Power in 1945. However, due to siltation of the reservoir, the dam was taken out of service in 1972, and the downstream portion of the reservoir was converted into a wildlife management area. This parcel contains 13.1 acres identified as being prime farmland.

Where not developed, the dam reservation is largely forested, and invasive species, such as Chinese privet, occurs. The nearly 53-acre dam reservation property provides a forested buffer to the river. The northernmost block of trees, transected by a power line corridor appears to be of mature age. The parcel provides moderate-quality wildlife habitat but marginal habitat for protected species. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the reservoir. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for reservoir users.

Private water use facilities will not be considered.

Recreation:

The dam reservation supports various recreation opportunities, which are appropriate on Zone 2 properties. There are two licenses to TWRA: one to manage a wildlife refuge and one for the boat ramp that is located to the west of the dam on the north side of the reservoir; however, the ramp was never developed due to safety issues. This site is used for dispersed recreation activities, such as bank fishing and viewing of the river tailwater and wildlife.

Sensitive Resources:

Sensitive plant species have been identified near this parcel. This parcel also contains a unique mix of high-quality wetland habitat. TVA must review any future construction or work on this parcel. No other sensitive resources were identified on this parcel.



Transfers/License/Easement/Lease Agreements:

- Greeneville Power and Light has a permanent utility easement on the south end of this parcel.
- Tennessee Wildlife Resources Agency (TWRA) has a wildlife refuge license on the majority of the parcel.
- TWRA has a recreation license on the north end of the parcel.

*Prior Forecast: No Forecast*

**Parcel 3**                      **48.9 Acres**  
**Common Name:**        **Golf Course**  
**Allocation:**            **Zone 4 (Natural Resource Conservation)**  
**Hydrological Unit:**    **TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
**Stream:**                *Nolichucky River Mile 46.7-47.6 Right*

General Description:

This parcel skirts the shoreline of the river and cove and fronts the River Trace Golf Course. Some of the parcel is maintained by the golf course. This parcel contains 2.2 acres identified as being prime farmland.

The area is largely forested but appears to have invasive species such as Chinese privet. It mostly consists of riparian species and deciduous lowland species. The parcel provides a forested buffer to the river in most areas. The northernmost block of trees, transected by a power line corridor appears to be of mature age. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the reservoir. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for reservoir users.

Private water use facilities will not be considered.

Sensitive Resources:

A wetland survey indicated a small area of scrub-shrub wetlands in the back of the cove. There are sensitive plant species nearby but not ubiquitous enough to be allocated Zone 3 (Sensitive Resources). The parcel provides moderate-quality wildlife habitat but marginal habitat for protected species. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- TWRA has a wildlife refuge license on the majority of the parcel.

*Prior Forecast: No Forecast*

**Parcel 4**                    **265.3 Acres**  
**Common Name:**        **Kinser Park**  
**Allocation:**            **Zone 6 (Developed Recreation)**  
**Hydrological Unit:**    **TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
**Stream:**                *Nolichucky River Mile 47.6-48.2 Right*

General Description:

Parcel 4 is under a permanent easement to Greene County and the City of Greeneville to be developed for municipal park purposes. It is developed and managed as Kinser Park and as such was placed in Zone 6 to reflect its current use. This parcel contains 17.3 acres identified as being prime farmland.

Private water use facilities will not be considered.

Recreation:

Kinser Park has many recreation facilities including a campground, waterslide, golf course, picnic pavilions, ball fields, a walking trail, and a video arcade. There is also a boat launch and gravel parking area.

Sensitive Resources:

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

Transfers/License/Easement/Lease Agreements:

- Greene County and the City of Greeneville have a permanent recreation easement on the majority of this parcel for Kinser Park.
- TWRA has a wildlife refuge license on this parcel.

*Prior Forecast: No Forecast*

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**Parcel 5**                    **22.5 Acres**  
**Common Name:**        **Richland Creek**  
**Allocation:**            **Zone 3 (Sensitive Resource Management)**  
**Hydrological Unit:**    **TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
**Stream:**                *Nolichucky River Mile 47.5 Right (Richland Creek 0.0)*

General Description:

This parcel is located at the headwater of Richland Creek before it descends to the main stem of the river. Headwater areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the reservoir. Trees and shrubs may also provide valuable

shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for reservoir users. This parcel contains 3 acres identified as being prime farmland.

Private water use facilities will not be considered.

Sensitive Resources:

High-quality wetlands were found on the parcel; as such, it has been allocated to Zone 3. A survey also indicated that sensitive plant species were also found nearby. No other sensitive resources were identified on this parcel.

Transfers/License/Easement/Lease Agreements:

- TWRA has a wildlife refuge license on the southern end of the parcel.

*Prior Forecast: No Forecast*

<b>Parcel 6</b>	<b>42.5 Acres</b>
<b>Common Name:</b>	<b>River Hill</b>
<b>Allocation:</b>	<b>Zone 3 (Sensitive Resource Management)</b>
<b>Hydrological Unit:</b>	<b>TN-06010-108-140</b>
<b>County:</b>	<b>Greene, Tennessee</b>
<b>Stream:</b>	<i>Nolichucky River Mile 48.2-50.3 Right</i>

General Description:

River corridor areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the reservoir. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for reservoir users.

Private water use facilities will not be considered.

Sensitive Resources:

This parcel was placed in Zone 3 to reflect occurrence of high-quality wetlands, sensitive river corridor and unique scenic qualities along the river main stem. A survey also indicated that sensitive plant species were also found nearby. No other sensitive resources were identified on this parcel.

Transfers/License/Easement/Lease Agreements:

- TWRA has a wildlife refuge license on the majority of the parcel.

*Prior Forecast: No Forecast*

**Parcel 7**                    **1.0 Acre**  
**Common Name:**        **Joe Johnson Ramp**  
**Allocation:**            **Zone 6 (Developed Recreation)**  
**Hydrological Unit:**    **TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
*Stream:*                 *Nolichucky River Mile 50.4 Right*

General Description:

This parcel was placed in Zone 6 to reflect management under a license agreement to TWRA for a wildlife refuge and developed boat ramp: the Joe Johnson Ramp at Bird's Bridge.

Private water use facilities will not be considered.

Recreation:

The boat ramp is paved, and the parking lot is gravel.

Sensitive Resources:

There are sensitive plant species nearby but not ubiquitous enough to be allocated Zone 3 (Sensitive Resources). No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any other sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- TWRA has a wildlife refuge license on the majority of the parcel.
- TWRA has a recreation license on the entire parcel.

*Prior Forecast: No Forecast*

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**Parcel 8**                    **62.0 Acres**  
**Common Name:**        **Mutton Creek**  
**Allocation:**            **Zone 3 (Sensitive Resource Management)**  
**Hydrological Unit:**    **TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
*Stream:*                 *Nolichucky River Mile 50.4-52.2 Right*

General Description:

River corridor areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the reservoir. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for reservoir users. This parcel contains 4.8 acres identified as being prime farmland.

Private water use facilities will not be considered.

Sensitive Resources:

This parcel was placed in Zone 3 to reflect occurrence of high-quality wetlands, sensitive river corridor, and unique scenic qualities along the river main stem. A survey also indicated that sensitive plant species are found nearby. Existing data did not indicate any other sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 9**                      **63.5 Acres**  
**Common Name:**        **Jones Bridge South**  
**Allocation:**            **Zone 3 (Sensitive Resource Management)**  
**Hydrological Unit:**    **TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
**Stream:**                 *Nolichucky River Mile 52.5-54.1 Right*

General Description:

River corridor areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the reservoir. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for reservoir users. This parcel contains 34.3 acres identified as being prime farmland.

Private water use facilities will not be considered.

Sensitive Resources:

This parcel was placed in Zone 3 to reflect occurrence of high-quality wetlands, sensitive river corridor and unique scenic qualities along the river main stem. Partial bridge remnants/abutments remain at this site from the old bridge for Highway 350. Existing data did not indicate any other sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 10**                    **2.5 Acres**  
**Common Name:**        **Jones Bridge Access**  
**Allocation:**            **Zone 6 (Developed Recreation)**  
**Hydrological Unit:**    **TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
**Stream:**                *Nolichucky River Mile 54.2 Right*

General Description:

This parcel is an undeveloped boat launch maintained by TVA. It was placed in Zone 6 to reflect its potential as a developed stream access area.

Private water use facilities will not be considered.

Recreation:

A gravel parking lot is easily accessible off Highway 350. Access rules that prohibit alcoholic beverages, motorized use, and night use have been posted.

Sensitive Resources:

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

Transfers/License/Easement/Lease Agreements:

- Greene County has a permanent easement on this parcel for the Highway 350 bridge.

*Prior Forecast: No Forecast*

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**Parcel 11**                    **43.3 Acres**  
**Common Name:**        **Jones Bridge North**  
**Allocation:**            **Zone 3 (Sensitive Resource Management)**  
**Hydrological Unit:**    **TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
**Stream:**                *Nolichucky River Mile 54.2-57.0 Right*

General Description:

River corridor areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the reservoir. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for reservoir users. This parcel contains 1.1 acres identified as being prime farmland.

Private water use facilities will not be considered.

Sensitive Resources:

This parcel was placed in Zone 3 to reflect occurrence of high-quality wetlands, sensitive river corridor and unique scenic qualities along the river main stem. This parcel also contains a rocky gorge and steep bluffs. Existing data did not indicate any other sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 12**                    **38.0 Acres**  
**Common Name:**        **Gasteiger Project**  
**Allocation:**            **Zone 4 (Natural Resource Conservation)**  
**Hydrological Unit:**    **TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
**Stream:**                *Nolichucky River Mile 61.9-63.5 Right*

General Description:

This large parcel is a mixture of pasture, wooded bluffs, riparian vegetation, and scattered small pockets of high-quality wetlands. A large sandy beach like area occurs in a bend of the river. These areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds. The shoreline vegetation provides a riparian buffer to the reservoir. This parcel contains 2.6 acres identified as being prime farmland.

This area would benefit from cattle enclosures, as impacts to the shoreline are obvious and widespread. This parcel provides a diverse array of wildlife habitat; however, the quality is moderate due to cattle impacts and illegal dumping. This parcel was placed in Zone 4 to reflect its management to enhance natural resources for human use and appreciation.

Private water use facilities will not be considered.

Sensitive Resources:

Field surveys indicate scattered, small Category 2 (moderate quality) emergent and scrub-shrub wetlands present along the shoreline of this parcel.

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 12a**                    **2.8 Acres**  
**Common Name:**        **Gasteiger Project Bluff**  
**Allocation:**            **Zone 3 (Sensitive Resource Management)**  
**Hydrological Unit:**    **TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
*Stream:*                 *Nolichucky River Mile 63.4 Right*

General Description:

This parcel is a mixture of wooded bluffs and riparian vegetation along the shoreline. A large sandy beach like area occurs in a bend of the river. The parcel provides a diverse array of wildlife habitat, and the shoreline vegetation provides a riparian buffer to the reservoir.

Private water use facilities will not be considered.

Sensitive Resources:

A survey indicated that a state-listed plant species of special concern occurs on the parcel. This parcel was placed in Zone 3 to reflect its need to protect the sensitive species. Field surveys also indicate scattered, small Category 2 (moderate quality) emergent and scrub-shrub wetlands present along the shoreline of this parcel.

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 13**                    **3.5 Acres**  
**Common Name:**        **Johnson Hollow**  
**Allocation:**            **Zone 4 (Natural Resource Conservation)**  
**Hydrological Unit:**    **TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
*Stream:*                 *Nolichucky River Mile 63.0 Left*

General Description:

This parcel was placed in Zone 4 to reflect its management to enhance natural resources for human use and appreciation. A steep bluff with a sheer rock face occurs on the parcel. It also consists of mixed deciduous forest and does not have road access. It offers only minimal-quality wildlife habitat. This parcel contains 1.1 acres identified as being prime farmland.

Private water use facilities will not be considered.

Sensitive Resources:

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



Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 14**                      **3.1 Acres**  
**Common Name:**        **Kinser Bridge**  
**Allocation:**            **Zone 6 (Developed Recreation)**  
**Hydrological Unit:**    **TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
**Stream:**                *Nolichucky River Mile 60.4-60.5 Left*

General Description:

This parcel is an undeveloped boat launch maintained by TVA. It was placed in Zone 6 to reflect its potential as a developed stream access area. Illegal dumping and littering is somewhat of a problem. The shoreline vegetation provides a riparian buffer to the reservoir.

Private water use facilities will not be considered.

Recreation:

There is a gravel access road with limited parking. The parcel is not easily visible from State Route 107 (John Sevier Highway) and is not posted as TVA property. TVA access regulations are not posted.

Sensitive Resources:

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

Transfers/License/Easement/Lease Agreements:

- Greene County has a permanent road easement for State Route 107 and Kinser Bridge on the middle of this parcel.

*Prior Forecast: No Forecast*

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**Parcel 15**                      **2.5 Acres**  
**Common Name:**        **Kinser Bridge Island**  
**Allocation:**            **Zone 4 (Natural Resource Conservation)**  
**Hydrological Unit:**    **TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
**Stream:**                *Nolichucky River Mile 60.5-60.7 Left*

General Description:

This parcel was placed in Zone 4 to reflect its management to enhance natural resources for human use and appreciation. It is an island of riparian vegetation and shoals. These areas can provide important riparian habitats for wetland mammals, wading birds, migrant

waterfowl, raptors, nesting wood ducks, and songbirds. The shoreline vegetation provides a riparian buffer to the river.

Private water use facilities will not be considered.

Sensitive Resources:

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

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 16**                    **4.7 Acres**  
**Common Name:**        **Mile 57**  
**Allocation:**            **Zone 4 (Natural Resource Conservation)**  
**Hydrological Unit:**    **TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
**Stream:**                 *Nolichucky River Mile 57.4 – 57.5 Left*

General Description:

This parcel was placed in Zone 4 to reflect its management to enhance natural resources for human use and appreciation. It consists of mixed deciduous forest and steep bluffs. The forest contains mid-aged to mature upland hardwoods. The nearly 5-acre parcel provides minimal-quality wildlife habitat. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the river. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for river users.

Private water use facilities will not be considered.

Sensitive Resources:

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

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 17**                      **3.0 Acres**  
**Common Name:**            **Island**  
**Allocation:**                **Zone 4 (Natural Resource Conservation)**  
**Hydrological Unit:**       **TN-06010-108-140**  
**County:**                    **Greene, Tennessee**  
*Stream:*                      *Nolichucky River Mile 56.4-56.5 Left*

General Description:

This parcel was placed in Zone 4 to reflect its management to enhance natural resources for human use and appreciation. It is an island of riparian vegetation and shoals. These areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds. The shoreline vegetation provides a riparian buffer to the river.

Private water use facilities will not be considered.

Sensitive Resources:

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

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 18**                      **33.5 Acres**  
**Common Name:**            **Bird Island Shoreline**  
**Allocation:**                **Zone 3 (Sensitive Resource Management)**  
**Hydrological Unit:**       **TN-06010-108-140**  
**County:**                    **Greene, Tennessee**  
*Stream:*                      *Nolichucky River Mile 53.5-54.5 Left*

General Description:

River corridor areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the reservoir. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for reservoir users. This parcel contains 12.7 acres identified as being prime farmland.

Private water use facilities will not be considered.

Recreation:

The islands provide opportunities for dispersed recreation opportunities like bank fishing and wildlife and scenic viewing. Road access is nearby at Bird Bridge (County Road 350).

Sensitive Resources:

This parcel was placed in Zone 3 to reflect occurrence of high-quality wetlands, sensitive river corridor and unique scenic qualities along the river main stem. No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any other sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 19**                      **102.2 Acres**  
**Common Name:**        **Johnson Island Shoreline**  
**Allocation:**            **Zone 3 (Sensitive Resource Management)**  
**Hydrological Unit:**    **TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
**Stream:**                *Nolichucky River Mile 51.9-53.5 Left and Island*

General Description:

The portion of the parcel that is land based is mixed deciduous forest and inaccessible without private landowner permission. It is comprised of a steep forested hillside with mid-aged to mature upland hardwoods. This parcel provides good wildlife habitat and also contains an island.

This parcel contains 55.1 acres identified as being prime farmland.

Private water use facilities will not be considered.

Sensitive Resources:

This parcel was placed in Zone 3 to reflect occurrence of high-quality wetlands, sensitive river corridor and unique scenic qualities along the river main stem. Existing data did not indicate any other sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 20**                      **64.8 Acres**  
**Common Name:**            **Duck Blind**  
**Allocation:**                **Zone 3 (Sensitive Resource Management)**  
**Hydrological Unit:**       **TN-06010-108-140**  
**County:**                    **Greene, Tennessee**  
*Stream:*                      *Nolichucky River Mile 50.3-51.8 Left*

General Description:

River corridor areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the reservoir. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for reservoir users. This parcel contains 4.1 acres identified as being prime farmland.

Private water use facilities will not be considered.

Recreation:

This parcel has a temporary duck blind available to the public for hunting purposes. The duck blind is only accessible by water.

Sensitive Resources:

This parcel was placed in Zone 3 to reflect occurrence of high-quality wetlands, sensitive river corridor and unique scenic qualities along the river main stem. There are sensitive plant species nearby. Existing data did not indicate any other sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- Vulcan Construction Materials has a license fronting this parcel for dredging purposes.

*Prior Forecast: No Forecast*

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**Parcel 21**                      **3.4 Acres**  
**Common Name:**            **Vulcan**  
**Allocation:**                **Zone 5 (Industrial)**  
**Hydrological Unit:**       **TN-06010-108-140**  
**County:**                    **Greene, Tennessee**  
*Stream:*                      *Nolichucky River Mile 50.0-50.2 Left*

General Description:

Vulcan Construction Materials has a sand operation located on this parcel. This parcel contains 0.2 acre identified as being prime farmland.

Private water use facilities will not be considered.

Sensitive Resources:

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

Transfers/License/Easement/Lease Agreements:

- Vulcan Construction Materials has a license on this parcel for sand dredging purposes.
- TWRA has a wildlife refuge license on the majority of the parcel.

*Prior Forecast: No Forecast*

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**Parcel 22**                      **80.7 Acres**  
**Common Name:**        **Mud Creek**  
**Allocation:**            **Zone 3 (Sensitive Resource Management)**  
**Hydrological Unit:**    **TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
**Stream:**                 *Nolichucky River Mile 47.8-50.0 Left*

General Description:

This parcel is very steep with limited road access. River corridor areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the reservoir. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for reservoir users. This parcel contains 12.2 acres identified as being prime farmland.

Private water use facilities will not be considered.

Sensitive Resources:

This parcel was placed in Zone 3 to reflect occurrence of high-quality wetlands, sensitive river corridor and unique scenic qualities along the river main stem. There are sensitive plant species nearby. Existing data did not indicate any other sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- TWRA has a wildlife refuge license on the majority of the parcel.

*Prior Forecast: No Forecast*

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**Parcel 23**                      **94.7 Acres**  
**Common Name:**            **Flag Branch**  
**Allocation:**                **Zone 3 (Sensitive Resource Management)**  
**Hydrological Unit:**       **TN-06010-108-140**  
**County:**                    **Greene, Tennessee**  
*Stream:*                      *Nolichucky River Mile 46.1-47.8 Left*

General Description:

This parcel is a large area across the river from Kinser Park and the River Trace Golf Course. There is a large subdivision adjacent to the parcel. As such, it is surrounded by developed land and is an important natural area within this matrix of land uses. The parcel consists of mixed deciduous forest, riparian vegetation, and steep bluffs. A portion of this parcel is farmed for hay. Riparian zones can provide important habitat for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the reservoir. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for reservoir users. This parcel contains 28.5 acres identified as being prime farmland.

Private water use facilities will not be considered.

Sensitive Resources:

This parcel was placed in Zone 3 to reflect occurrence of high-quality wetlands, sensitive river corridor and unique scenic qualities along the river main stem. Sensitive plant species and a state-listed species occur near the parcel. Future construction on the parcel should be reviewed by TVA. Existing data did not indicate any other sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- TWRA has a wildlife refuge license on the majority of the parcel.

*Prior Forecast: No Forecast*

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**Parcel 24**                      **3.1 Acres**  
**Common Name:**            **Dam Reservation**  
**Allocation:**                **Zone 2 (Project Operations)**  
**Hydrological Unit:**       **TN-06010-108-140; TN-06010-108-190**  
**County:**                    **Greene, Tennessee**  
*Stream:*                      *Nolichucky River Mile 45.9-46.1 Left*

General Description:

The dam reservation property provides a forested buffer to the river. The northernmost block of trees appears to be of mature age. The parcel provides moderate-quality wildlife habitat but marginal habitat for protected species. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the

reservoir. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for reservoirs users.

Private water use facilities will not be considered.

Sensitive Resources:

State-listed species occur in the area. The current allocation needs to remain as Zone 2. Any construction or work in Parcel 24 needs to be reviewed by TVA. No sensitive resources surveys have been conducted on committed land. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- TWRA has a wildlife refuge license on the majority of the parcel.
- The Tennessee Department of Transportation has a permanent easement for a bridge crossing in the middle of this parcel for Highway 70.

*Prior Forecast: No Forecast*

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**Parcel 25**                      **15.3 Acres**  
**Common Name:**        **Kiker 1**  
**Allocation:**              **Zone 3 (Sensitive Resource Management)**  
**Hydrological Unit:**    **TN-06010-108-190**  
**County:**                 **Greene, Tennessee**  
**Stream:**                  *Nolichucky River Mile 30.2-30.5 Right*

General Description:

This parcel has road access and contains mostly mixed deciduous forest and riparian vegetation. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the river. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for river users. These areas can also provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds.

Private water use facilities will not be considered.

Sensitive Resources:

This parcel was placed into Zone 3 due to the location of a sensitive cultural resource. In addition, there are sensitive plant species nearby. Existing data did not indicate any other sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 26**                      **7.6 Acres**  
**Common Name:**            **Kiker 2**  
**Allocation:**                **Zone 4 (Natural Resource Conservation)**  
**Hydrological Unit:**       **TN-06010-108-190**  
**County:**                    **Greene, Tennessee**  
**Stream:**                     *Nolichucky River Mile 30.4 Left*

General Description:

This parcel contains mostly mixed deciduous forest and riparian vegetation and is currently managed for enhancement of natural resources for human use and appreciation. This parcel does not have road access. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the river. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for river users. These areas can also provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds.

Private water use facilities will not be considered.

Sensitive Resources:

Field surveys indicate this parcel contains a mix of Category 3 (high quality) scrub-shrub, emergent, and forested wetlands. Due to the size and quality of the wetland areas, this parcel does not qualify for Zone 3 (Sensitive Resource Management). In addition, there are sensitive plant species nearby. TVA must review any future construction or work on the parcel.

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

**Parcel 27**                      **3.5 Acres**  
**Common Name:**            **Kiker 3**  
**Allocation:**                **Zone 3 (Sensitive Resource Management)**  
**Hydrological Unit:**       **TN-06010-108-190**  
**County:**                    **Greene, Tennessee**  
**Stream:**                     *Nolichucky River Mile 39.0-39.3 Right*

General Description:

This parcel contains mostly mixed deciduous forest, riparian vegetation, and high-quality wetlands particularly at the confluence of Pigeon Creek and the river main stem. This parcel does not have road access and contains wildlife habitat of moderate quality. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the river. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for river

users. These areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds.

Private water use facilities will not be considered.

Sensitive Resources:

This parcel was placed in Zone 3 to reflect occurrence of high-quality wetlands, sensitive river corridor and unique scenic qualities along the river main stem. In addition, there are sensitive plant species nearby. TVA must review any future construction or work on the parcel. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 28**                      **7.3 Acres**  
**Common Name:**        **Gray's Island**  
**Allocation:**            **Zone 3 (Sensitive Resource Management)**  
**Hydrological Unit:**    **TN-06010-108-190**  
**County:**                **Greene, Tennessee**  
**Stream:**                *Nolichucky River Mile 40.3-40.6 Island*

General Description:

This parcel consists of a large island, known as Gray's Island, in the mainstream of the Nolichucky River. The vegetation provides moderate-quality habitat and suitable habitat for heron colonies. Trees and shrubs provide valuable shade, cover, and food sources for fish. Islands can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds.

Private water use facilities will not be considered.

Sensitive Resources:

This parcel was placed in Zone 3 to reflect occurrence of high-quality forested wetlands, sensitive river corridor and unique scenic qualities along the river main stem. In addition, a heron colony is located on the island. Existing data did not indicate any other sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 29**                      **3.1 Acres**  
**Common Name:**            **Kiker 5**  
**Allocation:**                **Zone 3 (Sensitive Resource Management)**  
**Hydrological Unit:**       **TN-06010-108-190**  
**County:**                    **Greene, Tennessee**  
**Stream:**                     *Nolichucky River Mile 40.4-40.7 Right*

General Description:

This parcel reflects occurrence of sensitive river corridor and unique scenic qualities along the river main stem. This parcel does not have road access. This parcel contains mostly mixed deciduous forest, riparian vegetation, and high-quality wetlands. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the river. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for river users. These areas can also provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds.

Private water use facilities will not be considered.

Sensitive Resources:

A gray bat colony occurs in a cave on the mainland portion of this parcel. The Zone 3 designation is warranted due to the close proximity of the cave on the back-lying property and the requirement of gray bats to use forested flight paths to access feeding areas over water. Suitable habitat for a state-listed warbler species also occurs on the parcel. Existing data did not indicate any other sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

**Parcel 30**                      **6.9 Acres**  
**Common Name:**            **Kiker 6**  
**Allocation:**                **Zone 4 (Natural Resource Conservation)**  
**Hydrological Unit:**       **TN-06010-108-190**  
**County:**                    **Greene, Tennessee**  
**Stream:**                     *Nolichucky River Mile 39.7-40.4 Right*

General Description:

This parcel reflects occurrence of sensitive river corridor and unique scenic qualities along the river main stem. This parcel does not have road access. This parcel is a steep strip of shoreline buffer and riparian habitat. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the river. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for river users. These areas can provide important

riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds.

Private water use facilities will not be considered.

Sensitive Resources:

Suitable habitat for the state-listed Swainson's warbler species occurs on the parcel. This species was heard during field review; however, it was not visually observed. Existing data did not indicate any other sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 31**                    **1.3 Acres**  
**Common Name:**        **Kiker 7**  
**Allocation:**            **Zone 4 (Natural Resource Conservation)**  
**Hydrological Unit:**    **TN-06010-108-190**  
**County:**                **Greene, Tennessee**  
**Stream:**                 *Nolichucky River Mile 36.1-36.3 Right*

General Description:

This parcel is currently managed for enhancement of natural resources for human use and appreciation. It is a small wooded riparian parcel with no road access. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the river. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for river users. These areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds.

Private water use facilities will not be considered.

Sensitive Resources:

Field surveys indicate this parcel contains a mix of Category 3 (high quality) scrub-shrub, emergent, and forested wetlands. Due to the size and quality of the wetland areas, this parcel does not qualify for Zone 3 (Sensitive Resource Management).

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 32**                      **6.7 Acres**  
**Common Name:**            **Kiker 8**  
**Allocation:**                **Zone 3 (Sensitive Resource Management)**  
**Hydrological Unit:**       **TN-06010-108-190**  
**County:**                    **Greene, Tennessee**  
**Stream:**                     *Nolichucky River Mile 36.5-37.1 Right and Island*

General Description:

Although this parcel has moderate-quality wildlife habitat, the shoreline has been impacted by cattle. This parcel would benefit from cattle exclusion practices. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the river. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for river users. These areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds.

Private water use facilities will not be considered.

Recreation:

The shoreline receives some dispersed recreation use such as bank fishing and camping. There is no road access to the parcel.

Sensitive Resources:

This parcel was placed in Zone 3 to reflect the high-quality wetlands on the island and on low floodplain terrace, riparian vegetation, mixed deciduous forest, and moderate-quality wildlife habitat. Field surveys indicate this parcel contains a mix of Category 3 (high quality) scrub-shrub, emergent, and forested wetlands.

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

**Parcel 33**                      **4.2 Acres**  
**Common Name:**            **Highway 321 Access**  
**Allocation:**                **Zone 6 (Developed Recreation)**  
**Hydrological Unit:**       **TN-06010-108-190**  
**County:**                    **Greene, Tennessee**  
**Stream:**                     *Nolichucky River Mile 36.4-36.7 Right*

General Description:

This parcel contains riparian vegetation, mixed deciduous forest, and moderate-quality wildlife habitat. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the river. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for river users. These areas can provide important riparian habitats for

wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds.

Private water use facilities will not be considered.

Recreation:

This parcel was placed in Zone 6 to reflect its potential future use as a developed water-based recreation site. Zone 6 properties include small shoreline parcels that may be conveyed to public agencies or individuals to manage public or commercial water-based recreation activities. The shoreline receives some dispersed recreation use, like river access, bank fishing, and camping.

Sensitive Resources:

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

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 34**                      **1.8 Acres**  
**Common Name:**        **Kiker 9**  
**Allocation:**              **Zone 4 (Natural Resource Conservation)**  
**Hydrological Unit:**    **TN-06010-108-190**  
**County:**                  **Greene, Tennessee**  
**Stream:**                  *Nolichucky River Mile 36.8-36.9 Left*

General Description:

This parcel has moderate-quality wildlife habitat and is currently managed for enhancement of natural resources for human use and appreciation. There is no road access to the parcel. This parcel contains mostly riparian vegetation, some mixed deciduous forest, exposed rock, and moderate-quality wildlife habitat. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the river. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for river users. These areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds.

Private water use facilities will not be considered.

Sensitive Resources:

Field surveys indicate this parcel contains a mix of Category 3 (high quality) scrub-shrub, emergent, and forested wetlands.

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

**Parcel 35**                      **5.7 Acres**  
**Common Name:**        **Kiker 10**  
**Allocation:**            **Zone 4 (Natural Resource Conservation)**  
**Hydrological Unit:**    **TN-06010-108-190**  
**County:**                **Greene, Tennessee**  
**Stream:**                *Nolichucky River Mile 37.4-37.6 Left*

General Description:

This parcel does not have road access and is currently managed for enhancement of natural resources for human use and appreciation. This parcel contains mostly riparian vegetation, some mixed deciduous forest, exposed rock, and moderate-quality wildlife habitat. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the river. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for river users. These areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds.

Private water use facilities will not be considered

Sensitive Resources:

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

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

**Parcel 36**                      **12.3 Acres**  
**Common Name:**        **Kiker 11**  
**Allocation:**            **Zone 4 (Natural Resource Conservation)**  
**Hydrological Unit:**    **TN-06010-108-190**  
**County:**                **Greene, Tennessee**  
**Stream:**                *Nolichucky River Mile 37.6-38.1 Right*

General Description:

This parcel does not have road access and is currently managed for enhancement of natural resources for human use and appreciation. This parcel contains mostly riparian vegetation, some mixed deciduous forest, exposed rock, and moderate-quality wildlife habitat. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the river. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves

shoreline beauty for river users. These areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds. This parcel contains 1.1 acres identified as being prime farmland.

Private water use facilities will not be considered.

Sensitive Resources:

Suitable habitat for a state-listed warbler species also occurs on the parcel. Existing data did not indicate any sensitive resources at this location.

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 37**                      **1.9 Acres**  
**Common Name:**        **Kiker 12**  
**Allocation:**              **Zone 4 (Natural Resource Conservation)**  
**Hydrological Unit:**    **TN-06010-108-190**  
**County:**                  **Greene, Tennessee**  
**Stream:**                    *Nolichucky River Mile 37.8 Left*

General Description:

This parcel does not have road access and is currently managed for enhancement of natural resources for human use and appreciation. This parcel contains mostly riparian vegetation, some mixed deciduous forest, exposed rock, and moderate-quality wildlife habitat. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the river. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for river users. These areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds.

Private water use facilities will not be considered

Sensitive Resources:

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

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Parcel 38**                    **4.5 Acres**  
**Common Name:**        **Kiker 13**  
**Allocation:**            **Zone 4 (Natural Resource Conservation)**  
**Hydrological Unit:**    **TN-06010-108-190**  
**County:**                **Greene, Tennessee**  
**Stream:**                *Nolichucky River Mile 37.6-37.8 Left*

General Description:

This parcel does not have road access and is currently managed for enhancement of natural resources for human use and appreciation. This parcel contains mostly riparian vegetation, some mixed deciduous forest, exposed rock, and moderate-quality wildlife habitat, and the stream corridor on the parcel notably adds to the parcel's overall habitat complexity. Riparian zones protect water quality by filtering nutrients, sediments, and other pollutants from runoff before they reach the river. Trees and shrubs may also provide valuable shade, cover, and food sources for fish. In addition, vegetation preserves shoreline beauty for river users. These areas can provide important riparian habitats for wetland mammals, wading birds, migrant waterfowl, raptors, nesting wood ducks, and songbirds.

Private water use facilities will not be considered.

Sensitive Resources:

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

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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*Note: The following parcels were included in the Nolichucky RLMP during the public scoping period and have been removed from the RLMP due to TVA having no ownership or less than majority interest.*

**Former Parcel 14**        **0.9 Acres**  
**Common Name:**        **Horse Creek**  
**Allocation:**            **Zone 3 (Sensitive Resource Management)**  
**Hydrological Unit:**    **TN-06010-108-140**  
**County:**                **Greene, Tennessee**  
**Stream:**                *Nolichucky River Mile 61.1-61.3 Left*

General Description:

TVA does not have majority ownership in this parcel; therefore, the parcel is not indicated on the land plan map as TVA public land. This parcel does not have road access.

TVA would consider the management of this parcel as Zone 3 due to the occurrence of high-quality wetlands, sensitive river corridor, and unique scenic qualities along the river main stem.

Private water use facilities will not be considered.

Sensitive Resources:

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

Transfers/License/Easement/Lease Agreements:

- None

*Prior Forecast: No Forecast*

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**Former Parcel K-4**    **6.1 Acres**  
**Common Name:**    **Kiker 4**  
**Allocation:**        **Private Property**  
**Hydrological Unit:** **TN-06010-108-190**  
**County:**            **Greene, Tennessee**  
**Stream:**            *Nolichucky River Mile 38.8-39.3 Right*

General Description:

Because of the DNTRLMP scoping period, landowners debated TVA's ownership of this parcel. In an attempt to resolve the conflict, TVA Realty Services researched the deeds for this parcel. Deed research clearly indicates that TVA does not own the land associated with this parcel; therefore, the parcel is not indicated on the land plan map as TVA public land.

*Prior Forecast: Not Applicable*

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**Former Parcel K6a**    **3.22 Acres**  
**Common Name:**    **Kiker 6a Islands**  
**Allocation:**        **Zone 3 (Sensitive Resource Management)**  
**Hydrological Unit:** **TN-06010-108-190**  
**County:**            **Greene, Tennessee**  
**Stream:**            *Nolichucky River Mile 39.7-40.7 Islands*

General Description:

This parcel consists of a small island and a portion of Gray's Island in the mainstream of the Nolichucky River. Definitive ownership of the small island could not be determined without a survey; therefore, it is not indicated as TVA public land on the land plan map. However, Gray's Island has been included in the RLMP and is shown on the map as Parcel 28.

*Prior Forecast: No Forecast*

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## 5.0 LITERATURE CITED

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## 6.0 GLOSSARY OF TERMS

<b>100-year floodplain</b>	The area inundated by the 1 percent annual chance (or 100-year) flood.
<b>benthic</b>	Refers to the bottom of a stream, river, or reservoir.
<b>bradytictic</b>	A descriptor of mollusk reproductive biology, where spawning takes place in summer; glochidia overwinter in females and are expelled the following spring.
<b>dam reservation</b>	Lands generally maintained in a parklike setting by TVA to protect the integrity of the dam structure, hydroelectric facilities, and navigation lock. The reservation also provides for public visitor access to the TVA dam facilities and recreation opportunities, such as public boat access, bank fishing, camping, picnicking, etc.
<b>deciduous</b>	Vegetation that sheds leaves in autumn and produces new leaves in the spring.
<b>dissolved oxygen</b>	The oxygen dissolved in water, necessary to sustain aquatic life. It is usually measured in milligrams per liter or parts per million.
<b>ecoregion</b>	A relatively homogeneous area of similar geography, topography, climate, and soils that supports similar plant and animal life.
<b>embayment</b>	A bay or arm of the reservoir.
<b>emergent wetland</b>	Wetlands dominated by erect, rooted herbaceous plants, such as cattails and bulrush.
<b>endangered species</b>	A species in danger of extinction throughout all or significant portions of its range or territory. Endangered species recognized by the ESA or similar state legislation have special legal status for their protection and recovery.
<b>evergreen</b>	Vegetation with leaves that stay green and persist all year.
<b>evergreen-deciduous</b>	Vegetation consisting of a mixture of plants that are both evergreen and deciduous often referred to as mixed deciduous.
<b>floodplains</b>	Any land area susceptible to inundation by water from any source by a flood of selected frequency. For purposes of the National Flood Insurance Program, the floodplain, as a minimum, is that area subject to a 1 percent or greater chance of flooding (100-year flood) in any given year.

<b>flowage easement land</b>	Privately owned lakeshore properties where TVA has (1) the right to flood the land as part of its reservoir operations, (2) no rights for vegetation management, and (3) the authority to control structures, under Section 26a of the TVA Act.
<b>forest</b>	Vegetation having tree crowns overlapping, generally forming 60-100 percent cover (Grossman et al. 1998).
<b>glochidia</b>	The parasitic larva of certain freshwater mussels of the family Unionidae, having hooks for attaching to the gills or other external parts of a host fish.
<b>macroinvertebrates</b>	Bottom-dwelling aquatic animals without vertebrates, such as mollusks and arthropods.
<b>marginal strip</b>	The narrow strip of land retained by TVA between the summer operating pool and back-lying tracts that are privately owned or controlled by state, local, or other federal agencies.
<b>maximum shoreline contour</b>	An elevation typically 5 feet above the top of the gates of a TVA dam. It is often the property boundary between TVA marginal strip property and adjoining private property.
<b>physiographic provinces</b>	General divisions of land with each area having characteristic combinations of soil materials and topography.
<b>prime farmland</b>	Generally regarded as the best land for farming, these areas are flat or gently rolling and are usually susceptible to little or no soil erosion. Prime farmland produces the most food, feed, fiber, forage, and oil seed crops with the least amount of fuel, fertilizer, and labor. It combines favorable soil quality, growing season, and moisture supply and, under careful management, can be farmed continuously and at a high level of productivity without degrading either the environment or the resource base. Prime farmland does not include land already in or committed to urban development, roads, or water storage.
<b>riparian</b>	The communities of plants and animals that occur within the influence of a stream, river, or body of water.
<b>riparian zone</b>	An area of land that has vegetation or physical characteristics reflective of permanent water influence. Typically a streamside zone or shoreline edge.
<b>riprap</b>	Stones placed along the shoreline for bank stabilization and other purposes.
<b>riverine</b>	Having characteristics similar to a river.

<b>Section 26a review process</b>	Section 26a of the TVA Act requires TVA review and approval of plans for obstructions, such as docks, fills, bridges, outfalls, water intakes, and riprap, before they are constructed across, in, or along the Tennessee River and its tributaries. Applications for this approval are coordinated appropriately with TVA programs and the U.S. Army Corps of Engineers (USACE). USACE issues a joint public notice for those applications that are not covered by a USACE nationwide, general, or regional permit. The appropriate state water pollution control agency must also certify that the effluent from outfalls meets the applicable water quality standards.
<b>scrub-shrub</b>	Woody vegetation less than about 20 feet tall. Species include true shrubs, young trees, and trees or shrubs that are small or stunted because of environmental conditions.
<b>shoreline/shoreland</b>	The line where the water of a TVA reservoir meets the shore when the water level is at the normal summer pool elevation.
<b>significant cultural resources</b>	Some of the parcel descriptions state that “the parcel contains significant cultural resources” or that “cultural resource considerations may affect development of the parcel.” However, many of the parcel descriptions contain no reference to archaeological or other cultural resources. The lack of such references within a parcel description does not necessarily indicate that significant cultural resources do not exist. The use of any parcel for developmental purposes may require additional archaeological testing or mitigation of adverse impact to archaeological sites. The costs of required testing or mitigation would be the responsibility of the developer.
<b>substrates</b>	The base or material to which a plant is attached and from which it receives nutrients.
<b>threatened species</b>	A species threatened with extinction throughout all or significant portions of its range or territory. Threatened species recognized by the ESA or similar state legislation have special legal status for their protection and recovery.
<b>tributary reservoirs</b>	Impoundments created by dams constructed across streams and rivers that eventually flow into the Tennessee River.
<b>understory</b>	The least-dominant community of trees of a forest, consisting of shade-tolerant species.
<b>upland</b>	The higher parts of a region, not closely associated with streams or lakes.

<p><b>wetlands</b></p>	<p>As defined in <i>TVA Environmental Review Procedures</i> (TVA 1983), “Wetlands are those areas inundated by surface or groundwater with a frequency sufficient to support and under normal circumstances do or would support a prevalence of vegetation or aquatic life that requires saturated or seasonably saturated soil conditions for growth and reproduction.” Wetlands generally include swamps, marshes, bogs, and similar areas, such as sloughs, potholes, wet meadows, mud flats, and natural ponds.</p>
<p><b>Wildlife Management Area</b></p>	<p>Land and/or water areas designated by state wildlife agencies, such as TWRA, for the protection and management of wildlife. These areas typically have specific hunting and trapping regulations as well as rules regarding appropriate uses of these areas by the public.</p>
<p><b>woodland</b></p>	<p>Open stands of trees with crowns not usually touching, generally forming 25-60 percent cover (Grossman et al. 1998).</p>